

24

23

22

21

20

19

18

17

16

15

14

13

**NEW  
EDITION**

**UP-TO-DATE**

**CMOS 7400 IC's DATA & COMPARISON TABLES**

**最新 CMOS 7400 集成电路数据及对照表**



1

2

3

4

5

6

7

8

9

10

11

12

Q0

Q1

Q2

Q3

Q4

Q5

Q6

Q7

Q8

Q9

Q10

GND



TECH/ECA ASIA-PACIFIC EDITION



**UP-TO-DATE**  
**CMOS 7400 IC's Data & Comparison Tables**  
最新 CMOS 7400 集成电路数据及对照表



**TECH PUBLICATIONS PTE. LTD.**

10, Jalan Besar, #B1-39 Sim Lim Tower,  
Singapore 0820. Tel: 2914595 Fax: 7449835

## **First Edition 1992**

This book is deposited and protected by copyright. All rights reserved to the editor. The reproduction, translation, microfilming as well as storing and processing of data in electronic systems are liable to prosecution.

**ISBN 981-214-540-0**

Copyright © by ECA · Electronic GmbH, Germany.

© 1992 ECA. All rights reserved.

Illegal for sale outside the following countries:

Indian Subcontinent, Singapore, Malaysia, Indonesia, Hongkong, Philippines, Taiwan, New Zealand and Australia.

Illegal for export other than by Tech Publications Pte Ltd, Singapore.

Published by Tech Publications Pte Ltd  
by special arrangement with ECA · Electronic GmbH, Germany

Printed in Singapore by Continental Press Pte Ltd

## table of contents

	page	
Preface	IV	
Alphanumeric list of contents	V	
Explanations	1-1	<b>1</b>
Functional list of contents	1-11	
Abbreviations of manufacturers	1-17	
Data table CMOS	2-3	<b>2</b>
Case outline drawings	3-3	<b>3</b>

# GB PREFACE

Even when the "ttl 74's digital" last went into print it was obvious that this would be the last attempt to combine both TTL and pin-identical CMOS ICs of the 74 series in a single compilation. With more than 7000 "new entries" and the new AC and ACT technologies the compilation had to be split into "ttl 74's" and "cmos 74's". The "Owl" series of the digital ICs of ECA Publishers is thus listed as follows:

Series	Technology	ECA Compilation
40xx	CMOS	cmos 4000
45xx	CMOS	cmos 4000
47xx	CMOS	cmos 4000
74xx	TTL normal	ttl 74's
74ACxx	Advanced CMOS	cmos 74's
74ACTxx	Advanced CMOS/TTL-Interface	cmos 74's
74ALSxx	Advanced Low-Power Schottky TTL	ttl 74's
74ASxx	Advanced Schottky TTL	ttl 74's
74Cxx	CMOS, 74's pin assignment	cmos 74's
74Fxx	FAST-TTL	ttl 74's
74Hxx	High Speed TTL	ttl 74's
74HCxx	High Speed CMOS, 74's assignment	cmos 74's
74HC40xx	High Speed CMOS, 4000's assignment	cmos 4000*
74HC70xx	High Speed CMOS, 7000's assignment	cmos 74's
74HCTxx	High Speed CMOS/TTL-Interface, 74's assignment	cmos 74's
74HCT40xx	ditto with 4000's assignment	cmos 4000*
74HCT70xx	ditto with 7000's assignment	cmos 74's
74HCUxx	High Speed CMOS, non-buffered	cmos 74's
74Lxx	Low-Power TTL	ttl 74's
74LSxx	Low-Power Schottky TTL	ttl 74's
74Sxx	Schottky TTL	ttl 74's

You will find memories such as static, dynamic and bipolar RAMs, video RAMs, eprom, eeprom, prom and fifo memories in the "mem" (unless incorporated in the above series).

\* new print

Sectioning has been retained as follows:

**Section 1 "Functional Contents"**: In this section you can locate the families suitable for handling a specific problem. The **Explanations** have been supplemented by symbology as recognized by the new DIN 407000 and IEEE Std 91 standards. The **List of Manufacturers** has been completely revised and supplemented by indications as to sales openings and distributors throughout Europe.

**Section 2**: Here, we have kept to the accepted concept of combining all salient data such as abbreviations, data, comparisons, manufacturers, pin assignments, logic tables and – where necessary – notes too, all on a single page.

However, this has made it necessary to sacrifice all special-application data which is required by development engineers, in any case, only in extreme conditions. Nevertheless, Section 2 is more than just a short-form data compilation since it covers all salient aspects such as current consumption, input and output load factors, all of the important transition times and cut-off frequencies. The text of the tabulation is based on the 74...series since this is the one which is most popular. The sequence is listed ascending numerically starting with 7400.

**Section 3 "Case Outlines"**: This section now incorporates the new more-representative presentation as already used in the "cmos 4000" compilation.

**Section 4 "RAM"**: This lists random access memories.

**Section 5 "PROMS"**: This lists programmable read-only memories.

**Section 6 "FPLA"**: This lists field-programmable logic assemblies.

We would be pleased to hear that this "cmos 7400's tabulation" has become an indispensable tool in your data compilation. Within the framework of this comparative tabulation we cannot be held responsible for any deviations, however.

And, of course, errors excepted applies to such comprehensive data compilations as this.

## **alphanumeric list of contents**



Typ	s. Serien-Nr.	Typ	s. Serien-Nr.	Typ	s. Serien-Nr.	Typ	s. Serien-Nr.
AN 74...	74...	FJJ 151	7491	FLH 205S	7401-S1	FLH 391T	7409-S1
BU 74...	74...	FJJ 181	7475	FLH 201T	7401-S3	FLH 395T	7409-S1
CD 54...	74...	FJJ 191	7476	FLH 205T	7401-S3	FLH 401	74181
CD 74...	74...	FJJ 211	7493	FLH 211	7404	FLH 405	74181
D1...	74...	FJJ 241	7496	FLH 215	7404	FLH 411	74182
D2...	74...	FJJ 251	7492	FLH 221	7480	FLH 415	74182
DM 54...	74...	FJJ 261	74107	FLH 225	7480	FLH 421	74180
DM 74...	74...	FJK 101	74121	FLH 231	7482	FLH 425	74180
E 1...	74...	FJL 101	7441	FLH 235	7482	FLH 431	7485
FJH 101	7430	FJL 131	7413	FLH 271	7405	FLH 435	7485
FJH 111	7420	FJQ 111	7489	FLH 275	7405	FLH 441	7487
FJH 121	7410	FJY 101	7460	FLH 271S	7405-S1	FLH 445	7487
FJH 131	7400	FLH 101	7400	FLH 275S	7405-S3	FLH 451	74183
FJH 141	7440	FLH 105	7400	FLH 271T	7405-S3	FLH 455	74183
FJH 151	7450	FLH 111	7410	FLH 275T	7405-S3	FLH 481	7406
FJH 161	7451	FLH 115	7410	FLH 281	7442	FLH 485	7406
FJH 171	7453	FLH 121	7420	FLH 285	7442	FLH 481T	7416
FJH 181	7454	FLH 125	7420	FLH 291	7403	FLH 485T	7416
FJH 191	7480	FLH 131	7430	FLH 295	7403	FLH 491	7407
FJH 201	7482	FLH 135	7430	FLH 291S	7403-S1	FLH 495	7407
FJH 211	7483	FLH 141	7440	FLH 295S	7403-S1	FLH 491T	7417
FJH 221	7402	FLH 145	7440	FLH 291T	7403-S3	FLH 495T	7417
FJH 231	7401-S3	FLH 151	7450	FLH 295T	7403-S3	FLH 501	7412
FJH 241	7404	FLH 155	7450	FLH 291U	7426	FLH 505	7412
FJH 251	7405-S3	FLH 161	7451	FLH 295U	7426	FLH 511	7423
FJH 261	7442	FLH 165	7451	FLH 341	7486	FLH 515	7423
FJH 271	7486	FLH 171	7453	FLH 345	7486	FLH 521	7425
FJH 281	74180	FLH 175	7453	FLH 351	7413	FLH 525	7425
FJH 291	7403-S3	FLH 181	7454	FLH 355	7413	FLH 531	7437
FJH 301	7403-S1	FLH 185	7454	FLH 361	7443	FLH 535	7437
FJH 311	7401-S1	FLH 191	7402	FLH 365	7443	FLH 541	7438
FJH 321	7405-S1	FLH 195	7402	FLH 371	7444	FLH 545	7438
FJJ 101	7470	FLH 191S	7402-S1	FLH 375	7444	FLH 551	7448
FJJ 111	7472	FLH 195S	7402-S1	FLH 381	7408	FLH 555	7448
FJJ 121	7473	FLH 201	7401	FLH 385	7408	FLH 561	74184
FJJ 131	7474	FLH 205	7401	FLH 391	7409	FLH 565	74184
FJJ 141	7490	FLH 201S	7401-S1	FLH 395	7409	FLH 571	74185

Typ	s. Serien-Nr.	Typ	s. Serien-Nr.	Typ	s. Serien-Nr.	Typ	s. Serien-Nr.
FLH 575	74185	FLJ 231	7494	FLJ 421	74162	FLL 171	74143
FLH 601	74132	FLJ 235	7494	FLJ 425	74162	FLL 175	74143
FLH 605	74132	FLJ 241	74192	FLJ 431	74163	FLL 171T	74144
FLH 611	7422	FLJ 245	74192	FLJ 435	74163	FLL 175T	74144
FLH 615	7422	FLJ 251	74193	FLJ 441	74164	FLQ 101	7489
FLH 621	7427	FLJ 255	74193	FLJ 445	74164	FLQ 105	7489
FLH 625	7427	FLJ 261	7496	FLJ 451	74165	FLQ 111	7481
FLH 631	7432	FLJ 265	7496	FLJ 455	74165	FLQ 115	7481
FLH 635	7432	FLJ 271	74107	FLJ 461	74166	FLQ 121	7484
FLH 661	7428	FLJ 275	74107	FLJ 465	74166	FLQ 125	7484
FLH 665	7428	FLJ 281	74104	FLJ 471	74167	FLQ 131	74170
FLJ 101	7470	FLJ 285	74104	FLJ 521	74115	FLQ 135	74170
FLJ 105	7470	FLJ 291	74105	FLJ 525	74115	FLQ 141	74200
FLJ 111	7472	FLJ 295	74105	FLJ 531	74174	FLY 101	7460
FLJ 115	7472	FLJ 301	74100	FLJ 535	74174	FLY 105	7460
FLJ 121	7473	FLJ 305	74100	FLJ 541	74175	FLY 111	74150
FLJ 125	7473	FLJ 311	74198	FLJ 545	74175	FLY 115	74150
FLJ 131	7476	FLJ 315	74198	FLJ 551	74194	FLY 121	74151
FLJ 135	7476	FLJ 321	74199	FLJ 555	74194	FLY 125	74151
FLJ 141	7474	FLJ 325	74199	FLJ 561	74195	FLY 131	74153
FLJ 145	7474	FLJ 331	7497	FLJ 565	74195	FLY 135	74153
FLJ 151	7475	FLJ 341	74110	FLK 101	74121	FLY 141	74154
FLJ 155	7475	FLJ 345	74110	FLK 105	74121	FLY 145	74154
FLJ 161	7490	FLJ 351	74111	FLK 111	74122	FLY 151	74155
FLJ 165	7490	FLJ 355	74111	FLK 115	74122	FLY 155	74155
FLJ 171	7492	FLJ 361	74118	FLK 121	74123	FLY 161	74156
FLJ 175	7492	FLJ 365	74118	FLK 125	74123	FLY 165	74156
FLJ 181	7493	FLJ 371	74119	FLL 101	74141	FLY 171	74157
FLJ 185	7493	FLJ 375	74119	FLL 111	7445	FLY 175	74157
FLJ 191	7495	FLJ 381	74196	FLL 115	7445	FLY 181	74120
FLJ 195	7495	FLJ 385	74196	FLL 111T	74145	FLY 185	74120
FLJ 201	74190	FLJ 391	74197	FLL 115T	74145	GFB 74...	74...
FLJ 205	74190	FLJ 395	74197	FLL 121U	7446	GJB 74...	74...
FLJ 211	74191	FLJ 401	74160	FLL 125U	7446	GTB 74...	74...
FLJ 215	74191	FLJ 405	74160	FLL 121V	7447	HD 74...	74...
FLJ 221	7491	FLJ 411	74161	FLL 125V	7447	IDT 74...	74...
FLJ 225	7491	FLJ 415	74161	FLL 151	74142	ITT 54...	74...



Typ	s. Serien-Nr.	Typ	s. Serien-Nr.	Typ	s. Serien-Nr.	Typ	s. Serien-Nr.
ITT 74...	74...	MC 74...	74...	ZN 74...	74...	1LB 553	7400
ITT 84...	74...	MCB 54...	74...	μPB 2S...	74...	1LB 554	7410
JRC 74...	74...	MIC 54...	74...	μPB 201	7400	1LB 556	7440
LC 74...	74...	MIC 64...	74...	μPB 202	7410	1LB 558	7403
LR 74...	74...	MIC 74...	74...	μPB 203	7420	1LP 551	7460
M 5S...	74...	MH 74...	74...	μPB 204	7430	1LR 551	7450
M 532...	74...	MM 54...	74...	μPB 205	7440	1LR 553	7453
M 533...	741...	MM 74...	74...	μPB 206	7450	1TK 551	7472
M 74...	74...	MN 74...	74...	μPB 207	7451	1TK 552	7474
MB 400	7400	MSM 74...	74...	μPB 208	7453	1TR 551	7495
MB 402	7420	N 74...	74...	μPB 209	7454	54...	74...
MB 403	7430	NC 74...	74...	μPB 210	7460	74...	74...
MB 404	7440	PC 74...	74...	μPB 211	7470		
MB 405	7450	S 54...	74...	μPB 213	7413		
MB 407	7471	S 84...	74...	μPB 214	7474		
MB 408	7480	SFC 4...	74...	μPB 215	7401		
MB 410	74107	SFC 41...	741...	μPB 217	7475		
MB 411	7453	SN 54...	74...	μPB 219	7490		
MB 416	7401	SN 64...	74...	μPB 222	7492		
MB 417	7402	SN 74...	74...	μPB 223	7493		
MB 418	7404	SN 84...	74...	μPB 224	7476		
MB 420	7474	SW 54...	74...	μPB 225	7473		
MB 433	7438	SW 74...	74...	μPB 226	7495		
MB 435	7437	T 54...	74...	μPB 230	7483		
MB 440	74123	T 74...	74...	μPB 233	7411		
MB 442	7442	TD 34...	74...	μPB 234	7408		
MB 443	74145	TL 74...	74...	μPB 235	7404		
MB 447	74180	TL 84...	74...	μPB 236	7405		
MB 448	7485	TRW 74...	74...	μPB 237	7437		
MB 449	7486	U 31 54...	74...	μPB 238	7438		
MB 450	74160	U 31 74...	74...	μPB 20...	74...		
MB 451	74162	U 6A 54...	74...	μPB 21...	74...		
MB 456	74191	U 6A 74...	74...	1LB 311	7420		
MB 460	74170	U 7A 74...	74...	1LB 312	7430		
MB 461	7489	US 54...	74...	1LB 316	7440		
MB 74...	74...	US 74...	74...	1LB 551	7420		
MC 54...	74...	ZN 54...	74...	1LB 552	7430		

**explanations**  
**functional list of contents**

1-1

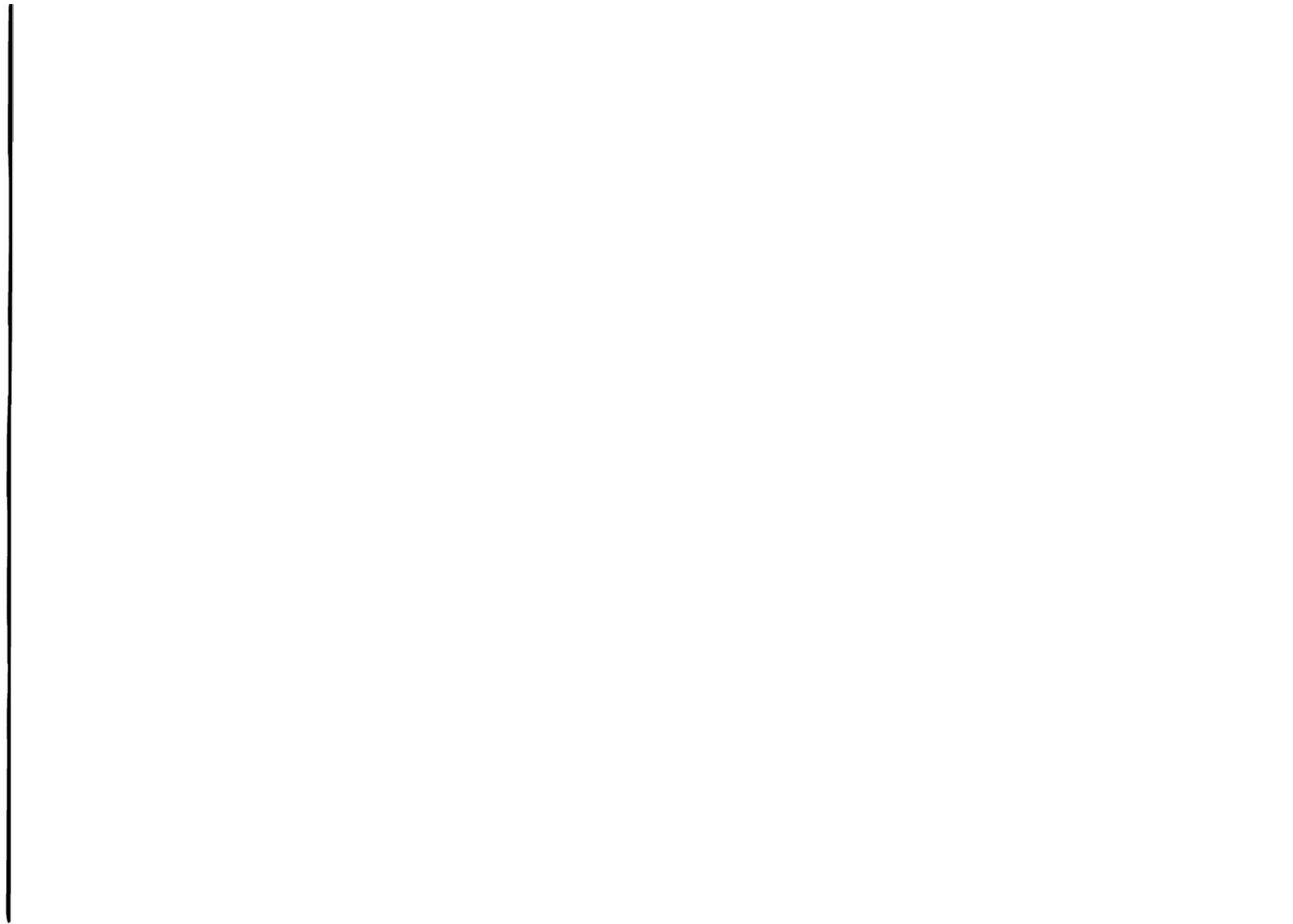
1-11

**section**

**1**

**abbreviations of manufacturers**

1-17



# GB Explanations

## I. Common absolute maximum ratings

			74AC	74ACT	74C	74HC	74HCT	74HCU	
Supply voltage	$V_{CC}$	min.	-0,5	-0,5	-0,3	-0,5	-0,5	-0,5	V
		max.	6	6	18	7	7	7	V
Recommended	$V_{CC}$	min.	1,5	4,5	3	2	4,5	2	V
		max.	5,5	5,5	15	6	5,5	6	V
Input voltage	$V_E$	min.	0	0	-0,3	-0,5	-0,5	-0,5	V
		max.	$V_{CC}$	$V_{CC}$	$V_{CC}+0,3$	$V_{CC}+0,5$	$V_{CC}+0,5$	$V_{CC}+0,5$	V
Input current	$I_E$	min.	-20	-20		-20	-20	-20	mA
		max.	20	20		20	20	20	mA
Output voltage	$V_Q$	min.	0	0	-0,3	-0,5	-0,5	-0,5	V
		max.	$V_{CC}$	$V_{CC}$	$V_{CC}+0,3$	$V_{CC}+0,5$	$V_{CC}+0,5$	$V_{CC}+0,5$	V

## II. Common electrical characteristics (at $V_{CC}=5V$ , $T_U=25^\circ C$ )

		74AC	74ACT	74C	74HC	74HCT	74HCU	
L input voltage	max.	1,5	0,8	1,5	1	0,8	1	V
H input voltage	min.	3,5	2	3,5	3,5	2	4	V
L output voltage	max.	0,1	0,1	0,5	0,1 <sup>1)</sup>	0,26 <sup>2)</sup>	0,1 <sup>1)</sup>	V
H output voltage	min.	4,9	4,9	4,5	4,4 <sup>1)</sup>	3,98 <sup>2)</sup>	4,4 <sup>1)</sup>	V
L noise margin		1,4	0,7	1	0,9 <sup>1)</sup>	0,4 <sup>2)</sup>	0,9 <sup>1)</sup>	V
H noise margin		1,4	2,9	1	1,4 <sup>1)</sup>	1,7 <sup>2)</sup>	1,4 <sup>1)</sup>	V
L input current ( $F_I=1$ )		-1	-1	-5n	-1	-1	-1	$\mu A$
H input current ( $F_I=1$ )		1	1	5n	1	1	1	$\mu A$
L output current		24	24	1,75	20 $\mu$ <sup>1)</sup>	4 <sup>2)</sup>	20 $\mu$ <sup>1)</sup>	mA
H output current		-24	-24	-1,75	-20 $\mu$ <sup>1)</sup>	-4 <sup>2)</sup>	-20 $\mu$ <sup>1)</sup>	mA
Fan out on L <sup>3)</sup>		2400	2400	*	* <sup>1)</sup>	10 <sup>2)</sup>	* <sup>1)</sup>	
Fan out on H <sup>3)</sup>		2400	2400	*	* <sup>1)</sup>	10 <sup>2)</sup>	* <sup>1)</sup>	

<sup>1)</sup> Wired to HC/HCU.

<sup>2)</sup> Wired to LS.

<sup>3)</sup> Unless stated otherwise in the data tables:  $F_I$  and  $F_Q$  relate only to circuits within a family, e.g. LS output to LS input.

\* Restricted only by desired transition time ( $t_R$ ) and load capacity:  $t_R=2.2 \cdot R_L \cdot C_L$

### III. Characteristics given in tables

Output Type	TP = totem pole, OC = open collector, TS = tri-state, X = expander, OD = open drain, MS = Multi-State (see pin assignments)
Manufacturer	See List of Manufacturers
Fig.	Case outline; see section 3 and last page: Pins - Art - Nr.
$I_S$	Average IC current consumption.
$I_R$	Quiescent current
$t_{PD}$	Propagation delay time from each stated input or pin number to the (→) corresponding outputs:
↓	for a change of the output signal from H to L,
↑	for a change of output signal from L to H, or
↓	arithmetic mean of both values.
$f_T$	max. clock frequency, typical or minimal value.
$f_Z$	max. count frequency, typical or minimal value.
$f_E$	max. input frequency, typical or minimal value.

All delay times and frequency apply under the following conditions unless stated otherwise:

		74AC	74ACT	74C	74HC	74HCT	74HCU	
Load resistance	$R_L$			$\infty$	1k	1k	1k	$\Omega$
Load capacity	$C_L$	50	50	50	50	50	50	pF
Supply voltage	$V_{CC}$	*5	*5	5	*4,5	*4,5	*4,5	V
Temperatur	$T_U$	*25	*25	25	*25	*25	*25	°C

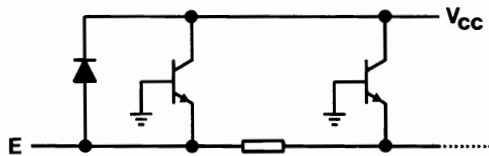
\*25: Typical values at 25°C, maximum values and frequencies for full  $T_U$  range.

\*4,5: Frequencies and quiescent current at 6V.

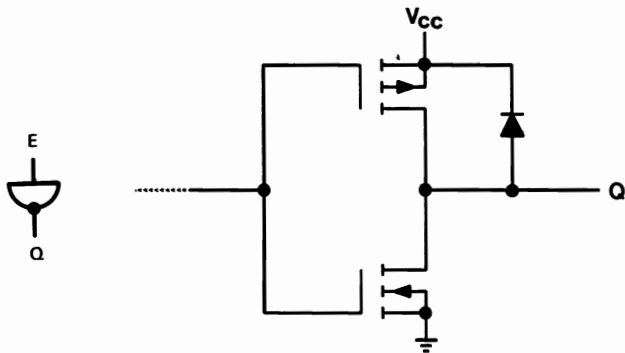
\*5: Typical values at 5V, maximum values at 5.5V.

#### IV. Input and output configurations HCMOS

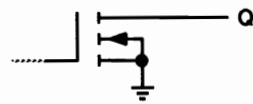
##### 1. Inputs



##### 2.1. Totem-pole outputs (TP)

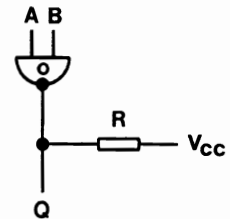


##### 2.2. Open collector outputs (OC) or open drain (OD)

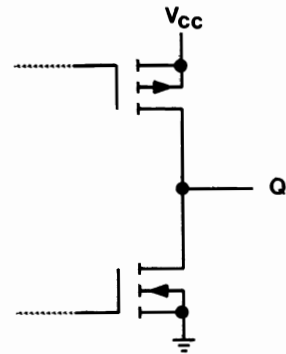


$$V_Q < V_{CC}$$

$$R \geq 390\Omega$$

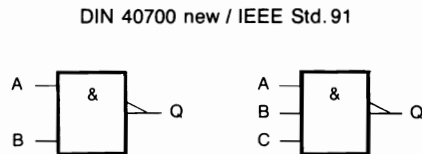
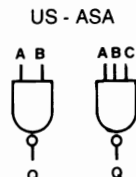
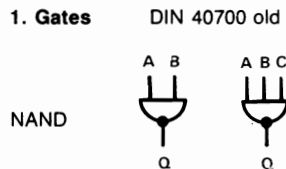


##### 2.3. Tri-state outputs



## V. Explanations to the function groups

### 1. Gates

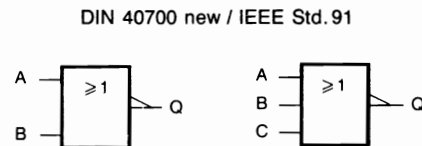
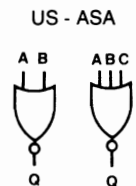
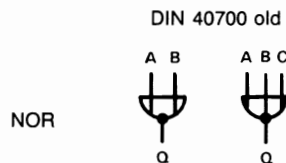


NAND

Logic table:

A	B	C	Q
H	H	H	L
L	X	X	H
X	L	X	H
X	X	L	H

Logical function (Boolean equation):  $Q = \overline{A \cdot B \cdot C}$

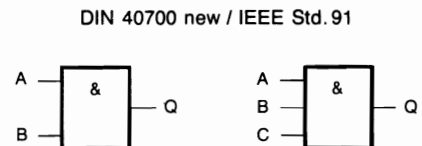
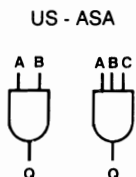
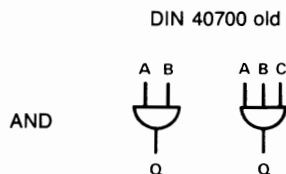


NOR

Logic table:

A	B	C	Q
L	L	L	H
H	X	X	L
X	H	X	L
X	X	H	L

Logical function (Boolean equation):  $Q = \overline{A + B + C}$



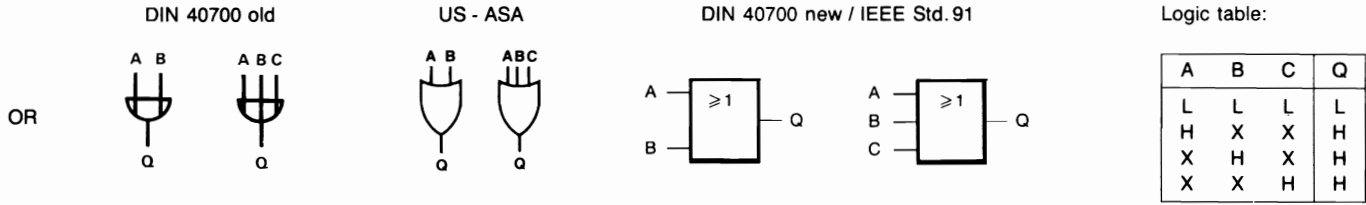
AND

Logic table:

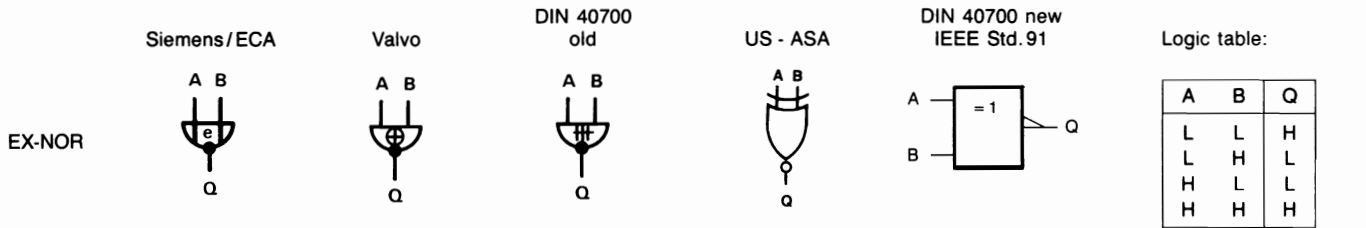
A	B	C	Q
H	H	H	H
L	X	X	L
X	L	X	L
X	X	L	L

Logical function (Boolean equation):  $Q = A \cdot B \cdot C$

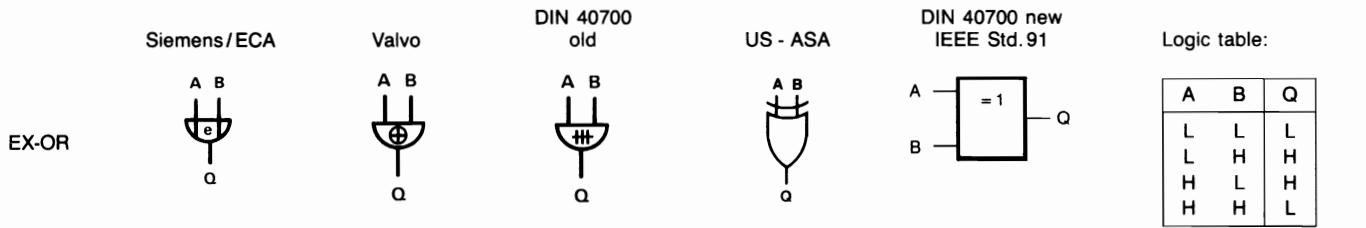
\* where provided, L = 0 = Low level, H = 1 = High level, X = L or H



Logical function (Boolean equation):  $Q = A + B + C^*$



Logical function (Boolean equation):  $Q = \overline{(A \cdot B)} + \overline{(A \cdot \overline{B})}$  resp.  $Q = A \oplus B$



Logical function (Boolean equation):  $Q = \overline{(A \cdot B)} + (A \cdot \overline{B})$  resp.  $Q = A \oplus B$

\* where provided, L = 0 = Low level, H = 1 = High level, X = L or H



DIN 40700 old



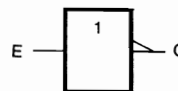
INVERTER

Logical function (Boolean equation):  $Q = \bar{E}$

US - ASA



DIN 40700 new



Logic table:

E	Q
L	H
H	L

DIN 40700 old



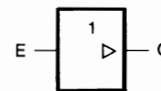
DRIVER/BUFFER

Logical function (Boolean equation):  $Q = E$

US - ASA



DIN 40700 new



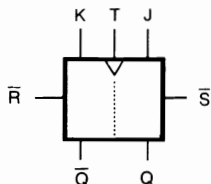
Logic table:

E	Q
L	L
H	H

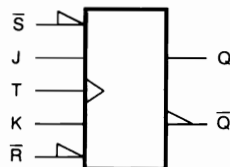
## 2. Flipflops

### 2.1. JK-flipflops (edge triggered)

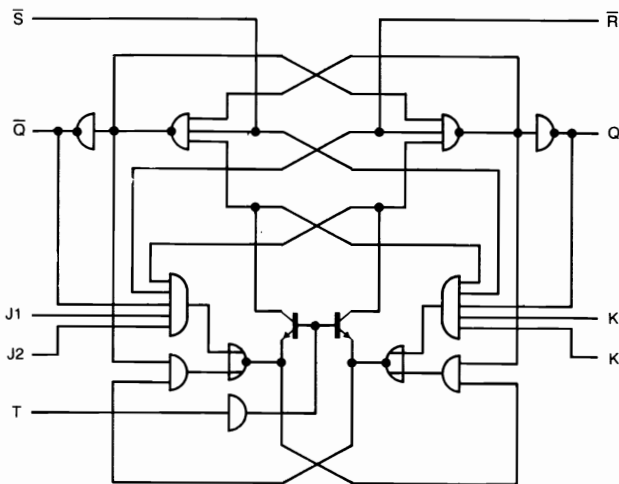
DIN 40700 old



DIN 40700 new/IEEE Std. 91

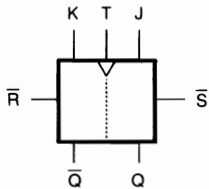


The data applied at Pins J and K is transferred to the output when the clock signal changes from L to H (positive edge triggered) or from H to L (negative edge triggered). R and S work independent from clock signal (asynchronous). For logic tables of the various types, see section 2.

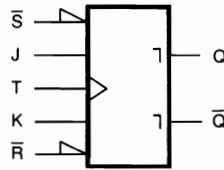


## 2.2. JK master-slave flipflops

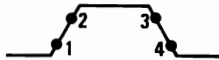
DIN 40700 old



DIN 40700 new / IEEE Std. 91



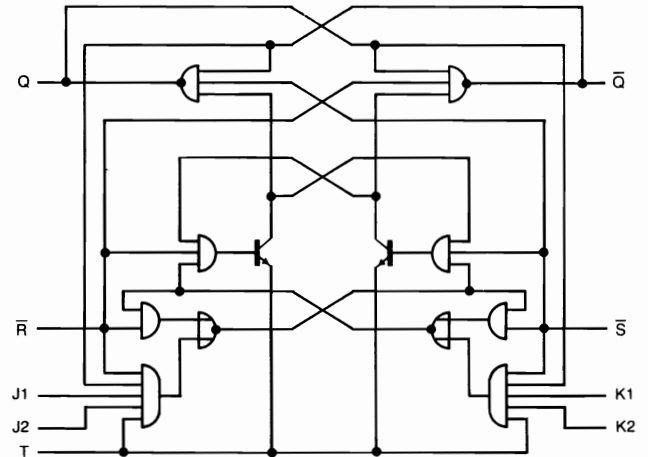
Clock pulse:



- 1 = separate slave from master
- 2 = enter J and K input signals in master
- 3 = reverse J and K inputs
- 4 = transfer data from master to slave

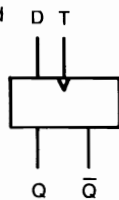
R and S also operate in these arrangements independent of the clock.  
See section 2 for logic tables.

Two-stage configuration makes for response uncritical with time on a change of the JK input signals during the clock pulse.  
1<sup>st</sup> stage = master, 2<sup>nd</sup> stage = slave



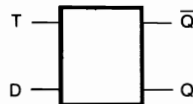
## 2.3. D-type flipflops / D-latches

DIN 40700 old

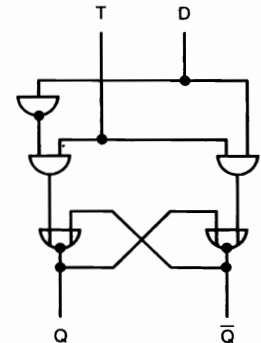
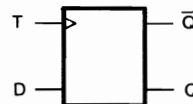


DIN 40700 new / IEEE Std. 91

latch



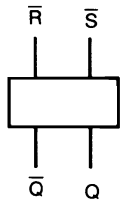
flipflop



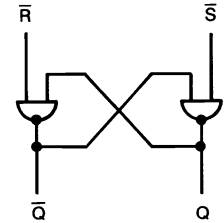
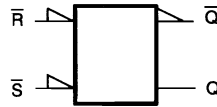
Data input D is transferred to Q whenever the clock pulse changes ( $\downarrow$  or  $\uparrow$ ) or as long as it is applied (H or L) – see corresponding logic table for case in question.

## 2.4. RS flipflops

DIN 40700 old



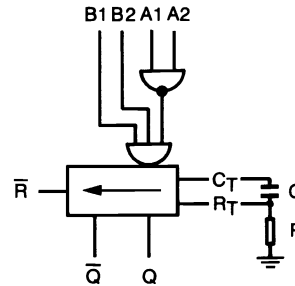
DIN 40700 new / IEEE Std. 91



Bistable flipflops triggered by L pulses applied to R or S.

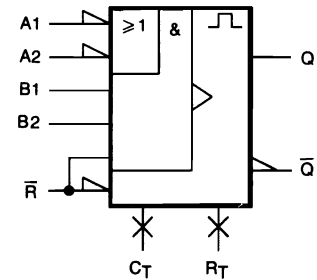
## 2.5. Monoflops

DIN 40700 old



The change from H to L at A or from L to H at B produces a positive pulse at Q and a negative pulse at  $\bar{Q}$ . The length of this pulse is determined by the external values of C and R.  $\bar{R}$  returns the flipflop to the stable state irrespective of the state of the inputs A and B. Arrow indicates output carrying a H potential in the stable state.

DIN 40700 new / IEEE Std. 91





## VI. Abbreviations used in the connection drawings

A, B, C...	Inputs on counters, shift registers, decoders etc.	J, J1, J2...	J inputs on flipflops
AB	A... B... Enable	JK	JK inputs on flipflops
a, b, c...	Outputs of 7-segment decoders	K, K1, K2...	K inputs on flipflops
A0, A1...	Address inputs (from memories or data bus A)	LDCK	Load clock
BA	Mode select input	LT	Lamp test input on 7-segment decoders
BER	Range control input on oscillators	M0, M1...	Multiplier inputs
BI	Digit blanking input	MEM	Memory
C	Check input, general	MR	Master Reset
C <sub>E</sub>	Carry input	OE	Output enable
C <sub>ext</sub>	Connection for external capacitor	OERB	Output Enable Read Back
C <sub>n</sub> , C <sub>n+1</sub>	Carry input/output, according to arrow	odd	Odd number preselect input
C <sub>Q</sub>	Carry output	Osc.U <sub>S</sub>	Supply voltage for oscillator only
CASC	Cascade input/output	OV	Overflow
CLK	Clock	PE	Parallel Enable
CLR	Clear	Q	Output, general
CLKEN	Clock enable	Q <sub>even</sub>	Parity output, even
CS	Chip select	Q <sub>odd</sub>	Parity output, odd
D	Data input/output, general	Q0, Q1...	Data outputs on decimal decoders
DIR	Direction	QA, QB...	Data outputs, QA = least significant bit (LSB)
D0, D1...	Data inputs, D0 = least significant bit (LSB)	R	Reset input, general
dp	Decimal point output of 7 segment decoders	R0	Input set to 0
E	Input, general	R9	Input set to 9
EE	Expansion input	R <sub>ext</sub>	Connection for external resistance
EMPTY	FIFO empty	R <sub>int</sub>	Connection of internal resistance
EN	Enable	RBI	Ripple blanking input
even	Even number preselect input	RBQ	Ripple blanking output
F0, F1...	Bidirection data pins/outputs, F0 = LSB	RC <sub>ext</sub>	Connection for external resistance and capacitance
FE	Enable input	RD	Read enable input
FEp	Enable input, parallel	R/W	Read/write
FES	enable input, serial	S	Set input, general
FQ	Enable output	S...	Select...
FULL	FIFO full	SE	Serial input on shift registers
G...	Enable...	SEL	Serial input for shift left
GAB	Enable A to B data flow	SEr	Serial input for shift right
GBA	Enable B to A data flow	SER	Serial
GND	Ground	SEL	Selection input
		SI	Shift in
		SO	Shift out
		SQ	Serial output on shift registers

SQl	Serial output for shift left
SQr	Serial output for shift right
ST	Strobe input
S0, S1...	Mode select inputs
T	Clock input
TL	Clock input for shift left
TR	Clock input for shift right
Ü	Carry output
U/D	Up/down
UNCK	Unload clock
V	Positive supply voltage
V <sub>CC</sub>	Connection for supply voltage
V/R	Mode input count up/count down
W/R	Read/write enable input
WR	Write enable input
X, X̄	Inputs for expandable gates and expander outputs
X1, X2...	Address inputs matrix line
Y1, Y2...	Address inputs matrix column
Σ	Sum output
...	Pin is low active
④	Circled number indicates number of pins of associated chip

## VII. Special abbreviations in the logic tables

A, B...	Logic status at A, B...
A·B	A AND B (not A times B)
A + B	A OR B (not A plus B)
A→B	A to B data flow
H	Logic HIGH
L	Logic LOW
Q1n, Q2n...	Logic status of Q1, Q2... prior to clock pulse
shift →	Data in the corresponding column shifted right
shift ←	Data shifted left
t <sub>n</sub>	Time before clock pulse
t <sub>n+...</sub>	Time after ... clock pulses
X	Irrelevant logic level (L or H)
Z	Logic level is high impedance (Tri-State outputs only)
┌	Transition from L to H level
└	Transition from H to L level
	Positive pulse
	Negative pulse
Σ	Sum
?	Logic level depends on other conditions

Note that abbreviations found neither here nor in the pin drawings are too complex to permit explanation within the framework of this document.

Short description	Type	Pins	Out-put	A C	A C T	C	H C	H C T	H C U	Short description	Type	Pins	Out-put	A C	A C T	C	H C	H C T	H C U																						
<b>1. GATES</b>										<b>1.7. Inverters</b>																															
<b>1.1. NAND</b>										<b>1.8. Combination gates</b>																															
1x13 NAND		74133	16	TP			x			NAND/NOR + Inverters		747006	24	TP				x		NAND/NOR + Inverters		747008	24	TP				x													
1x8 NAND		7430	14	TP			x	x	x	6 Inverters		74366	16	TS				x	x	AND/NOR		7451	14	TP				x													
2x4 NAND		7420	14	TP	x	x	x	x	x	AND/OR		7458	14	TP				x		div. Gates + flip-flops		747074	24	TP				x													
3x3 NAND		7410	14	TP	x	x	x	x	x	div. Gates + flip-flops		747075	24	TP				x		div. Gates + flip-flops		747076	24	TP				x													
3x3 NAND		7412	14	TP				x																																	
4x2 NAND		7400	14	TP	x	x	x	x	x																																
4x2 NAND		7401	14	OC				x																																	
4x2 NAND		7403	14	OC				x	x																																
6x2 NAND		74804	20	TP				x																																	
<b>1.2. NOR</b>										<b>1.9. Schmitt Triggers</b>																															
3x3 NOR		7427	14	TP				x	x	2x4 NAND Schmitt triggers		7413	14	TP				x		4x2 NAND Schmitt triggers		74132	14	TP				x	x												
4x2 NOR		7402	14	TP	x	x	x	x	x	4x2 AND Schmitt triggers		747001	14	TP				x		4x2 NOR Schmitt triggers		747002	14	TP				x													
4x2 NOR		7436	14	TP				x		6 inverting Schmitt triggers		7414	14	TP	x	x	x	x	x																						
6x2 NOR drivers		74805	20	TP				x																																	
<b>1.3. AND</b>										<b>2. FLIP-FLOPS</b>																															
2x4 AND		7421	14	TP				x	x	<b>2.1. Edge-triggered</b>																															
3x3 AND		7411	14	TP	x			x	x	<b>2.1.1. With Preset, J and K</b>																															
4x2 AND		7408	14	TP	x	x	x	x	x	<b>2.1.2. With Clear, J and K</b>																															
4x2 AND		7409	14	OC				x		2 flip-flops		74113	14	TP				x		2 flip-flops		7473	14	TP				x	x	x											
4x2 AND drivers (15V)		74131	14	OC				x												2 flip-flops		74107	14	TP				x	x	x											
6x2 AND drivers		74808	20	TP				x																																	
<b>1.4. OR</b>																																									
4x2 OR		7432	14	TP	x	x	x	x	x																																
6x2 OR drivers		74832	20	TP				x																																	
<b>1.5. EX-NOR</b>																																									
4x2 EX-NOR		74266	14	OC				x																																	
4x2 EX-NOR		747266	14	TP				x	x																																
<b>1.6. EX-OR</b>																																									
4x2 EX-OR		7486	14	TP	x	x	x	x	x																																
4x2 EX-OR		74386	14	TP				x																																	

Short description	Type	Pins	Out-put	A	A	C	H	H	H	Short description	Type	Pins	Out-put	A	A	C	H	H	H
				C	C	T	C	C	T					C	C	T	C	C	T
<b>2.1.3. With Preset, Clear, J and K</b>										<b>2.5. D-type flip-flops</b>									
2 flip-flops		7476	16	TP			x	x	x	<b>2.5.1. Non-inverting</b>									
2 flip-flops		7478	14	TP				x		4 flip-flops	74173	16	TS			x	x	x	
2 flip-flops		74109	16	TP	x	x		x	x	6 flip-flops	74174	16	TP	x	x	x	x	x	
2 flip-flops		74112	16	TP	x	x		x	x	6 flip-flops	74378	16	TP	x	x		x		
2 flip-flops		74114	14	TP				x		8 flip-flops	74273	20	TP	x	x		x	x	
<b>2.2. Pulse-triggered</b>										8 flip-flops	74374	20	TS	x	x	x	x	x	
<b>2.2.1. With Clear, J and K</b>										8 flip-flops	74377	20	TP	x	x		x	x	
2 flip-flops		7473	14	TP			x	x	x	8-bit bus interface	74574	20	TS	x	x		x	x	
2 flip-flops		74107	14	TP			x	x	x	8-bit bus interface	74825	24	TS	x	x				
<b>2.2.2. With Preset, Clear, J and K</b>										9-bit bus interface	74823	24	TS	x	x				
2 flip-flops		7476	16	TP			x	x	x	10-bit bus interface	74821	24	TS	x	x				
2 flip-flops		7478	14	TP				x		<b>2.5.2. Inverting</b>									
<b>2.3. RS-Latches</b>										8-bit bus interface	74534	20	TS	x	x		x	x	
4 latches		74279	16	TP				x		8-bit bus interface	74564	20	TS	x	x		x	x	
<b>2.4. D-type Latches</b>										8-bit bus interface	74576	20	TS				x	x	
<b>2.4.1. Non inverting</b>										8-bit bus interface	74826	24	TS	x	x				
4 latches		7477	14	TP				x		9-bit bus interface	74824	24	TS	x	x				
8 latches		74373	20	TS	x	x	x	x	x	10-bit bus interface	74822	24	TS	x	x				
8-bit bus interface		74573	20	TS	x	x		x	x	<b>2.5.3. Complementary outputs</b>									
8-bit bus interface		74845	24	TS	x	x				2 flip-flops	7474	14	TP	x	x	x	x	x	
9-bit bus interface		74843	24	TS	x	x				4 flip-flops	74175	16	TP	x	x	x	x	x	
10-bit bus interface		74841	24	TS	x	x				4 flip-flops	74379	16	TP	x	x		x		
<b>2.4.2. Inverting</b>										<b>2.6. Monostable multivibrators</b>									
8-bit		74580	20	TS				x	x	With Schmitt-Trigger inputs	74221	16	TP			x	x	x	
8-bit bus interface		74533	20	TS	x	x		x	x	2 retriggerable monostable multivibrators	74123	16	TP				x	x	
8-bit bus interface		74563	20	TS	x	x		x	x	2 retriggerable monostable multivibrators	74423	16	TP				x	x	
8-bit bus interface		74846	24	TS	x	x				<b>2.7. Other</b>									
9-bit bus interface		74844	24	TS	x	x				8-bit diagnostic register	74818	24	TP	x	x				
9-bit bus interface		74844	24	TS	x	x													
10-bit bus interface		74842	24	TS	x	x													
<b>2.4.3. Complementary outputs</b>																			
4 latches		7475	16	TP				x	x										
4 latches		74375	16	TP				x											

Short description	Type	Pins	Out-put	A C	A C T	C	H C	H C T	H C U	Short description	Type	Pins	Out-put	A C	A C T	C	H C	H C T	H C U
<b>3. COUNTERS</b>										<b>3.2.2. Count up/down</b>									
<b>3.1. Binary counters</b>										4-bit ..... 74168 16 TP x									
<b>3.1.1. Count up</b>										4-bit with preset ..... 74190 16 TP x									
2x4-bit ..... 74393 14 TP										4-bit with preset ..... 74192 16 TP x									
4-bit ..... 7493 14 TP										4-bit with preset ..... 74668 16 TP									
4-bit ..... 74293 14 TP										4-bit with preset and register ..... 74698 20 TP									
4-bit with preset ..... 74569 20 TS x										<b>4. SHIFT REGISTERS</b>									
4-bit with preset ..... 74161 16 TP x										<b>4.1. Serial</b>									
4-bit with preset ..... 74163 16 TP x										8-bit ..... 7491 14 TP									
4-bit with preset and register ..... 74691 20 TP										<b>4.2. Parallel inputs</b>									
4-bit with preset and register ..... 74693 20 TP										8-bit ..... 74165 16 TP									
8-bit ..... 74590 16 TS										8-bit ..... 74166 16 TP									
8-bit with preset ..... 74592 16 TP										8-bit with latch ..... 74589 16 TS									
8-bit with preset ..... 74593 20 TP										8-bit with latch ..... 74597 16 TP									
14-bit ..... 747060 20 TP x										16-bit ..... 74674 24 TP									
14-bit ..... 747061 20 TP x										<b>4.3. Parallel outputs</b>									
<b>3.1.2. Count up/down</b>										8-bit ..... 74164 14 TP									
4-bit ..... 74169 16 TP x										8-bit with latch ..... 74594 16 TP									
4-bit with preset ..... 74191 16 TP x										8-bit with latch ..... 74595 16 TS									
4-bit with preset ..... 74193 16 TP x										16-bit ..... 74673 24 TP									
4-bit with preset ..... 74669 16 TP										<b>4.4. Parallel inputs and outputs</b>									
4-bit with preset and register ..... 74697 20 TP										4-bit ..... 7495 14 TP									
4-bit with preset and register ..... 74699 20 TP										4-bit left/right shift ..... 74194 16 TP									
<b>3.2. Decimal counters</b>										4-bit universal ..... 74195 16 TP									
<b>3.2.1. Count up</b>										8-bit left/right ..... 74299 20 TS									
2x4-bit ..... 74390 16 TP										8-bit universal ..... 74323 20 TS									
2x4-bit ..... 74490 16 TP										<b>5. MULTIPLEXERS</b>									
4-bit ..... 7490 14 TP										8 to 1 ..... 74151 16 TP									
4-bit with preset ..... 74160 16 TP x										8 to 1 ..... 74152 14 TP									
4-bit with preset ..... 74162 16 TP x										8 to 1 ..... 74251 16 TS									
4-bit with preset ..... 74568 20 TS x																			
4-bit with preset and register ..... 74690 20 TP																			
4-bit with preset and register ..... 74692 20 TP																			
4-bit with preset and register ..... 74696 20 TP																			



Short description	Type	Pins	Out-put	A	A	C	H	H	H	Short description	Type	Pins	Out-put	A	A	C	H	H	H
				C	C	T	C	C	T					C	C	T	C	C	T
8 to 1	74354	20	TS				x	x		<b>7.3. Parity checkers</b>									
8 to 1	74356	20	TS				x	x		9-bit	74180	14	TP				x		
16 to 1	74150	24	TP			x				9-bit	74280	14	TP	x	x		x	x	
2x4 to 1	74153	16	TP	x	x		x	x		<b>7.4. ALU (Arithmetic/logic units)</b>									
2x4 to 1	74253	16	TS	x	x		x	x		4-bit	74181	24	TP				x	x	
2x4 to 1	74352	16	TP	x	x		x			4-bit	74381	20	TP				x		
2x4 to 1	74353	16	OC	x	x		x			<b>7.5. Comparators</b>									
4x2 to 1	74157	16	TP	x	x	x	x	x		4-bit	7485	16	TP			x	x	x	
4x2 to 1	74158	16	TP	x	x		x	x		8-bit	74520	20	TP	x	x				
4x2 to 1	74257	16	TS	x	x	x	x	x		8-bit	74521	20	TP	x	x		x	x	
4x2 to 1	74258	16	TS	x	x		x	x		8-bit	74684	20	TP				x		
4x2 to 1	74398	20	TP	x	x					8-bit	74688	20	TP				x	x	
4x2 to 1	74399	16	TP			x				8-bit with pull-up resistors	74682	20	TP				x		
4x2 to 1 with register	74298	16	TP					x		12-bit address comparator	74679	20	TP				x		
8x2 to 1 with latch	74604	28	TS				x			12-bit address comparator with latch	74680	20	TP				x		
										16-bit address comparator	74677	24	TP				x		
										16-bit address comparator with latch	74678	24	TP				x		
<b>6. DEMULTIPLEXERS</b>										<b>7.6. Other</b>									
3 to 8	74131	14	OC				x			Carry generator for counter	74182	16	TP				x	x	
3 to 8	74238	16	TP	x	x		x	x		<b>8. CODE CONVERTERS</b>									
3 to 8 with latch	74137	16	TP				x	x		<b>8.1. BCD-to-decimal</b>									
4 to 16	74154	24	TP			x	x	x		4-bit	7442	16	TP			x	x	x	
2x2 to 4	74155	16	TP				x	x		4-bit (15V)	74145	16	OC				x		
2x2 to 4	74156	16	OC				x			<b>8.2. BCD-to-7-segment</b>									
2x2 to 4	74239	16	TP				x			4-bit negativ logic	7448	16	OC			x			
<b>7. ARITHMETIC OPERATORS</b>										<b>8.3. Binary-to-decimal</b>									
<b>7.1. Adders</b>										2x2-bit	74139	16	TP	x	x		x	x	
2x1-bit	74183	14	TP				x			3-bit	74138	16	TP	x	x		x	x	
4-bit	7483	16	TP			x	x			3-bit	74237	16	TP				x	x	
4-bit	74283	16	TP	x	x		x	x		3 to 8	74131	14	OC				x		
4-bit BCD	74583	16	TP				x	x		3 to 8 with latch	74137	16	TP				x	x	
<b>7.2. Multipliers</b>										4 to 16	74154	24	TP			x	x	x	
8-bit by 1-bit 2's complement	74384	16	TP				x	x		2x2 to 4	74155	16	TP				x	x	
										2x2 to 4	74156	16	OC				x		

Short description	Type	Pins	Out-put	A	A	C	H	H	H	Short description	Type	Pins	Out-put	A	A	C	H	H	H		
				C	C	T	C	C	T					C	C	T	C	C	T		
<b>8.4. Priority encoders</b>																					
8 channel .....	74149	20	TP				x	x		4 + 2-bit .....	74367	16	TS					x	x		
8 to 3 bit .....	74148	16	TP				x			4 + 2-bit .....	74368	16	TS					x	x		
9 to 4 bit .....	74147	16	TP				x	x		4-bit .....	74125	14	TS	x	x			x	x		
<b>9. MEMORIES</b>																					
<b>9.1. RAM</b>																					
4x4-bit .....	74670	16	TS				x	x		4-bit bi-directional .....	74243	14	TS					x	x		
16x4-bit .....	7489	16	OC			x				4-bit tri-directional .....	74442	20	TS					x			
256x1-bit .....	74200	16	TS			x				6-bit .....	7407	14	OC					x	x		
<b>9.2. FIFO (first-in first-out memory)</b>																					
64x9-bit .....	74708	28	TS	x	x					6-bit .....	7434	14	TP						x		
64x9-bit .....	74723	28	TS	x	x					6-bit .....	74365	16	TS						x	x	
64x9-bit .....	747030	28	TS				x	x		8-bit .....	74541	20	TS	x	x			x	x		
512x9-bit .....	74725	28	TP	x	x					8-bit bi-directional .....	74245	20	TS	x	x			x	x		
<b>9.3. Other</b>																					
8-bit latch .....	74259	16	TP				x	x		8-bit bi-directional .....	74623	20	TS	x	x			x	x		
<b>10. DIVIDERS</b>																					
1:12 .....	7492	14	TP				x			8-bit bi-directional with OC/TS-output .....	747623	20	SS	x	x						
16-bit programmable .....	74294	16	TP				x			8-bit bi-directional with latch .....	74543	24	TS					x	x		
30-bit programmable .....	74292	16	TP				x			8-bit bi-directional with latch .....	74550	28	TS					x	x		
<b>11. DRIVERS</b>																					
<b>11.1. Non-inverting</b>																					
2x4-bit .....	74241	20	TS	x	x		x	x		8-bit bi-directional with latch .....	74646	24	TS	x	x			x	x		
2x4-bit .....	74244	20	TS	x	x	x	x	x		8-bit bi-directional with latch .....	74652	24	TS	x	x			x	x		
										<b>11.2. Inverting</b>											
										2x4-bit .....	74240	20	TS	x	x	x	x	x	x		
										4-bit bi-directional .....	74242	14	TS	x				x	x		
										4-bit tri-directional .....	74443	20	TS					x			
										6-bit .....	7406	14	OC					x			
										6-bit .....	74366	16	TS					x	x		
										8-bit .....	74540	20	TS	x	x			x	x		
										8-bit with latch .....	747651	24	TS	x	x						
										8-bit bi-directional .....	74620	20	TS					x	x		
										8-bit bi-directional .....	74640	20	TS	x	x			x	x		
										8-bit bi-directional with latch .....	74544	24	TS					x	x		
										8-bit bi-directional with latch .....	74551	28	TS					x	x		
										8-bit bi-directional with latch .....	74648	24	TS	x	x			x	x		
										8-bit bi-directional with latch .....	74649	24	OC	x	x						
										8-bit bi-directional with latch .....	74651	24	TS	x	x			x	x		
										8-bit bi-directional with latch .....	74653	24	SS	x	x						

Short description	Type	Pins	Output	A C	A C T	C	H C	H C T	H C U	Short description	Type	Pins	Output	A C	A C T	C	H C	H C T	H C U
<b>11.3. Inverting and non-inverting</b>																			
4-bit tri-directional .....	74444	20	TS				x												
8-bit bi-directional .....	74643	20	TS	x	x		x	x											
<b>12. MICROCOMPONENTS</b>																			
IEEE-488 bus interface .....	74488	48	TP		x														
<b>13. OTHER</b>																			
Digital PLL filter .....	74297	16	TP	x	x		x	x											



- Aeg** **AEG-Telefunken** (Fachbereich Halbleiter)  
Postfach 1109, 7100 Heilbronn, BRD
- Amd** **Advanced Micro Devices Inc.**  
901 Thompson Place, Sunnyvale, A 94086, USA  
BRD: Herzog-Heinrich-Straße 3, 8000 München 2
- Fch** **Fairchild Camera and Instrument Corp.**  
464 Ellis Street, Mountain View, California 94042  
BRD: Fairchild Camera and Instrument GmbH  
3000 Hannover, Königsworther Str. 23  
6202 Wiesbaden-Bierbrich, Hagenauer Str. 38  
7250 Leonberg, Poststr. 37  
8046 Garching, Daimlerstr. 15  
8500 Nürnberg, Waldluststr. 1
- Fer** **Ferranti Electronics, Ltd.**  
Fields New Road, Chadderton, Oldham OL9 8NP, England  
BRD: Ferranti GmbH, Widenmayerstraße 5, 8000 München 22
- Fui** **Fujitsu Ltd.** (Components Group)  
1015 Kamikodanaka, Nakahara-Ku, Kawasaki 211, Japan  
BRD: Comtec GmbH, Widenmayerstraße 1, 8000 München 22
- Hfo** **VEB Halbleiterwerk Frankfurt (Oder)**  
Markendorf, 1201 Frankfurt (Oder)  
Export: Heim-Electric, Alexanderplatz 6, 1026 Berlin
- Hit** **Hitachi, Ltd.** (Electronic Devices Group)  
1450 Josuihonmachi, Kodaire City, Tokyo, Japan  
BRD: Hitachi Ltd., Immermannstraße 15, 4000 Düsseldorf 1
- Int** **Intel Group**  
Intel Corp., 3065 Bowers Av., Santa Clara, CA 95051, USA  
Intel Semiconductor GmbH, Dornacher Straße 1,  
8016 Feldkirchen, BRD
- Itt** **ITT Semiconductors (Intermetall)**  
748 Commerce Way, Woburn, MA 01801, USA  
BRD: Intermetall GmbH, Hans-Bunte-Straße 19, 7800 Freiburg
- Mat** **Matsuhita Electronics Corp.**  
Kotari Yakemachi 1, Nagaokakyo City, Kyoto, Japan
- Mit** **Mitsubishi Electric Corporation**  
Kita-Itami Works, 4-1 Mizuhara, Itami-Shi, Hyogo-Ken,  
Post Code 664, Japan
- Mot** **Motorola Semiconductor Products**  
5005 E.McDowell Rd., M370, Phoenix, Arizona 85008  
BRD: Motorola GmbH, Geschäftsbereich Halbleiter  
6204 Taunusstein-Neuhof 5, Heinrich-Hertz-Str. 1 (Zentrale)  
3012 Langenhagen, Hans-Böckler-Str. 30 (Verkaufsbüro)
- Mul** **Mullard, Ltd.**  
Torrington Place, London WC1E 7HD, England  
BRD: Valvo GmbH, Burchardstraße 19, 2000 Hamburg 1
- Nec** **Nippon Electric Co., Ltd. (NEC)**  
1753 Shimonumabe, Nakahara-ku, Kawasaki City, Japan  
BRD: NEC Electronics GmbH, Karlstr.123 - 127, 4 Düsseldorf
- Njr** **New Japan Radio Co. Ltd.**  
1-22-14 Toranomom, Minato-Ku, Tokyo 105, Japan
- Nsc** **National Semiconductor Corporation**  
2900 Semiconductor Drive, Santa Clara, CA 95051, USA  
BRD: National Semiconductor GmbH, Industriestraße 10,  
8080 Fürstfeldbruck
- Nuc** **Nucleonic Products Co., Inc.**  
6660 Variel Avenue, Canoga Park, CA 91303, USA
- Oki** **Oki Electric Industry Co. Ltd.**  
10-3 Shibarra 4-Chome, Minato-Ku, Tokyo 108, Japan  
BRD: Oki Electric Europe GmbH, Emanuel-Leutze-Straße 8,  
4000 Düsseldorf 11
- Phi** **Philips Gloeilampen-Fabrieken N.V.**  
Building BA, Eindhoven, Niederlande  
BRD: Valvo GmbH, Burchardstraße 19, 2000 Hamburg 1
- Ray** **Raytheon Semiconductor Co.**  
350 Ellis Street, Mountain View, CA 94042, USA  
BRD: Raytheon Halbleiter GmbH, Thalkirchner Straße 74,  
8000 München 2
- Rca** **RCA Corporation** (Solid State Division)  
Route 202, Somerville, NJ 08876, USA  
BRD: RCA GmbH, Schillerstraße 14, 2085 Quickborn
- Riz** **RIZ Radio Industrie Zagreb/Iskra Ljubljana**  
Trg revolucije 3, 61000 Ljubljana, Jugoslawia  
BRD: Alfred Neye, Schillerstraße 14, 2085 Quickborn
- Rtc** **R.T.C. La Radiotechnique-Compelec**  
130 Avenue Ledru-Rollin, 75540 Paris Cedex 11, France  
BRD: Valvo GmbH, Burchardstraße 19, 2000 Hamburg 1

- Say Sanyo Electric Co. Ltd.**  
2-Chome, Yushima, Bankyoko, Natsuma Bldg.,  
Tokyo 113, Japan
- Ses Sescosem (Thomson CSF)**  
23, Rue de Courcelles, 75362 Paris, France  
BRD: Thomson-CSF GmbH, Perchtinger Str.3, 8 München 70
- Sgs SGS-ATES Componenti Elettronici Spa**  
Via C. Olivetti 2, I-20041 Agrate Brianza  
BRD: SGS-ATES Deutschland Halbleiter Bauelemente GmbH  
8018 Grafing, Haidling 17 (Zentrale Deutschland)  
3012 Langenhagen, Hubertusstr. 7 (Verkaufsbüro)  
7000 Stuttgart 80, Kalifenweg 45 (Verkaufsbüro)  
8000 München 21, Landsberger Str. 289 (Verkaufsbüro)  
8500 Nürnberg 15, Parsifalstr. 10 (Verkaufsbüro)
- Sha Sharp Corporation Electronic Components Group**  
22-22 Nagaïke Cho, Abeno-Ku, Osaka 545, Japan
- Sie Siemens AG (Bereich Bauelemente)**  
Balanstraße 73, 8000 München 80, BRD  
Vertrieb Bauteile: Postfach 202109, 8000 München 2
- Sig Signetics Corporation**  
811 E. Arques Avenue, Sunnyvale, CA 94086, USA
- Spr Sprague Electric Co.**  
87 Marshall Street, North Adams, MA 01247, USA  
BRD: Sprague Elektronik GmbH, Friedberger Anlage 24,  
6000 Frankfurt 1
- Stw Stow Laboratories, Inc.**  
Kane Industrial Drive, Hudson, MA 01749, USA
- Su UdSSR**
- Tes Tesla**  
Roznov pod Rahdostem, CSSR
- Tix Texas Instruments, Inc.**  
P.O.Box 225012, Dallas, TX 75265, USA  
BRD: Texas Instruments Deutschland GmbH,  
Haggertystraße 1, 8050 Freising
- Tos Toshiba - Tokyo Shibaura Electric Co., Ltd.**  
72 Horikawa-cho, Saiwai-ku, Kawasaki-shi, Kanagawa-ken,  
Japan  
BRD: Toshiba Deutschl., Hammer Landstr.115, 4040 Neuss
- Toy Toyo Denki Seizo Electronics Industry Corp.**  
21, Sain-Misosaki-cho, P.O.-Box 103, Ukyo-Ku, Kyoto, Japan  
BRD: R-ohm Electronics, Mühlenstraße 70,  
4052 Korschenbroich
- Trw TRW Semiconductors, Inc.**  
14520 Aviation Boulevard, Lawndale, CA 90260, USA  
BRD: TRW GmbH, Konrad-Celtis-Str. 81, 8000 München 70
- Tun Tungsram**  
Vacuït 77, Budapest IV, Ungarn  
BRD: Tungsram GmbH, Hohenstaufenstr. 8, 6000 Frankfurt
- Val Valvo GmbH**  
Burchardstr. 19, 2000 Hamburg 1  
Zweigbüros BRD: Valvo GmbH  
6000 Frankfurt/Main, Theodor-Heuss-Allee 106  
7012 Fellbach, Höhenstr. 21  
8000 München 2, Ridlerstr. 37



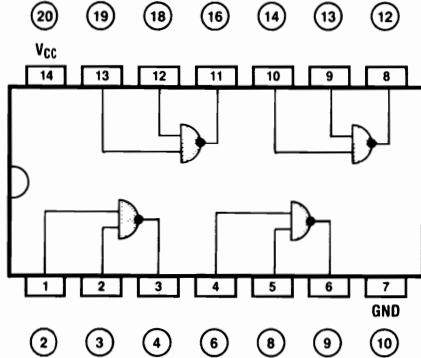






**7400**  
Output: TP

NAND gates



Logiktablelle siehe Section 1  
Function table see section 1  
Tableau logique voir section 1  
Per tavola di logica vedi sez. 1  
Tabla de verdad, ver sección 1

7400		Type			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E·Q n <sub>styp</sub>	I <sub>PD</sub> E·Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>	
		0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C							
		Pins- Art-Nr.	mA	↓ ↑ †							↓ ↑ †
AC	CD74AC00E	CD54ACT00H	Rca	chip	14-smd-1	&(4μ		10.8	13.2		
		CD54ACT00M	Rca	14-smd-1	&(4μ		10.8	13.2			
		74ACT00D	Fch,Nsc	14-dil-4	&(8μ	4	5.5	8	9.5		
		74ACT00F	Fch,Nsc	14-dil-4	&(4μ	4	5.5	8	9.5		
	74ACT00P	74ACT00L	Fch,Nsc	14-flat-1	&(8μ	4	5.5	8	9.5		
		74ACT00S	Fch,Nsc	20-chip-2	&(8μ	4	5.5	8	9.5		
		74ACT00T	Fch,Nsc	14-dil-1	&(4μ	4	5.5	8	9.5		
		74ACT00U	Fch,Nsc	14-smd-1	&(4μ	4	5.5	8	9.5		
	ACT	CD74AC00E	MM74C00J	Nsc	14-dil-4			50	50	90	90
			MM74C00N	Nsc	14-dil-1			50	50	90	90
MM54C00W			Nsc	14-flat-1			50	50	90	90	
CD74HC00E			Toy	14-dil	&(2μ				24	24	
74AC00D		CD54HC00F	Rca	14-dil-1	&(2μ	7	7	27	23		
		CD54HC00H	Rca	14-dil-4	&(2μ	7	7	27	27		
		CD74HC00M	Rca	chip	&(2μ	7	7	27	27		
		HD74AC00	Rca	14-smd-1	&(2μ	7	7	23	23		
SN74HC00D		74AC00D	HD74HC00	Hit	14-dil	&(2μ			24	24	
			JRC74HC00	Njr	14-dil	&(2μ			24	24	
	LC74HC00		Say	14-dil	&(2μ			24	24		
	LR74HC00		Sha	14-dil	&(2μ			24	24		
	74AC00F	MC54HC00J	Mot	14-dil-4	&(2μ		8	8	15	15	
		MC74HC00N	Mot	14-dil-1	&(2μ		8	8	15	15	
		MC74HC00AD	Mot	14-smd-1	&(2μ				22	22	
		MC54HC00AJ	Mot	14-dil-4	&(2μ				22	22	
	74AC00L	MC74HC00AN	Mot	14-dil-1	&(2μ				22	22	
		MM74HC00J	Nsc	14-dil-4	&(2μ				27	27	
MM74HC00N		Nsc	14-dil-1	&(2μ				27	27		
MN74HC00		Nat	14-dil-1	&(2μ				24	24		
74AC00S	MN74HC00S	Mat	14-smd-1	&(2μ				24	24		
	PC74HC00P	Phi,Val	14-dil-1	&(2μ		9	9	23	23		
	PC74HC00T	Phi,Val	14-smd-1	&(2μ		9	9	23	23		
	SN74HC00F	Tix	14-smd-1	&(2μ		9	9	27	27		
74AC00T	SN74HC00FH	Tix	20-chip-3	&(2μ		9	9	23	23		
	SN74HC00FK	Tix	20-chip-3	&(2μ		9	9	27	27		
	SN74HC00FN	Tix	20-chip-2	&(2μ		9	9	23	23		
	SN74HC00J	Tix	20-chip-1	&(2μ		9	9	27	27		
74AC00U	SN74HC00N	Tix	14-dil-4	&(2μ		9	9	23	23		
	SN74HC00P	Tix	14-dil-1	&(2μ		9	9	27	27		
	SN74HC00Q	Tos	14-dil	&(2μ				24	24		
	μPB74HC00	Nec	14-dil	&(2μ				24	24		

7400	Type		Production	Bild Sec. 3	$I_S$ & $I_R$	$t_{PD}$ E-Q $n_{styp}$	$t_{PD}$ E-Q $n_{smax}$	Note $f_T$ $f_{fz}$ & $f_E$	7401	NAND gates	
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	Pins- Art-Nr.
HCT	CD74HCT00E	CD54HCT00F CD54HCT00H	Pca Rca Rca chip	14-dil-1 14-dil-4 14-dil-4 14-dil-4	&(2μ &(2μ &(2μ &(2μ	8 8 8 8 8 8 8 8	25 25 30 30 30 30 25 25				
M74HCT00	CD74HCT00M		Pca Mit	14-smd-1 14-dil	&(2μ &(2μ	8 8 24 24					
μPB74HCT00		MC54HCT00J MC74HCT00N MM54HCT00J	Mot Mot Nsc	14-dil-4 14-dil-1 14-dil-4	&(2μ &(2μ		35 35 24 24				
		MM74HCT00J MM74HCT00N PC74HCT00P PC74HCT00T	Nsc Phi,Val Phi,Val Nec	14-dil-1 14-dil-1 14-smd-1 14-dil	&(2μ &(2μ &(2μ	12 12 12 12 24 24 24 24					
7401	Type		Production	Bild Sec. 3	$I_S$ & $I_R$	$t_{PD}$ E-Q $n_{styp}$	$t_{PD}$ E-Q $n_{smax}$	Note $f_T$ $f_{fz}$ & $f_E$		NAND gates	
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C								Pins- Art-Nr.	mA
HC HD74HC01 SN74HC01D			Hit Tix Tix Tix	14-dil 14-smd-1 20-chip-2 14-dil-4	&(2μ &(2μ &(2μ &(2μ	10 13 10 13 10 13 10 13	25 31 30 36 30 36 25 31				
SN74HC01N			SN54HC01FK SN54HC01J								



7402	Type		Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	I <sub>PD</sub> E-Q n <sub>styp</sub>	I <sub>PD</sub> E-Q n <sub>max</sub>	Note f <sub>T</sub> §f <sub>Z</sub> & f <sub>E</sub>	7402	Type			Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	I <sub>PD</sub> E-Q n <sub>styp</sub>	I <sub>PD</sub> E-Q n <sub>max</sub>	Note f <sub>T</sub> §f <sub>Z</sub> & f <sub>E</sub>	
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C	-40...85°C §-25...85°C							-55...125°C
	mA	↓ ↑ ↑								↓ ↓ ↑	mA	↓ ↑ ↑							↓ ↓ ↑
	CD74HCT02M PC74HCT02P PC74HCT02T		Rca Phi, Val Phi, Val	14-smd-1 14-dil-1 14-smd-1	8 (2μ &(2μ &(2μ	8 8 11 11 11 11	26 26 24 24 24 24												

7403 Output: OD	NAND gates			7403			Type	Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>S</sub> typ	t <sub>PD</sub> E-Q n <sub>S</sub> max	Note f <sub>T</sub> f <sub>TZ</sub> &E	
				0...70°C	-40...85°C	-55...125°C								
				0...75°C	§-25...85°C	§-25...85°C								
<p>Logiktablelle siehe Section 1 Function table see section 1 Tableau logique voir section 1 Per tavola di logica vedi sez. 1 Tabla de verdad, ver sección 1</p>				SN74HC03D	PC74HC03P PC74HC03T	SN54HC03FH SN54HC03FK	SN74HC03FN SN74HC03N	SN54HC03J	Phi, Val Phi, Val Tix Tix Tix Tix Tix Sgs Tos Nec	14-dil-1 14-smd-1 14-smd-1 20-chip-3 20-chip-2 14-dil-4 14-dil-1 14-dil 14-dil 14-dil	&(2μ &(2μ &(2μ &(2μ &(2μ &(2μ &(2μ &(2μ &(2μ &(2μ	10 10 10 10 10 13 10 13 10 13 10 13 10 13 10 13 10 13 10 13 10 13	24 24 24 24 25 31 30 36 30 36 25 31 30 36 25 31 32 32 32 32 32 32	
				T74HC03 TD74HC03 μPB74HC03										
				HCT BU74HCT03			CD74HCT03E		Toy Rca Rca Rca Phi, Val Phi, Val	14-dil 14-dil-1 14-dil-4 chip 14-smd-1 14-dil-1	&(2μ &(2μ &(2μ &(2μ &(2μ &(2μ	9 9 9 9 9 9 9 9 12 12 12 12	30 30 36 36 36 36 30 30 30 30 30 30	
							CD74HCT03M PC74HCT03P PC74HCT03T	CD54HCT03F CD54HCT03H						
7403	Type			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>S</sub> typ	t <sub>PD</sub> E-Q n <sub>S</sub> max	Note f <sub>T</sub> f <sub>TZ</sub> &E					
0...70°C	-40...85°C	-55...125°C												
0...75°C	§-25...85°C	§-25...85°C		Pins- Art-Nr.	mA	↓ ↓ ↑	↓ ↓ ↑	↓ ↓ ↑	MHz					
HC BU74HC03	CD74HC03E	CD54HC03F CD54HC03H	Toy Rca Rca Rca Rca	14-dil 14-dil-1 14-dil-4 chip 14-smd-1	&(2μ &(2μ &(2μ &(2μ &(2μ	8 8 8 8 8 8 8 8	32 32 25 25 30 30 30 30 25 25							
LC74HC03 LR74HC03 M74HC03	CD74HC03M		Say Sha Mit	14-dil 14-dil 14-dil	&(2μ &(2μ &(2μ	11 11 11 11 11 11	32 32 32 32 32 32							
		MC74HC03D MC54HC03J MC74HC03N MM54HC03J	Mot Mot Mot Nsc	14-smd-1 14-dil-4 14-dil-1 14-dil-4	&(4μ &(4μ &(4μ &(4μ	11 11 11 11 11 11 11 11	21 21 21 21 21 21 21 21							
		MM74HC03J MM74HC03N MN74HC03 MN74HC03S	Nsc Mat Mat	14-dil-1 14-dil-1 14-smd-1	&(4μ &(4μ &(2μ	11 11 11 11 11 11	21 21 21 21 32 32							
MSM74HC03			Oki	14-dil	&(2μ		32 32							

7404 Output: TP	Inverters						7404	Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q ns <sub>typ</sub> ↓ ↓ ↓ ↑	t <sub>PD</sub> E-Q ns <sub>max</sub> ↓ ↓ ↓ ↑	Note f <sub>T</sub> f <sub>Z</sub> &E MHz																																												
								0...70°C §0...75°C	-40...85°C §-25...85°C							-55...125°C																																											
								Type																																																			
<p>Logiktablelle siehe Section 1 Function table see section 1 Tableau logique voir section 1 Per tavola di logica vedi sez. 1 Tabla de verdad, ver sección 1</p>	<p>Logiktablelle siehe Section 1 Function table see section 1 Tableau logique voir section 1 Per tavola di logica vedi sez. 1 Tabla de verdad, ver sección 1</p>	C		<p>7404</p> <p>Type</p> <p>Production</p> <p>Bild Sec. 3 Pins- Art-Nr.</p> <p>I<sub>S</sub> &amp;I<sub>R</sub> mA</p> <p>t<sub>PD</sub> E-Q ns<sub>typ</sub> ↓ ↓ ↓ ↑</p> <p>t<sub>PD</sub> E-Q ns<sub>max</sub> ↓ ↓ ↓ ↑</p> <p>Note f<sub>T</sub> f<sub>Z</sub> &amp;E MHz</p>	0...70°C §0...75°C		-40...85°C §-25...85°C		-55...125°C		<p>CD54ACT04H CD54ACT04M</p> <p>Rca Rca Rca</p> <p>chip 14-sm-d-1 14-sm-d-1</p> <p>8.5 8.5</p> <p>9.3 9.3 9.3 9.3 8.5 8.5</p>	<p>MM54C04J MM74C04N MM54C04W</p> <p>Nsc Nsc Nsc</p> <p>14-dil-4 14-dil-1 14-flat-1</p> <p>50 50 50 50 90 90</p>	<p>MC74HC04D MC54HC04J MC74HC04N MC74HC04M</p> <p>Mot Mot Mot Mot</p> <p>14-sm-d-1 14-dil-4 14-dil-1 14-sm-d-1</p> <p>8.5 8.5 8.5 8.5 8.5 8.5 9 9</p>	<p>CD74ACT04M</p> <p>CD74HC04E</p> <p>CD74HC04M</p>	<p>CD54HC04F CD54HC04H</p> <p>Rca Rca Rca</p> <p>chip 14-sm-d-1</p> <p>8.5 8.5 8.5 8.5 6 6</p>	<p>MC74HC04D MC54HC04J MC74HC04N MC74HC04M</p> <p>Mot Mot Mot Mot</p> <p>14-sm-d-1 14-dil-4 14-dil-1 14-sm-d-1</p> <p>8.5 8.5 8.5 8.5 8.5 8.5 9 9</p>	<p>MM74HC04J MM74HC04N MM74HC04M MM74HC04S</p> <p>Nsc Nsc Mat Mat</p> <p>14-dil-1 14-dil-1 14-dil-1 14-sm-d-1</p> <p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>	<p>MSM74HC04</p> <p>SN74HC04D</p> <p>SN74HC04FH</p> <p>SN74HC04FN</p> <p>SN74HC04J SN74HC04N</p> <p>T74HC04 TD74HC04 µPB74HC04</p> <p>HCT</p>	<p>HD74HC04 JRC74HC04 LC74HC04 LR74HC04 M74HC04 MB74HC04</p> <p>Hit Njr Say Sha Mit Fui</p> <p>14-dil 14-dil 14-dil 14-dil</p> <p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>	<p>BU74HC04</p> <p>CD74HC04E</p> <p>CD74HC04M</p>	<p>MC74HC04D MC54HC04J MC74HC04N MC74HC04M</p> <p>Mot Mot Mot Mot</p> <p>14-sm-d-1 14-dil-4 14-dil-1 14-sm-d-1</p> <p>8.5 8.5 8.5 8.5 8.5 8.5 9 9</p>	<p>MC74HC04AD MC54HC04J MC74HC04AN</p> <p>Mot Mot Mot</p> <p>14-dil-4 14-dil-1 14-dil-1</p> <p>8.5 8.5 8.5 8.5 8.5 8.5</p>	<p>MM54HC04J</p> <p>Nsc</p> <p>14-dil-1</p> <p>8.5 8.5</p>	<p>Phi, Val Phi, Val</p> <p>14-dil-1 14-sm-d-1</p> <p>8.5 8.5 8.5 8.5</p>	<p>20-chip-3 20-chip-3 20-chip-2 20-chip-1</p> <p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>	<p>SN54HC04FH</p> <p>SN54HC04FK</p> <p>SN54HC04J</p>	<p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>	<p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>	<p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>	<p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>																													
		AC			CD74AC04E	CD54AC04E	Rca	14-dil-1	&(4μ	3.5 4																					6.5 6.5	<p>MSM74HC04</p> <p>SN74HC04D</p> <p>SN74HC04FH</p> <p>SN74HC04FN</p> <p>SN74HC04J SN74HC04N</p> <p>T74HC04 TD74HC04 µPB74HC04</p> <p>HCT</p>	0...70°C §0...75°C		-40...85°C §-25...85°C		-55...125°C		<p>CD74ACT04M</p> <p>CD74HC04E</p> <p>CD74HC04M</p>	<p>CD54HC04F CD54HC04H</p> <p>Rca Rca Rca</p> <p>chip 14-sm-d-1</p> <p>8.5 8.5 8.5 8.5 6 6</p>	<p>MC74HC04D MC54HC04J MC74HC04N MC74HC04M</p> <p>Mot Mot Mot Mot</p> <p>14-sm-d-1 14-dil-4 14-dil-1 14-sm-d-1</p> <p>8.5 8.5 8.5 8.5 8.5 8.5 9 9</p>	<p>MM74HC04J MM74HC04N MM74HC04M MM74HC04S</p> <p>Nsc Nsc Mat Mat</p> <p>14-dil-1 14-dil-1 14-dil-1 14-sm-d-1</p> <p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>	<p>Phi, Val Phi, Val</p> <p>14-dil-1 14-sm-d-1</p> <p>8.5 8.5 8.5 8.5</p>	<p>20-chip-3 20-chip-3 20-chip-2 20-chip-1</p> <p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>	<p>SN54HC04FH</p> <p>SN54HC04FK</p> <p>SN54HC04J</p>	<p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>	<p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>	<p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>											
		ACT			CD74ACT04E	CD54ACT04E	Rca	14-dil-1	&(4μ	3.5 4																					9.3 9.3		<p>MSM74HC04</p> <p>SN74HC04D</p> <p>SN74HC04FH</p> <p>SN74HC04FN</p> <p>SN74HC04J SN74HC04N</p> <p>T74HC04 TD74HC04 µPB74HC04</p> <p>HCT</p>	0...70°C §0...75°C		-40...85°C §-25...85°C		-55...125°C											<p>CD74ACT04M</p> <p>CD74HC04E</p> <p>CD74HC04M</p>	<p>CD54HC04F CD54HC04H</p> <p>Rca Rca Rca</p> <p>chip 14-sm-d-1</p> <p>8.5 8.5 8.5 8.5 6 6</p>	<p>MC74HC04D MC54HC04J MC74HC04N MC74HC04M</p> <p>Mot Mot Mot Mot</p> <p>14-sm-d-1 14-dil-4 14-dil-1 14-sm-d-1</p> <p>8.5 8.5 8.5 8.5 8.5 8.5 9 9</p>	<p>MM74HC04J MM74HC04N MM74HC04M MM74HC04S</p> <p>Nsc Nsc Mat Mat</p> <p>14-dil-1 14-dil-1 14-dil-1 14-sm-d-1</p> <p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>	<p>Phi, Val Phi, Val</p> <p>14-dil-1 14-sm-d-1</p> <p>8.5 8.5 8.5 8.5</p>	<p>20-chip-3 20-chip-3 20-chip-2 20-chip-1</p> <p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>	<p>SN54HC04FH</p> <p>SN54HC04FK</p> <p>SN54HC04J</p>	<p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>	<p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>	<p>8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5</p>	

7404		Type		Production	Bild Sec. 3	IS &IR	tpD E - Q ns <sub>typ</sub>	tpD E - Q ns <sub>max</sub>	Note f <sub>T</sub> f <sub>SZ</sub> &f <sub>E</sub>	7404		Type		Production	Bild Sec. 3	IS &IR	tpD E - Q ns <sub>typ</sub>	tpD E - Q ns <sub>max</sub>	Note f <sub>T</sub> f <sub>SZ</sub> &f <sub>E</sub>				
0...70°C \$0...75°C	-40...85°C \$-25...85°C	-55...125°C	0...70°C \$0...75°C							-40...85°C \$-25...85°C	-55...125°C	Pins- Art-Nr.	mA							↓ ↑ ↑	↓ ↑ ↑	Pins- Art-Nr.	mA
LR74HCT04 M74HCT04 MB74HCT04	CD74HCT04M	CD54HCT04H	Rca	chip	&(2μ	7	7	29	29														
			Rca	14-sm-d-1	&(2μ	7	7	24	24														
			Sha	14-dil	&(2μ			24	24														
			Mit	14-dil	&(2μ			24	24														
			Fui	14-dil	&(2μ			24	24														
		MSM74HCT04	MM74HCT04J MM74HCT04N MN74HCT04 MN74HCT04S	MCS54HCT04J	Mot	14-dil-4																	
					Mot	14-dil-1																	
					Mot	14-sm-d-1	&1μ			26	22												
					Mot	14-dil-4	&1μ			26	22												
					Mot	14-dil-1	&1μ			26	22												
SN74HCT04D	PC74HCT04P PC74HCT04T			MM54HCT04J	Nsc	14-dil-4	&(2μ	14	14	20	20												
					Nsc	14-dil-1	&(2μ	14	14	20	20												
					Mat	14-dil-1	&(2μ			24	24												
					Mat	14-sm-d-1	&(2μ			24	24												
					Ok	14-dil	&(2μ			24	24												
		SN74HCT04N T74HCT04 TD74HCT04 μPB74HCT04	SN54HCT04FK SN54HCT04J	SN54HCT04FK	Phi,Val	14-dil-1	&(2μ	10	10	24	24												
					Phi,Val	14-sm-d-1	&(2μ	10	10	24	24												
					Tix	14-sm-d-1	&(2μ	14	14	25	25												
					Tix	20-chip-2	&(2μ	14	14	30	30												
					Tix	14-dil-4	&(2μ	14	14	30	30												
HCU BU74HC04 JRC74HC04 LC74HC04 M74HC04 MB74HC04	MM74HCU04J MM74HCU04N MN74HCU04 MN74HCU04S			MC74HCU04AD	Tix	14-dil-1	&(2μ	14	14	25	25												
					Sgs	14-dil	&(2μ			24	24												
					Tos	14-dil	&(2μ			24	24												
					Nec	14-dil	&(2μ			24	24												
					Toy	14-dil																	
		MSM74HC04	PC74HC04P PC74HC04T	MC54HCU04J	Njr	14-dil																	
					Say	14-dil																	
					Mit	14-dil																	
					Fui	14-dil																	
					Mot	14-sm-d-1	&(2μ	8	8	14	14												
SN74HCU04D	MM74HCU04J MM74HCU04N MN74HCU04 MN74HCU04S			MMS54HCU04J	Mot	14-dil-4	&(2μ	8	8	14	14												
					Mot	14-dil-1	&(2μ	8	8	14	14												
					Nsc	14-dil-4	&(2μ	8.4	8.4	14	14												
					Nsc	14-dil-1	&(2μ	8.4	8.4	14	14												
					Mat	14-dil-1	&(2μ			14	14												
		SN74HCU04N T74HC04 TD74HC04 μPB74HC04	SN54HCU04FK SN54HCU04J	SN54HCU04FK	Mat	14-sm-d-1																	
					Ok	14-dil																	
					Val	14-dil-1	&(2μ	8	8	14	14												
					Val	14-sm-d-1	&(2μ	8	8	14	14												
					Tix	14-sm-d-1	&(2μ	8	8	20	20												



7405 Output: OD	Inverters						7405			Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E · Q n <sup>styp</sup>	t <sub>PD</sub> E · Q n <sup>max</sup>	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>
	0...70°C §0...75°C		- 40...85°C § - 25...85°C		- 55...125°C		Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz						
<p>Logiktablelle siehe Section 1 Function table see section 1 Tableau logique voir section 1 Per tavola di logica vedi sez. 1 Tabla de verdad, ver sección 1</p>							M74HC05 SN74HC05D	SN54HC05FH SN54HC05FK	Mit Tix Tix Tix Tix Nec	14-dil 14-smd-1 20-chip-3 20-chip-2 20-chip-1 14-dil-4 14-dil-1 14-dil	&(2μ &(2μ &(2μ &(2μ &(2μ &(2μ &(2μ	9 13 9 13 9 13 9 13 9 13 9 13 9 13	21 29 26 35 26 35 21 29 26 35 21 29				
							μPB74HC05	SN74HC05N	Nec								
							HCT M74HCT05	MM74HCT05J MM74HCT05N	Mit Nsc Nsc	14-dil 14-dil-4 14-dil-1	&(2μ &(2μ	10 12 10 12	22 20 22 20				

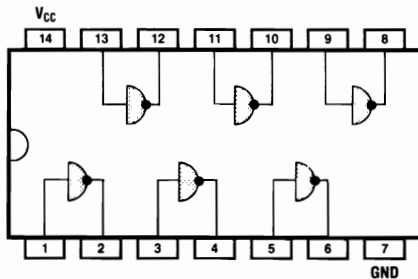
7405	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E · Q n <sup>styp</sup>	t <sub>PD</sub> E · Q n <sup>max</sup>	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>				
	0...70°C §0...75°C								- 40...85°C § - 25...85°C		- 55...125°C	
AC	CD74AC05E	CD54AC05E	Rca	14-dil-1	&(4μ	6.5 6.5	5.9 5.9					
		CD54AC05H	Rca	14-dil-1	&(4μ	6.5 6.5	6.5 6.5					
		CD54AC05M	Rca	chip	&(4μ	6.5 6.5	6.5 6.5					
	CD74AC05M		Rca	14-smd-1	&(4μ	6.5 6.5	5.9 5.9					
			Rca	14-smd-1	&(4μ	5.9 5.9	5.9 5.9					
ACT	CD74ACT05E	CD54ACT05E	Rca	14-dil-1	&(4μ	9.3 9.3	8.5 8.5					
		CD54ACT05H	Rca	14-dil-1	&(4μ	9.3 9.3	9.3 9.3					
		CD54ACT05M	Rca	chip	&(4μ	9.3 9.3	8.5 8.5					
	CD74ACT05M		Rca	14-smd-1	&(4μ	9.3 9.3	8.5 8.5					
			Rca	14-smd-1	&(4μ	8.5 8.5	8.5 8.5					
HC	JRC74HC05		Njr	14-dil								
	LC74HC05		Say	14-dil								

**7406**

Output: OD

**Inverters (30V)**

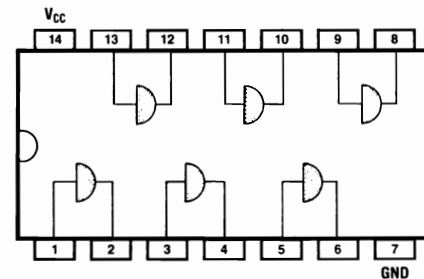
Logiktablelle siehe Section 1  
 Function table see section 1  
 Tableau logique voir section 1  
 Per tavola di logica vedi sez.1  
 Tabla de verdad, ver sección 1

**7407**

Output: OD

**Drivers (30V)**

Logiktablelle siehe Section 1  
 Function table see section 1  
 Tableau logique voir section 1  
 Per tavola di logica vedi sez.1  
 Tabla de verdad, ver sección 1



7406	Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q ns*typ ↓ ↓ ↑ ↑	t <sub>PD</sub> E-Q ns*max ↓ ↓ ↑ ↑	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub> MHz	7407	Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q ns*typ ↓ ↓ ↑ ↑	t <sub>PD</sub> E-Q ns*max ↓ ↓ ↑ ↑	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub> MHz
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C						
HC LC74HC06			Say	14-dil					HC LC74HC07 TD74HC07  HCT MSM74HCT07 TD74HCT07			Say Tos  Oki Tos	14-dil 14-dil  14-dil 14-dil				

7408 Output: TP		AND gates						7408		Typ - Type - Tipo			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>S</sub> typ	t <sub>PD</sub> E → Q n <sub>S</sub> max	Note fr štz &fE								
								0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	chip 14-smd-1							Rca 14-smd-1	chip &(4μ	12.9 12.9	11.7 11.7				
								mA	↓ ↓ ↑	↑													MHz			
AC	CD74AC08E	CD54AC08E	Rca	14-dil-1	&(4μ	8.7	8.7	MSM74HC08	CD74ACT08M	Rca	chip	&(4μ	12.9	12.9	HC BU74HC08	C	V <sub>CC</sub>	14 13 12 11 10 9 8	20 19 18 16 14 13 12							
		CD54AC08H	Rca	14-dil-1	&(4μ	7.9	7.9		CD54ACT08M	Rca	14-smd-1	&(4μ	12.9	12.9												
	CD74AC08M	CD54AC08M	Rca	chip	&(4μ	8.7	8.7		MM74C08J	MM74C08N	Nsc	14-dil-4	10n	80						80	140	140	140	140	140	
		HD74AC08	CD54AC08M	Rca	14-smd-1	&(4μ	8.7					8.7	MM54C08J	Nsc						14-dil-1	10n					80
	74AC08D	54AC08D	Fch,Nsc	14-dil-4	&(8μ	5.5	5.5		CD74HC08E	CD74HC08M	Nsc	14-flat-1	10n	80						80	140	140	140	140	140	
	74AC08F	54AC08F	Fch,Nsc	14-flat-1	&(8μ	5.5	5.5					CD54HC08F	CD54HC08H	Rca						chip	&(2μ					7
	74AC08P	54AC08L	Foh,Nsc	20-chip-2	&(8μ	5.5	5.5		HD74HC08	JRC74HC08	Hit									14-smd-1	&(2μ	7	7	23	23	23
	74AC08S	54AC08L	Fch,Nsc	14-dil-1	&(4μ	5.5	5.5					LC74HC08	LR74HC08	Njr						14-dil	&(2μ	7	7	30	30	30
	ACT	CD74ACT08E	CD54ACT08E	Rca	14-dil-1	&(4μ	12.9		12.9	SN74HC08D	MM74HC08J									Nsc	14-dil-4	&(2μ	13	7	20	13
			CD54ACT08H	Rca	14-dil-1	&(4μ	11.7		11.7			MM74HC08N	Nsc	14-dil-1							&(2μ	13	7	20	13	20
74AC08D		54AC08D	Fch,Nsc	14-dil-4	&(8μ	5.5	5.5	MM74HC08J	MM74HC08N		Nsc	14-dil-4	&(2μ	13	7	20	13	20	13	20						
		74AC08F	54AC08F	Fch,Nsc	14-flat-1	&(8μ	5.5					5.5	MM74HC08N	Nsc	14-dil-1	&(2μ	13	7	20	13	20	13	20			
74AC08P		54AC08L	Foh,Nsc	20-chip-2	&(8μ	5.5	5.5	MM74HC08J	MM54HC08J		Nsc	14-dil-1	&(1μ	22	22	22	22	22	22	22						
74AC08S		54AC08L	Fch,Nsc	14-dil-1	&(4μ	5.5	5.5					MM74HC08N	Nsc	14-dil-4	&(2μ	13	7	20	13	20	13	20				
ACT		CD74ACT08E	CD54ACT08E	Rca	14-dil-1	&(4μ	12.9	12.9	SN74HC08F		MM74HC08J	Nsc	14-dil-4	&(2μ	13	7	20	13	20	13	20					
			CD54ACT08H	Rca	14-dil-1	&(4μ	11.7	11.7					MM74HC08N	Nsc	14-dil-1	&(2μ	13	7	20	13	20	13	20			
		74AC08D	54AC08D	Fch,Nsc	14-dil-4	&(8μ	5.5	5.5			SN74HC08FH	SN54HC08FH	Tix	20-chip-3	&(2μ	10	10	25	25	25	25	25				
			74AC08F	54AC08F	Fch,Nsc	14-flat-1	&(8μ	5.5						5.5	SN74HC08FN	SN54HC08FK	Tix	20-chip-2	&(2μ	10	10	25	25	25	25	
	74AC08P	54AC08L	Foh,Nsc	20-chip-2	&(8μ	5.5	5.5	SN74HC08FN		SN54HC08J	Tix	20-chip-1	&(2μ	10	10	25	25	25	25	25						
	74AC08S	54AC08L	Fch,Nsc	14-dil-1	&(4μ	5.5	5.5					SN74HC08J	SN54HC08J	Tix	14-dil-4	&(2μ	10	10	30	30	30	30				
	ACT	CD74ACT08E	CD54ACT08E	Rca	14-dil-1	&(4μ	12.9	12.9		T74HC08	TD74HC08	Sgs	14-dil	&(2μ	10	10	30	30	30	30	30					
			CD54ACT08H	Rca	14-dil-1	&(4μ	11.7	11.7					TD74HC08	Tos	14-dil	&(2μ	10	10	30	30	30	30	30			
		74AC08D	54AC08D	Fch,Nsc	14-dil-4	&(8μ	5.5	5.5			SN74HC08J	SN74HC08N	Nec	14-dil-4	&(2μ	10	10	30	30	30	30	30				
			74AC08F	54AC08F	Fch,Nsc	14-flat-1	&(8μ	5.5						5.5	SN74HC08N	SN74HC08N	Tix	14-dil-1	&(2μ	10	10	25	25	25	25	
74AC08P		54AC08L	Foh,Nsc	20-chip-2	&(8μ	5.5	5.5	SN74HC08J	SN74HC08N		Nec	14-dil	&(2μ	10	10	30	30	30	30	30						
74AC08S		54AC08L	Fch,Nsc	14-dil-1	&(4μ	5.5	5.5					SN74HC08N	SN74HC08N	Tix	14-dil-1	&(2μ	10	10	25	25	25	25				
74AC08D		54AC08D	Fch,Nsc	14-dil-4	&(8μ	5.5	5.5	SN74HC08J	SN74HC08N		Nec	14-dil-4	&(2μ	10	10	30	30	30	30	30						
		74AC08F	54AC08F	Fch,Nsc	14-flat-1	&(8μ	5.5					5.5	SN74HC08N	SN74HC08N	Tix	14-dil-1	&(2μ	10	10	25	25	25	25			
74AC08P		54AC08L	Foh,Nsc	20-chip-2	&(8μ	5.5	5.5	SN74HC08J	SN74HC08N		Nec	14-dil	&(2μ	10	10	30	30	30	30	30						
74AC08S		54AC08L	Fch,Nsc	14-dil-1	&(4μ	5.5	5.5					SN74HC08N	SN74HC08N	Tix	14-dil-1	&(2μ	10	10	25	25	25	25				
74AC08D	54AC08D	Fch,Nsc	14-dil-4	&(8μ	5.5	5.5	SN74HC08J	SN74HC08N	Nec	14-dil-4	&(2μ	10	10	30	30	30	30	30								
74AC08F	54AC08F	Fch,Nsc	14-flat-1	&(8μ	5.5	5.5				SN74HC08N	SN74HC08N	Tix	14-dil-1	&(2μ	10	10	25	25	25	25						
74AC08P	54AC08L	Foh,Nsc	20-chip-2	&(8μ	5.5	5.5	SN74HC08J	SN74HC08N	Nec	14-dil	&(2μ	10	10	30	30	30	30	30								
74AC08S	54AC08L	Fch,Nsc	14-dil-1	&(4μ	5.5	5.5				SN74HC08N	SN74HC08N	Tix	14-dil-1	&(2μ	10	10	25	25	25	25						

7408	Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> & I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>S</sub> typ ↓ ↓ ↑	t <sub>PD</sub> E-Q n <sub>S</sub> max ↓ ↓ ↑	Note f <sub>T</sub> f <sub>z</sub> & f <sub>E</sub> MHz	7409 Output: OD	AND gates
	0...70°C §0...75°C	-40...85°C §-25...85°C								
μPB74HC08	CD74HCT08M PC74HCT08P PC74HCT08T	Rca Phi,Val Phi,Val Nec	14-smd-1 14-dil-1 14-smd-1 14-dil	&(2μ &(2μ &(2μ &(2μ	10 10 14 14 14 14	31 31 30 30 30 30 30 30			<p>Logiktablelle siehe Section 1 Function table see section 1 Tableau logique voir section 1 Per tavola di logica vedi sez. 1 Tabla de verdad, ver sección 1</p>	
7409	Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> & I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>S</sub> typ ↓ ↓ ↑	t <sub>PD</sub> E-Q n <sub>S</sub> max ↓ ↓ ↑	Note f <sub>T</sub> f <sub>z</sub> & f <sub>E</sub> MHz		
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C								
HC HD74HC09 LC74HC09 M74HC09 SN74HC09D	SN74HC09FN SN74HC09N	Hit Say Mit Tix Tix Tix Tix Tix	14-dil 14-dil 14-dil 14-smd-1 20-chip-3 20-chip-2 20-chip-1 14-dil-4 14-dil-1	&(2μ &(2μ &(2μ &(2μ &(2μ	10 13 10 13 10 13 10 13 10 13 10 13	25 31 30 36 30 36 25 31 30 36 25 31				

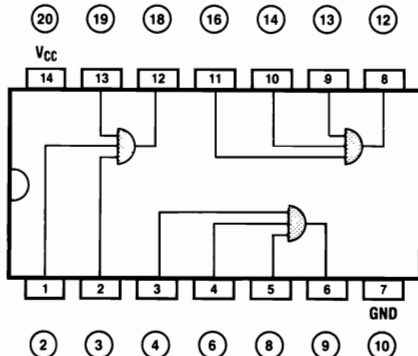
7410 Output: TP		NAND gates						7410			Type		Production	Blld Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>S</sub> typ	t <sub>PD</sub> E → Q n <sub>S</sub> max	Note f <sub>T</sub> &f <sub>Z</sub> &E	
								0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Type								
7410		Type		Production	Blld Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>S</sub> typ	t <sub>PD</sub> E → Q n <sub>S</sub> max	Note f <sub>T</sub> &f <sub>Z</sub> &E	Type		Production	Blld Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>S</sub> typ	t <sub>PD</sub> E → Q n <sub>S</sub> max	Note f <sub>T</sub> &f <sub>Z</sub> &E		
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Type																
<p>Logiktablelle siehe Section 1 Function table see section 1 Tableau logique voir section 1 Per tavola di logica vedi sez.1 Tabla de verdad, ver sección 1</p>		<p>C</p> <p>HC</p> <p>HD74HC10 LR74HC10 M74HC10 MB74HC10</p>	CD74ACT10M	Rca Rca	14-smd-1 14-smd-1	&(4μ &(4μ		13.5 13.5 12.3 12.3											
			MM74C10J MM74C10N	MM54C10J MM54C10W	Nsc Nsc	14-dil-4 14-dil-1		60 60 60 60	100 100 100 100										
			CD74HC10E	CD54HC10F CD54HC10H	Rca Rca	14-dil-1 14-dil-4	&(2μ &(2μ	8 8 8 8	25 25 30 30										
			CD74HC10M	CD54HC10F CD54HC10H	Rca Rca	14-smd-1 chip	&(2μ &(2μ	8 8 8 8	25 25 30 30										
				MC74HC10D MC54HC10J MC74HC10N MM54HC10J	Hit Sha Mit Fui Mot Mot Mot Nsc	14-dil 14-dil 14-dil 14-dil	&(2μ &(2μ &(2μ &(2μ	8 8 8 8 8 8 8 8	24 24 24 24 24 24 15 15										
				MM74HC10J MM74HC10N MN74HC10 MN74HC10S PC74HC10P PC74HC10T	Mat Mat Mat Mat Phi,Val Phi,Val	14-dil-1 14-smd-1 14-dil-1 14-smd-1 14-dil-1	&(2μ &(2μ &(2μ &(2μ &(2μ	11 11 11 11	24 24 24 24 24 24 24 24										
				SN74HC10D	Phi,Val	14-smd-1	&(2μ	11 11	24 24										
				SN74HC10FH	Tix	20-chip-3	&(2μ	10 10	24 24										
				SN74HC10FH	Tix	20-chip-3	&(2μ	10 10	24 24										
				SN74HC10FN	Tix	20-chip-2	&(2μ	10 10	24 24										
	SN74HC10J SN74HC10N	Tix	20-chip-1 14-dil-4	&(2μ &(2μ	10 10 10 10	24 24 24 24													
		Tix	14-dil-4	&(2μ	10 10	24 24													
		Tix	14-dil-1	&(2μ	10 10	24 24													
		Sgs	14-dil	&(2μ		24 24													
		Tos	14-dil	&(2μ		24 24													
		Nec	14-dil	&(2μ		24 24													
			CD74HCT10E	Rca Rca	14-dil-1 14-dil-4	&(2μ &(2μ	9 9 9 9	30 30 36 36											
			CD74HCT10M PC74HCT10P PC74HCT10T	Rca Phi,Val Phi,Val	14-smd-1 14-dil-1 14-smd-1	&(2μ &(2μ &(2μ	9 9 14 14 14 14	30 30 30 30 30 30											
AC	CD74AC10E	CD54AC10E CD54AC10H CD54AC10M	Rca Rca Rca	14-dil-1 14-dil-1 chip	&(4μ &(4μ &(4μ	12.2 12.2 11.1 11.1 12.2 12.2													
	CD74AC10M	54AC10D	Fch,Nsc	14-dil-4	&(4μ	4 4.5 7 8.5													
	74AC10D	54AC10F 54AC10L	Fch,Nsc Fch,Nsc	14-dil-4 14-flat-1	&(4μ &(4μ	4 4.5 4 4.5	6.5 8.5 7 8.5												
	74AC10P 74AC10S		Fch,Nsc Fch,Nsc	20-chip-2 14-dil-1	&(4μ &(4μ	4 4.5 4 4.5	7 8.5 6.5 8.5												
ACT	CD74ACT10E	CD54ACT10E CD54ACT10H	Rca Rca	14-dil-1 14-dil-1	&(4μ &(4μ	13.5 13.5 12.3 12.3													
			Rca	chip	&(4μ	13.5 13.5													

**7411**

Output: TP

**AND gates**

Logiktablelle siehe Section 1  
 Function table see section 1  
 Tableau logique voir section 1  
 Per tavola di logica vedi sez. 1  
 Tabla de verdad, ver sección 1



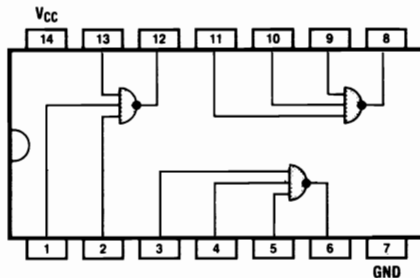
7411	Type			Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	I <sub>PD</sub> E-Q n <sub>styp</sub>	I <sub>PD</sub> E-Q n <sub>smax</sub>	Note f <sub>T</sub> f <sub>SZ</sub> & f <sub>E</sub>	
	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C							
	Pins-Art-Nr.									
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>MB74HC11</p> <p>MC74HC11D MC54HC11J MC74HC11N MM54HC11J</p> </div> <div style="width: 45%;"> <p>MM74HC11J MM74HC11N MN74HC11 MN74HC11S PC74HC11P PC74HC11T</p> </div> </div>										
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>SN74HC11D</p> <p>SN74HC11FH SN74HC11FH SN74HC11FN SN74HC11J SN74HC11N</p> </div> <div style="width: 45%;"> <p>SN54HC11FH SN54HC11FK SN54HC11J</p> </div> </div>										
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>T74HC11 TD74HC11 µPB74HC11</p> </div> <div style="width: 45%;"> <p>HCT</p> <p>CD74HCT11E CD54HCT11F CD54HCT11H CD74HCT11M PC74HCT11P PC74HCT11T</p> </div> </div>										
<b>7411</b>	Type			Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	I <sub>PD</sub> E-Q n <sub>styp</sub>	I <sub>PD</sub> E-Q n <sub>smax</sub>	Note f <sub>T</sub> f <sub>SZ</sub> & f <sub>E</sub>	
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C								
Pins-Art-Nr.										
<b>AC</b>	74AC11D	54AC11D 54AC11F 54AC11L	Fch,Nsc Fch,Nsc Fch,Nsc	14-dil-4 14-dil-4 14-flat-1 20-chip-2	&(4µ &(4µ &(4µ &(4µ	4 4 4 .4 4 4 4 4	8 8.5 7.5 8.5 8 8.5 8 8.5			
	74AC11P 74AC11S		Fch,Nsc Fch,Nsc	14-dil-1 14-smd-1	&(4µ &(4µ	4 4 4 4	7.5 8.5 7.5 8.5			
<b>HC</b>	CD74HC11E	CD54HC11F CD54HC11H	Rca Rca Rca Rca	14-dil-1 14-dil-4 chip 14-smd-1	&(2µ &(2µ &(2µ &(2µ	8 8 8 8 8 8 8 8	25 25 30 30 30 30 25 25			
	CD74HC11M		Hit Say Sha Mit	14-dil 14-dil 14-dil 14-dil	&(2µ &(2µ &(2µ &(2µ		31 31 31 31 31 31 31 31			
	HD74HC11 LC74HC11 LR74HC11 M74HC11									

**7412**

Output: TP

**AND gates**

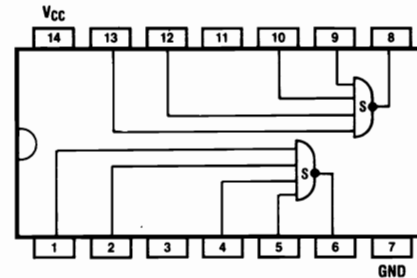
Logiktablelle siehe Section 1  
 Function table see section 1  
 Tableau logique voir section 1  
 Per tavola di logica vedi sez.1  
 Tabla de verdad, ver sección 1

**7413**

Output: TP

**NAND Schmitt Triggers**

Logiktablelle siehe Section 1  
 Function table see section 1  
 Tableau logique voir section 1  
 Per tavola di logica vedi sez. 1  
 Tabla de verdad, ver sección 1



7412	Type		Production	Bild Sec. 3 Pins- Art-Nr.	$I_S$	$t_{PD}$	$t_{PD}$	Note $t_T$ §fz &fE	7413	Type		Production	Bild Sec. 3 Pins- Art-Nr.	$I_S$	$t_{PD}$	$t_{PD}$	Note $t_T$ §fz &fE
	0...70°C §0...75°C	-40...85°C §-25...85°C			-55...125°C	&fR	E -Q n§typ			E -Q n§max	0...70°C §0...75°C			-40...85°C §-25...85°C	-55...125°C	&fR	
HC MSM74HC12			Oki	14-dil					HC μPB74HC13			Nec	14-dil				

7414 Output: TP	Schmitt Trigger Inverters							7414	Type	Production	Bld Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sup>styp</sup> ↓ ↑ †	t <sub>PD</sub> E-Q n <sup>smax</sup> ↓ ↑ †	Note †r \$fz &fE MHz	
	0...70°C §0...75°C		-40...85°C §-25...85°C		-55...125°C											
Logiktablelle siehe Section 1 Function table see section 1 Tableau logique voir section 1 Per tavola di logica vedi sez. 1 Tabla de verdad, ver sección 1								C	CD74ACT14H CD54ACT14H	Rca Rca Rca	chip 14-smd-1 14-smd-1	&(4μ &(4μ &(4μ	9.5 14.5 9.5 14.5 8.6 13.2			
								HC	MM74C14J MM74C14N MM54C14W	Nsc Nsc Nsc	14-dil-4 14-dil-1 14-flat-1	50n 50n 50n	220 220 220 220 220 220	400 400 400 400 400 400		
								HD74HC14 M74HC14	CD74HC14E CD74HC14M	Rca Rca Rca Rca	14-dil-1 14-dil-4 chip 14-smd-1	12 12 12 12	12 12 12 12			
									MM74HC14J MM74HC14N MN74HC14 MN74HC14S	Nsc Nsc Mat Mat	14-dil-4 14-dil-1 14-dil-1 14-smd-1	&(2μ &(2μ &(2μ &(2μ	11 11 11 11 11 11 11 11	21 21 21 21 31 31 31 31	21 21 21 21 31 31 31 31	
									PC74HC14P PC74HC14T	Phi,Val Phi,Val	14-dil-1 14-smd-1	&(2μ &(2μ	15 15 15 15	31 31 31 31	31 31 31 31	
									SN74HC14FH SN74HC14FN	Tix Tix	20-chip-3 20-chip-2	&(2μ &(2μ	12 12 12 12	38 38 38 38	31 31 31 31	
									SN74HC14J SN74HC14N	Tix Tix	14-dil-4 14-dil-1	&(2μ &(2μ	12 12 12 12	31 31 31 31	31 31 31 31	
									TD74HC14 μPB74HC14	Sgs Tos Nec	14-dil 14-dil 14-dil	&(2μ &(2μ &(2μ	12 12 12 12 12 12	31 31 31 31 31 31	31 31 31 31 31 31	
									CD74HCT14E CD74HCT14M PC74HCT14P PC74HCT14T	Rca Rca Rca Phi,Val Phi,Val	14-dil-1 14-dil-1 chip 14-smd-1 14-dil-1 14-smd-1	12 12 12 12	12 12 20 20 20 20	43 43 43 43		
	AC	CD74AC14E CD74AC14M HD74AC14 74AC14D 74AC14P 74AC14S	CD54AC14E CD54AC14H CD54AC14M 54AC14D 54AC14F 54AC14L	Rca Rca Rca Rca Fch,Nsc Fch,Nsc Fch,Nsc Fch,Nsc Fch,Nsc Fch,Nsc	14-dil-1 14-dil-1 chip 14-smd-1 14-smd-1 Hit 14-dil-4 14-dil-4 14-flat-1 20-chip-2 14-dil-1 14-smd-1	&(4μ &(4μ &(4μ &(4μ &(4μ &(4μ &(4μ &(4μ &(4μ &(4μ &(4μ &(4μ &(4μ 6 7 6 7 6 7 6 7 6 7 6 7 6 7	10.5 10.5 9.5 9.5 10.5 10.5 10.5 10.5 9.5 9.5 9.5 11 10 12 9.5 11 10 12 10 12 9.5 11 9.5 11									
ACT	CD74ACT14E	CD54ACT14E	Rca Rca	14-dil-1 14-dil-1	&(4μ &(4μ	9.5 14.5 8.6 13.2										



7420 Output: TP	NAND gates				7420			Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E · Q n <sub>styp</sub>	I <sub>PD</sub> E · Q n <sub>max</sub>	Note f <sub>T</sub> §fz &E	
					0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Type								
					Pins- Art-Nr.		mA		MHz							
<p>Logiktablelle siehe Section 1 Function table see section 1 Tableau logique voir section 1 Per tavola di logica vedi sez. 1 Tabla de verdad, ver sección 1</p>					C	CD74ACT20M	CD54ACT20M	Rca	14-smd-1	&(4μ	13.5	13.5				
						MM74C20J MM74C20N	MM54C20J MM54C20W	Nsc	14-dil-4 14-dil-1 14-flat-1		70	70	115	115		
					HC	CD74HC20E	CD54HC20F CD54HC20H	Rca	14-dil-1 14-dil-4 chip		20	20	20	20		
						CD74HC20M		Rca	14-smd-1		20	20				
					HD74HC20 LR74HC20 M74HC20 MB74HC20	MC74HC20D MC54HC20J MC74HC20N MM54HC20J	Mot	14-smd-1	&(2μ	8	8	15	15			
						MM74HC20J MM74HC20N MN74HC20 MN74HC20S PC74HC20P PC74HC20T	Nsc	14-dil-4 14-dil-1 14-smd-1	&(2μ	8	8	15	15			
					SN74HC20D	SN74HC20FH	Phi,Val	14-dil-1	&(2μ	10	10	23	23			
						SN74HC20FN	Phi,Val	14-smd-1	&(2μ	10	10	23	23			
					T74HC20 TD74HC20 μPB74HC20	SN74HC20FHX	Tix	14-smd-1	&(2μ	14	14	28	28			
						SN74HC20FK	Tix	20-chip-3	&(2μ	14	14	33	33			
					HCT	SN74HC20J	Tix	20-chip-3	&(2μ	14	14	28	28			
						SN74HC20N	Tix	20-chip-2	&(2μ	14	14	33	33			
						SN74HC20J	Tix	20-chip-1	&(2μ	14	14	28	28			
						SN74HC20N	Tix	14-dil-4	&(2μ	14	14	33	33			
						CD74HCT20E	Rca	14-dil-1		20	20					
						CD74HCT20M PC74HCT20P PC74HCT20T	Rca	14-dil-4 chip 14-smd-1		20	20	20	20			
						CD54HCT20F CD54HCT20H	Rca	14-dil-1	&(2μ	16	16	35	35			
							Phi,Val	14-dil-1	&(2μ	16	16	35	35			
						CD54AC20E	Rca	14-dil-1	&(4μ	13.5	13.5					
						CD74AC20E	Rca	14-dil-1	&(4μ	12.3	12.3					
						CD54AC20H CD54AC20M	Rca	chip	&(4μ	13.5	13.5					
						CD74AC20M	Rca	14-smd-1	&(4μ							
						54AC20D	Fch,Nsc	14-dil-4	&(4μ	4	5	7	8.5			
						74AC20D	Fch,Nsc	14-dil-4	&(4μ	4	5	7	8			
						54AC20F 54AC20L	Fch,Nsc	14-flat-1	&(4μ	4	5	7	8.5			
						74AC20P 74AC20S	Fch,Nsc	20-chip-2	&(4μ	4	5	7	8.5			
						CD54ACT20E	Rca	14-dil-1	&(4μ	13.5	13.5					
						CD74ACT20E	Rca	14-dil-1	&(4μ	12.3	12.3					
						CD54ACT20H	Rca	chip	&(4μ	13.5	13.5					

7421 Output: TP	AND gates		7421		Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>S</sub> typ ↓ ↓ ↑ ↑	t <sub>PD</sub> E-Q n <sub>S</sub> max ↓ ↓ ↑ ↑	Note f <sub>T</sub> §f <sub>Z</sub> &f <sub>E</sub> MHz
			0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C							
<p>Logiktablelle siehe Section 1 Function table see section 1 Tableau logique voir section 1 Per tavola di logica vedi sez. 1 Tabla de verdad, ver sección 1</p>			<p>T74HC21 TD74HC21 μPB74HC21  HCT</p>		SN54HC21FH	Tix	20-chip-3	&(2μ	14 14	33 33		
					SN74HC21FH	Tix	20-chip-3	&(2μ	14 14	28 28		
					SN54HC21FK	Tix	20-chip-3	&(2μ	14 14	28 28		
					SN74HC21FK	Tix	20-chip-3	&(2μ	14 14	28 28		
					SN54HC21J	Tix	20-chip-1	&(2μ	14 14	28 28		
					SN74HC21J	Tix	20-chip-1	&(2μ	14 14	28 28		
					SN74HC21N	Tix	14-dil-4	&(2μ	14 14	33 33		
					SN74HC21N	Tix	14-dil-1	&(2μ	14 14	28 28		
						Sgs	14-dil		14 14	28 28		
						Tos	14-dil					
						Nec	14-dil					
					CD74HCT21E	Rca	14-dil-1	&(2μ	11 11	34 34		
					CD74HCT21M	Rca	14-dil-4	&(2μ	11 11	41 41		
					CD54HCT21F	Rca	chip	&(2μ	11 11	41 41		
					CD54HCT21H	Rca	14-smd-1	&(2μ	11 11	34 34		
					PC74HCT21P	Phi,Val	14-dil-1	&(2μ	15 15	34 34		
					PC74HCT21T	Phi,Val	14-smd-1	&(2μ	15 15	34 34		

7421	Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>S</sub> typ ↓ ↓ ↑ ↑	t <sub>PD</sub> E-Q n <sub>S</sub> max ↓ ↓ ↑ ↑	Note f <sub>T</sub> §f <sub>Z</sub> &f <sub>E</sub> MHz	
	0...70°C §0...75°C	-40...85°C §-25...85°C							-55...125°C
HC	CD74HC21E	CD54HC21F CD54HC21H	Rca	14-dil-1	&(2μ	9 9	28 28		
			Rca	14-dil-4	&(2μ	9 9	33 33		
			Rca	chip	&(2μ	9 9	33 33		
			Rca	14-smd-1	&(2μ	9 9	28 28		
			Hit	14-dil					
	HD74HC21 LC74HC21 M74HC21 MB74HC21	CD74HC21M	CD54HC21F CD54HC21H	Say	14-dil				
				Mit	14-dil				
				Fui	14-dil				
				Mat	14-dil-1				
				Mat	14-smd-1				
SN74HC21D	MN74HC21 MN74HC21S PC74HC21P PC74HC21T	CD54HC21F CD54HC21H	Phi,Val	14-dil-1	&(2μ	12 12	28 28		
			Phi,Val	14-smd-1	&(2μ	12 12	28 28		
			Tix	14-smd-1	&(2μ	14 14	28 28		

7427 Output: TP	NOR gates						7427			Type	Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	I <sub>PD</sub> E-Q n <sub>S</sub> typ ↓ ↑ ↑	I <sub>PD</sub> E-Q n <sub>S</sub> max ↓ ↑ ↑	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub> MHz
							0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C							
							Type									
<p>Logiktablelle siehe Section 1 Function table see section 1 Tableau logique voir section 1 Per tavola di logica vedi sez.1 Tabla de verdad. ver sección 1</p>							SN74HC27D	PC74HC27P PC74HC27T	SN54HC27FH	Phi, Val Phi, Val Tix	14-dil-1 14-smd-1 14-smd-1	&(2μ &(2μ &(2μ	10 10 10 10 10 10	23 23 23 23 27 27	23 23 23 23 23 23	
							T74HC27 TD74HC27 μPB74HC27	SN74HC27FH SN74HC27FN SN74HC27J SN74HC27N	SN54HC27FK SN54HC27J	Tix Tix Tix Tix Tix Sgs Tos Nec	20-chip-3 20-chip-2 20-chip-1 14-dil-4 14-dil-4 14-dil-1 14-dil 14-dil	&(2μ &(2μ &(2μ &(2μ &(2μ &(2μ &(2μ	10 10 10 10 10 10 10 10 10 10 23 23 23 23 23 23	27 27 23 23 23 23 23 23 23 23 23 23 23 23		
							HCT	CD74HCT27E  CD74HCT27M PC74HCT27P PC74HCT27T	CD54HCT27F CD54HCT27H	Rca Rca Rca Rca Phi, Val Phi, Val	14-dil-1 14-dil-4 chip 14-smd-1 14-smd-1	12 12 12 12 12 12 12 12 &(2μ &(2μ	12 12 12 12 12 12 12 12 12 12 26 26 26 26			
7427	Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	I <sub>PD</sub> E-Q n <sub>S</sub> typ ↓ ↑ ↑	I <sub>PD</sub> E-Q n <sub>S</sub> max ↓ ↑ ↑	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub> MHz								
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C														
HC	CD74HC27E	CD54HC27F CD54HC27H	Rca Rca Rca Rca	14-dil-1 14-dil-4 chip 14-smd-1		12 12 12 12 12 12 12 12										
HD74HC27 LC74HC27 LR74HC27 M74HC27 MB74HC27	CD74HC27M		Hit Say Sha Mit Fui	14-dil 14-dil 14-dil 14-dil 14-dil	&(2μ &(2μ &(2μ &(2μ &(2μ	23 23 23 23 23 23 23 23 23 23										
		MC74HC27D MC54HC27J MC74HC27N MMS4HC27J	Mot Mot Mot Nsc	14-smd-1 14-dil-4 14-dil-1 14-dil-4	&(2μ &(2μ &(2μ &(2μ	8 8 8 8 8 8 8 8	15 15 15 15 15 15 15 15									
		MM74HC27J MM74HC27N MN74HC27 MN74HC27S	Nsc Nsc Mat Mat	14-dil-1 14-dil-1 14-dil-1 14-smd-1	&(2μ &(2μ &(2μ &(2μ	8 8 8 8 8 8 8 8	15 15 15 15 23 23 23 23									

7430 Output: TP	NAND gates							7430		Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E · Q n <sub>S</sub> typ	t <sub>PD</sub> E · Q n <sub>S</sub> max	Note t <sub>r</sub> f <sub>fz</sub> &f <sub>E</sub>	
								0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Type							
								Production		Pins- Art-Nr.	mHz							
<p>Logiktablelle siehe Section 1 Function table see section 1 Tableau logique voir section 1 Per tavola di logica vedi sez. 1 Tabla de verdad, ver sección 1</p>								SN74HC30D	MM74HC30J MM74HC30N MN74HC30 MN74HC30S PC74HC30P PC74HC30T	MM54HC30J	Nsc Nsc Mat Phi, Val Phi, Val	14-dil-4 14-dil-1 14-dil-1 14-smd-1 14-dil-1	&(2μ) &(2μ) &(2μ) &(2μ) &(2μ)	18 18 18 18 42 42 42 42 15 15	30 30 30 30 42 42 42 42 33 33			
								T74HC30 TD74HC30 μPB74HC30	SN74HC30FH SN74HC30FN	SN54HC30FH SN54HC30FK	Tix Tix Tix	20-chip-3 20-chip-3 20-chip-2	&(2μ) &(2μ) &(2μ)	15 15 15 15 15 15	39 39 33 33 39 39			
								HCT	SN74HC30J SN74HC30N	SN54HC30J	Tix Tix Tix	14-dil-4 14-dil-4 14-dil-1	&(2μ) &(2μ) &(2μ)	15 15 15 15 15 15	39 39 33 33 33 33			
									CD74HCT30E		Rca	14-dil-1	&(2μ)	11 11	35 35			
									CD74HCT30M PC74HCT30P PC74HCT30T	CD54HCT30F CD54HCT30H	Rca Rca Rca Phi, Val Phi, Val	14-dil-4 14-dil-4 chip 14-smd-1 14-dil-1 14-smd-1	&(2μ) &(2μ) &(2μ) &(2μ) &(2μ) &(2μ)	11 11 11 11 11 11 16 16 16 16	42 42 42 42 35 35 35 35 35 35			
7430	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E · Q n <sub>S</sub> typ	t <sub>PD</sub> E · Q n <sub>S</sub> max	Note t <sub>r</sub> f <sub>fz</sub> &f <sub>E</sub>										
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C		Pins- Art-Nr.	mHz		mHz											
Production																		
C	MM74C30J MM74C30N	MM54C30J MM54C30W	Nsc Nsc Nsc	14-dil-4 14-dil-1 14-flat-1	10n 10n 10n	125 125 125 125 125 125	180 180 180 180 180 180											
HC	CD74HC30E CD74HC30M	CD54HC30F CD54HC30H	Rca Rca Rca Rca	14-dil-1 14-dil-4 chip 14-smd-1	&(2μ) &(2μ) &(2μ) &(2μ)	10 10 10 10 10 10 10 10	33 33 39 39 39 39 33 33											
HD74HC30 LR74HC30 M74HC30 MB74HC30		MC74HC30D MC54HC30J MC74HC30N	Hit Sha Mit Fui Mot Mot Mot	14-dil 14-dil 14-dil 14-dil 14-smd-1 14-dil-4 14-dil-1	&(2μ) &(2μ) &(2μ) &(2μ) &(2μ) &(2μ) &(2μ)	42 42 42 42 42 42 42 42 53 53 53 53 53 53	42 42 42 42 42 42 42 42 53 53 53 53 53 53											

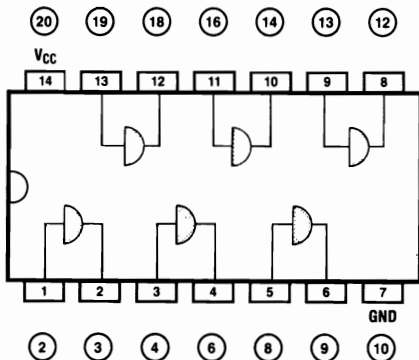
7432 Output: TP	OR gates							7432			Type	Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sup>st</sup> typ	t <sub>PD</sub> E-Q n <sup>max</sup>	Note f <sub>T</sub> f <sub>SZ</sub> &E						
								0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C													
								Pins- Art-Nr.	mA	↓ ↑ ↑								↓ ↑ ↑	MHz				
<p>Logiktablelle siehe Section 1 Function table see section 1 Tableau logique voir section 1 Per tavola di logica vedi sez. 1 Tabla de verdad, ver sección 1</p>																							
7432	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sup>st</sup> typ	t <sub>PD</sub> E-Q n <sup>max</sup>	Note f <sub>T</sub> f <sub>SZ</sub> &E	7432	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sup>st</sup> typ	t <sub>PD</sub> E-Q n <sup>max</sup>	Note f <sub>T</sub> f <sub>SZ</sub> &E						
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C								Pins- Art-Nr.	mA							↓ ↑ ↑	↓ ↑ ↑	MHz			
AC	CD74AC32E	CD54AC32E	Rca	14-dil-1	&(4μ	9.5	9.5		C	CD74ACT32M	CD54ACT32H	Rca	chip	&(4μ		12.1	12.1						
		CD54AC32H	Rca	14-dil-1	&(4μ	8.6	8.6			CD54ACT32M	CD54ACT32M	Rca	14-smd-1	&(4μ		12.1	12.1						
	CD74AC32M HD74AC32	CD54AC32M	Rca	14-smd-1	&(4μ	9.5	9.5			HC	MM74C32J	MM54C32J	Nsc	14-dil-4	50n	80	80	150	150				
		54AC32D	Rca	14-smd-1	&(4μ	8.6	8.6				MM74C32N	MM54C32W	Nsc	14-dil-1	50n	80	80	150	150				
	74AC32D	54AC32F	Fch,Nsc	14-dil-4	&(4μ	5	5.5	8.5		9	HD	CD74HC32E	CD54HC32F	Rca	14-dil-1		9	9					
		54AC32L	Fch,Nsc	14-flat-1	&(4μ	5	5.5	8.5		9		CD74HC32M	CD54HC32H	Rca	14-dil-4		9	9					
	74AC32P 74AC32S	54AC32L	Fch,Nsc	20-chip-2	&(4μ	5	5.5	8.5		9		MB	CD74HC32M	MC54HC32J	Rca	14-smd-1		9	9				
		54AC32L	Fch,Nsc	14-dil-1	&(4μ	5	5.5	7.5		8.5				MC74HC32N	MC74HC32AD	Hit	14-dil	&(2μ			30	30	
	ACT	CD74ACT32E	CD54ACT32E	Rca	14-dil-1	&(4μ				12.1			12.1	T74HC32 TD74HC32 μPB74HC32	MM74HC32J	MM74HC32N	Nsc	14-dil-4	&(2μ	9	9	17	17
			CD54ACT32E	Rca	14-dil-1	&(4μ				11			11		MM74HC32J	MM74HC32N	Nsc	14-dil-1	&(2μ	9	9	17	17
CD74ACT32E		CD54ACT32E	Rca	14-dil-1	&(4μ			11	11	MM74HC32J			MM74HC32N		Nsc	14-dil-1	&(2μ	9	9	17	17		
		CD54ACT32E	Rca	14-dil-1	&(4μ			11	11	MM74HC32J			MM74HC32N		Nsc	14-dil-1	&(2μ	9	9	17	17		
CD74ACT32E		CD54ACT32E	Rca	14-dil-1	&(4μ			11	11	MM74HC32J			MM74HC32N		Nsc	14-dil-1	&(2μ	9	9	17	17		
		CD54ACT32E	Rca	14-dil-1	&(4μ			11	11	MM74HC32J			MM74HC32N		Nsc	14-dil-1	&(2μ	9	9	17	17		
CD74ACT32E		CD54ACT32E	Rca	14-dil-1	&(4μ			11	11	MM74HC32J	MM74HC32N		Nsc		14-dil-1	&(2μ	9	9	17	17			
		CD54ACT32E	Rca	14-dil-1	&(4μ			11	11	MM74HC32J	MM74HC32N		Nsc		14-dil-1	&(2μ	9	9	17	17			
CD74ACT32E		CD54ACT32E	Rca	14-dil-1	&(4μ			11	11	MM74HC32J	MM74HC32N	Nsc	14-dil-1		&(2μ	9	9	17	17				
		CD54ACT32E	Rca	14-dil-1	&(4μ			11	11	MM74HC32J	MM74HC32N	Nsc	14-dil-1		&(2μ	9	9	17	17				
CD74ACT32E	CD54ACT32E	Rca	14-dil-1	&(4μ			11	11	MM74HC32J	MM74HC32N	Nsc	14-dil-1	&(2μ	9	9	17	17						
	CD54ACT32E	Rca	14-dil-1	&(4μ			11	11	MM74HC32J	MM74HC32N	Nsc	14-dil-1	&(2μ	9	9	17	17						

**7434**

Output: TP

Driver

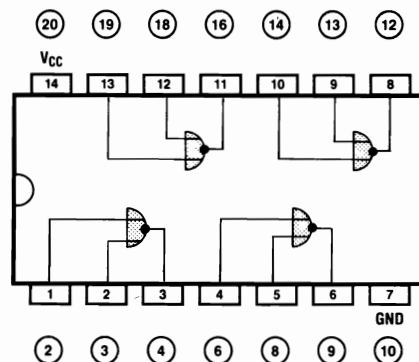
Logiktablelle siehe Section 1  
 Function table see section 1  
 Tableau logique voir section 1  
 Per tavola di logica vedi sez.1  
 Tabla de verdad, ver sección 1

**7436**

Output: TP

NOR gates

Logiktablelle siehe Section 1  
 Function table see section 1  
 Tableau logique voir section 1  
 Per tavola di logica vedi sez.1  
 Tabla de verdad, ver sección 1

**7434**

Type

Production

Bild  
Sec. 3I<sub>S</sub>  
&I<sub>R</sub>t<sub>PD</sub>  
E-Q  
n<sub>styp</sub>t<sub>PD</sub>  
E-Q  
n<sub>smax</sub>Note  
f<sub>T</sub> f<sub>sz</sub>  
&f<sub>E</sub>0...70°C  
§0...75°C-40...85°C  
§-25...85°C

-55...125°C

Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz

HCT

MM74HCT34J  
MM74HCT34N

MM54HCT34J

Nsc  
Nsc14-dil-4  
14-dil-1&(2μ  
&(2μ10 10  
10 1018 18  
18 18**7436**

Type

Production

Bild  
Sec. 3I<sub>S</sub>  
&I<sub>R</sub>t<sub>PD</sub>  
E-Q  
n<sub>styp</sub>t<sub>PD</sub>  
E-Q  
n<sub>smax</sub>Note  
f<sub>T</sub> f<sub>sz</sub>  
&f<sub>E</sub>0...70°C  
§0...75°C-40...85°C  
§-25...85°C

-55...125°C

Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz

HC

JRC74HC36  
SN74HC36D

SN74HC36FH

SN74HC36FN

SN74HC36J

SN74HC36N

SN54HC36FH

SN54HC36FK

SN54HC36J

Njr  
Tix14-smd-1  
20-chip-3&(2μ  
&(2μ10 10  
10 1025 25  
30 3020-chip-3  
20-chip-2&(2μ  
&(2μ10 10  
10 1025 25  
30 3020-chip-1  
14-dil-4&(2μ  
&(2μ10 10  
10 1025 25  
30 3014-dil-4  
14-dil-1&(2μ  
&(2μ10 10  
10 1025 25  
25 25

7442 Output: TP		BCD-to-decimal decoder						7442		Type		Production	Blld Sec. 3	IS &I <sub>R</sub>	tpD E-Q ns <sub>typ</sub>	tpD E-Q ns <sub>max</sub>	Note †r ‡fz &IE																																							
								0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	MM74HC42J MM74HC42N MN74HC42 MN74HC42S PC74HC42P PC74HC42T							MM54HC42J  SN54HC42FH SN74HC42FH SN54HC42FK SN74HC42FN SN54HC42J SN74HC42J SN74HC42N																																						
<table border="1"> <thead> <tr> <th>BCD - Input</th> <th>Out</th> </tr> <tr> <th>D C B A</th> <th>Q = L</th> </tr> </thead> <tbody> <tr><td>L L L L</td><td>0</td></tr> <tr><td>L L L H</td><td>1</td></tr> <tr><td>L L H L</td><td>2</td></tr> <tr><td>L L H H</td><td>3</td></tr> <tr><td>L H L L</td><td>4</td></tr> <tr><td>L H L H</td><td>5</td></tr> <tr><td>L H H L</td><td>6</td></tr> <tr><td>L H H H</td><td>7</td></tr> <tr><td>H L L L</td><td>8</td></tr> <tr><td>H L L H</td><td>9</td></tr> <tr><td>H L H L</td><td>—</td></tr> <tr><td>H L H H</td><td>—</td></tr> <tr><td>H H L L</td><td>—</td></tr> <tr><td>H H L H</td><td>—</td></tr> <tr><td>H H H L</td><td>—</td></tr> <tr><td>H H H H</td><td>—</td></tr> </tbody> </table>		BCD - Input	Out	D C B A	Q = L	L L L L	0	L L L H	1	L L H L	2	L L H H	3	L H L L	4	L H L H	5	L H H L	6	L H H H	7	H L L L	8	H L L H	9	H L H L	—	H L H H	—	H H L L	—	H H L H	—	H H H L	—	H H H H	—							T74HC42 TD74HC42 μPB74HC42  HCT	CD74HCT42E  CD74HCT42M PC74HCT42P PC74HCT42T	CD54HCT42F CD54HCT42H	Rca Rca Rca Rca Phi, Val Phi, Val	16-dil-1 16-dil-3 chip 16-smd-1 16-dil 16-dil 16-dil 16-smd-1 16-dil-3 16-dil	&(8μ)	15 15 15 15	15 15 15	38 38 38 26 26 26	38 38 38 26 26 26	38 38 38 26 26 26	44 44	44 44
BCD - Input	Out																																																							
D C B A	Q = L																																																							
L L L L	0																																																							
L L L H	1																																																							
L L H L	2																																																							
L L H H	3																																																							
L H L L	4																																																							
L H L H	5																																																							
L H H L	6																																																							
L H H H	7																																																							
H L L L	8																																																							
H L L H	9																																																							
H L H L	—																																																							
H L H H	—																																																							
H H L L	—																																																							
H H L H	—																																																							
H H H L	—																																																							
H H H H	—																																																							
C	MM74C42J MM74C42N	MM54C42J MM54C42W	Nsc Nsc Nsc	16-dil-3 16-dil-1 16-flat-3	50n 50n 50n	200 200 200	200 300 300	300 300 300																																																
HC	CD74HC42E  CD74HC42M	CD54HC42F CD54HC42H	Rca Rca Rca Rca	16-dil-1 16-dil-3 chip 16-smd-1	&(8μ)	13 13 13	13 13 13	26 26 26	26 26 26	26 26 26																																														
HD74HC42 LR74HC42 MB74HC42		MC74HC42D MC54HC42J MC74HC42N	Hit Sha Fui Mot Mot	16-dil 16-dil 16-dil 16-smd-1 16-dil-3 16-dil-1	&(8μ)	13 13 13	13 13 13	26 26 26	26 26 26	26 26 26																																														

**7448**  
Output: OD

BCD-to-7-segment decoder, outputs active-high

**7448**

Type

Production

Bild Sec. 3

I<sub>S</sub> & I<sub>R</sub>

t<sub>PD</sub> E · Q n<sub>typ</sub>

t<sub>PD</sub> E · Q n<sub>max</sub>

Note f<sub>T</sub> S<sub>FZ</sub> & I<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

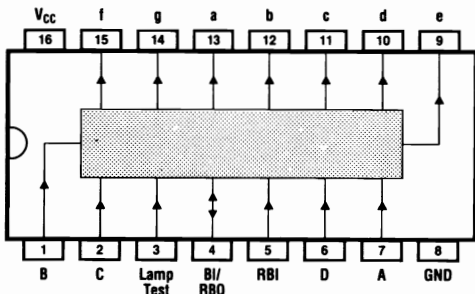
Pins-Art-Nr.

mA

↓ ↓ ↑ ↑

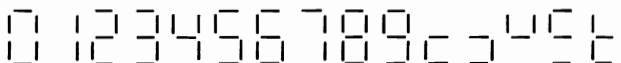
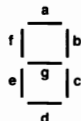
↓ ↓ ↑ ↑

MHz



In		In/Out		Out			
D	C	B	A	LT	RBI	BI/RBQ	Q
X	X	X	X	L	X	H	8
X	X	X	X	X	X	L	—
L	L	L	L	H	L	L	—
L	L	L	L	H	H	H	0
L	L	L	H	H	X	H	1
L	L	H	L	H	X	H	2
.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.
H	H	H	H	H	X	H	15

Pin	FI		FQ	
	N	LS	N	LS
4	3	3	5	3
1-15	1	1	4	5



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

C

MM74C48J  
MM74C48N

MM54C48J  
MM54C48W

Nsc  
Nsc  
Nsc

16-dil-3  
16-dil-1  
16-flat-3

50n  
50n  
50n

450 450  
450 450  
450 450

1500 1500  
1500 1500  
1500 1500



7451 Output: TP	AND-OR-Invert gates							7451		Type		Production	Bld Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q ns <sub>typ</sub>	t <sub>PD</sub> E-Q ns <sub>max</sub>	Note fr &f <sub>E</sub> &MHz																																																																																																							
								0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C																																																																																																														
								Production		Type																																																																																																														
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Q1 = <math>\overline{ABC} + \overline{DEF}</math> Q2 = <math>\overline{AB} + \overline{CD}</math></p> </div> <div style="width: 45%;"> <p>SN74HC51FN SN74HC51J SN74HC51N</p> <p>T74HC51 TD74HC51 μPB74HC51</p> </div> </div>																																																																																																																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>7451</th> <th colspan="2">Type</th> <th rowspan="2">Production</th> <th rowspan="2">Bld Sec. 3 Pins- Art-Nr.</th> <th rowspan="2">I<sub>S</sub> &amp;I<sub>R</sub> mA</th> <th rowspan="2">t<sub>PD</sub> E-Q ns<sub>typ</sub></th> <th rowspan="2">t<sub>PD</sub> E-Q ns<sub>max</sub></th> <th rowspan="2">Note fr &amp;f<sub>E</sub> &amp;MHz</th> </tr> <tr> <th>0...70°C §0...75°C</th> <th>-40...85°C §-25...85°C</th> <th>-55...125°C</th> </tr> </thead> <tbody> <tr> <td rowspan="14"> <b>HC</b> HD74HC51 LC74HC51 M74HC51 MB74HC51           <b>SN74HC51D</b> </td> <td rowspan="14"></td> <td rowspan="14"></td> <td>Hit</td> <td>14-dil</td> <td>&amp;(2μ</td> <td></td> <td>32 32</td> <td></td> </tr> <tr> <td>Say</td> <td>14-dil</td> <td>&amp;(2μ</td> <td></td> <td>32 32</td> <td></td> </tr> <tr> <td>Mit</td> <td>14-dil</td> <td>&amp;(2μ</td> <td></td> <td>32 32</td> <td></td> </tr> <tr> <td>Fui</td> <td>14-dil</td> <td>&amp;(2μ</td> <td></td> <td>32 32</td> <td></td> </tr> <tr> <td>Mot</td> <td>14-smd-1</td> <td>&amp;(2μ</td> <td>11 11</td> <td>21 21</td> <td></td> </tr> <tr> <td>Mot</td> <td>14-dil-4</td> <td>&amp;(2μ</td> <td>11 11</td> <td>21 21</td> <td></td> </tr> <tr> <td>Mot</td> <td>14-dil-1</td> <td>&amp;(2μ</td> <td>11 11</td> <td>21 21</td> <td></td> </tr> <tr> <td>Nsc</td> <td>14-dil-4</td> <td>&amp;(2μ</td> <td>11 11</td> <td>21 21</td> <td></td> </tr> <tr> <td>Nsc</td> <td>14-dil-1</td> <td>&amp;(2μ</td> <td>11 11</td> <td>21 21</td> <td></td> </tr> <tr> <td>Mat</td> <td>14-dil-1</td> <td>&amp;(2μ</td> <td></td> <td>32 32</td> <td></td> </tr> <tr> <td>Mat</td> <td>14-smd-1</td> <td>&amp;(2μ</td> <td></td> <td>32 32</td> <td></td> </tr> <tr> <td>Tix</td> <td>14-smd-1</td> <td>&amp;(2μ</td> <td>15 15</td> <td>35 35</td> <td></td> </tr> <tr> <td>Tix</td> <td>20-chip-3</td> <td>&amp;(2μ</td> <td>15 15</td> <td>42 42</td> <td></td> </tr> <tr> <td>Tix</td> <td>20-chip-3</td> <td>&amp;(2μ</td> <td>15 15</td> <td>35 35</td> <td></td> </tr> <tr> <td>Tix</td> <td>20-chip-2</td> <td>&amp;(2μ</td> <td>15 15</td> <td>42 42</td> <td></td> </tr> </tbody> </table>																7451	Type		Production	Bld Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q ns <sub>typ</sub>	t <sub>PD</sub> E-Q ns <sub>max</sub>	Note fr &f <sub>E</sub> &MHz	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	<b>HC</b> HD74HC51 LC74HC51 M74HC51 MB74HC51           <b>SN74HC51D</b>			Hit	14-dil	&(2μ		32 32		Say	14-dil	&(2μ		32 32		Mit	14-dil	&(2μ		32 32		Fui	14-dil	&(2μ		32 32		Mot	14-smd-1	&(2μ	11 11	21 21		Mot	14-dil-4	&(2μ	11 11	21 21		Mot	14-dil-1	&(2μ	11 11	21 21		Nsc	14-dil-4	&(2μ	11 11	21 21		Nsc	14-dil-1	&(2μ	11 11	21 21		Mat	14-dil-1	&(2μ		32 32		Mat	14-smd-1	&(2μ		32 32		Tix	14-smd-1	&(2μ	15 15	35 35		Tix	20-chip-3	&(2μ	15 15	42 42		Tix	20-chip-3	&(2μ	15 15	35 35		Tix	20-chip-2	&(2μ	15 15	42 42	
7451	Type		Production	Bld Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q ns <sub>typ</sub>	t <sub>PD</sub> E-Q ns <sub>max</sub>	Note fr &f <sub>E</sub> &MHz																																																																																																																
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C																																																																																																																						
<b>HC</b> HD74HC51 LC74HC51 M74HC51 MB74HC51           <b>SN74HC51D</b>			Hit	14-dil	&(2μ		32 32																																																																																																																	
			Say	14-dil	&(2μ		32 32																																																																																																																	
			Mit	14-dil	&(2μ		32 32																																																																																																																	
			Fui	14-dil	&(2μ		32 32																																																																																																																	
			Mot	14-smd-1	&(2μ	11 11	21 21																																																																																																																	
			Mot	14-dil-4	&(2μ	11 11	21 21																																																																																																																	
			Mot	14-dil-1	&(2μ	11 11	21 21																																																																																																																	
			Nsc	14-dil-4	&(2μ	11 11	21 21																																																																																																																	
			Nsc	14-dil-1	&(2μ	11 11	21 21																																																																																																																	
			Mat	14-dil-1	&(2μ		32 32																																																																																																																	
			Mat	14-smd-1	&(2μ		32 32																																																																																																																	
			Tix	14-smd-1	&(2μ	15 15	35 35																																																																																																																	
			Tix	20-chip-3	&(2μ	15 15	42 42																																																																																																																	
			Tix	20-chip-3	&(2μ	15 15	35 35																																																																																																																	
Tix	20-chip-2	&(2μ	15 15	42 42																																																																																																																				

7458 Output: TP	AND/OR gates			7478	Type			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>S</sub> typ	t <sub>PD</sub> E-Q n <sub>S</sub> max	Note f <sub>T</sub> f <sub>SZ</sub> &f <sub>E</sub>
					0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C						
<p> <math>Q1 = (A1 \cdot B1) + (C1 \cdot D1)</math>  <math>Q2 = (A2 \cdot B2 \cdot C2) + (D2 \cdot E2 \cdot F2)</math> </p>													
7458	Type			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>S</sub> typ	t <sub>PD</sub> E-Q n <sub>S</sub> max	Note f <sub>T</sub> f <sub>SZ</sub> &f <sub>E</sub>				
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.							mA	↓ ↑ †	↓ ↑ †	MHz
HC      μPB74HC58	MM74HC58J MM74HC58N PC74HC58P PC74HC58T	MC74HC58D	Mot	14-smd-1	&(2μ	11 11	21 21						
		MC54HC58J	Mot	14-dil-4	&(2μ	11 11	21 21						
		MC74HC58N	Mot	14-dil-1	&(2μ	11 11	21 21						
		MM54HC58J	Nsc	14-dil-4	&(2μ	11 11	21 21						
			Nsc	14-dil-1	&(2μ	11 11	21 21						
			Val	14-dil-1	&(2μ	11 11	21 21						
			Val	14-smd-1	&(2μ	11 11	21 21						
			Nec	14-dil	&(4μ			38 38					

**7473**

Output: TP

JK-flip-flops

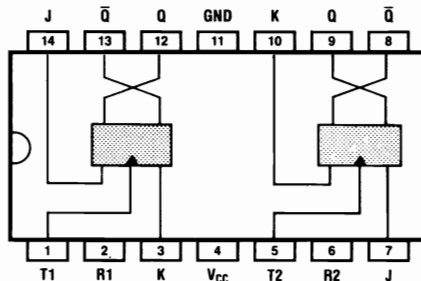
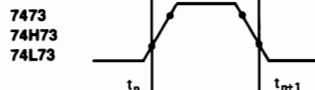
**7473**0...70°C  
§0...75°C

Type	
- 40...85°C §- 25...85°C	- 55...125°C

Production

Bild  
Sec. 3  
Pins-  
Art-Nr.IS  
&IR  
mAI<sub>PD</sub>  
E-Q  
n<sub>typ</sub>I<sub>PD</sub>  
E-Q  
n<sub>max</sub>Note  
f<sub>r</sub> f<sub>z</sub>  
&f<sub>E</sub>  
MHz

FI (Pin R + T) = 2

Taktimpuls · L'impulsion d'horloge · Clock pulse  
Impulso di cadenza · Pulso del reloj

Input		Output		
R	J	K	Q	Q̄
L	X	X	L	H
H	L	L	Q <sub>n</sub>	Q̄ <sub>n</sub>
H	H	L	H	L
H	L	H	L	H
H	H	H	Q̄ <sub>n</sub>	Q <sub>n</sub>

C

MM74C73J  
MM74C73NMM54C73J  
MM54C73WNsc  
Nsc  
Nsc14-dil-4  
14-dil-1  
14-flat-150n  
50n  
50n180 180  
180 180  
180 180300 300  
300 300  
300 3002.5  
2.5  
2.5

HC

BU74HC73

CD74HC73E  
CD54HC73F  
CD54HC73H

CD74HC73M

Toy  
Rca  
Rca  
Rca14-dil  
14-dil-1  
14-dil-4  
chip&(4μ  
18 18  
18 18  
18 18

32 32

21  
60  
60  
60HD74HC73  
M74HC73MM74HC73J  
MM74HC73N  
MN74HC73  
MN74HC73S  
PC74HC73P  
PC74HC73TMC54HC73J  
MC74HC73N  
MM54HC73JHit  
Mit  
Mot  
Mot  
Nsc  
Nsc  
Mat  
Mat14-dil  
14-dil  
14-dil-4  
14-dil-1  
14-dil-1  
14-dil-1  
14-smd-1&(4μ  
&(4μ  
(4μ  
(4μ  
(4μ  
(4μ  
&(4μ11 11  
11 11  
15 15  
15 15  
15 15  
15 15  
32 3232 32  
32 32  
21 31  
21 31  
21 32  
21 32  
21 3221  
21  
31  
31  
32  
32  
21

SN74HC73D

SN74HC73N  
T74HC73  
TD74HC73

SN54HC73J

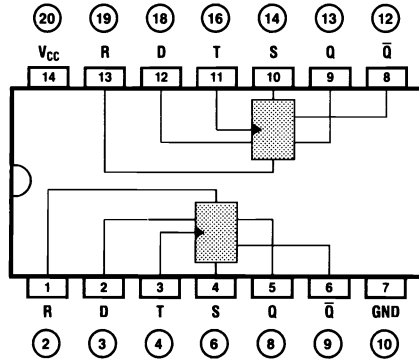
Phi, Val  
Phi, Val  
Tix  
Tix  
Tix  
Sgs  
Tos14-dil-1  
14-smd-1  
14-dil-4  
14-smd-1  
14-dil-1  
14-dil&(4μ  
&(4μ  
&(4μ  
&(4μ  
&(4μ  
&(4μ  
&(4μ19 19  
19 19  
13 13  
13 13  
13 13  
32 32  
32 3240 40  
40 40  
32 32  
37 37  
32 32  
32 32  
32 3224  
24  
T)Q  
T)Q  
T)Q  
21  
21

HCT

CD74HCT73E  
CD54HCT73F  
CD54HCT73HCD74HCT73M  
CD74HCT73P  
CD74HCT73TRca  
Rca  
Rca  
Rca14-dil-1  
14-dil-4  
chip  
14-smd-118 18  
18 18  
18 18  
18 1818 18  
18 18  
18 18  
18 1860  
60  
60  
60Phi, Val  
Phi, Val14-dil-1  
14-smd-1&(4μ  
&(4μ18 18  
18 1848 48  
48 48

**7474**  
Output: TP

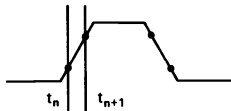
D-type flip-flops



Pin	FI				
	N	H	L	LS	S
R	3	2	2	3,3	3
S,T	2	2	2	2,2	2
D	1	1	1	1,1	1

Input			Output	
S	R	D	Q	Q̄
H	L	X	L	H
L	H	X	H	L
L	L	X	.	.
H	H	L	H	L
H	H	H	L	H

Taktimpuls · L'impulsion d'horloge · Clock pulse  
Impulso di cadenza · Pulso del reloj



\* Dieser Zustand ist nicht stabil  
\* This state is not stable  
\* Cet état n'est pas stable  
\* Questo stato non è stabile  
\* Este estado no es estable

7474	Type		Production	Blid Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>styp</sub>	t <sub>PD</sub> E → Q n <sub>max</sub>	Note	
	0...70°C §0...75°C	-40...85°C §-25...85°C						-55...125°C	f <sub>T</sub>
			Pins-Art-Nr.		mA		MHz		
AC	CD74AC74E	CD54AC74E	Rca	14-dil-1	&(4μ		10 10	110	
		CD54AC74H	Rca	14-dil-1	&(4μ		9.1 9.1	125	
		CD54AC74M	Rca	chip	&(4μ		10 10	110	
		CD74AC74M	Rca	14-sm-d-1	&(4μ		10 10	110	
		HD74AC74	Rca	14-sm-d-1	&(4μ		9.1 9.1	125	
	74AC74D	54AC74D	Fch,Nsc	14-dil-4	&(4μ	6 6	11.5 11	95	
		54AC74F	Fch,Nsc	14-dil-4	&(4μ	6 6	10.5 14.5	125	
		54AC74L	Fch,Nsc	14-flat-1	&(4μ	6 6	11.5 11	95	
		74AC74P	Fch,Nsc	20-chip-2	&(4μ	6 6	11.5 11	95	
		74AC74S	Fch,Nsc	14-dil-1	&(4μ	6 6	10.5 14.5	125	
ACT	CD74ACT74E	CD54ACT74E	Rca	14-dil-1	&(4μ		9.5 9.5	85	
		CD54ACT74H	Rca	14-dil-1	&(4μ		8.6 8.6	97	
		CD54ACT74M	Rca	chip	&(4μ		9.5 9.5	85	
		CD74ACT74M	Rca	14-sm-d-1	&(4μ		9.5 9.5	85	
		HD74ACT74D	Rca	14-sm-d-1	&(4μ		8.6 8.6	97	
	74ACT74D	54ACT74D	Fch,Nsc	14-dil-4	&(4μ	6 7.5	12 14	95	
		54ACT74F	Fch,Nsc	14-dil-4	&(4μ	6 7.5	11.5 13	125	
		54ACT74L	Fch,Nsc	14-flat-1	&(4μ	6 7.5	12 14	95	
		74ACT74P	Fch,Nsc	20-chip-2	&(4μ	6 7.5	12 14	95	
		74ACT74S	Fch,Nsc	14-dil-1	&(4μ	6 7.5	11.5 13	125	
C	MM74C74J	MM54C74J	Nsc	14-dil-4	50n	180 180	300 300	2	
		MM74C74N	Nsc	14-dil-1	50n	180 180	300 300	2	
		MM54C74W	Nsc	14-flat-1	50n	180 180	300 300	2	
HC	BU74HC74	CD74HC74E	Toy	14-dil	&(4μ		44 44	21	
			Rca	14-dil-1	&(4μ	14 14	44 44	25	
			Rca	14-dil-4	&(4μ	14 14	53 53	20	
			Rca	chip	&(4μ	14 14	53 53	20	
			Rca	14-sm-d-1	&(4μ	14 14	44 44	25	
			Hit	14-dil	&(4μ		44 44	21	
			Sha	14-dil	&(4μ		44 44	21	
HD74HC74	LR74HC74	M74HC74	MB74HC74	Mit	14-dil	&(4μ		44 44	21
				Fui	14-dil	&(4μ		44 44	21

7474	Type		Production	Bild Sec. 3	IS &IR	tpD E-Q n <sub>typ</sub>	tpD E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>	7474	Type		Production	Bild Sec. 3	IS &IR	tpD E-Q n <sub>typ</sub>	tpD E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>		
	0...70°C	-40...85°C § -25...85°C								-55...125°C	0...70°C							-40...85°C § -25...85°C	-55...125°C
	§0...75°C										§0...75°C								
SN74HC74D	MM74HC74J MM74HC74N MN74HC74 MN74HC74S PC74HC74P PC74HC74T	MC54HC74J	Mot	14-dil-4	(4μ	15 15	30 30	32											
		MC74HC74N	Mot	14-dil-1	(4μ	15 15	30 30	32											
		MC74HC74AD	Mot	14-smd-1	2μ		30 30	24											
		MC54HC74AJ	Mot	14-dil-4	2μ		30 30	24											
		MC74HC74AN	Mot	14-dil-1	2μ		30 30	24											
		MM54HC74J	Nsc	14-dil-4	(4μ	15 15	30 30	32											
			Nsc	14-dil-1	(4μ	15 15	30 30	32											
			Mat	14-dil-1	&(4μ		44 44	21											
			Mat	14-smd-1	&(4μ		44 44	21											
			Phi,Val	14-dil-1	&(4μ	17 17	44 44	24											
			Phi,Val	14-smd-1	&(4μ	17 17	44 44	24											
			Tix	14-smd-1	&(4μ	20 20	44 44	25											
			Tix	20-chip-3	&(4μ	20 20	50 50	21											
			Tix	20-chip-3	&(4μ	20 20	44 44	25											
SN74HC74FH		SN54HC74FH	Tix	20-chip-2	&(4μ	20 20	50 50	21											
		SN54HC74FK	Tix	20-chip-1	&(4μ	20 20	44 44	25											
		SN54HC74J	Tix	14-dil-4	&(4μ	20 20	50 50	21											
		SN54HC74J	Tix	14-dil-4	&(4μ	20 20	44 44	25											
T74HC74 TD74HC74 μPB74HC74			Tix	14-dil-1	&(4μ	20 20	44 44	25											
			Sgs	14-dil	&(4μ		44 44	21											
			Tos	14-dil	&(4μ		44 44	21											
HCT			Nec	14-dil	&(4μ		44 44	21											
		CD74HCT74E	Rca	14-dil-1	&(4μ	14 14	44 44	20											
		CD54HCT74F CD54HCT74H	Rca chip	14-dil-4	&(4μ	14 14	53 53	16											
LR74HCT74	CD74HCT74M		Rca	14-smd-1	&(4μ	14 14	44 44	20											
			Sha	14-dil	&(4μ		44 44	21											
			Nsc	14-dil-4	(4μ	21 21	35 35	27											
SN74HCT74D	MM74HCT74J MM74HCT74N PC74HCT74P PC74HCT74T	MM54HCT74J	Nsc	14-dil-1	(4μ	21 21	35 35	27											
			Nsc	14-dil-1	(4μ	21 21	35 35	27											
			Phi,Val	14-dil-1	&(4μ	18 18	44 44	22											
			Phi,Val	14-smd-1	&(4μ	18 18	44 44	22											
			Tix	14-smd-1	&(4μ	20 20	35 35	22											
SN74HCT74N		SN54HCT74FK	Tix	20-chip-2	&(4μ	20 20	42 42	18											
		SN54HCT74J	Tix	14-dil-4	&(4μ	20 20	42 42	18											
		SN54HCT74J	Tix	14-dil-1	&(4μ	20 20	35 35	22											

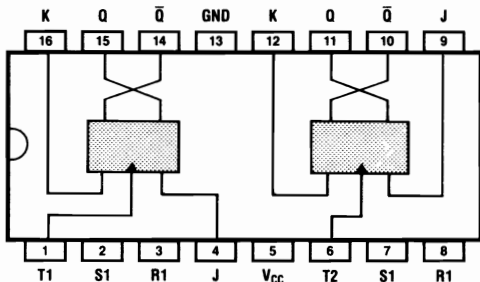
7475 Output: TP	Edge-triggered D-type flip-flops							7475		Type		Production	Bld Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>typ</sub> ↓ ↓ ↑ ↑	t <sub>PD</sub> E-Q n <sub>max</sub> ↓ ↓ ↑ ↑	Note t <sub>T</sub> §fZ &I <sub>E</sub> MHz																																																																																																																																																																																													
	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	-40...85°C §-25...85°C	-55...125°C																																																																																																																																																																																																									
<table border="1" style="display: inline-table; margin-right: 20px;"> <thead> <tr> <th>Pin</th> <th>N</th> <th>FI</th> <th>L</th> <th>LS</th> </tr> </thead> <tbody> <tr> <td>D</td> <td>2</td> <td>9</td> <td>1,1</td> <td></td> </tr> <tr> <td>T</td> <td>4</td> <td>18</td> <td>4,4</td> <td></td> </tr> </tbody> </table> <table border="1" style="display: inline-table;"> <thead> <tr> <th>EN</th> <th>D</th> <th>Q</th> <th>Q-bar</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>X</td> <td>Q<sub>n</sub></td> <td>Q<sub>n</sub>-bar</td> </tr> <tr> <td>H</td> <td>L</td> <td>L</td> <td>H</td> </tr> <tr> <td>H</td> <td>H</td> <td>H</td> <td>L</td> </tr> </tbody> </table>																		Pin	N	FI	L	LS	D	2	9	1,1		T	4	18	4,4		EN	D	Q	Q-bar	L	X	Q <sub>n</sub>	Q <sub>n</sub> -bar	H	L	L	H	H	H	H	L																																																																																																																																																														
Pin	N	FI	L	LS																																																																																																																																																																																																										
D	2	9	1,1																																																																																																																																																																																																											
T	4	18	4,4																																																																																																																																																																																																											
EN	D	Q	Q-bar																																																																																																																																																																																																											
L	X	Q <sub>n</sub>	Q <sub>n</sub> -bar																																																																																																																																																																																																											
H	L	L	H																																																																																																																																																																																																											
H	H	H	L																																																																																																																																																																																																											
<table border="1"> <thead> <tr> <th rowspan="2">7475</th> <th colspan="2">Type</th> <th rowspan="2">Production</th> <th rowspan="2">Bld Sec. 3 Pins- Art-Nr.</th> <th rowspan="2">I<sub>S</sub> &amp;I<sub>R</sub> mA</th> <th rowspan="2">t<sub>PD</sub> E-Q n<sub>typ</sub> ↓ ↓ ↑ ↑</th> <th rowspan="2">t<sub>PD</sub> E-Q n<sub>max</sub> ↓ ↓ ↑ ↑</th> <th rowspan="2">Note t<sub>T</sub> §fZ &amp;I<sub>E</sub> MHz</th> </tr> <tr> <th>0...70°C §0...75°C</th> <th>-40...85°C §-25...85°C</th> <th>-55...125°C</th> </tr> </thead> <tbody> <tr> <td rowspan="12">HC  HD74HC75 JRC74HC75</td> <td rowspan="3">CD74HC75E</td> <td>MN74HC75</td> <td>Rca</td> <td>16-dil-1</td> <td></td> <td>10</td> <td>10</td> <td>60</td> </tr> <tr> <td>MN74HC75S</td> <td>Rca</td> <td>16-dil-3</td> <td></td> <td>10</td> <td>10</td> <td>60</td> </tr> <tr> <td>MC74HC75D</td> <td>Hit</td> <td>16-dil</td> <td>&amp;(4μ)</td> <td></td> <td>36</td> <td>36</td> <td>60</td> </tr> <tr> <td rowspan="3">CD74HC75M</td> <td>CD54HC75F</td> <td>Rca</td> <td>16-dil-3</td> <td></td> <td>10</td> <td>10</td> <td>10</td> <td>60</td> </tr> <tr> <td>CD54HC75H</td> <td>Rca</td> <td>chip</td> <td></td> <td>10</td> <td>10</td> <td>10</td> <td>60</td> </tr> <tr> <td>MC74HC75N</td> <td>Mot</td> <td>16-smd-1</td> <td>(4μ)</td> <td>14</td> <td>14</td> <td>21</td> <td>21</td> </tr> <tr> <td rowspan="6">MM74HC75J MM74HC75N</td> <td rowspan="3">MC74HC75D</td> <td>MC74HC75J</td> <td>Mot</td> <td>16-dil-3</td> <td>(4μ)</td> <td>14</td> <td>14</td> <td>21</td> <td>21</td> </tr> <tr> <td>MC74HC75N</td> <td>Mot</td> <td>16-dil-1</td> <td>(4μ)</td> <td>14</td> <td>14</td> <td>21</td> <td>21</td> </tr> <tr> <td>MM54HC75J</td> <td>Nsc</td> <td>16-dil-3</td> <td>(4μ)</td> <td>14</td> <td>14</td> <td>24</td> <td>24</td> </tr> <tr> <td rowspan="3">SN74HC75D</td> <td>SN74HC75J</td> <td>Mat</td> <td>16-dil-1</td> <td></td> <td>12</td> <td>12</td> <td>30</td> <td>30</td> </tr> <tr> <td>SN74HC75N</td> <td>Phi,Val</td> <td>16-smd-1</td> <td></td> <td>12</td> <td>12</td> <td>30</td> <td>30</td> </tr> <tr> <td>SN74HC75N</td> <td>Phi,Val</td> <td>16-smd-1</td> <td></td> <td>12</td> <td>12</td> <td>30</td> <td>30</td> </tr> <tr> <td rowspan="6">T74HC75 TD74HC75 HCT</td> <td rowspan="3">SN54HC75J</td> <td>SN74HC75J</td> <td>Tix</td> <td>16-smd-1</td> <td>&amp;(4μ)</td> <td>14</td> <td>14</td> <td>30</td> <td>30</td> </tr> <tr> <td>SN74HC75N</td> <td>Tix</td> <td>16-dil-3</td> <td>&amp;(4μ)</td> <td>14</td> <td>14</td> <td>30</td> <td>30</td> </tr> <tr> <td>SN74HC75N</td> <td>Tix</td> <td>16-dil-1</td> <td>&amp;(4μ)</td> <td>14</td> <td>14</td> <td>30</td> <td>30</td> </tr> <tr> <td rowspan="3">CD54HCT75F CD54HCT75H</td> <td>CD74HCT75E</td> <td>Rca</td> <td>16-dil-1</td> <td></td> <td>10</td> <td>10</td> <td></td> <td>60</td> </tr> <tr> <td>CD74HCT75M</td> <td>Rca</td> <td>16-dil-3</td> <td></td> <td>10</td> <td>10</td> <td></td> <td>60</td> </tr> <tr> <td>CD74HCT75N</td> <td>Rca</td> <td>chip</td> <td></td> <td>10</td> <td>10</td> <td></td> <td>60</td> </tr> <tr> <td rowspan="3">PC74HC75P PC74HC75T</td> <td rowspan="3">PC74HC75P PC74HC75T</td> <td>PC74HC75P</td> <td>Phi,Val</td> <td>16-dil-2</td> <td>&amp;(8μ)</td> <td>13</td> <td>13</td> <td>35</td> <td>35</td> </tr> <tr> <td>PC74HC75P</td> <td>Phi,Val</td> <td>16-smd-1</td> <td>&amp;(8μ)</td> <td>13</td> <td>13</td> <td>35</td> <td>35</td> </tr> <tr> <td>PC74HC75T</td> <td>Phi,Val</td> <td>16-smd-1</td> <td>&amp;(8μ)</td> <td>13</td> <td>13</td> <td>35</td> <td>35</td> </tr> </tbody> </table>																		7475	Type		Production	Bld Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>typ</sub> ↓ ↓ ↑ ↑	t <sub>PD</sub> E-Q n <sub>max</sub> ↓ ↓ ↑ ↑	Note t <sub>T</sub> §fZ &I <sub>E</sub> MHz	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	HC  HD74HC75 JRC74HC75	CD74HC75E	MN74HC75	Rca	16-dil-1		10	10	60	MN74HC75S	Rca	16-dil-3		10	10	60	MC74HC75D	Hit	16-dil	&(4μ)		36	36	60	CD74HC75M	CD54HC75F	Rca	16-dil-3		10	10	10	60	CD54HC75H	Rca	chip		10	10	10	60	MC74HC75N	Mot	16-smd-1	(4μ)	14	14	21	21	MM74HC75J MM74HC75N	MC74HC75D	MC74HC75J	Mot	16-dil-3	(4μ)	14	14	21	21	MC74HC75N	Mot	16-dil-1	(4μ)	14	14	21	21	MM54HC75J	Nsc	16-dil-3	(4μ)	14	14	24	24	SN74HC75D	SN74HC75J	Mat	16-dil-1		12	12	30	30	SN74HC75N	Phi,Val	16-smd-1		12	12	30	30	SN74HC75N	Phi,Val	16-smd-1		12	12	30	30	T74HC75 TD74HC75 HCT	SN54HC75J	SN74HC75J	Tix	16-smd-1	&(4μ)	14	14	30	30	SN74HC75N	Tix	16-dil-3	&(4μ)	14	14	30	30	SN74HC75N	Tix	16-dil-1	&(4μ)	14	14	30	30	CD54HCT75F CD54HCT75H	CD74HCT75E	Rca	16-dil-1		10	10		60	CD74HCT75M	Rca	16-dil-3		10	10		60	CD74HCT75N	Rca	chip		10	10		60	PC74HC75P PC74HC75T	PC74HC75P PC74HC75T	PC74HC75P	Phi,Val	16-dil-2	&(8μ)	13	13	35	35	PC74HC75P	Phi,Val	16-smd-1	&(8μ)	13	13	35	35	PC74HC75T	Phi,Val	16-smd-1	&(8μ)	13	13	35	35
7475	Type		Production	Bld Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>typ</sub> ↓ ↓ ↑ ↑	t <sub>PD</sub> E-Q n <sub>max</sub> ↓ ↓ ↑ ↑	Note t <sub>T</sub> §fZ &I <sub>E</sub> MHz																																																																																																																																																																																																						
	0...70°C §0...75°C	-40...85°C §-25...85°C							-55...125°C																																																																																																																																																																																																					
HC  HD74HC75 JRC74HC75	CD74HC75E	MN74HC75	Rca	16-dil-1		10	10	60																																																																																																																																																																																																						
		MN74HC75S	Rca	16-dil-3		10	10	60																																																																																																																																																																																																						
		MC74HC75D	Hit	16-dil	&(4μ)		36	36	60																																																																																																																																																																																																					
	CD74HC75M	CD54HC75F	Rca	16-dil-3		10	10	10	60																																																																																																																																																																																																					
		CD54HC75H	Rca	chip		10	10	10	60																																																																																																																																																																																																					
		MC74HC75N	Mot	16-smd-1	(4μ)	14	14	21	21																																																																																																																																																																																																					
	MM74HC75J MM74HC75N	MC74HC75D	MC74HC75J	Mot	16-dil-3	(4μ)	14	14	21	21																																																																																																																																																																																																				
			MC74HC75N	Mot	16-dil-1	(4μ)	14	14	21	21																																																																																																																																																																																																				
			MM54HC75J	Nsc	16-dil-3	(4μ)	14	14	24	24																																																																																																																																																																																																				
		SN74HC75D	SN74HC75J	Mat	16-dil-1		12	12	30	30																																																																																																																																																																																																				
			SN74HC75N	Phi,Val	16-smd-1		12	12	30	30																																																																																																																																																																																																				
			SN74HC75N	Phi,Val	16-smd-1		12	12	30	30																																																																																																																																																																																																				
T74HC75 TD74HC75 HCT	SN54HC75J	SN74HC75J	Tix	16-smd-1	&(4μ)	14	14	30	30																																																																																																																																																																																																					
		SN74HC75N	Tix	16-dil-3	&(4μ)	14	14	30	30																																																																																																																																																																																																					
		SN74HC75N	Tix	16-dil-1	&(4μ)	14	14	30	30																																																																																																																																																																																																					
	CD54HCT75F CD54HCT75H	CD74HCT75E	Rca	16-dil-1		10	10		60																																																																																																																																																																																																					
		CD74HCT75M	Rca	16-dil-3		10	10		60																																																																																																																																																																																																					
		CD74HCT75N	Rca	chip		10	10		60																																																																																																																																																																																																					
PC74HC75P PC74HC75T	PC74HC75P PC74HC75T	PC74HC75P	Phi,Val	16-dil-2	&(8μ)	13	13	35	35																																																																																																																																																																																																					
		PC74HC75P	Phi,Val	16-smd-1	&(8μ)	13	13	35	35																																																																																																																																																																																																					
		PC74HC75T	Phi,Val	16-smd-1	&(8μ)	13	13	35	35																																																																																																																																																																																																					

# 7476

Output: TP

## JK-flip-flops

Pin	FI		
	N	H	LS
R, S	2	2	2,2
T	2	1	2



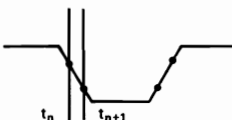
Input				Output	
S	R	J	K	Q	Q-bar
L	H	X	X	H	L
H	L	X	X	L	H
L	L	X	X	.	.
H	H	L	L	Q <sub>n</sub>	Q-bar <sub>n</sub>
H	H	H	L	H	L
H	H	L	H	L	H
H	H	H	H	Q-bar <sub>n</sub>	Q <sub>n</sub>

Taktimpuls · L'impulsion d'horloge · Clock pulse  
 Impulso di cadenza · Pulso del reloj

7476  
74H76



74C76  
74HC76  
74HCT76  
74LS76



- \* Dieser Zustand ist nicht stabil
- \* This state is not stable
- \* Cet état n'est pas stable
- \* Questo stato non è stabile
- \* Este estado no es estable

7476

Type

Production

Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>typ</sub>	t <sub>PD</sub> E-Q n <sub>max</sub>	Note	
				f <sub>T</sub>	f <sub>TZ</sub> &f <sub>E</sub>
Pin- Art-Nr.	mA	↓ ↑ ↓	↓ ↑ ↓	MHz	

C

MM74C76J  
MM74C76N

MM54C76J  
MM54C76W

Nsc  
Nsc  
Nsc

16-dil-3	50n	180	180	300	300	2.5
16-dil-1	50n	180	180	300	300	2.5
16-flat-3	50n	180	180	300	300	2.5

HC

HD74HC76  
LR74HC76  
MB74HC76

Hit  
Sha  
Fui

16-dil	&(4μ)			41	41	21
16-dil	&(4μ)			41	41	21
16-dil	&(4μ)			41	41	21

SN74HC76D

MM74HC76J  
MM74HC76N  
MN74HC76  
MN74HC76S

MC74HC76D  
MC54HC76J  
MC74HC76N  
MM54HC76J

Mot  
Mot  
Mot  
Nsc  
Nsc  
Mat

16-smd-1	(4μ)	17	17	22	22	31
16-dil-3	(4μ)	17	17	22	22	31
16-dil-1	(4μ)	17	17	22	22	31
16-dil-3	(4μ)	17	17	21	21	31
16-dil-1	(4μ)	17	17	21	21	31
16-dil-1	&(4μ)	17	17	21	21	31

T74HC76  
TD74HC76

SN74HC76J  
SN74HC76N

SN54HC76J

Tix  
Tix  
Tix  
Sgs  
Tos

16-smd-1	&(4μ)	19	19	36	36	25
16-dil-3	&(4μ)	19	19	44	44	21
16-dil-3	&(4μ)	19	19	36	36	25
16-dil-1	&(4μ)	19	19	36	36	25
16-dil	&(4μ)	19	19	36	36	25
16-dil	&(4μ)	41	41	41	41	21

HCT

MM74HCT76J  
MM74HCT76N

MM54HCT76J

Nsc  
Nsc

16-dil-3	(4μ)	22	22	35	35	27
16-dil-1	(4μ)	22	22	35	35	27

**7477**

Output: TP

**D-type flip-flops****7477**

Type

0...70°C  
§0...75°C-40...85°C  
§-25...85°C

-55...125°C

Production

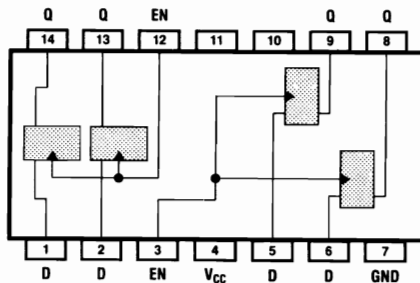
Blld  
Sec. 3I<sub>S</sub>  
&I<sub>R</sub>I<sub>PD</sub>  
E-Q  
n<sub>typ</sub>I<sub>PD</sub>  
E-Q  
n<sub>max</sub>Note  
f<sub>T</sub> f<sub>Z</sub>  
&I<sub>E</sub>Pins-  
Art-Nr.

mA

↓ ↓ ↑

↓ ↓ ↑

MHz

7477:  
FI (Pin D) = 2  
FI (Pin T) = 474L77:  
FI (Pin D) = 9  
FI (Pin T) = 18HC  
HD74HC77  
JRC74HC77MN74HC77  
MN74HC77SMSM74HC77  
SN74HC77D

SN54HC77J

SN74HC77N  
TD74HC77  
μPB74HC77Hit  
Njr  
Mat  
Mat  
Oki  
Tix  
Tix  
Tix  
Tos  
Nec14-dil  
14-dil  
14-dil-1  
14-smd-1  
14-dil  
14-smd-1  
14-dil-4  
14-dil-1  
14-dil

&amp;(4μ

12 12

30 30

36 36

30 30

EN	D	Q
L	X	Q <sub>n</sub>
H	L	L
H	H	H



**7478**

Output: TP

**JK-flip-flops****7478**

Type

0...70°C  
§0...75°C-40...85°C  
§-25...85°C

-55...125°C

Production

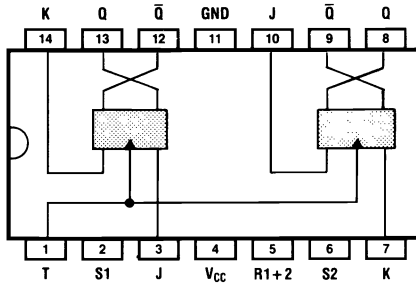
Bild  
Sec. 3 $I_S$   
&  $I_R$  $I_{PD}$   
E-Q  
n<sub>styp</sub> $I_{PD}$   
E-Q  
n<sub>smax</sub>Note  
f<sub>T</sub> §f<sub>Z</sub>  
& f<sub>E</sub>Pins-  
Art-Nr.

mA

↓ ↑ †

↓ ↑ †

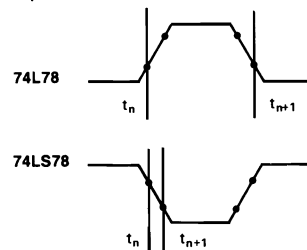
MHz

74L78:  
FI (Pin R, T) = 4  
FI (Pin S) = 274LS78:  
FI (Pin R) = 4,4  
FI (Pin S) = 2,2  
FI (Pin T) = 4HC  
HD74HC78  
SN74HC78D  
SN74HC78N

SN54HC78J

Hit  
Tix  
Tix  
Tix14-dil  
14-smd-1  
14-dil-4  
14-dil-1&(4μ  
&(4μ  
&(4μ13 13  
13 13  
13 1332 32  
37 37  
32 3225  
21  
25

Input $t_n$		Output $t_{n+1}$			
S	R	J	K	Q	$\bar{Q}$
L	H	X	X	H	L
H	L	X	X	L	H
L	L	X	X	*	*
H	H	L	L	$Q_n$	$\bar{Q}_n$
H	H	H	L	H	L
H	H	L	H	L	H
H	H	H	H	$\bar{Q}_n$	$Q_n$

Taktimpuls · L'impulsion d'horloge · Clock pulse  
Impulso di cadenza · Pulso del reloj

- \* Dieser Zustand ist nicht stabil.
- \* This state is not stable
- \* Cet état n'est pas stable
- \* Questo stato non è stabile
- \* Este estado no es estable

**7483**

Output: TP

4-bit full adder

**7483**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E → Q  
n<sub>styp</sub>

t<sub>PD</sub>  
E → Q  
n<sub>max</sub>

Note  
f<sub>T</sub> f<sub>SZ</sub>  
& f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

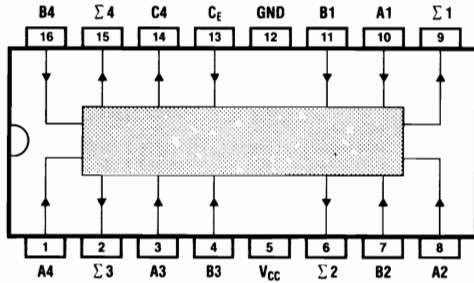
Pin-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz



Input		Output		
A <sub>n+1</sub>	B <sub>n+1</sub>	Σ <sub>n</sub> *C <sub>E</sub>	Σ <sub>n+1</sub>	Σ <sub>n+2</sub> **C <sub>O</sub>
L	L	L	L	L
H	L	L	H	L
L	H	L	H	L
H	H	L	L	H
L	L	H	H	L
H	L	H	L	H
L	H	H	L	H
H	H	H	H	H

Pin	FI		FQ	
	N	LS	N	LS
A, B	1	2,2		
CE	1	1,1		
C4			5	20

\* für/when/pour/per A1, B1

\*\* für/when/pour/per A4, B4

C

HC  
HD74HC83

MM74C83J  
MM74C83N

MM54C83J  
MM54C83W

Nsc  
Nsc  
Nsc

16-dil-3  
16-dil-1  
16-flat-3

50n  
50n  
50n

300  
300  
300

550  
550  
550

Hit

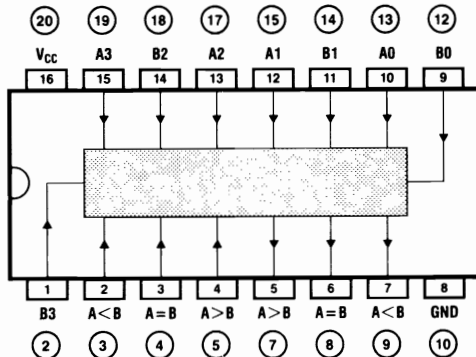
16-dil

**7485**

Output: TP

**4-bit comparator**

FI = 3  
FI (A < B, A > B) = 1



Input data				Input cascade			Output		
A3, B3	A2, B2	A1, B1	A0, B0	A > B	A < B	A = B	A > B	A < B	A = B
A3 > B3	X	X	X	X	X	X	H	L	L
A3 < B3	X	X	X	X	X	X	L	H	L
A3 = B3	A2 > B2	X	X	X	X	X	H	L	L
A3 = B3	A2 < B2	X	X	X	X	X	L	H	L
A3 = B3	A2 = B2	A1 > B1	X	X	X	X	H	L	L
A3 = B3	A2 = B2	A1 < B1	X	X	X	X	L	H	L
A3 = B3	A2 = B2	A1 = B1	A0 > B0	X	X	X	H	L	L
A3 = B3	A2 = B2	A1 = B1	A0 < B0	X	X	X	L	H	L
A3 = B3	A2 = B2	A1 = B1	A0 = B0	H	L	L	H	L	L
A3 = B3	A2 = B2	A1 = B1	A0 = B0	L	H	L	L	H	L
A3 = B3	A2 = B2	A1 = B1	A0 = B0	X	X	H	L	L	H
A3 = B3	A2 = B2	A1 = B1	A0 = B0	H	H	L	L	L	L
A3 = B3	A2 = B2	A1 = B1	A0 = B0	L	L	L	H	H	L

**7485**

Type

0...70°C  
-40...85°C  
§ -25...85°C  
-55...125°C

Production

Bld Sec. 3  
IS & IR  
tPD E--Q ntyp  
tPD E--Q nmax  
Note fT fZ & IE  
MHz

C	MM74C85J MM74C85N	MM54C85J MM54C85W	Nsc Nsc Nsc	16-dil-3 16-dil-1 16-flat-3	50n 50n 50n	250 250 250	250 250 250	600 600 600	600 600 600		
											PIne- Art-Nr.
HC	CD74HC85E CD74HC85M HD74HC85 LR74HC85 M74HC85 MB74HC85	CD54HC85F CD54HC85H	Rca	16-dil-1		18	18				
			Rca	16-dil-3		18	18				
			Rca	chip		18	18				
			Rca	16-smd-1		18	18				
			Hit	16-dil	&(8μ			50	50		
			Sha	16-dil	&(8μ			50	50		
			Mit	16-dil	&(8μ			50	50		
			Fui	16-dil	&(8μ			50	50		
			Mot	16-dil-3	(8μ	17	17	34	34		
			Mot	16-dil-1	(8μ	17	17	34	34		
HCT	MM74HC85J MM74HC85N PC74HC85P PC74HC85T SN74HC85AN T74HC95 TD74HC85 μPB74HC85	MC54HC85J MC74HC85N MM54HC85J SN54HC85AFK SN54HC85AJ	Nsc	16-dil-3	(8μ	15	15	30	30		
			Nsc	16-dil-1	(8μ	15	15	30	30		
			Nsc	16-dil-1	(8μ	15	15	30	30		
			Phi, Val	16-dil-2	&(8μ	21	21	44	44		
			Phi, Val	16-smd-1	&(8μ	21	21	44	44		
			Tix	20-chip-2	&(8μ	22	22	60	60		
			Tix	16-dil-3	&(8μ	22	22	60	60		
			Tix	16-dil-2	&(8μ	22	22	50	50		
			Sgs	16-dil	&(8μ			50	50		
			Tos	16-dil	&(8μ			50	50		
Nec	16-dil	&(8μ			50	50					
TD74HCT85	CD74HCT85E CD54HCT85F CD54HCT85H	Rca	16-dil-1		18	18					
		Rca	16-dil-3		18	18					
		Rca	chip		18	18					
		Rca	16-smd-1		18	18					
TD74HCT85	CD74HCT85M PC74HCT85P PC74HCT85T	Phi, Val	16-dil-2	&(8μ	24	24	50	50			
		Phi, Val	16-smd-1	&(8μ	24	24	50	50			
			Tos	16-dil							

7486 Output: TP	EX-OR gates							7486	Type		Production	Bild Sec. 3	$I_S$ &I <sub>R</sub>	$t_{PD}$ E-Q n <sub>styp</sub>	$t_{PD}$ E-Q n <sub>max</sub>	Note t <sub>r</sub> Stz &I <sub>E</sub>	
	0...70°C §0...75°C		-40...85°C §-25...85°C		-55...125°C		C	HC	HD74HC86 M74HC86 MB74HC86	CD54ACT86M MM74C86J MM74C86N MM54C86W		Rca Rca	14-smd-1	&(4μ &(4μ	14.6 14.6	13.3 13.3	
													Pins- Art-Nr.	mA	↓ ↓ ↑ ↑	↓ ↓ ↑ ↑	MHz
Fl (LS) = 2  Logiktablelle siehe Section 1 Function table see section 1 Tableau logique voir section 1 Per tavola di logica vedi sez.1 Tabla de verdad, ver sección 1								C  HD74HC86 M74HC86 MB74HC86  MSM74HC86  SN74HC86D	CD54ACT86M	CD54ACT86M	Rca Rca	14-smd-1 14-smd-1	&(4μ &(4μ	14.6 14.6	13.3 13.3		
	MM74C86J MM74C86N	MM54C86J MM54C86W	Nsc Nsc	14-dil-4 14-dil-1	10n 10n	110 110 110 110	185 185 185 185										
	CD74HC86E	CD54HC86F CD54HC86H	Rca Rca Rca	14-dil-1 14-dil-4 chip	&(2μ &(2μ &(2μ	9 9 10 10 10 10	30 30										
	CD74HC86M	MC74HC86D MC54HC86J MC74HC86N MC54HC86J	Rca Hit Mit Fui Mot Mot Mot	14-smd-1 14-dil 14-dil 14-dil 14-smd-1 14-dil-4 14-dil-1	&(2μ &(2μ &(2μ &(2μ &(2μ &(2μ &(2μ	9 9 30 30 30 30 30 30 10 10 10 10 10 10	30 30 30 30 30 30 20 20 20 20 20 20										
	MM74HC86J MM74HC86N MN74HC86 MN74HC86S	MM54HC86J	Nsc Nsc Mat Mat Oki	14-dil-1 14-dil-1 14-dil-1 14-smd-1 14-dil	&(2μ &(2μ &(2μ &(2μ &(2μ	10 10 10 10 10 10 30 30 30 30	20 20 20 20 20 20 30 30 30 30										
	PC74HC86P PC74HC86T	PC74HC86T	Phi,Val Phi,Val	14-dil-1 14-smd-1	&(2μ &(2μ	14 14 14 14	30 30 30 30										
	SN74HC86D	SN54HC86FH SN74HC86FH SN54HC86FK SN74HC86FN SN54HC86J SN74HC86J SN74HC86N	Tix Tix Tix Tix Tix Tix Tix Sgs Tos Nec	20-chip-3 20-chip-3 20-chip-2 20-chip-1 14-dil-4 14-dil-4 14-dil-1 14-dil	&(2μ &(2μ &(2μ &(2μ &(2μ &(2μ &(2μ &(2μ &(2μ &(2μ	12 12 12 12 12 12 12 12 12 12 12 12 12 12	25 25 30 30 30 30 25 25 30 30 25 25 30 30 30 30 30 30										
	AC	CD74AC86E	CD54AC86E CD54AC86H CD54AC86M	Rca Rca Rca Rca	14-dil-1 14-dil-1 chip 14-smd-1	&(4μ &(4μ &(4μ &(4μ	10.8 10.8 9.8 9.8 10.8 10.8 10.8 10.8										
	CD74AC86M	CD74AC86M	Rca	14-smd-1	&(4μ	9.8 9.8											
	74AC86D	54AC86D	Fch,Nsc	14-dil-4	&(4μ	6 6.5											
74AC86P	54AC86F	Fch,Nsc	14-dil-4	&(4μ	6 6.5												
74AC86S	54AC86L	Fch,Nsc	20-chip-2	&(4μ	6 6.5												
ACT	CD74ACT86E	CD54ACT86E CD54ACT86H	Rca Rca Rca	14-dil-1 14-dil-1 chip	&(4μ &(4μ &(4μ	14.6 14.6 13.3 13.3 14.6 14.6											

7489 Output: OD	16x4-bit random access memory	7489	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>typ</sub>	t <sub>PD</sub> E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>z</sub> &I <sub>E</sub>	
		0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C		Pins- Art-Nr.	mA	↓ ↑ †	↓ ↑ †	MHz	
<p>FQ = 7,5</p>		C	MM74C89J	MM54C89J	Nsc	16-dil-3	50n	350 350	650 650		
			MM74C89N	MM54C89W	Nsc Nsc	16-dil-1 16-flat-3	50n	350 350	650 650	650 650	
<p>Siehe auch Section 4 See also section 4 Voir aussi section 4 Vedi anche sezione 4 Veasé tambien sección 4</p>											
$\overline{CE}$	WR	Operation	Operation	Operation	Operazione	Operación					
L	L	schreiben	write	mémorisation	immissione	escritura					
L	H	lesen	read	balaïement	estrazione	lectura					
H	L	keine Veränderung	do nothing	pas de modification	senza alterazione	sin modificación					
H	H	keine Veränderung	do nothing	pas de modification	senza alterazione	sin modificación					

**7490**

Output: TP

Decade counter

**7490**

Type

Production

Bild  
Sec. 3 $I_S$   
&  $I_R$  $t_{PD}$   
E-Q  
n<sup>styp</sup> $t_{PD}$   
E-Q  
n<sup>max</sup>Note  
f<sub>T</sub> f<sub>sz</sub>  
& E0...70°C  
§0...75°C-40...85°C  
§-25...85°C

-55...125°C

Pins-  
Art-Nr.

mA

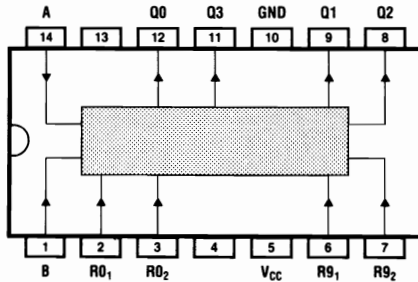
↓ ↑ ↑

↓ ↑ ↑

MHz

Count	Output			
	Q3	Q2	Q1	Q0
0	L	L	L	L
1	L	L	L	H
2	L	L	H	L
3	L	L	H	H
4	L	H	L	L
5	L	H	L	H
6	L	H	H	L
7	L	H	H	H
8	H	L	L	L
9	H	L	L	H

BCD



Count	Output			
	Q0	Q3	Q2	Q1
0	L	L	L	L
1	L	L	L	H
2	L	L	H	L
3	L	L	H	H
4	L	H	L	L
5	H	L	L	L
6	H	L	L	H
7	H	L	H	L
8	H	L	H	H
9	H	H	L	L

Pin	FI	
	N	L
A	2	2
B	3	2

Input				Output			
R01	R02	R91	R92	Q3	Q2	Q1	Q0
H	H	L	X	L	L	L	L
H	H	X	L	L	L	L	L
X	X	H	H	H	L	L	H
X	L	X	L				Count
L	X	L	X				Count
L	X	X	L				Count
X	L	L	X				Count

Q3 mit A verbunden, biquinär  
 Q3 connected to A, biquinary  
 Q3 relié à A, biquinnaire  
 Q3 collegato con A, biquinario  
 Q3 unido a A, bi-quinario

C

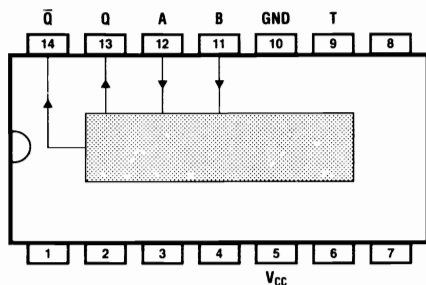
HC

MM74C90J  
MM74C90NMM54C90J  
MM54C90WNsc  
Nsc  
Nsc14-dil-4  
14-dil-1  
14-flat-150n  
50n  
50n200 200  
200 200  
200 200400 400  
400 400  
400 4002  
2  
2MC54HC90J  
MC74HC90NMot  
Mot14-dil-4  
14-dil-18/80μ  
8/80μ

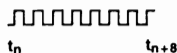
**7491**

Output: TP

8-bit serial shift register

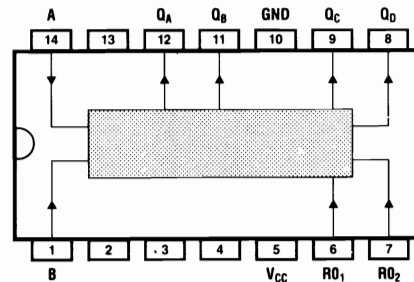


Input		Output	
$t_n$		$t_{n+8}$	
A	B	Q	$\bar{Q}$
H	H	H	L
L	X	L	H
X	L	L	H

**7492**

Output: TP

Divide-by-12 counter



Pin	FI		
	N	LS	
A	2	6,7	
B	3	8,9	

Count	Output			
	$Q_D$	$Q_C$	$Q_B$	$Q_A$
0	L	L	L	L
1	L	L	L	H
2	L	L	H	L
3	L	L	H	H
4	L	H	L	L
5	H	L	L	H
6	H	L	L	L
7	H	L	L	H
8	H	L	H	L
9	H	L	H	H
10	H	H	L	L
11	H	H	L	H

Input		Output			
$R_{01}$	$R_{02}$	$Q_D$	$Q_C$	$Q_B$	$Q_A$
H	H	L	L	L	L
L	X	Count			
X	L	Count			

**7491**

Type

Production

Bild

Sec. 3

Pins-

Art-Nr.

 $I_S$ &I<sub>R</sub> $t_{PD}$ 

E-Q

ns<sub>typ</sub>

↓ ↑ ↑

↓ ↓ ↑

MHz

MHz

MHz

MHz

MHz

MHz

MHz

MHz

MHz

**7492**

Type

Production

Bild

Sec. 3

Pins-

Art-Nr.

 $I_S$ &I<sub>R</sub> $t_{PD}$ 

E-Q

ns<sub>typ</sub>

↓ ↑ ↑

↓ ↓ ↑

MHz

MHz

MHz

MHz

MHz

MHz

MHz

MHz

MHz

HC  
HD74HC91  
MB74HC91Hit  
Fui14-dil  
14-dil

HC

MC54HC92J  
MC74HC92NMot  
Mot14-dil-4  
14-dil-1&(80μ  
&(80μ

**7493**

Output: TP

4-bit binary counter

**7493**

Type

0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C
-----------------------	---------------------------	-------------

Production

Bld  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E-Q  
n#typ

t<sub>PD</sub>  
E-Q  
n#max

Note  
fr \$fz  
& IE

Pins-  
Art-Nr.

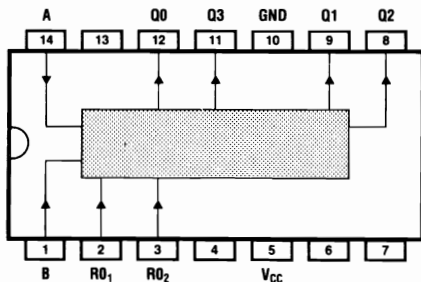
mA

↓ ↓ ↑

↓ ↓ ↑

MHz

Pin	FI	
	N	LS
A	2	6,7
B	2	4,4



Count	Output			
	Q3	Q2	Q1	Q0
0	L	L	L	L
1	L	L	L	H
2	L	L	H	L
3	L	L	H	H
4	L	H	L	L
5	L	H	L	H
6	L	H	H	L
7	L	H	H	H
8	H	L	L	L
9	H	L	L	H
10	H	L	H	L
11	H	L	H	H
12	H	H	L	L
13	H	H	L	H
14	H	H	H	L
15	H	H	H	H

Input		Output			
R <sub>01</sub>	R <sub>02</sub>	Q3	Q2	Q1	Q0
H	H	L	L	L	L
L	X	Count			
X	L	Count			

C

HC

HD74HC93  
LC74HC93

HCT

MM74C93J  
MM74C93N

MM54C93J  
MM54C93W

Nsc  
Nsc  
Nsc

14-dil-4  
14-dil-1  
14-flat-1

50n  
50n  
50n

200 200  
200 200  
200 200

400 400  
400 400  
400 400

2  
2  
2

CD74HC93E

CD54HC93F  
CD54HC93H

Rca  
Rca  
Rca

14-dil-1  
14-dil-4  
chip

&(8μ  
&(8μ  
&(8μ

10 10  
10 10  
10 10

31 31  
38 38  
38 38

24  
20  
20

CD74HC93M

CD54HC93H

Rca  
Hit  
Say

14-smd-1  
14-dil  
14-dil

&(8μ  
&(8μ  
&(8μ

10 10  
10 10  
10 10

31 31  
31 31  
31 31

24  
20  
20

MC54HC93J  
MC74HC93N

Mot  
Mot

14-dil-1  
14-dil-1

&(80μ  
&(80μ

15 15  
15 15

31 31  
31 31

24  
24

PC74HC93P  
PC74HC93T

Phi,Val  
Phi,Val

14-dil-1  
14-smd-1

&(8μ  
&(8μ

15 15  
15 15

31 31  
31 31

24  
24

CD74HCT93E

CD54HCT93F  
CD54HCT93H

Rca  
Rca  
Rca

14-dil-1  
14-dil-4  
chip

&(8μ  
&(8μ  
&(8μ

14 14  
14 14  
14 14

43 43  
51 51  
51 51

24  
20  
20

CD74HCT93M  
PC74HCT93P  
PC74HCT93T

Rca  
Phi,Val  
Phi,Val

14-smd-1  
14-dil-1  
14-smd-1

&(8μ  
&(8μ  
&(8μ

14 14  
18 18  
18 18

43 43  
43 43  
43 43

24  
24  
24



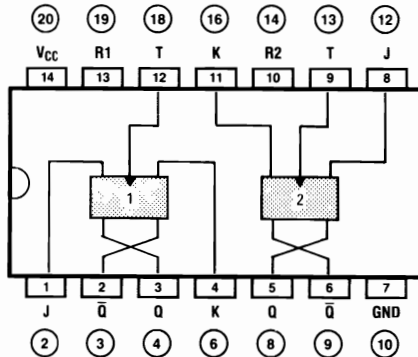
7495 Output: TP	4-bit shift register with parallel inputs and outputs	7495		Type	Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E · Q n <sub>styp</sub>	t <sub>PD</sub> E · Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>TZ</sub> &f <sub>E</sub>																																																					
		0...70°C §0...75°C	- 40...85°C § - 25...85°C								- 55...125°C	Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↑ ↑	MHz																																															
<table border="1"> <thead> <tr> <th rowspan="2">Pin</th> <th colspan="2">FI</th> </tr> <tr> <th>N</th> <th>LS</th> </tr> </thead> <tbody> <tr> <td>MC</td> <td>2</td> <td>2</td> </tr> <tr> <td>TL,TR</td> <td>1</td> <td>1,2</td> </tr> </tbody> </table>	Pin	FI		N	LS	MC	2	2	TL,TR	1	1,2		C	MM74C95J MM74C95N	MM54C95J MM54C95W	Nsc Nsc Nsc	14-dil-4 14-dil-1 14-flat-1	50n 50n 50n	200 200 200 200 200 200	400 400 400 400 400 400	3 3 3																																										
		Pin	FI																																																												
N	LS																																																														
MC	2	2																																																													
TL,TR	1	1,2																																																													
HC HD74HC95	Hit	14-dil																																																													
<table border="1"> <thead> <tr> <th rowspan="2"></th> <th colspan="4">Input</th> <th colspan="4">Output</th> </tr> <tr> <th>MC</th> <th>TL</th> <th>TR</th> <th>SE</th> <th>Q0</th> <th>Q1</th> <th>Q2</th> <th>Q3</th> </tr> </thead> <tbody> <tr> <td>*t<sub>n+1</sub></td> <td>H</td> <td>↓</td> <td>X</td> <td>X</td> <td>D0</td> <td>D1</td> <td>D2</td> <td>D3</td> </tr> <tr> <td>t<sub>n</sub></td> <td>H</td> <td>H</td> <td>X</td> <td>X</td> <td>Q0<sub>n</sub></td> <td>Q1<sub>n</sub></td> <td>Q2<sub>n</sub></td> <td>Q3<sub>n</sub></td> </tr> <tr> <td>**t<sub>n+1</sub></td> <td>H</td> <td>↓</td> <td>X</td> <td>X</td> <td colspan="4" style="text-align: right;">D3</td> </tr> <tr> <td>t<sub>n</sub></td> <td>L</td> <td>X</td> <td>H</td> <td>X</td> <td colspan="4" style="text-align: right;">Q0<sub>n</sub> Q1<sub>n</sub> Q2<sub>n</sub> Q3<sub>n</sub></td> </tr> <tr> <td>t<sub>n+1</sub></td> <td>L</td> <td>X</td> <td>↓</td> <td>SE</td> <td colspan="4" style="text-align: right;">Q0<sub>n</sub> Q1<sub>n</sub> Q2<sub>n</sub> Q3<sub>n</sub></td> </tr> </tbody> </table>		Input				Output				MC	TL	TR	SE	Q0	Q1	Q2	Q3	*t <sub>n+1</sub>	H	↓	X	X	D0	D1	D2	D3	t <sub>n</sub>	H	H	X	X	Q0 <sub>n</sub>	Q1 <sub>n</sub>	Q2 <sub>n</sub>	Q3 <sub>n</sub>	**t <sub>n+1</sub>	H	↓	X	X	D3				t <sub>n</sub>	L	X	H	X	Q0 <sub>n</sub> Q1 <sub>n</sub> Q2 <sub>n</sub> Q3 <sub>n</sub>				t <sub>n+1</sub>	L	X	↓	SE	Q0 <sub>n</sub> Q1 <sub>n</sub> Q2 <sub>n</sub> Q3 <sub>n</sub>				<ul style="list-style-type: none"> <li>* Stellen</li> <li>** Links schieben, wenn Q1 mit D0, Q2 mit D1 und Q3 mit D2 verbunden ist</li> <li>* Preset</li> <li>** Shift left when Q1 connected to D0, Q2 to D1 and Q3 to D2</li> <li>* Régler</li> <li>** Pousser vers la gauche si Q1 est connecté à D0, Q2 à D1 et Q3 à D2</li> <li>* Regolare</li> <li>** Spostare verso sinistra se Q1 e collegato a D0, Q2 a D1 e Q3 a D2</li> <li>* Ajuste</li> <li>** Desplazar hacia la izquierda cuando Q1 esté unida a D0, Q2 a D1 y Q3 a D2</li> </ul>
			Input				Output																																																								
MC	TL		TR	SE	Q0	Q1	Q2	Q3																																																							
*t <sub>n+1</sub>	H	↓	X	X	D0	D1	D2	D3																																																							
t <sub>n</sub>	H	H	X	X	Q0 <sub>n</sub>	Q1 <sub>n</sub>	Q2 <sub>n</sub>	Q3 <sub>n</sub>																																																							
**t <sub>n+1</sub>	H	↓	X	X	D3																																																										
t <sub>n</sub>	L	X	H	X	Q0 <sub>n</sub> Q1 <sub>n</sub> Q2 <sub>n</sub> Q3 <sub>n</sub>																																																										
t <sub>n+1</sub>	L	X	↓	SE	Q0 <sub>n</sub> Q1 <sub>n</sub> Q2 <sub>n</sub> Q3 <sub>n</sub>																																																										

**74107**

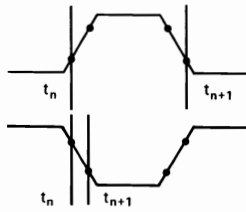
Output: TP

**JK master slave flip-flops**

FI (R,T)=2


**Taktimpuls - L'impulsion d'horloge - Clock pulse  
 Impulso di cadenza - Pulso del reloj**

74107

 74ALS107  
 74C107  
 74HC107  
 74HCT107  
 74LS107


Input		Output	
$t_n$	$t_{n+1}$	$Q_n$	$Q_{n+1}$
R	J K	Q	$\bar{Q}$
L	X X	L	H
H	L L	H	$\bar{Q}_n$
H	H L	L	L
H	L H	L	H
H	H H	$\bar{Q}_n$	$\bar{Q}_n$

74107	Type		Production	Blid Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>typ</sub>	t <sub>PD</sub> E → Q n <sub>max</sub>	Note	
	0...70°C §0...75°C	-40...85°C §-25...85°C						-55...125°C	f <sub>T</sub>
				Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↑ ↑		MHz
C	MM74C107J	MM54C107J	Nsc	14-dil-4	50n	180 180	300 300	2.5	
	MM74C107N	MM54C107W	Nsc	14-dil-1	50n	180 180	300 300	2.5	
HC			Nsc	14-flat-1	50n	180 180	300 300	2.5	
	CD74HC107E	CD54HC107F CD54HC107H	Rca Rca Rca	14-dil-1 14-dil-4 chip	&(4u)	14 14	43 43	25	
HD74HC107 LC74HC107 MB74HC107	CD74HC107M		Rca	14-smd-1	&(4u)	14 14	43 43	25	
		MC54HC107J MC74HC107N MM54HC107J	Hit Say Fui	14-dil 14-dil 14-dil	&(4u)	17 17	21 21	31	
SN74HC107D	MM74HC107J	MM54HC107J	Mot	14-dil-4	(4u)	17 17	21 21	31	
	MM74HC107N		Mot	14-dil-1	(4u)	17 17	21 21	31	
T74HC107 µPB74HC107	MN74HC107S		Nsc	14-dil-4	(4u)	16 16	21 21	31	
	PC74HC107P		Nsc	14-dil-1	(4u)	16 16	21 21	31	
HCT	PC74HC107T		Mat	14-dil-1	&(4u)	19 19	40 40	24	
		SN54HC107FH SN74HC107FH SN74HC107FN	Phi, Val Phi, Val Tix	14-smd-1 14-smd-1 20-chip-3	&(4u)	19 19	40 40	24	
HCT		SN54HC107FK SN54HC107J	Tix Tix	20-chip-2 20-chip-1	&(4u)	20 20	32 32	25	
		SN74HC107J SN74HC107N	Tix Tix	14-dil-4 14-dil-4	&(4u)	20 20	32 32	25	
HCT		CD74HCT107E CD54HCT107F CD54HCT107H	Sgs Nec	14-dil 14-dil	&(4u)	19 19	39 39	21	
		CD74HCT107M MM74HCT107J MM74HCT107N PC74HCT107P PC74HCT107T	Rca Rca Rca Nsc Nsc Phi, Val Phi, Val	14-dil-1 14-dil-4 chip 14-smd-1 14-dil-4 14-dil-1 14-dil-1	&(4u)	18 18	54 54	22	
		MM54HCT107J	Nsc	14-smd-1	(4u)	18 18	65 65	19	
			Nsc	14-dil-4	(4u)	18 18	65 65	19	
			Nsc	14-dil-4	(4u)	18 18	54 54	22	
			Nsc	14-dil-1	(4u)	22 22	35 35	27	
			Phi, Val	14-dil-1	&(4u)	19 19	45 45	24	
			Phi, Val	14-smd-1	&(4u)	19 19	45 45	24	

# 74109

Output: TP

## JK-flip-flops

### 74109

- Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E · Q  
n#typ

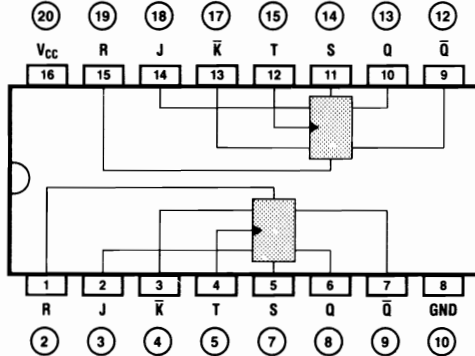
t<sub>PD</sub>  
E · Q  
n#max

Note  
f<sub>T</sub> f<sub>z</sub>  
& I<sub>E</sub>

0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C
-----------------------	---------------------------	-------------

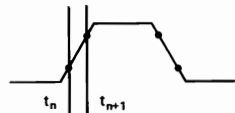
Pins- Art-Nr.	↓ ↑ ↑	↓ ↓ ↑	MHz
------------------	-------	-------	-----

Pin	FI	LS
R	4	4,4
S,T	2	2,2
J,K	1	1,1



Input		Output			
S	R	J	K	Q	Q-bar
L	H	X	X	H	L
H	L	X	X	L	H
L	L	X	X	H*	H*
H	H	L	L	L	H
H	H	H	L	Q <sub>n</sub>	Q <sub>n</sub>
H	H	L	H	Q <sub>n</sub>	Q <sub>n</sub>
H	H	H	H	H	L

Taktimpuls · L'impulsion d'horloge · Clock pulse  
Impulso di cadenza · Pulso del reloj



- \* Dieser Zustand ist nicht stabil
- \* This state is not stable
- \* Cet état n'est pas stable
- \* Questo stato non è stabile
- \* Este estado no es estable

AC

CD74AC109E	CD54AC109E	Rca	16-dil-1	8(4μ)			10.3	10.3	100
		Rca	16-dil-1	8(4μ)			9.4	9.4	114
		Rca	chip	8(4μ)			10.3	10.3	100
CD74AC109M	CD54AC109M	Rca	16-smd-1	8(4μ)			10.3	10.3	100
		Rca	16-smd-1	8(4μ)			9.4	9.4	114
74AC109D	54AC109D	Fch,Nsc	16-dil-3	8(4μ)	6	6	11.5	11	95
		Fch,Nsc	16-dil-3	8(4μ)	6	6	10.5	10.5	125
		Fch,Nsc	16-flat-1	8(4μ)	6	6	11.5	11	95
74AC109P	54AC109L	Fch,Nsc	20-chip-2	8(4μ)	6	6	11.5	11	95
74AC109S		Fch,Nsc	16-dil-2	8(4μ)	6	6	10.5	10.5	125
		Fch,Nsc	16-smd-1	8(4μ)	6	6	10.5	10.5	125

ACT

CD74ACT109E	CD54ACT109E	Rca	16-dil-1	8(4μ)			10.3	10.3	100
		Rca	16-dil-1	8(4μ)			9.4	9.4	114
		Rca	chip	8(4μ)			10.3	10.3	100
CD74ACT109M	CD54ACT109M	Rca	16-smd-1	8(4μ)			10.3	10.3	100
		Rca	16-smd-1	8(4μ)			9.4	9.4	114
74ACT109D	54ACT109D	Fch,Nsc	16-dil-3	8(4μ)	6	7	12	14	95
		Fch,Nsc	16-dil-3	8(4μ)	6	7	11.5	13	125
		Fch,Nsc	16-flat-1	8(4μ)	6	7	12	14	95
74ACT109P	54ACT109L	Fch,Nsc	20-chip-2	8(4μ)	6	7	12	14	95
74ACT109S		Fch,Nsc	16-dil-2	8(4μ)	6	7	11.5	13	125
		Fch,Nsc	16-smd-1	8(4μ)	6	7	11.5	13	125

HC

CD74HC109E	CD54HC109E	Rca	16-dil-1	8(4μ)	14	14	44	44	25
		Rca	16-dil-3	8(4μ)	14	14	53	53	20
		Rca	chip	8(4μ)	14	14	53	53	20
CD74HC109M	CD54HC109M	Rca	16-smd-1	8(4μ)	14	14	44	44	25
		Hit	16-dil	8(4μ)			44	44	21
		Sha	16-dil	8(4μ)			44	44	21
		Mot	16-smd-1	(4μ)	15	15	30	30	32
		Mot	16-dil-3	(4μ)	15	15	30	30	32
		Mot	16-dil-1	(4μ)	15	15	30	30	32
MM74HC109J	MM54HC109J	Nsc	16-dil-3	(4μ)	16	16	21	21	31
MM74HC109N		Nsc	16-dil-1	(4μ)	16	16	21	21	31
MN74HC109		Mat	16-dil-1	8(4μ)			44	44	21
MN74HC109S		Mat	16-smd-1	8(4μ)			44	44	21
PC74HC109P		Phi,Val	16-dil-2	8(4μ)	18	18	44	44	24
PC74HC109T		Phi,Val	16-smd-1	8(4μ)	18	18	44	44	24

HD74HC109  
LR74HC109

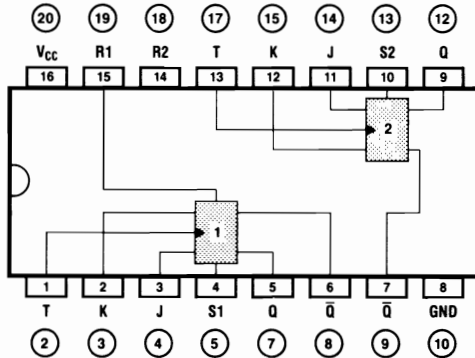
74109	Type		Production	Bild Sec. 3	IS &IR	tPD E-Q n\$typ	tPD E-Q n\$max	Note iT \$fz &fE	74109	Type		Production	Bild Sec. 3	IS &IR	tPD E-Q n\$typ	tPD E-Q n\$max	Note iT \$fz &fE
	0...70°C §0...75°C	- 40...85°C § - 25...85°C								- 55...125°C	0...70°C §0...75°C						
SN74HC109D	SN74HC109FH	SN54HC109FH	Tix	16-smd-1	&(4μ	15 15	44 44	25									
		Tix	20-chip-3	&(4μ	15 15	50 50	21										
		Tix	20-chip-3	&(4μ	15 15	44 44	25										
	SN74HC109FN	SN54HC109FK	Tix	20-chip-2	&(4μ	15 15	50 50	21									
		Tix	20-chip-1	&(4μ	15 15	44 44	25										
		Tix	16-dil-3	&(4μ	15 15	50 50	21										
	SN74HC109J	SN54HC109J	Tix	16-dil-3	&(4μ	15 15	44 44	25									
			Tix	16-dil-1	&(4μ	15 15	44 44	25									
	T74HC109 μPB74HC109			Sgs	16-dil	&(4μ		44 44		21							
				Nec	16-dil	&(4μ		44 44		21							
HCT	CD74HCT109E	Rca	16-dil-1	&(4μ	17 17	50 50	22										
		Rca	16-dil-3	&(4μ	17 17	60 60	18										
	CD74HCT109M	CD54HCT109F CD54HCT109H	Rca	chip	&(4μ	17 17	60 60	18									
LR74HCT109			Rca	16-smd-1	&(4μ	17 17	50 50	22									
			Sha	16-dil													
			Nsc	16-dil-3	(4μ	22 22	35 35	27									
			Nsc	16-dil-1	(4μ	22 22	35 35	27									
			Phi,Val	16-dil-2	&(4μ	20 20	44 44	22									
PC74HCT109P PC74HCT109T			Phi,Val	16-smd-1	&(4μ	20 20	44 44	22									

# 74112

Output: TP

## JK-flip-flops

Pin	FI	
	LS	S
T	4	2
R,S	3	3,5



Input				Output	
S	R	J	K	Q	Q̄
L	H	X	X	H	L
L	L	X	X	L	H
H	L	X	X	.	.
H	H	L	L	Q <sub>n</sub>	Q̄ <sub>n</sub>
H	H	H	L	H	L
H	H	L	H	L	H
H	H	H	H	Q̄ <sub>n</sub>	Q <sub>n</sub>

Taktimpuls · L'impulsion d'horloge · Clock pulse  
Impulso de cadenza · Pulso del reloj



- \* Dieser Zustand ist nicht stabil
- \* This state is not stable
- \* Cet état n'est pas stable
- \* Questo stato non è stabile
- \* Este estado no es estable

### 74112

### Type

0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C
-----------------------	---------------------------	-------------

### Production

Blid Sec. 3	Pins-Art-Nr.	ls & lR	tpD E · Q nstyp	tpD E · Q nmax	Note ft S/z & fE		
						mA	↓ ↑ ↑
AC	CD74AC112E	Rca	16-dil-1	&(4μ	10.3 10.3	100	
		Rca	16-dil-1	&(4μ	9.4 9.4	114	
	CD74AC112H	Rca	chip	&(4μ	10.3 10.3	100	
		Rca	16-smd-1	&(4μ	10.3 10.3	100	
	CD74AC112M	Rca	16-smd-1	&(4μ	9.4 9.4	114	
		Rca	16-smd-1	&(4μ	10.3 10.3	100	
	ACT	CD74ACT112E	Rca	16-dil-1	&(4μ	10.3 10.3	100
			Rca	16-dil-1	&(4μ	9.4 9.4	114
		CD74ACT112H	Rca	chip	&(4μ	10.3 10.3	100
			Rca	16-smd-1	&(4μ	10.3 10.3	100
		CD74ACT112M	Rca	16-smd-1	&(4μ	9.4 9.4	114
			Rca	16-smd-1	&(4μ	10.3 10.3	100
HC		CD74HC112E	Rca	16-dil-1	&(4μ	14 14	25
			Rca	16-dil-3	&(4μ	14 14	53 53
		CD74HC112F	Rca	chip	&(4μ	14 14	53 53
			Rca	16-smd-1	&(4μ	14 14	44 44
		CD74HC112M	Hit	16-dil	&(4μ	32 32	21
			Mit	16-dil	&(4μ	32 32	21
	HD74HC112	Fui	16-dil	&(4μ	32 32	21	
		Mit	16-dil-3	(4μ	17 17	21 21	
	M74HC112	Me	16-dil-1	(4μ	17 17	21 21	
		Mot	16-dil-1	(4μ	17 17	21 21	
	MB74HC112	Nac	16-dil-3	(4μ	17 17	21 21	
		Nac	16-dil-1	(4μ	17 17	21 21	
SN74HC112D	MM74HC112J	Nsc	16-dil-1	(4μ	32 32	21	
		Nsc	16-dil-1	(4μ	32 32	21	
	MM74HC112N	Mat	16-dil-1	(4μ	20 20	44 44	
		Mat	16-smd-1	(4μ	32 32	21	
	MN74HC112	Mat	16-dil-1	(4μ	20 20	44 44	
		Mat	16-smd-1	(4μ	32 32	21	
	MN74HC112S	Phi, Val	16-dil-2	(4μ	20 20	44 44	
		Phi, Val	16-smd-1	(4μ	20 20	44 44	
	PC74HC112P	Tix	16-smd-1	(4μ	16 16	31 31	
		Tix	20-chip-3	(4μ	16 16	37 37	
	PC74HC112T	Tix	20-chip-3	(4μ	16 16	31 31	
		Tix	20-chip-2	(4μ	16 16	37 37	
SN74HC112FH	SN74HC112FH	Tix	20-chip-1	(4μ	16 16	31 31	
		Tix	16-dil-3	(4μ	16 16	37 37	
	SN74HC112FN	Tix	16-dil-3	(4μ	16 16	31 31	
		Tix	16-dil-1	(4μ	16 16	31 31	
	SN74HC112J	Tix	16-dil-3	(4μ	16 16	31 31	
		Tix	16-dil-1	(4μ	16 16	31 31	
	T74HC112	Sgs	16-dil	(4μ	32 32	21	
		Tos	16-dil	(4μ	32 32	21	
	TD74HC112	Nec	16-dil	(4μ	32 32	21	
		μPB74HC112	Nec	16-dil	(4μ	32 32	21

74112	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>pD</sub> E-Q n <sub>s</sub> typ	t <sub>pD</sub> E-Q n <sub>s</sub> max	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>	74112	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>pD</sub> E-Q n <sub>s</sub> typ	t <sub>pD</sub> E-Q n <sub>s</sub> max	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>	
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C							-40...85°C §-25...85°C
HCT	CD74HCT112E CD54HCT112F CD54HCT112H CD74HCT112M MM74HCT112J MM54HCT112J MM74HCT112N MM74HCT112P PC74HCT112P PC74HCT112T	Rca Rca Rca Rca Nsc Nsc Phi,Val Phi,Val	16-dil-1 16-dil-3 chip 16-smd-1 16-dil-3 16-dil-1 16-dil-2 16-smd-1	&(4μ)	14	14	44	44	25									
					14	14	53	53	20									
					14	14	53	53	20									
					14	14	44	44	25									
					21	21	35	35	27									
					21	21	35	35	27									
					21	21	44	44	24									
					21	21	44	44	24									
					21	21	44	44	24									
					21	21	44	44	24									

**74113**

Output: TP

JK-flip-flops

**74113**

Type

Production

Bild  
Sec. 3 $I_S$   
&I<sub>R</sub> $t_{PD}$   
E · Q  
n#typ $t_{PD}$   
E · Q  
n#maxNote  
f<sub>T</sub> f<sub>Sz</sub>  
&f<sub>E</sub>  
MHz0...70°C  
§0...75°C-40...85°C  
§-25...85°C

-55...125°C

Pins-  
Art-Nr.

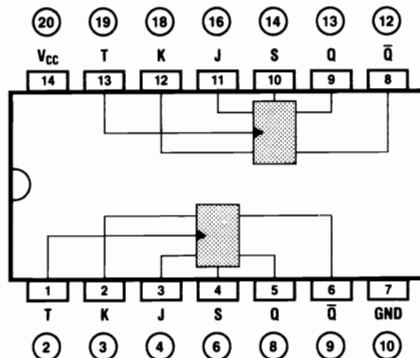
mA

↓ ↑ ↑

↓ ↑ ↑

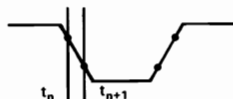
MHz

Pin	FI	
	LS	S
T	4	2
S	3	3,5



Input		Output	
$t_n$		$t_{n+1}$	
S	J K	Q	$\bar{Q}$
L	X X	H	L
H	L L	$\bar{Q}_n$	$\bar{Q}_n$
H	H L	H	L
H	L H	L	H
H	H H	$\bar{Q}_n$	$Q_n$

Taktimpuls · L'impulsion d'horloge · Clock pulse  
Impulso di cadenza · Pulso del reloj



HC  
HD74HC113  
M74HC113  
MB74HC113

MM74HC113J  
MM74HC113N

SN74HC113D

T74HC113  
TD74HC113

MC54HC113J  
MC74HC113N

MM54HC113J

SN54HC113FH

SN74HC113FH

SN54HC113FK

SN74HC113FN

SN54HC113J

SN74HC113J

SN74HC113N

Hit  
Mit  
Fui  
Mot  
Mot  
Nsc  
Nsc  
Tix  
Tix  
Tix  
Tix  
Tix  
Tix  
Tix  
Tix  
Tix  
Sgs  
Tos

14-dil  
14-dil  
14-dil  
14-dil-4  
14-dil-1  
14-dil-4  
14-dil-1  
14-smd-1  
20-chip-3  
20-chip-3  
20-chip-2  
20-chip-1  
14-dil-4  
14-dil-4  
14-dil-1  
14-dil

&(4μ  
&(4μ  
&(4μ  
(4μ  
(4μ  
(4μ  
(4μ  
(4μ  
(4μ  
(4μ  
(4μ  
(4μ  
(4μ  
(4μ  
(4μ  
(4μ  
(4μ  
(4μ

32 32  
32 32  
32 32  
21 21  
21 21  
33 33  
33 33  
35 35  
19 19  
19 19  
19 19  
19 19  
19 19  
19 19  
19 19  
19 19  
19 19  
32 32  
32 32

21  
21  
21  
31  
31  
31  
31  
25  
25  
25  
21  
21  
25  
25  
25  
25  
25  
25  
21  
21

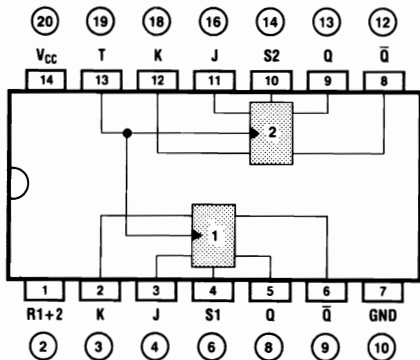
f<sub>T</sub> f<sub>Sz</sub>  
&f<sub>E</sub>  
MHz

**74114**

Output: TP

**JK-flip-flops**

Pin	FI	LS	S
T	8	4	
R	6	7	
S	3	3,5	



Input				Output	
S	R	J	K	Q	Q̄
L	H	X	X	H	L
L	L	X	X	L	H
L	L	X	X	*	*
H	H	L	L	Q <sub>n</sub>	Q̄ <sub>n</sub>
H	H	H	L	H	L
H	H	L	H	L	H
H	H	H	H	Q̄ <sub>n</sub>	Q <sub>n</sub>

Taktimpuls · L'impulsion d'horloge · Clock pulse  
Impulso di cadenza · Pulso del reloj



- \* Dieser Zustand ist nicht stabil
- \* This state is not stable
- \* Cet état n'est pas stable
- \* Questo stato non è stabile
- \* Este estado no es estable

**74114**

Type

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Production

Bild  
Sec. 3

Pin-  
Art-Nr.

I<sub>S</sub>  
&I<sub>R</sub>  
mA

t<sub>PD</sub>  
E-Q  
n<sub>styp</sub>  
↓ ↑ ↑

t<sub>PD</sub>  
E-Q  
n<sub>max</sub>  
↓ ↓ ↑

Note  
f<sub>T</sub> f<sub>fz</sub>  
&f<sub>E</sub>  
MHz

HC  
HD74HC114  
JRC74HC114  
SN74HC114D

SN74HC114FH

SN54HC114FH

SN54HC114FK

SN74HC114N

SN54HC114J

SN74HC114J

SN74HC114N

Hit  
Njr  
Tix  
Tix  
Tix  
Tix  
Tix  
Tix  
Tix

14-dil  
14-dil  
14-smd-1  
20-chip-3  
20-chip-3  
20-chip-2  
20-chip-1  
14-dil-4  
14-dil-4

&(4μ  
&(4μ  
&(4μ  
&(4μ  
&(4μ  
&(4μ  
&(4μ  
&(4μ

19 19  
19 19  
19 19  
19 19  
19 19  
19 19  
19 19  
19 19

44 44  
50 50  
44 44  
50 50  
44 44  
50 50  
44 44  
44 44

20  
17  
20  
17  
20  
17  
20  
20



# 74123

Output: TP

## Retriggerable monostable multivibrators

### 74123

#### Type

#### Production

#### Bild Sec. 3

#### I<sub>S</sub> & R

#### t<sub>PD</sub> E-Q n\*typ

#### t<sub>PD</sub> E-Q n\*max

#### Note f<sub>T</sub> f<sub>fz</sub> & f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

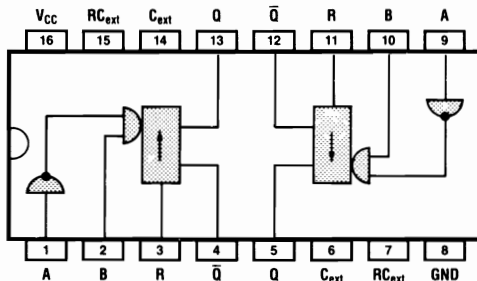
mA

↓ ↑ ↑

↓ ↑ ↑

MHz

Pin	FI
	N L
A, B	1 4, 5
R	2 9



Input	Output
R A B	Q Q-bar
L X X	L H
X H X	L H
X X L	L H
H L ↑	⌋ ⌋
H ↓ H	⌋ ⌋
↑ L H	⌋ ⌋

#### HC

CD74HC123E

CD54HC123F  
CD54HC123H

Rca 16-dil-1  
Rca 16-dil-3  
Rca chip  
Rca 16-smd-1

&(8μ  
&(8μ  
&(8μ  
&(8μ

25 25  
25 25  
25 25  
25 25

75 75  
90 90  
90 90  
75 75

#### HD74HC123

CD74HC123M

MC54HC123J  
MC74HC123N  
MM54HC123J

Hit 16-dil  
Mot 16-dil-3  
Mot 16-dil-1  
Nsc 16-dil-3

&(8μ  
&(80μ  
&(8μ  
&(8μ

21 21  
21 21

32 32  
32 32

#### MSM74HC123

MM74HC123J  
MM74HC123N  
MN74HC123  
MN74HC123S

Nsc 16-dil-1  
Mat 16-dil-1  
Mat 16-smd-1

&(8μ  
&(8μ  
&(8μ

21 21

32 32

#### T74HC123

PC74HC123P  
PC74HC123T

Ok! 16-dil  
Phi, Val 16-dil-2  
Phi, Val 16-smd-1  
Sgs 16-dil  
Nec 16-dil

&(8μ  
&(8μ  
&(8μ  
&(8μ

30 30  
30 30

64 64  
64 64

#### HCT

CD74HCT123E

CD54HCT123F  
CD54HCT123H

Rca 16-dil-1  
Rca 16-dil-3  
Rca chip  
Rca 16-smd-1

&(8μ  
&(8μ  
&(8μ  
&(8μ

25 25  
25 25  
25 25  
25 25

75 75  
90 90  
90 90  
75 75

CD74HCT123M

MN74HCT123  
MN74HCT123S  
PC74HCT123P  
PC74HCT123T

Mat 16-dil-1  
Mat 16-smd-1  
Phi, Val 16-dil-2  
Phi, Val 16-smd-1

&(8μ  
&(8μ  
&(8μ  
&(8μ

28 28  
28 28

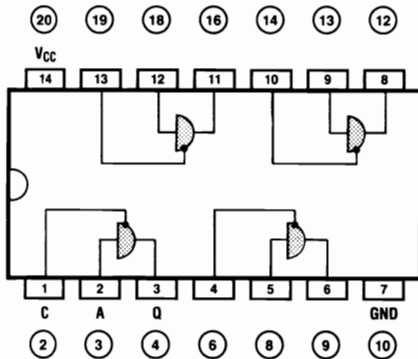
64 64  
64 64

**74125**

Output: TS

Line driver

FQ (LS) = 44



Input	Outp.	
C A	Q	
H X	Z	
L H	H	
L L	L	

**74125**

Type

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Production

Bld  
Sec. 3  
Pins-  
Art-Nr.

I<sub>S</sub>  
&I<sub>R</sub>  
mA

t<sub>PD</sub>  
E-Q  
n§typ

t<sub>PD</sub>  
E-Q  
n§max

Note  
t<sub>T</sub> §f<sub>Z</sub>  
&f<sub>E</sub>  
MHz

AC	HD74AC125		Hit	14-dil						
ACT	HD74AC125		Hit	14-dil						
HC	CD74HC125E	CD54HC125F	Rca	14-dil-1	§(8µ	8	8	25	25	
		CD54HC125H	Rca	14-dil-4	§(8µ	8	8	30	30	
			Rca	chip	§(8µ	8	8	30	30	
	CD74HC125M		Rca	14-smd-1	§(8µ	8	8	25	25	
	HD74HC125		Hit	14-dil	§(8µ					
	LR74HC125		Sha	14-dil	§(8µ					
	M74HC125		Mit	14-dil	§(8µ					
		MC54HC125J		Mot	14-dil-4	§(80µ				
		MC74HC125N		Mot	14-dil-1	§(80µ				
		MC74HC125AD		Mot	14-smd-1	§(4µ			27	27
		MC54HC125AJ		Mot	14-dil-4	§(4µ			27	27
		MC74HC125AN		Mot	14-dil-1	§(4µ			27	27
	MM74HC125J	MM54HC125J	Nsc	14-dil-4	(8µ	8	8	17	17	
	MM74HC125N		Nsc	14-dil-1	(8µ	8	8	17	17	
	MN74HC125		Mat	14-dil-1	§(8µ					
	MN74HC125S		Mat	14-smd-1	§(8µ					
	PC74HC125P		Phi,Val	14-dil-1	§(8µ	11	11	25	25	
	PC74HC125T		Phi,Val	14-smd-1	§(8µ	11	11	25	25	
		SN54HC125FK	Tix	20-chip-2	§(8µ	14	14	36	36	
		SN54HC125J	Tix	14-dil-4	§(8µ	14	14	36	36	
SN74HC125N			Tix	14-dil-1	§(8µ	14	14	30	30	
T74HC125			Sgs	14-dil	§(8µ					
µPB74HC125			Nec	14-dil	§(8µ					
HCT	CD74HCT125E	CD54HCT125F	Rca	14-dil-1	§(8µ	10	10	31	31	
		CD54HCT125H	Rca	14-dil-4	§(8µ	10	10	38	38	
	CD74HCT125M		Rca	chip	§(8µ	10	10	38	38	
			Rca	14-smd-1	§(8µ	10	10	31	31	
HD74HCT125			Hit	14-dil	§(8µ					
LR74HCT125			Sha	14-dil	§(8µ					
	PC74HCT125P		Phi,Val	14-dil-1	§(8µ	15	15	31	31	
	PC74HCT125T		Phi,Val	14-smd-1	§(8µ	15	15	31	31	

74126 Output: TS	Line driver	74126			Production	Blid Sec. 3	IS &Iq	I <sub>PD</sub> E -Q n <sub>styp</sub>	I <sub>PD</sub> E -Q n <sub>max</sub>	Note f <sub>T</sub> S <sub>TZ</sub> &E
		Type								
		0...70°C 90...75°C	-40...85°C -25...85°C	-55...125°C						
<p>FQ (LS) = 44</p>	HC BU74HC126	CD74HC126E	CD54HC126F CD54HC126H	Toy Rca Rca Rca Rca Hit Mit	14-dil 14-dil-1 14-dil-4 chip 14-smd-1 14-dil	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ	8 8 8 8 8 8 8 8	25 25 25 25 30 30 30 30 25 25 25 25		
	HD74HC126 M74HC126	CD74HC126M	MC54HC126J MC74HC126N MC74HC126AD MC54HC126AJ MC74HC126AN MM54HC126J	Mot Mot Mot Mot Mot Mot Nsc Nsc Mat Mat Phi, Val Phi, Val	14-dil-4 14-dil-1 14-smd-1 14-dil-4 14-dil-1 14-smd-1 14-dil-4 14-dil-1 14-smd-1 14-smd-1	&(80μ &(80μ &(4μ &(4μ &(4μ &(4μ (8μ (8μ &(8μ &(8μ &(8μ &(8μ	8 8 8 8 8 8 8 8 8 8	27 27 27 27 27 27 27 27 17 17 17 17 25 25 25 25 25 25 25 25		
	SN74HC126N T74HC126 μPB74HC126	SN54HC126FK SN54HC126J	Tix Tix Sgs Nec	20-chip-2 14-dil-4 14-dil-1 14-dil	&(8μ &(8μ &(8μ &(8μ	14 14 14 14 14 14	36 36 36 36 30 30 25 25 25 25			
	HCT BU74HCT126	CD74HCT126E	CD54HCT126F CD54HCT126H	Toy Rca Rca Rca Rca Hit Phi, Val Phi, Val	14-dil 14-dil-1 14-dil-4 chip 14-smd-1 14-dil 14-dil-1 14-smd-1	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ	9 9 9 9 9 9 9 9	30 30 30 30 36 36 36 36 30 30 25 25 30 30 30 30		
	HD74HCT126	CD74HCT126M	PC74HCT126P PC74HCT126T	Phi, Val Phi, Val	14-smd-1	&(8μ	14 14 14 14	30 30 30 30		

Input	Outp.	
C A Q		
L X Z		
H H H		
H L L		

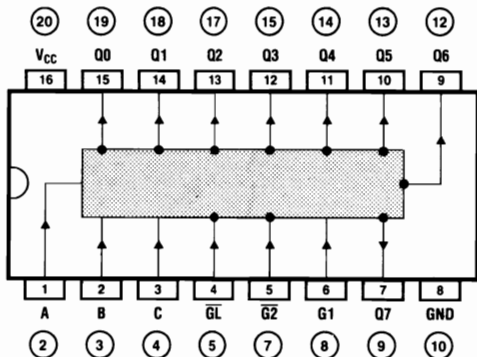
74132 Output: TP	NAND Schmitt Trigger			74132		Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n*typ	t <sub>PD</sub> E-Q n*max	Note f <sub>T</sub> §f <sub>Z</sub> &f <sub>E</sub>				
				0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Mat							Pin- Art-Nr.			
Logiktablelle siehe Section 1 Function table see section 1 Tableau logique voir section 1 Per tavola di logica vedi sez. 1 Tabla de verdad, ver sección 1								SN74HC132D  SN74HC132N T74HC132 T074HC132 μPB74HC132  HCT  CD74HCT132E  CD74HCT132M PC74HCT132P PC74HCT132T		SN54HC132FK SN54HC132J  CD54HCT132F CD54HCT132H		Mat Phi,Val Phi,Val Tix Tix Tix Sgs Tos Nec  Rca Rca Rca Rca Phi,Val Phi,Val		14-smd-1 &(2μ 14-dil-1 &(2μ 14-smd-1 &(2μ 20-chip-2 &(2μ 14-dil-4 &(2μ 14-dil-1 &(2μ 18 18 18 18 18 18 14-dil &(2μ 14-dil &(2μ 14-dil &(2μ 14-dil-1 &(2μ 14-dil-4 &(2μ chip &(2μ Rca &(2μ 14-smd-1 &(2μ 14-dil-1 &(2μ 14-smd-1 &(2μ		32 32 31 31 31 31 31 31 37 37 37 37 31 31 32 32 32 32 32 32 41 41 50 50 50 50 41 41 41 41 41 41	
				74132	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n*typ	t <sub>PD</sub> E-Q n*max	Note f <sub>T</sub> §f <sub>Z</sub> &f <sub>E</sub>					
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pin- Art-Nr.	mA	↓ ↓ ↑	↓ ↓ ↑							MHz				
HC	CD74HC132E	Rca	14-dil-1	&(2μ	10	10	31	31									
HD74HC132	CD74HC132M	Rca	14-dil-4	&(2μ	10	10	38	38									
		Rca	chip	&(2μ	10	10	38	38									
		Rca	14-smd-1	&(2μ	10	10	31	31									
		Hit	14-dil	&(2μ			32	32									
		Mot	14-dil-4	&(2μ	11	11	21	21									
		Mot	14-dil-1	&(2μ	11	11	21	21									
	MM74HC132J MM74HC132N MN74HC132	MCS54HC132J MC74HC132N MC74HC132AD MC54HC132AJ MC74HC132AN MM54HC132J	Mot	14-smd-1	&(1μ			38	38								
			Mot	14-dil-4	&(1μ			38	38								
			Mot	14-dil-1	&(1μ			38	38								
			Nsc	14-dil-4	&(2μ	11	11	21	21								
			Nsc	14-dil-1	&(2μ	11	11	21	21								
			Mat	14-dil-1	&(2μ			32	32								

74133 Output: TP	NAND gates			74133		Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>S</sub> typ	t <sub>PD</sub> E-Q n <sub>S</sub> max	Note fr S <sub>fz</sub> &I <sub>E</sub>				
				0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.							mA	↓ ↑ †	↓ ↑ †	MHz
				T74HC133 μPB74HC133	SN74HC133FH	SN54HC133FK	Tix	20-chip-3	&(2μ	16 16	38 38						
					SN74HC133FN	SN54HC133J	Tix	20-chip-2	&(2μ	16 16	45 45						
<p>Logiktablelle siehe Sektion 1 · Function table see section 1 · Tableau logique voir section 1 Per tavola di logica vedi sezione 1 · Tabla de verdad, ver sección 1</p>					SN74HC133J	Tix	16-dil-3	&(2μ	16 16	45 45							
					SN74HC133N	Tix	16-dil-3	&(2μ	16 16	38 38							
					SN74HC133N	Tix	16-dil-1	&(2μ	16 16	38 38							
					SN74HC133S	Sgs	16-dil	&(2μ	42 42								
					SN74HC133S	Nec	16-dil	&(2μ	42 42								
					SN54HC133FH	Tix	20-chip-3	&(2μ	45 45								

**74137**

Output: TP

**3-line-to-8-line demultiplexer with address latch**



Input			Output										
Enable	Address												
$\overline{G\bar{L}}$	G1	G2	C	B	A	Q0	Q1	Q2	Q3	Q4	Q5	Q6	Q7
X	X	H	X	X	X	H	H	H	H	H	H	H	H
X	L	X	X	X	X	H	H	H	H	H	H	H	H
L	H	L	L	L	L	L	H	H	H	H	H	H	H
L	H	L	L	L	H	H	L	H	H	H	H	H	H
L	H	L	L	H	L	H	H	L	H	H	H	H	H
L	H	L	L	H	H	H	H	H	L	H	H	H	H
L	H	L	H	L	L	H	H	H	H	L	H	H	H
L	H	L	H	H	L	H	H	H	H	H	L	H	H
L	H	L	H	H	H	H	H	H	H	H	L	L	H
L	H	L	H	H	H	H	H	H	H	H	H	L	L
$\bar{L}$	H	L	X	X	X	Latch address CBA							

**74137**

Type

Production

Bldg Sec. 3  
Pins- Art-Nr.

$I_S$   
&  $I_Q$   
mA

$t_{PD}$   
E · Q  
ns<sub>typ</sub>

$t_{PD}$   
E · Q  
ns<sub>max</sub>

Note  
 $f_T$   $f_{fz}$   
& E  
MHz

HC

CD74HC137E

CD54HC137F  
CD54HC137H

Rca  
Rca  
Rca

16-dil-1  
16-dil-4  
chip

HD74HC137  
M74HC137

CD74HC137M

MC74HC137D  
MC54HC137J  
MC74HC137N  
MM54HC137J

Rca  
Hit  
Mit  
Mot  
Mot  
Mot  
Nsc  
Nsc

16-smd-1  
16-dil  
16-dil  
16-smd-1  
16-dil-3  
16-dil-1  
16-dil-3  
16-dil-1

& (8μ  
(8μ  
(8μ  
(8μ  
(8μ  
(8μ  
(8μ

60 60  
60 60  
41 29  
41 29  
41 29  
41 29  
41 29

μPB74HC137

MM74HC137J  
MM74HC137N  
MN74HC137S  
PC74HC137P  
PC74HC137T

SN54HC137FH

Mat  
Mat  
Phi, Val  
Phi, Val

16-dil-1  
16-smd-1  
20-chip-3

& (8μ  
(8μ  
(8μ

60 60  
60 60  
45 45

HCT

CD74HCT137E

CD54HCT137F  
CD54HCT137H

Rca  
Rca  
Rca

16-dil-1  
16-dil-4  
chip

HD74HCT137

CD74HCT137M

PC74HCT137P  
PC74HCT137T

Hit  
Phi, Val  
Phi, Val

16-smd-1  
16-dil  
16-dil-2

& (8μ  
(8μ  
(8μ

48 48  
48 48  
48 48

SN74HCT137DW

SN74HCT137FH

SN54HCT137FH  
SN54HCT137FK

Tix  
Tix

20-chip-3  
20-chip-2

& (8μ  
(8μ

57 57  
57 57

SN74HCT137FN

SN54HCT137J

Tix

20-chip-1

& (8μ

48 48

SN74HCT137J

SN74HCT137N

Tix

16-dil-3  
16-dil-1

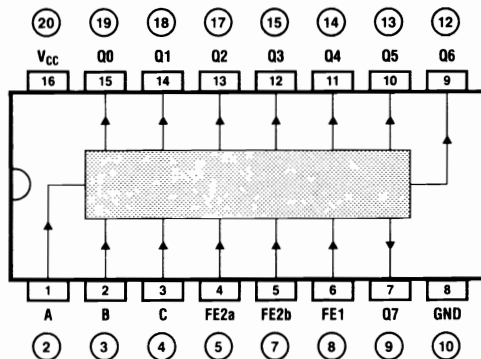
& (8μ  
(8μ

57 57  
48 48

# 74138

Output: TP

## 3-bit binary decoder



$$FE = FE1 (\overline{FE2a} + FE2b)$$

Input	Outp.
FE C B A	Q = L
L X X X	—
H L L L	Q0
H L L H	Q1
H L H L	Q2
H L H H	Q3
H H L L	Q4
H H L H	Q5
H H H L	Q6
H H H H	Q7

74138	Type		Production	Blid Sec. 3	I <sub>S</sub> & I <sub>R</sub>	I <sub>PD</sub> E - Q n <sub>S</sub> typ	I <sub>PD</sub> E - Q n <sub>S</sub> max	Note f <sub>T</sub> f <sub>S</sub> z & f <sub>E</sub>
	0...70°C §0...75°C	-40...85°C §-25...85°C						
AC	CD74AC138E M74AC138	CD54AC138E	Rca	16-dil-1	&(8μ		11 11	
		CD54AC138H CD54AC138M	Rca	16-dil-1	&(8μ		10 10	
			chip	&(8μ		11 11		
		54AC138D	Rca	16-smd-1	&(8μ		11 11	
			Mit	16-smd-1	&(8μ		10 10	
		74AC138D 74AC138P 74AC138S	54AC138D	Fch,Nsc	16-dil-3	&(8μ	6 6.5	11.5 12
	54AC138F 54AC138L		Fch,Nsc	16-dil-3	&(8μ	6 6.5	10.5 10.5	
			Fch,Nsc	16-flat-1	&(8μ	6 6.5	11.5 12	
	74AC138P 74AC138S		Fch,Nsc	20-chip-2	&(8μ	6 6.5	11.5 12	
			Fch,Nsc	16-dil-2	&(8μ	6 6.5	10.5 10.5	
	Fch,Nsc		16-smd-1	&(8μ	6 6.5	10.5 10.5		
	ACT	CD74ACT138E M74ACT138	CD54ACT138E	Rca	16-dil-1	&(8μ		12 12
CD54ACT138H CD54ACT138M			Rca	16-dil-1	&(8μ		10.9 10.9	
			chip	&(8μ		12 12		
54ACT138D			Rca	16-smd-1	&(8μ		12 12	
			Mit	16-smd-1	&(8μ		10.9 10.9	
74ACT138D 74ACT138P 74ACT138S			54ACT138D	Fch,Nsc	16-dil-3	&(8μ	6.5 7	12.5 12.5
		54ACT138F 54ACT138L	Fch,Nsc	16-dil-3	&(8μ	6.5 7	11.5 11.5	
			Fch,Nsc	16-flat-1	&(8μ	6.5 7	12.5 12.5	
		74ACT138P 74ACT138S	Fch,Nsc	20-chip-2	&(8μ	6.5 7	12.5 12.5	
			Fch,Nsc	16-dil-2	&(8μ	6.5 7	11.5 11.5	
		Fch,Nsc	16-smd-1	&(8μ	6.5 7	11.5 11.5		
HC BU74HC138		CD74HC138E M74HC138	CD54HC138E	Toy	16-dil	&(8μ		50 50
	CD54HC138F CD54HC138H		Rca	16-dil-1	&(8μ	13 13	38 38	
			chip	&(8μ	13 13	45 45		
	CD74HC138M		Rca	16-smd-1	&(8μ	13 13	38 38	
			Mit	16-dil	&(8μ		50 50	
	HD74HC138 M74HC138 MB74HC138		MC54HC138J MC74HC138N	Fui	16-dil	&(8μ		50 50
		Mot		16-dil-3	(8μ	17 13	34 26	
		MC54HC138AJ MC74HC138AN	Mot	16-dil-1	(8μ	17 13	34 26	
			Mot	16-smd-1	&(4μ		41 41	
		MM74HC138J	Mot	16-dil-3	&(4μ		41 41	
			Nsc	16-dil-2	&(4μ		41 41	
	Mot	16-dil-3	(8μ	17 13	34 26			

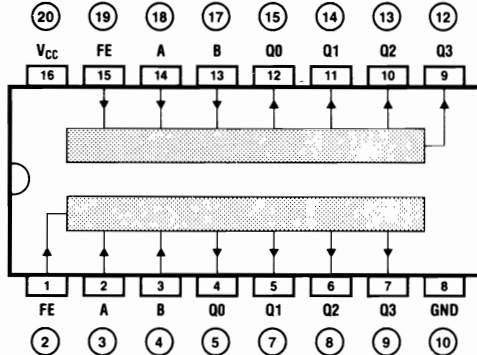
74138	Type		Production	Bild Sec. 3	IS &I <sub>q</sub>	tpD E -Q n <sub>styp</sub>	tpD E -Q n <sub>max</sub>	Note f <sub>T</sub> §f <sub>Z</sub> &f <sub>E</sub>	74138	Type		Production	Bild Sec. 3	IS &I <sub>q</sub>	tpD E -Q n <sub>styp</sub>	tpD E -Q n <sub>max</sub>	Note f <sub>T</sub> §f <sub>Z</sub> &f <sub>E</sub>		
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C							-40...85°C §-25...85°C	-55...125°C
	Pins- Art-Nr.	mA								↓ ↑ ↑	↓ ↑ ↑							MHz	
MSM74HC138	MM74HC138N		Nsc	16-dil-1	(8μ	17 13	34 26												
	MN74HC138		Mat	16-dil-1	&(8μ		50 50												
	MN74HC138S		Mat	16-smd-1	&(8μ		50 50												
SN74HC138D	PC74HC138P		OkI	16-dil	&(8μ		50 50												
	PC74HC138T		Phi_Val	16-dil-2	&(8μ	15 15	38 38												
			Phi_Val	16-smd-1	&(8μ	15 15	38 38												
TD74HC138 μPB74HC138		SN54HC138FH	Tix	16-smd-1	&(8μ	18 18	45 45												
			Tix	20-chip-3	&(8μ	18 18	54 54												
			Tix	20-chip-3	&(8μ	18 18	45 45												
		SN74HC138FH		Tix	20-chip-2	&(8μ	18 18	54 54											
			SN54HC138FK	Tix	20-chip-2	&(8μ	18 18	54 54											
				Tix	20-chip-1	&(8μ	18 18	45 45											
HCT		SN54HC138J	Tix	16-dil-3	&(8μ	18 18	54 54												
			Tix	16-dil-3	&(8μ	18 18	45 45												
			Tos	16-dil	&(8μ		50 50												
HD74HCT138 M74HCT138			Nec	16-dil	&(8μ		50 50												
		CD74HCT138E	Rca	16-dil-1	&(8μ	14 14	44 44												
			Rca	16-dil-3	&(8μ	14 14	53 53												
SN74HCT138DW		CD54HCT138F	Rca	chip	&(8μ	14 14	53 53												
			Rca	16-smd-1	&(8μ	14 14	44 44												
		CD74HCT138M	Hit	16-dil	&(8μ		50 50												
			Mit	16-dil	&(8μ		50 50												
			MC54HCT138J	Mot	16-dil-3														
			MC74HCT138N	Mot	16-dil-1														
TD74HCT138 μPB74HCT138		MM54HCT138J	Nsc	16-dil-3	(8μ	24 24	40 40												
			Nsc	16-dil-1	(8μ	24 24	40 40												
		MM74HCT138J	Phi_Val	16-dil-2	&(8μ	20 20	44 44												
			Phi_Val	16-smd-1	&(8μ	20 20	44 44												
				Tix	16-smd-2	&(8μ	23 23	45 45											
			SN54HCT138FH	Tix	20-chip-3	&(8μ	23 23	54 54											
SN74HCT138D			Tix	20-chip-3	&(8μ	23 23	45 45												
		SN74HCT138FH	Tix	20-chip-3	&(8μ	23 23	45 45												
			Tix	20-chip-2	&(8μ	23 23	54 54												
			SN54HCT138FK	Tix	20-chip-2	&(8μ	23 23	45 45											
				Tix	20-chip-1	&(8μ	23 23	45 45											
			SN54HCT138J	Tix	16-dil-3	&(8μ	23 23	54 54											
SN74HCT138N			Tix	16-dil-3	&(8μ	23 23	45 45												
			Tix	16-dil-1	&(8μ	23 23	45 45												
			Tos	16-dil	&(8μ		50 50												
			Nec	16-dil	&(8μ		50 50												



**74139**

Output: TP

**2x2-bit binary decoders**



Input		Outp.	
FE	B A	Q=L	
H	X X	—	
L	L L	0	
L	L H	1	
L	H L	2	
L	H H	3	

74139	Type		Production	Blld Sec. 3	I <sub>S</sub> & I <sub>R</sub>	I <sub>PD</sub> E-Q n <sub>S</sub> typ	I <sub>PD</sub> E-Q n <sub>S</sub> max	Note f <sub>T</sub> f <sub>Sfz</sub> & f <sub>E</sub>			
	0...70°C §0...75°C	-40...85°C §-25...85°C							-55...125°C		
AC	CD74AC139E	CD54AC139E	Rca	16-dil-1	&(8μ	10.5	10.5	MSM74HC139			
		Rca	16-dil-1	&(8μ	9.5	9.5					
		CD54AC139H	Rca	chip	&(8μ	10.5	10.5				
		CD54AC139M	Rca	16-smd-1	&(8μ	10.5	10.5				
		CD74AC139M	Rca	16-smd-1	&(8μ	9.5	9.5				
	CD74AC139M M74AC139 74AC139D	54ACT139D	Mit	16-dil	&(8μ	14.5	14.5				
		Fch,Nsc	16-dil-3	&(8μ	5.5	6.5	8.5		9.5		
		Fch,Nsc	16-dil-3	&(8μ	5.5	6.5	8.5		9.5		
		ACT	74AC139P 74AC139S	54ACT139F	Fch,Nsc	16-flat-1	&(8μ		5.5	6.5	SN74HC139DW
				54ACT139L	Fch,Nsc	20-chip-2	&(8μ		5.5	6.5	
Fch,Nsc	16-dil-2			&(8μ	5.5	6.5	8.5	9.5			
Fch,Nsc	16-smd-1			&(8μ	5.5	6.5	8.5	9.5			
CD74ACT139E	Rca			16-dil-1	&(8μ	11.5	11.5				
CD74ACT139M	CD54ACT139H		Rca	chip	&(8μ	11.5	11.5				
	CD54ACT139M		Rca	16-smd-1	&(8μ	11.5	11.5				
	54ACT139D		Fch,Nsc	16-dil-3	&(8μ	6	6	11	12		
	Fch,Nsc		16-dil-3	&(8μ	6	6	10.5	9.5			
	Fch,Nsc		16-flat-1	&(8μ	6	6	11	12			
HC	74ACT139P 74ACT139S	54ACT139F	Fch,Nsc	20-chip-2	&(8μ	6	6	T74HC139 TD74HC139 μPB74HC139			
		54ACT139L	Fch,Nsc	16-dil-2	&(8μ	6	6		10.5	9.5	
		Fch,Nsc	16-smd-1	&(8μ	6	6	10.5		9.5		
		CD74HC139E	Rca	16-dil-1	&(8μ	12	12		36	36	
		CD54HC139F	Rca	16-dil-3	&(8μ	12	12		44	44	
	HD74HC139 M74HC139 MB74HC139	CD54HC139H	Rca	chip	&(8μ	12	12		44	44	
		CD74HC139M	Rca	16-smd-1	&(8μ	12	12		36	36	
		Hit	16-dil	&(8μ	55	55					
		Mit	16-dil	&(8μ	55	55					
		Fu	16-dil	&(8μ	55	55					
MSM74HC139	MM74HC139J MM74HC139N MN74HC139 MN74HC139S	MC54HC139J	Mot	16-dil-3	(8μ	18	18	SN74HC139FH SN74HC139FN SN74HC139J SN74HC139N			
		MC74HC139N	Mot	16-dil-1	(8μ	18	18		30	30	
		MC74HC139AD	Mot	16-smd-1	(4μ	35	35				
		MC54HC139AJ	Mot	16-dil-3	(4μ	35	35				
		MC74HC139AN	Mot	16-dil-2	(4μ	35	35				
	SN74HC139DW	MM74HC139J	Nsc	16-dil-3	(8μ	18	18		30	30	
		MM74HC139N	Nsc	16-dil-1	(8μ	18	18		30	30	
		MN74HC139	Mat	16-dil-1	&(8μ	55	55				
		MN74HC139S	Mat	16-smd-1	&(8μ	55	55				
		Ok	16-dil	&(8μ	55	55					
T74HC139 TD74HC139 μPB74HC139	PC74HC139P PC74HC139T	Phi,Val	16-dil-2	&(8μ	14	14	36	36			
		Phi,Val	16-smd-1	&(8μ	14	14	36	36			
		Tix	16-smd-2	(8μ	14	14	44	44			
		Tix	20-chip-3	&(8μ	14	14	51	51			
		Tix	20-chip-3	&(8μ	14	14	44	44			
	T74HC139 TD74HC139 μPB74HC139	SN54HC139FH	Tix	20-chip-3	&(8μ	14	14	51	51		
		SN54HC139FK	Tix	20-chip-2	&(8μ	14	14	44	44		
		SN54HC139J	Tix	20-chip-1	&(8μ	14	14	44	44		
		Tix	16-dil-3	&(8μ	14	14	51	51			
		Tix	16-dil-3	&(8μ	14	14	44	44			
T74HC139 TD74HC139 μPB74HC139	Sgs	16-dil	&(8μ	55	55						
	Tos	16-dil	&(8μ	55	55						
	Nec	16-dil	&(8μ	55	55						

74139		Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>S</sub> typ ↓ ↑ ↑	t <sub>PD</sub> E-Q n <sub>S</sub> max ↓ ↓ ↑	Note f <sub>T</sub> §fz &f <sub>E</sub> MHz	74145		BCD-to-decimal decoder / display driver (15V)	
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Output: OD										
HCT	CD74HCT139E	Rca	16-dil-1							&(8μ	14	14	43
	CD54HCT139F	Rca	16-dil-3	&(8μ	14	14	51	51					
	CD54HCT139H	Rca	chip	&(8μ	14	14	51	51					
	CD74HCT139M	Rca	16-smd-1	&(8μ	14	14	43	43					
M74HCT139	MM74HCT139J	Mit	16-dil	&(8μ	20	20	35	35					
	MM54HCT139J	Nsc	16-dil-3	(4μ	20	20	35	35					
	MM74HCT139N	Nsc	16-dil-1	(4μ	20	20	35	35					
	PC74HCT139P	Phi,Val	16-dil-2	&(8μ	16	16	43	43					
μPB74HCT139	PC74HCT139T	Phi,Val Nec	16-smd-1 16-dil	&(8μ &(8μ	16	16	43	43					

Input	Output
D C B A	Q=L
L L L L	Q0
L L L H	Q1
L L H L	Q2
L L H H	Q3
H L L H	Q9
H L H L	—
H L H H	—
H H H H	—

74145		Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>S</sub> typ ↓ ↓ ↑	t <sub>PD</sub> E-Q n <sub>S</sub> max ↓ ↓ ↑	Note f <sub>T</sub> §fz &f <sub>E</sub> MHz	
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C								
HC LC74HC145										Say

**74147**

Output: TP

Priority encoder

**74147**

Type

Production

Bld  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>  
E → Q

t<sub>PD</sub>  
E → Q

Note  
f<sub>T</sub> f<sub>Z</sub>  
&f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

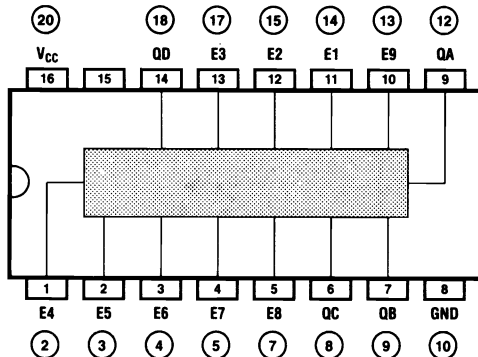
Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz



Input									Output			
E1	E2	E3	E4	E5	E6	E7	E8	E9	QD	QC	QB	QA
H	H	H	H	H	H	H	H	H	H	H	H	H
L	H	H	H	H	H	H	H	H	H	H	H	L
X	L	H	H	H	H	H	H	H	H	H	L	H
X	X	L	H	H	H	H	H	H	H	H	L	L
X	X	X	L	H	H	H	H	H	H	L	H	H
X	X	X	X	L	H	H	H	H	H	L	H	L
X	X	X	X	X	L	H	H	H	H	L	L	H
X	X	X	X	X	X	L	H	H	H	L	H	L
X	X	X	X	X	X	X	L	H	H	L	H	H
X	X	X	X	X	X	X	X	L	L	H	H	L

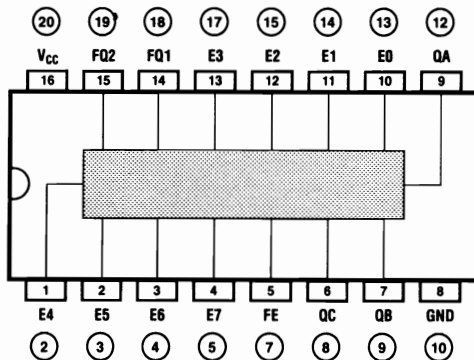
HC	CD74HC147E	CD54HC147F	Rca	16-dil-1	&(8μ	13	13	40	40
		CD54HC147H	Rca	16-dil-3	&(8μ	13 <td>13</td> <td>48</td> <td>48</td>	13	48	48
			Rca	chip	&(8μ	13 <td>13</td> <td>48</td> <td>48</td>	13	48	48
	CD74HC147M		Rca	16-smd-1	&(8μ	13 <td>13</td> <td>40</td> <td>40</td>	13	40	40
			Hit	16-dil	&(8μ			55	55
			Mit	16-dil	&(8μ			55	55
HD74HC147		MC74HC147D	Mot	16-smd-1	&(8μ			68	68
M74HC147		MC54HC147J	Mot	16-dil-3	&(8μ			68	68
		MC74HC147N	Mot	16-dil-1	&(8μ			68	68
	MM74HC147J	MM54HC147J	Nsc	16-dil-3	(8μ	31	31	37	37
	MM74HC147N		Nsc	16-dil-1	(8μ	31	31	37	37
	MN74HC147		Mat	16-dil-1	&(8μ			55	55
	MN74HC147S		Mat	16-smd-1	&(8μ			55	55
	PC74HC147P		Phi,Val	16-dil-2	&(8μ	18	18	40	40
SN74HC147DW		PC74HC147T	Phi,Val	16-smd-1	&(8μ	18	18	40	40
		SN54HC147FK	Tix	16-smd-2	&(8μ	25	25	48	48
		SN54HC147J	Tix	20-chip-2	&(8μ	25	25	57	57
SN74HC147N			Tix	16-dil-3	&(8μ	25	25	57	57
T74HC147			Tix	16-dil-2	&(8μ	25	25	48	48
TD74HC147			Sgs	16-dil	&(8μ			55	55
			Tos	16-dil	&(8μ			55	55
HCT	CD74HCT147E	CD54HCT147F	Rca	16-dil-1	&(8μ	14	14	44	44
		CD54HCT147H	Rca	16-dil-3	&(8μ	14	14	53	53
			Rca	chip	&(8μ	14	14	53	53
	CD74HCT147M		Rca	16-smd-1	&(8μ	14	14	44	44
	PC74HCT147P		Phi,Val	16-dil-2	&(8μ	20	20	44	44
	PC74HCT147T		Phi,Val	16-smd-1	&(8μ	20	20	44	44

# 74148

Output: TP

## Priority encoder

Pin	FI
E0	1
FE	2
E1...E7	2



Input								Output					
FE	E0	E1	E2	E3	E4	E5	E6	E7	QC	QB	QA	FQ1	FQ2
H	X	X	X	X	X	X	X	X	H	H	H	H	H
L	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	H	H	H	H	H	H	H	H	H	L	L	H
L	X	L	H	H	H	H	H	H	H	L	L	L	H
L	X	X	L	H	H	H	H	H	H	L	L	L	H
L	X	X	X	L	H	H	H	H	L	H	L	L	H
L	X	X	X	X	L	H	H	H	L	L	L	L	H
L	X	X	X	X	X	L	H	H	L	L	L	L	H
L	X	X	X	X	X	X	L	H	L	L	L	L	H

### 74148

Type

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Production

Bild Sec. 3

Pin- Art-Nr.

I<sub>S</sub> & I<sub>R</sub>

mA

I<sub>PD</sub> E-Q n<sub>typ</sub>

23 23

I<sub>PD</sub> E-Q n<sub>max</sub>

45 45

Note f<sub>T</sub> §f<sub>Z</sub> & I<sub>E</sub>

MHz

HC  
HD74HC148  
MB74HC148

SN74HC148D

SN74HC148N  
T74HC148  
TD74HC148  
µPB74HC148

MN74HC148  
MN74HC148S

SN54HC148FK  
SN54HC148J

Hit  
Fui  
Mat  
Mat  
Tix  
Tix  
Tix  
Sgs  
Tos  
Nec

16-dil  
16-dil  
16-dil-1  
16-smd-1  
16-smd-1  
20-chip-2  
16-dil-3  
16-dil-2  
16-dil  
16-dil  
16-dil

&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ

23 23  
23 23  
23 23  
23 23

45 45  
54 54  
54 54  
45 45

**74149**

Output: TP

**8 channel priority encoder**

**74149**

Type

Production

Blid  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E-Q  
n<sub>typ</sub>

t<sub>PD</sub>  
E-Q  
n<sub>max</sub>

Note  
f<sub>T</sub> f<sub>FZ</sub>  
& t<sub>E</sub>

0...70°C  
§0...75°C

- 40...85°C  
§ - 25...85°C

- 55...125°C

Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz

HC

MM74HC149J  
MM74HC149N

MM54HC149J

Nsc

20-dil-3  
20-dil-1

(8μ

22 22

30 30

30 30

HCT

MM74HCT149J  
MM74HCT149N

MM54HCT149J

Nsc

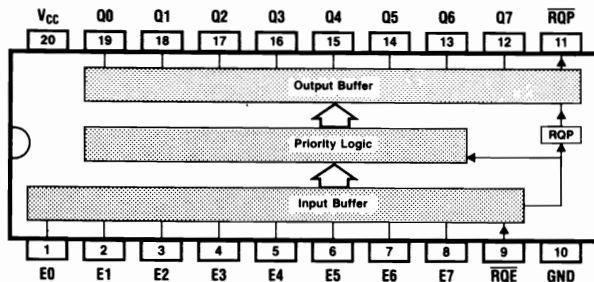
20-dil-3  
20-dil-1

(8μ

18 18

32 32

32 32



Input								Output									
E0	E1	E2	E3	E4	E5	E6	E7	RQE	Q0	Q1	Q2	Q3	Q4	Q5	Q6	Q7	RQP
X	X	X	X	X	X	X	X	H	H	H	H	H	H	H	H	H	H
H	H	H	H	H	H	H	L	L	H	H	H	H	H	H	H	H	H
X	X	X	X	X	X	L	L	L	H	H	H	H	H	H	L	L	L
X	X	X	X	X	L	H	L	L	H	H	H	H	H	L	H	L	L
X	X	X	L	H	H	H	L	L	H	H	H	L	H	H	H	L	L
X	X	X	L	H	H	H	L	L	H	H	L	H	H	H	H	L	L
X	L	H	H	H	H	H	L	L	H	H	L	H	H	H	H	L	L
X	L	H	H	H	H	H	L	L	H	L	H	H	H	H	H	L	L
L	H	H	H	H	H	H	L	L	L	H	H	H	H	H	H	L	L

**74150**

Output: TP

16-line-to-1-line multiplexer

**74150**

Type

Production

Blld  
Sec. 3I<sub>S</sub>  
& I<sub>R</sub>t<sub>pD</sub>  
E-Q  
n<sub>s</sub>typt<sub>pD</sub>  
E-Q  
n<sub>s</sub>maxNote  
f<sub>T</sub> S/z  
& I<sub>E</sub>0...70°C  
§0...75°C-40...85°C  
§-25...85°C

-55...125°C

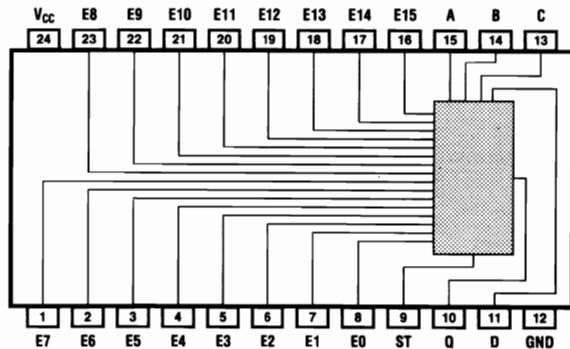
Pins-  
Art-Nr.

mA

↓ ↓ ↑

↓ ↓ ↑

MHz



C

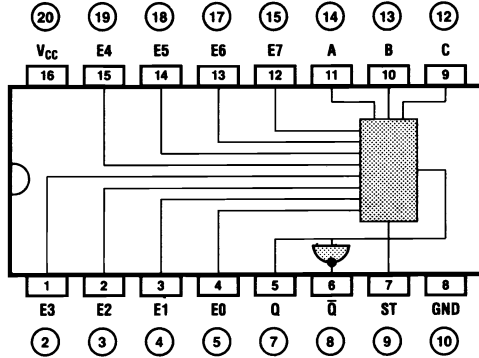
MM74C150J  
MM74C150NMM54C150J  
MM54C150WNsc  
Nsc  
Nsc24-dil-4  
24-dil-1  
24-flat-350n  
50n  
50n250 250  
250 250  
250 250600 600  
600 600  
600 600

Input					Outp.
D	C	B	A	ST	Q
X	X	X	X	H	H
L	L	L	L	L	E <sub>0</sub>
L	L	L	H	L	E <sub>1</sub>
.	.	.	.	.	⋮
H	H	H	L	L	E <sub>14</sub>
H	H	H	H	L	E <sub>15</sub>

# 74151

Output: TP

## 8-line-to-1-line multiplexer



Input		Output	
ST	C B A	Q	Q̄
H	X X X	L	H
L	L L L	E0	E0
L	L L H	E1	E1
L	L H L	E2	E2
L	L H H	E3	E3
.	.	.	.
.	.	.	.
L	H H H	E7	E7

74151	Type		Production	Bld Sec. 3	IS & IR	tPD E · Q ns typ	tPD E · Q ns max	Note	
	0...70°C §0...75°C	-40...85°C §-25...85°C							-55...125°C
			Pins- Art-Nr.	mA	↓ ↓ ↑	↓ ↓ ↑	MHz		
AC	CD74AC151E	CD54AC151E	Rca	16-dil-1	&(8μ		13.5 13.5		
		CD54AC151H CD54AC151M	Rca	16-dil-1 chip	&(8μ		12.3 12.3 13.5 13.5		
	CD74AC151M	54AC151D	Fch, Nsc	16-smd-1	&(8μ		13.5 13.5		
		74AC151D	Fch, Nsc	16-smd-1	&(8μ		12.3 12.3		
	74AC151F	54AC151F	Fch, Nsc	16-dil-3	&(8μ	7 7	13 12		
		54AC151L	Fch, Nsc	16-dil-3	&(8μ	7 7	12 11		
	74AC151P	74AC151P	Fch, Nsc	16-flat-1	&(8μ	7 7	13 12		
		74AC151S	Fch, Nsc	20-chip-2	&(8μ	7 7	13 12		
	ACT	CD74ACT151E	CD54ACT151E	Rca	16-dil-1	&(8μ		15.5 15.5	
			CD54ACT151H CD54ACT151M	Rca	16-dil-1 chip	&(8μ		14.1 14.1 15.5 15.5	
CD74ACT151M	54ACT151D	Fch, Nsc	16-smd-1	&(8μ		14.1 14.1			
	74ACT151D	Fch, Nsc	16-smd-1	&(8μ		14.1 14.1			
74ACT151F	54ACT151F	Fch, Nsc	16-dil-3	&(8μ	11 11	13.5 12.5			
	54ACT151L	Fch, Nsc	16-dil-3	&(8μ	11 11	13.5 12.5			
74ACT151P	74ACT151P	Fch, Nsc	16-flat-1	&(8μ	11 11	13.5 12.5			
	74ACT151S	Fch, Nsc	20-chip-2	&(8μ	11 11	13.5 12.5			
C	MM74C151J MM74C151N	MM54C151J	Nsc	16-dil-3	50n	170 170	270 270		
		MM54C151W	Nsc	16-dil-1	50n	170 170	270 270		
	MM54C151W	Nsc	16-flat-3	50n	170 170	270 270			
HC	CD74HC151E	CD54HC151F	Rca	16-dil-1	&(8μ	15 15	46 46		
		CD54HC151H	Rca	16-dil-3 chip	&(8μ	15 15	56 56		
	CD74HC151M	MC74HC151D	Fui	16-smd-1	&(8μ	15 15	46 46		
		MC54HC151J MC74HC151N	Mot	16-dil	&(8μ		49 49 49 49		
HD74HC151 M74HC151 MB74HC151	MC74HC151D	Mot	16-dil	&(8μ		49 49			
		MC54HC151J	Mot	16-smd-1	(8μ	26 26	43 43		
		MC74HC151N	Mot	16-dil-1	(8μ	26 26	43 43		

74151	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>pD</sub> E-Q n <sub>styp</sub>	I <sub>pD</sub> E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Sz</sub> &E	74151			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>pD</sub> E-Q n <sub>styp</sub>	I <sub>pD</sub> E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Sz</sub> &E		
	0...70°C §0...75°C	-40...85°C §-25...85°C							-55...125°C	0...70°C §0...75°C	-40...85°C §-25...85°C							-55...125°C	
SN74HC151D  T74HC151 TD74HC151 µPB74HC151  HCT	MM74HC151J	MM54HC151J	Nsc	16-dil-3	(8µ	26 26	35 35												
	MM74HC151N		Nsc	16-dil-1	(8µ	26 26	35 35												
	MN74HC151		Mat	16-dil-1	&(8µ		49 49												
	MN74HC151S		Mat	16-smd-1	&(8µ		49 49												
	PC74HC151P		Phi,Val	16-dil-2	&(8µ	19 19	43 43												
	PC74HC151T		Phi,Val	16-smd-1	&(8µ	19 19	43 43												
				Tix	16-smd-1	&(8µ	33 33	88 88											
		SN74HC151FH	SN54HC151FH	Tix	20-chip-3	&(8µ	33 33	105 105											
				Tix	20-chip-3	&(8µ	33 33	88 88											
		SN74HC151FN	SN54HC151FK	Tix	20-chip-2	&(8µ	33 33	105 105											
				Tix	20-chip-1	&(8µ	33 33	88 88											
		SN74HC151J	SN54HC151J	Tix	16-dil-3	&(8µ	33 33	105 105											
		SN74HC151N		Tix	16-dil-3	&(8µ	33 33	88 88											
				Tix	16-dil-1	&(8µ	33 33	88 88											
				Sgs	16-dil	&(8µ		49 49											
				Tos	16-dil	&(8µ		49 49											
				Nec	16-dil	&(8µ		49 49											
		CD74HCT151E		Rca	16-dil-1	&(8µ	17 17	51 51											
		CD54HCT151F	Rca	16-dil-3	&(8µ	17 17	62 62												
		CD54HCT151H	Rca	chip	&(8µ	17 17	62 62												
	CD74HCT151M		Rca	16-smd-1	&(8µ	17 17	51 51												
	PC74HCT151P		Phi,Val	16-dil-2	&(8µ	22 22	48 48												
	PC74HCT151T		Phi,Val	16-smd-1	&(8µ	22 22	48 48												



**74152**

Output: TP

8-line-to-1-line multiplexer

**74152**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E · Q  
n<sub>styp</sub>

t<sub>PD</sub>  
E · Q  
n<sub>smax</sub>

Note  
f<sub>T</sub> f<sub>z</sub>  
& f<sub>E</sub>

0...70°C  
§0...75°C

- 40...85°C  
§ - 25...85°C

- 55...125°C

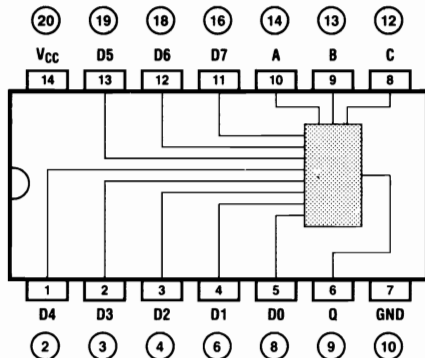
Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↓ ↑

MHz



Input		Outp.	
C	B	A	Q
L	L	L	D0
L	L	H	D1
L	H	L	D2
L	H	H	D3
.	.	.	.
.	.	.	.
H	H	H	D7

HC  
HD74HC152  
SN74HC152D

SN74HC152FH

SN54HC152FH

SN74HC152FN

SN54HC152FK

SN74HC152J

SN54HC152J

SN74HC152N

Hit  
Tix  
Tix  
Tix  
Tix  
Tix  
Tix  
Tix

14-dil  
14-smd-1  
20-chip-3  
20-chip-3  
20-chip-2  
20-chip-1  
14-dil-4  
14-dil-4  
14-dil-1

&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ

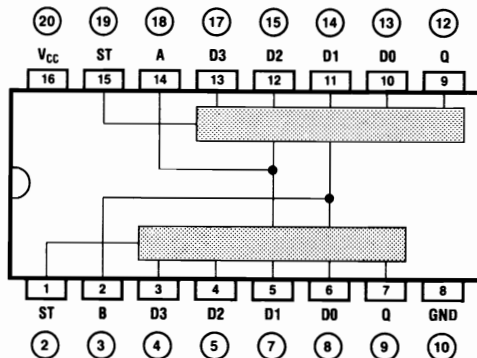
22 22  
22 22  
22 22  
22 22  
22 22  
22 22  
22 22  
22 22

64 64  
77 77  
64 64  
77 77  
64 64  
77 77  
64 64  
64 64

74153

Output: TP

2 4-line-to-1-line multiplexer

FI (L) = 4,5  
FQ (L) = 40

Input	Output		
ST B A Q			
H X X L			
L L L D0			
L L H D1			
L H L D2			
L H H D3			

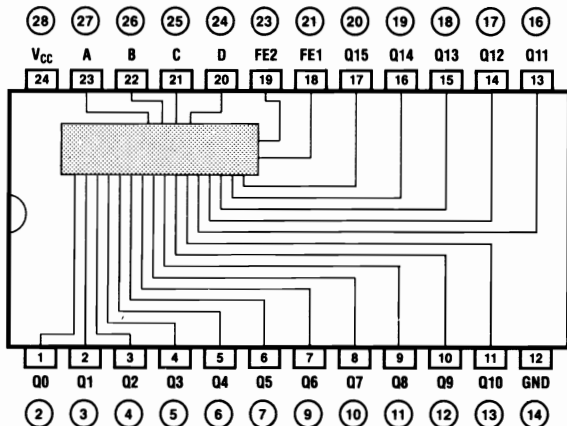
74153	Type		Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	I <sub>PD</sub> E → Q n <sub>typ</sub>	I <sub>PD</sub> E → Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>SZ</sub> & f <sub>E</sub>	
	0...70°C 90...75°C	-40...85°C § -25...85°C							-55...125°C
			Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↑ ↑	MHz		
AC	CD74AC153E	CD54AC153E	Rca	16-dil-1	&(8μ		13.3 13.3		
		CD54AC153H	Rca	16-dil-1	&(8μ		12.1 12.1		
		CD54AC153M	Rca	chip	&(8μ		13.3 13.3		
		CD74AC153M	Rca	16-smd-1	&(8μ		13.3 13.3		
		HD74AC153	Rca	16-smd-1	&(8μ		12.1 12.1		
		HD74AC153	Hit	16-dil	&(8μ		17 17		
	74AC153D	54AC153D	Fch,Nsc	16-dil-3	&(8μ	5	5.5	10.5 11.5	
		54AC153F	Fch,Nsc	16-dil-3	&(8μ	5	5.5	10 10.5	
		54AC153F	Fch,Nsc	16-flat-1	&(8μ	5	5.5	10.5 11.5	
		54AC153L	Fch,Nsc	20-chip-2	&(8μ	5	5.5	10.5 11.5	
		74AC153P	Fch,Nsc	16-dil-2	&(8μ	5	5.5	10 10.5	
		74AC153S	Fch,Nsc	16-smd-1	&(8μ	5	5.5	10 10.5	
ACT	CD74ACT153E	CD54ACT153E	Rca	16-dil-1	&(8μ		18 18		
		CD54ACT153H	Rca	16-dil-1	&(8μ		16.4 16.4		
		CD54ACT153M	Rca	chip	&(8μ		18 18		
		CD74ACT153M	Rca	16-smd-1	&(8μ		18 18		
		CD74ACT153M	Rca	16-smd-1	&(8μ		16.4 16.4		
		CD74ACT153M	Rca	16-smd-1	&(8μ		14.5 15		
	74ACT153D	54ACT153D	Fch,Nsc	16-dil-3	&(8μ	7	7	14.5 15	
		54ACT153F	Fch,Nsc	16-dil-3	&(8μ	7	7	13.5 13.5	
		54ACT153F	Fch,Nsc	16-flat-1	&(8μ	7	7	14.5 15	
		54ACT153L	Fch,Nsc	20-chip-2	&(8μ	7	7	14.5 15	
		74ACT153P	Fch,Nsc	16-dil-2	&(8μ	7	7	13.5 13.5	
		74ACT153S	Fch,Nsc	16-smd-1	&(8μ	7	7	13.5 13.5	
HC	CD74HC153E	CD54HC153E	Rca	16-dil-1	&(8μ	12	12	36 36	
		CD54HC153F	Rca	16-dil-3	&(8μ	12	12	44 44	
		CD54HC153H	Rca	chip	&(8μ	12	12	44 44	
		CD74HC153M	Rca	16-smd-1	&(8μ	12	12	36 36	
		CD74HC153M	Hit	16-dil	&(8μ			35 35	
		CD74HC153M	Mit	16-dil	&(8μ			35 35	
	HD74HC153 M74HC153 MB74HC153	MC74HC153D	Fui	16-dil	&(8μ			35 35	
		MC74HC153D	Mot	16-smd-1	(8μ	18	18	23 23	
		MC74HC153J	Mot	16-dil-3	(8μ	18	18	23 23	
		MC74HC153N	Mot	16-dil-1	(8μ	18	18	23 23	
		MM74HC153J	Nsc	16-dil-3	(8μ	19	19	23 23	
		MM74HC153N	Nsc	16-dil-1	(8μ	19	19	23 23	
MN74HC153 MN74HC153S	MM74HC153	Mat	16-dil-1	&(8μ			35 35		
	MM74HC153S	Mat	16-smd-1	&(8μ			35 35		

74153	Type		Production	Bild Sec. 3	IS &IR	tPD E-Q n#typ	tPD E-Q n#max	Note fT fZ &fE	74153	Type		Production	Bild Sec. 3	IS &IR	tPD E-Q n#typ	tPD E-Q n#max	Note fT fZ &fE			
	0...70°C	-40...85°C								-55...125°C	0...70°C							-40...85°C	-55...125°C	
	§0...75°C	§-25...85°C									§0...75°C							§-25...85°C		
T74HC153 TD74HC153 μPB74HC153  HCT	PC74HC153P	SN54HC153FH SN54HC153FK SN54HC153FN SN54HC153J SN74HC153J SN74HC153N  CD74HCT153E CD54HCT153F CD54HCT153H CD74HCT153M PC74HCT153P PC74HCT153T	Phi,Val	16-dil-2	&(8μ	17 17	36 36													
	PC74HC153T		Phi,Val	16-smd-1	&(8μ	17 17	36 36													
			Tix	20-chip-3	&(8μ	17 17	42 42													
	SN74HC153FH		Tix	20-chip-3	&(8μ	17 17	35 35													
			Tix	20-chip-2	&(8μ	17 17	42 42													
	SN74HC153FN		Tix	20-chip-1	&(8μ	17 17	35 35													
			Tix	16-dil-3	&(8μ	17 17	42 42													
	SN74HC153J		Tix	16-dil-3	&(8μ	17 17	35 35													
			Tix	16-dil-1	&(8μ	17 17	35 35													
			Sgs	16-dil	&(8μ		35 35													
			Tos	16-dil	&(8μ		35 35													
			Nec	16-dil	&(8μ		35 35													
				Rca	16-dil-1	&(8μ	14 9	43 30												
				Rca	16-dil-3	&(8μ	14 9	51 36												
				Rca	chip	&(8μ	14 9	51 36												
		Rca	16-smd-1	&(8μ	14 9	43 30														
		Phi,Val	16-dil-2	&(8μ	19 19	43 43														
		Phi,Val	16-smd-1	&(8μ	19 19	43 43														

# 74154

Output: TP

4-bit binary decoder / demultiplexer



Input		Outp.				
FE1	FE2	D	C	B	A	Q=L
H	X	X	X	X	X	—
X	H	X	X	X	X	—
L	L	L	L	L	L	0
L	L	L	L	L	H	1
L	L	L	L	H	L	2
L	L	L	L	H	H	3
.	.	.	.	.	.	.
L	L	H	H	H	L	14
L	L	H	H	H	H	15

FI (L) = 4,5  
FQ (L) = 40

74154	Type		Production	Bild Sec. 3 Pins- Art-Nr.	IS & IR mA	t <sub>PD</sub> E-Q ns <sub>typ</sub>	t <sub>PD</sub> E-Q ns <sub>max</sub>	Note t <sub>r</sub> Stz & t <sub>E</sub> MHz		
	0...70°C 50...75°C	-40...85°C 5-25...85°C							-55...125°C	
C	MM74C154J	MM54C154J	Nsc	24-dil-4	50n	275	265	400	400	
	MM74C154N	MM54C154N	Nsc	24-dil-1	50n	275	265	400	400	
		MM54C154W	Nsc	24-flat-3	50n	275	265	400	400	
	HC	CD74HC154E	CD54HC154F	Rca	24-dil-1	&(8μ)	14	14	44	44
			CD54HC154H	Rca	24-dil-6	&(8μ)	14	14	53	53
		CD74HC154M		Rca	chip	&(8μ)	14	14	53	53
				Rca	24-smd-2	&(8μ)	14	14	44	44
		HD74HC154		Hit	24-dil	&(8μ)			42	42
		M74HC154		Mit	24-dil	&(8μ)			42	42
			MC54HC154J	Mot	24-dil-6	(8μ)	11	11	21	21
			MC74HC154N	Mot	24-dil-2	(8μ)	11	11	21	21
			MM74HC154J	Nsc	24-dil-6	(8μ)	20	20	30	30
			MM74HC154N	Nsc	24-dil-1	(8μ)	20	20	30	30
	MSM74HC154		OkI	24-dil	&(8μ)			42	42	
SN74HC154DW	PC74HC154P		Phi,Val	24-dil-1	&(8μ)	13	13	38	38	
	PC74HC154T		Phi,Val	24-smd-2	&(8μ)	13	13	38	38	
		SN54HC154FK	Tix	24-smd-2	&(8μ)	24	24	45	45	
		SN54HC154JT	Tix	28-chip-2	&(8μ)	24	24	54	54	
	SN74HC154NT		Tix	24-dil-6	&(8μ)	24	24	54	54	
	T74HC154		Tix	24-dil-2	&(8μ)	24	24	45	45	
HCT	TD74HC154		Sgs	24-dil	&(8μ)			42	42	
			Tos	24-dil	&(8μ)			42	42	
	CD74HCT154E	CD54HCT154F	Rca	24-dil-1	&(8μ)	14	14	44	44	
		CD54HCT154H	Rca	24-dil-6	&(8μ)	14	14	53	53	
TD74HCT154	CD74HCT154M		Rca	chip	&(8μ)	14	14	53	53	
	PC74HCT154P		Rca	24-smd-2	&(8μ)	14	14	44	44	
	PC74HCT154T		Phi,Val	24-dil-1	&(8μ)	16	16	44	44	
			Phi,Val	24-smd-2	&(8μ)	16	16	44	44	
		Tos	24-dil							

# 74155

Output: TP

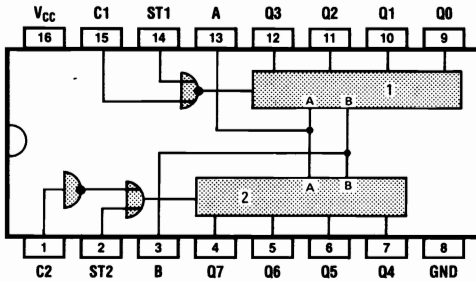
## 2 2-bit binary decoders / demultiplexers

### 74155

Type	
0...70°C §0...75°C	-40...85°C §-25...85°C
-55...125°C	

Production

Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E · Q n <sub>S</sub> typ	t <sub>PD</sub> E · Q n <sub>S</sub> max	Note f <sub>T</sub> f <sub>SZ</sub> &f <sub>E</sub>
P/In- Art-Nr.	mA	↓ ↑ ↑	↓ ↑ ↑	MHz



Input		Outp.	
FE	C B A	Q=L	Q=L
H	X X X	—	—
L	L L L	0	0
L	L L H	1	1
L	L H L	2	2
L	L H H	3	3
.	.	.	.
.	.	.	.
L	H H H	7	7

- 1 = 3-Bit-Binärdekodeur
- 1 = 3-bit binary decoder
- 1 = Décodeur binaire à 3 bits
- 1 = Decodificatore binario di 3 bits
- 1 = Decodificador binario de 3 bits

1+2	1		2	
SEL	Input	Outp.	Input	Outp.
B A	ST1 C1	Q=L	ST2 C2	Q=L
X X	H X	—	H X	—
X X	X L	—	X H	—
L L	L L	0	L L	4
L H	L L	1	L H	5
H L	L L	2	L H	6
H H	L L	3	L H	7

- 2 = 2-Bit-Binärdekodeur
- 2 = 2-bit binary decoders
- 2 = Décodeurs binaires à 2 bits
- 2 = Decodificatori binari di 2 bits
- 2 = Decodificadores binarios de 2 bits

C1 mit C2 und ST1 mit ST2 verbunden  
 C1 connected to C2 and ST1 to ST2  
 C1 connexé à C2 et ST1 à ST2  
 C1 collegato a C2 e ST1 a ST2  
 C1 unido a C2 y ST1 a ST2

HC  
 HD74HC155  
 T74HC155  
 TD74HC155

MN74HC155  
 MN74HC155S

HCT

MM74HCT155J  
 MM74HCT155N

MM54HCT155J

Hit  
 Mat  
 Mat  
 Sgs  
 Tos

Nsc  
 Nsc

16-dil  
 16-dil-1  
 16-smd-1  
 16-dil  
 16-dil

16-dil-3  
 16-dil-1

(8μ

21 21  
 21 21

35 35  
 35 35

**74156**

Output: OD

**2 2-bit binary decoders / demultiplexers****74156**

Type

Production

Bild  
Sec. 3I<sub>S</sub>  
&I<sub>R</sub>I<sub>PD</sub>  
E-Q  
n<sub>styp</sub>I<sub>PD</sub>  
E-Q  
n<sub>max</sub>Note  
f<sub>T</sub> f<sub>z</sub>  
&f<sub>E</sub>0...70°C  
§0...75°C-40...85°C  
§ -25...85°C

-55...125°C

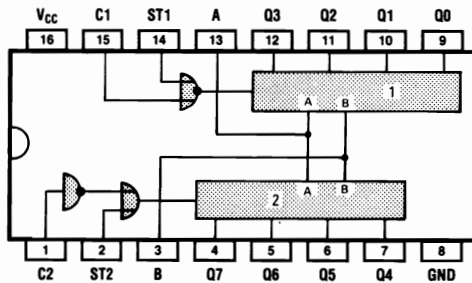
Pina-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz

HC  
M74HC156

Mit

16-dil

Input		Outp.	
FE	C B A	Q=L	
H	X X X	—	
L	L L L	0	
L	L L H	1	
L	L H L	2	
L	L H H	3	
.	.	.	
.	.	.	
L	H H H	7	

1 = 3-Bit-Binärdekoder

1 = 3-bit binary decoder

1 = Décodeur binaire à 3 bits

1 = Decodificatore binario di 3 bits

1 = Decodificador binario de 3 bits

1+2	1		2	
SEL	Input	Outp.	Input	Outp.
B A	ST1 C1	Q=L	ST2 C2	Q=L
X X	H X	—	H X	—
X X	X L	—	X H	—
L L	L L	0	L H	4
L H	L L	1	L H	5
H L	L L	2	L H	6
H H	L L	3	L H	7

2 = 2-Bit-Binärdekoder

2 = 2-bit binary decoders

2 = Décodeurs binaires à 2 bits

2 = Decodificatori binari di 2 bits

2 = Decodificadores binarios de 2 bits

C1 mit C2 und ST1 mit ST2 verbunden

C1 connected to C2 and ST1 to ST2

C1 connexé à C2 et ST1 à ST2

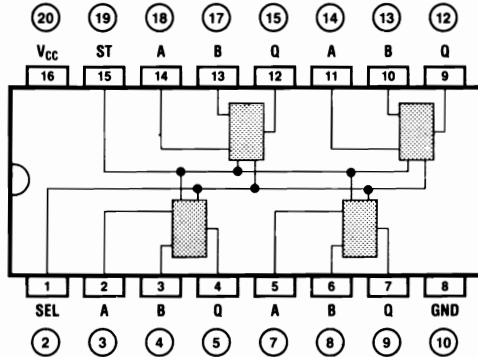
C1 collegato a C2 e ST1 a ST2

C1 unido a C2 y ST1 a ST2

# 74157

Output: TP

## 4 2-line-to-1-line multiplexers



Input		Outp.		
ST	SEL	A	B	Q
H	X	X	X	L
L	L	L	X	L
L	L	H	X	H
L	H	X	L	L
L	H	X	H	H

Pin	FI / FQ			
	N	L	LS	S
A, B	1	4, 5	1, 1	1
SEL, St	1	4, 5	2, 2	2
FQ	10	40	20	10

### 74157

0...70°C  
§0...75°C

Type		Production
-40...85°C §-25...85°C	-55...125°C	

Bild Sec. 3	I <sub>S</sub> &I <sub>q</sub>	I <sub>PD</sub> E-Q n <sub>styp</sub>	I <sub>PD</sub> E-Q n <sub>max</sub>	Note I <sub>T</sub> I <sub>Stz</sub> &E								
					Pin- Art-Nr.	mA	↓ ↓ ↑	↓ ↓ ↑	MHz			
AC	CD74AC157E CD74AC157H CD74AC157M HD74AC157	CD54AC157E CD54AC157H CD54AC157M	Rca	16-dil-1	&(8μ	8.5	8.5					
			Rca	16-dil-1	&(8μ	7.7	7.7					
			Rca	chip	&(8μ	8.5	8.5					
			Rca	16-smd-1	&(8μ	8.5	8.5					
			Rca	16-smd-1	&(8μ	7.7	7.7					
			Hit	16-dil	&(8μ	10.5	10.5					
			Fch,Nsc	16-dil-3	&(8μ	4	4	7.5	7.5			
			Fch,Nsc	16-dil-3	&(8μ	4	4	7	7			
			Fch,Nsc	16-flat-1	&(8μ	4	4	7.5	7.5			
			Fch,Nsc	20-chip-2	&(8μ	4	4	7.5	7.5			
			Fch,Nsc	16-dil-2	&(8μ	4	4	7	7			
			Fch,Nsc	16-smd-1	&(8μ	4	4	7	7			
ACT	CD74ACT157E CD74ACT157H CD74ACT157M	CD54ACT157E CD54ACT157H CD54ACT157M	Rca	16-dil-1	&(8μ	9.5	9.5					
			Rca	16-dil-1	&(8μ	8.6	8.6					
			Rca	chip	&(8μ	9.5	9.5					
			Rca	16-smd-1	&(8μ	9.5	9.5					
			Rca	16-smd-1	&(8μ	8.6	8.6					
			Fch,Nsc	16-dil-3	&(8μ	4.5	4	10	10			
			Fch,Nsc	16-dil-3	&(8μ	4.5	4	8.5	8.5			
			Fch,Nsc	16-flat-1	&(8μ	4.5	4	10	10			
			Fch,Nsc	20-chip-2	&(8μ	4.5	4	10	10			
			Fch,Nsc	16-dil-2	&(8μ	4.5	4	8.5	8.5			
			Fch,Nsc	16-smd-1	&(8μ	4.5	4	8.5	8.5			
			C	MM74C157J MM74C157N	MM54C157J MM54C157W	Nsc	16-dil-3	50n	150	150	250	250
Nsc	16-dil-1	50n				150	150	250	250			
Nsc	16-flat-3	50n				150	150	250	250			
HC	CD74HC157E CD74HC157M	CD54HC157F CD54HC157H	Rca	16-dil-1	&(8μ	12	12	36	36			
			Rca	16-dil-3	&(8μ	12	12	44	44			
			Rca	chip	&(8μ	12	12	44	44			
			Rca	16-smd-1	&(8μ	12	12	36	36			
			Hit	16-dil	&(8μ	32	32	32	32			
			Mit	16-dil	&(8μ	32	32	32	32			
			Fu	16-dil	&(8μ	32	32	32	32			
			Mot	16-dil-3	&(8μ	13	13	32	32			
			Mot	16-dil-1	&(8μ	13	13	32	32			
			MC54HC157J	MC74HC157J MC74HC157N	MC54HC157J	Mot	16-dil-3	&(8μ	13	13	32	32
						Mot	16-dil-1	&(8μ	13	13	32	32
						Mot	16-dil-1	&(8μ	13	13	32	32

74157	Type		Production	Bild Sec. 3	IS &IR	tpD E-Q n <sub>typ</sub>	tpD E-Q n <sub>max</sub>	Note fr fE &fE	74158 Output: TP	4 2-line-to-1-line multiplexers																																													
	0...70°C §0...75°C	-40...85°C §-25...85°C									-55...125°C	Pins- Art-Nr.	mA	↓ ↓ ↑	↓ ↓ ↑	MHz																																							
T74HC157 TD74HC157 μPB74HC157  HCT	MM74HC157J MM74HC157N MN74HC157 MN74HC157S PC74HC157P PC74HC157T	MC74HC157AD MC54HC157AJ MC74HC157AN MM54HC157J	Mot Mot Mot Nsc Nsc Mat Mat Phi,Val Phi,Val Tix Tix Tix Tix Sgs Tos Nec	16-smd-1 16-dil-3 16-dil-2 16-dil-3 16-dil-1 16-smd-1 16-dil-2 16-smd-1 20-chip-3 20-chip-3 20-chip-2 20-chip-1 16-dil-3 16-dil-3 16-dil 16-dil 16-dil	&(4μ &(4μ &(4μ (8μ 11 11 (8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ	32 32 32 32 32 32 21 21 21 21 32 32 32 32 31 31 31 31 38 38 32 32 38 38 32 32 38 38 32 32 32 32 32 32 32 32	16 15 14 13 12 11 10 9	V <sub>CC</sub> ST A B Q A B Q	20 19 18 17 15 14 13 12 11 10 9	FI (SEL, ST) = 2																																													
												CD74HCT157E  CD74HCT157M MM74HCT157J MM74HCT157N PC74HCT157P PC74HCT157T	CD54HCT157F CD54HCT157H  MM54HCT157J	Rca Rca Rca Rca Nsc Nsc Phi,Val Phi,Val	16-dil-1 16-dil-3 chip 16-smd-1 16-dil-3 16-dil-1 16-dil-2 16-smd-1	&(8μ &(8μ &(8μ &(8μ (8μ (8μ &(8μ &(8μ	15 15 15 15 15 15 15 15 13 13 13 13 16 16 16 16	46 46 56 56 56 56 46 46 25 25 25 25 34 34 34 34	1 2 3 4 5 6 7 8	SEL A B Q A B Q GND	2 3 4 5 7 8 9 10	<table border="1"> <thead> <tr> <th>Input</th> <th colspan="3">Output</th> </tr> <tr> <th>ST SEL A B</th> <th>B</th> <th>Q</th> <th></th> </tr> </thead> <tbody> <tr> <td>H X X X</td> <td>X</td> <td>H</td> <td>H</td> <td></td> </tr> <tr> <td>L L L X</td> <td>L</td> <td>X</td> <td>H</td> <td></td> </tr> <tr> <td>L L H X</td> <td>L</td> <td>X</td> <td>L</td> <td></td> </tr> <tr> <td>L H X L</td> <td>H</td> <td>X</td> <td>L</td> <td></td> </tr> <tr> <td>L H X H</td> <td>H</td> <td>X</td> <td>L</td> <td></td> </tr> </tbody> </table>	Input	Output			ST SEL A B	B	Q		H X X X	X	H	H		L L L X	L	X	H		L L H X	L	X	L		L H X L	H	X	L		L H X H	H	X	L	
																							Input	Output																															
																							ST SEL A B	B	Q																														
																							H X X X	X	H	H																													
																							L L L X	L	X	H																													
																							L L H X	L	X	L																													
												L H X L	H	X	L																																								
												L H X H	H	X	L																																								



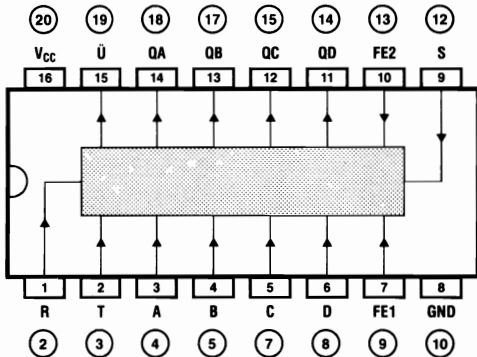
74158	Type		Production	Bild Sec. 3 Pins- Art-Nr.	IS &IR	tPD E-Q n <sup>s</sup> typ	tPD E-Q n <sup>s</sup> max	Note f <sub>T</sub> f <sub>SZ</sub> &f <sub>E</sub>	74158	Type		Production	Bild Sec. 3 Pins- Art-Nr.	IS &IR	tPD E-Q n <sup>s</sup> typ	tPD E-Q n <sup>s</sup> max	Note f <sub>T</sub> f <sub>SZ</sub> &f <sub>E</sub>		
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C							-40...85°C §-25...85°C	-55...125°C
AC	CD74AC158E	CD54AC158E	Rca	16-dil-1	&(8μ		8 8	T74HC158 μPB74HC158	HCT	PC74HC158P	SN54HC158FH	Phi,Val	16-dil-2	&(8μ	15 15	31 31			
			Rca	16-dil-1	&(8μ	7.3 7.3	PC74HC158T			Phi,Val		16-smd-1	&(8μ	15 15	31 31				
			Rca	chip	&(8μ	8 8				Tix		20-chip-3	&(8μ	13 13	38 38				
			Rca	16-smd-1	&(8μ	8 8	SN74HC158FH			Tix		20-chip-3	&(8μ	13 13	32 32				
			Rca	16-smd-1	&(8μ	7.3 7.3				Tix		20-chip-2	&(8μ	13 13	38 38				
	CD74AC158M HD74AC158		Rca	16-dil-3	&(8μ	10.5 10.5	SN74HC158FN			Tix	20-chip-1	&(8μ	13 13	32 32					
		Hit	16-dil	&(8μ	7.5 8.5		Tix			16-dil-3	&(8μ	13 13	38 38						
		Fch,Nsc	16-dil-3	&(8μ	4 4	7.5 8.5	SN74HC158J			Tix	16-dil-3	&(8μ	13 13	32 32					
		Fch,Nsc	16-dil-3	&(8μ	4 4	6.5 7.5				Tix	16-dil-3	&(8μ	13 13	32 32					
		Fch,Nsc	16-flat-1	&(8μ	4 4	7.5 8.5	SN74HC158N			Tix	16-dil-1	&(8μ	13 13	32 32					
74AC158D	54AC158D	54AC158F	Fch,Nsc	20-chip-2	&(8μ	4 4	7.5 8.5		Sgs	16-dil	&(8μ		32 32						
	Fch,Nsc	16-dil-2	&(8μ	4 4	6.5 7.5		7.5 8.5	Nec	16-dil	&(8μ		32 32							
74AC158P 74AC158S	54AC158L	54AC158L	Fch,Nsc	16-smd-1	&(8μ	4 4	6.5 7.5												
ACT	CD74ACT158E	CD54ACT158E	Rca	16-dil-1	&(8μ		9.2 9.2	HCT		CD74HCT158E	CD54HCT158F CD54HCT158H	Rca	16-dil-1	&(8μ	14 14	44 44			
			Rca	16-dil-1	&(8μ	8.4 8.4	Rca		16-dil-3	&(8μ		14 14	53 53						
			Rca	chip	&(8μ	9.2 9.2	Rca		chip	&(8μ		14 14	53 53						
			Rca	16-smd-1	&(8μ	9.2 9.2	Rca		16-smd-1	&(8μ		14 14	44 44						
			Rca	16-smd-1	&(8μ	8.4 8.4	Nsc		16-dil-3	(8μ		13 13	25 25						
	CD74ACT158M		Fch,Nsc	16-dil-3	&(8μ	4 4.5	8 9.5		MM74HCT158J	Nsc	16-dil-1	(8μ	13 13	25 25					
		Fch,Nsc	16-dil-3	&(8μ	4 4.5	7.5 8.5	MM74HCT158N		Nsc	16-dil-1	(8μ	13 13	25 25						
		Fch,Nsc	16-flat-1	&(8μ	4 4.5	8 9.5	PC74HCT158P		Phi,Val	16-dil-2	&(8μ	16 16	38 38						
		Fch,Nsc	20-chip-2	&(8μ	4 4.5	8 9.5	PC74HCT158T		Phi,Val	16-smd-1	&(8μ	16 16	38 38						
		Fch,Nsc	16-dil-2	&(8μ	4 4.5	7.5 8.5													
74ACT158P 74ACT158S	54ACT158L	54ACT158L	Fch,Nsc	16-smd-1	&(8μ	4 4.5	7.5 8.5												
HC	CD74HC158E	CD54HC158E	Rca	16-dil-1	&(8μ	12 12	38 38	HCT		CD74HCT158E	CD54HCT158F CD54HCT158H	Rca	16-dil-1	&(8μ	12 12	45 45			
			Rca	16-dil-3	&(8μ	12 12	45 45		Rca	16-dil-3		&(8μ	12 12	45 45					
			Rca	chip	&(8μ	12 12	45 45		Rca	chip		&(8μ	12 12	45 45					
			Rca	16-smd-1	&(8μ	12 12	38 38		Rca	16-smd-1		&(8μ	12 12	38 38					
			Hit	16-dil	&(8μ		32 32		Hit	16-dil		&(8μ		32 32					
	CD74HC158M		Mit	16-dil	&(8μ		32 32		Mit	16-dil	&(8μ		32 32						
		Fui	16-dil	&(8μ		32 32	Fui		16-dil	&(8μ		32 32							
		Mot	16-smd-1	&(8μ		38 38	Mot		16-smd-1	&(8μ		38 38							
		Mot	16-dil-3	&(8μ	13 13	32 32	Mot		16-dil-3	&(8μ	13 13	32 32							
		Mot	16-dil-1	&(8μ	13 13	32 32	Mot		16-dil-1	&(8μ	13 13	32 32							
HD74HC158 M74HC158 MB74HC158		Nsc	16-dil-3	(8μ	11 11	21 21													
	Nsc	16-dil-1	(8μ	11 11	21 21														
MC74HC158J MC74HC158N	MM74HC158J	MM74HC158N	Mat	16-dil-1	&(8μ		32 32												
	Mat	16-smd-1	&(8μ			32 32													

# 74160

Output: TP

## Synchronous programmable decade counter

Pin	FI	
	N	LS
T	2	3,3
FE2	2	2,2
S	1	2,2



Input					Output				
R	S	FE1	FE2	T	QA	QB	QC	QD	Ü
L	X	X	X	X	L	L	L	L	L
H	L	X	X	↑	Load				
H	H	L	X	X	Keine Veränderung*				
H	H	X	L	X					
H	H	H	H	↑	Count				
H	L	L	L	H	H				

\* No change · Pas de modification  
Senza alterazioni · Sin modificación

### 74160

Type

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Production

Bild  
Sec. 3

IS

tpD  
E-Q

tpD  
E-Q

Note

Pin-  
Art-Nr.

mA

n<sub>typ</sub>

n<sub>max</sub>

f<sub>r</sub> f<sub>z</sub>  
&f<sub>E</sub>

↓ ↓ ↑

↓ ↓ ↑

↓ ↓ ↑

↓ ↓ ↑

MHz

AC

74AC160D  
74AC160P  
74AC160S

Fch, Nsc  
Fch, Nsc  
Fch, Nsc

16-dil-3  
16-dil-2  
16-smd-1

&(8µ)  
&(8µ)  
&(8µ)

6 5.5  
6 5.5  
6 5.5

118  
118  
118

ACT

74ACT160D  
74ACT160P  
74ACT160S

Fch, Nsc  
Fch, Nsc  
Fch, Nsc

16-dil-3  
16-dil-2  
16-smd-1

&(8µ)  
&(8µ)  
&(8µ)

6 5.5  
6 5.5  
6 5.5

118  
118  
118

C

MM74C160J  
MM74C160N

MM54C160J  
MM54C160W

Nsc  
Nsc  
Nsc

16-dil-3  
16-dil-1  
16-flat-3

50n  
50n  
50n

250 250  
250 250  
250 250

400 400  
400 400  
400 400

HC

CD74HC160E  
CD54HC160F  
CD54HC160H  
CD74HC160M

Rca  
Rca  
Rca  
Rca

16-dil-1  
16-dil-3  
chip  
16-smd-1

&(8µ)  
&(8µ)  
&(8µ)  
&(8µ)

15 15  
15 15  
15 15  
15 15

46 46  
56 56  
56 56  
46 24

HD74HC160  
MB74HC160

MC74HC160D  
MC54HC160J  
MC74HC160N  
MM74HC160J  
MM74HC160N  
MN74HC160  
MN74HC160S  
PC74HC160P  
PC74HC160T

Mot  
Mot  
Mot  
Nsc  
Nsc  
Mat  
Mat  
Phi, Val  
Phi, Val

16-smd-1  
16-dil-3  
16-dil-1  
16-dil-1  
16-dil-2  
16-smd-1

(8µ)  
(8µ)  
(8µ)  
(8µ)  
(8µ)  
(8µ)

17 14  
17 14  
17 14  
26 14  
26 14  
52 52

35 29  
35 29  
35 29  
35 29  
35 29  
52 52

SN74HC160D

SN54HC160FH  
SN74HC160FH  
SN74HC160FN  
SN54HC160J  
SN74HC160J  
SN74HC160N

Tix  
Tix  
Tix  
Tix  
Tix  
Tix

16-smd-1  
20-chip-3  
20-chip-3  
20-chip-2  
20-chip-1  
16-dil-3

&(8µ)  
&(8µ)  
&(8µ)  
&(8µ)  
&(8µ)  
&(8µ)

22 22  
25 25  
25 25  
25 25  
25 25  
25 25

46 46  
51 25  
51 25  
51 25  
51 25  
51 25

T74HC160  
µPB74HC160

µPB74HC160

Sgs  
Nec

16-dil  
16-dil

&(8µ)  
&(8µ)

25 25  
25 25

52 52  
52 52

74160	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>s</sub> typ	t <sub>PD</sub> E-Q n <sub>s</sub> max	Note f <sub>T</sub> §fz &fE	74161	Synchronous programmable binary counter
	0...70°C §0...75°C	-40...85°C §-25...85°C								
HCT	CD74HCT160E	Rca	16-dil-1	&(8μ	16	16	49	49	24	
		CD54HCT160F CD54HCT160H	Rca chip	16-dil-3	&(8μ	16	16	59	59	
	CD74HCT160M	Rca	16-smd-1	&(8μ	16	16	49	49	24	
		MM74HCT160J MM54HCT160J	Nsc	16-dil-3	&(2μ	21	17	41	34	
	MM74HCT160N	Nsc	16-dil-1	&(2μ	21	17	41	34	27	
		PC74HCT160P PC74HCT160T	Phi,Val	16-dil-2	&(8μ	25	25	54	54	
	Phi,Val		16-smd-1	&(8μ	25	25	54	54	13	

Pin	FI	
	N	LS
T	2	3,3
FE2	2	2,2
S	1	2,2

Input		Output							
R	S	FE1	FE2	T	QA	QB	QC	QD	Ü
L	X	X	X	X	L	L	L	L	L
H	L	X	X	↑	Load				
H	H	L	X	X	Keine Veränderung*				
H	H	X	L	X					
H	H	H	H	↑	Count				
					H	H	H	H	H

\* No change · Pas de modification  
Senza alterazione · Sin modificación

74161	Type		Production	Blld Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E · Q nStyp	I <sub>PD</sub> E · Q n <sub>S</sub> max	Note I <sub>T</sub> S <sub>I</sub> Z &I <sub>E</sub>	74161	Type		Production	Blld Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E · Q nStyp	I <sub>PD</sub> E · Q n <sub>S</sub> max	Note I <sub>T</sub> S <sub>I</sub> Z &I <sub>E</sub>					
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C							-40...85°C §-25...85°C	-55...125°C			
AC	CD74AC161E	CD54AC161E	Rca	16-dil-1	&(8μ		16.5 16.5	90	SN74HC161D	MN74HC161S	SN54HC161FH	Mat	16-smd-1	&(8μ		52 52	21					
		CD54AC161H	Rca	16-dil-1	&(8μ		15 15	103		PC74HC161P		Phi,Val	16-dil-2	&(8μ	22 22	48 48	18					
		CD54AC161M	Rca	chip	&(8μ		16.5 16.5	90		PC74HC161T		Phi,Val	16-smd-1	&(8μ	22 22	48 48	18					
		74AC161D	54AC161D	Fch,Nsc	16-smd-1	&(8μ		16.5 16.5		90		SN74HC161FH	Tix	16-smd-1	&(8μ	25 25	51 51	25				
			54AC161F	Fch,Nsc	16-smd-1	&(8μ		15 15		103		SN54HC161FK	Tix	20-chip-3	&(8μ	25 25	62 62	21				
		74AC161P	54AC161L	Fch,Nsc	16-dil-3	&(8μ	7 6			118		SN74HC161FN	Tix	20-chip-3	&(8μ	25 25	51 51	25				
			74AC161S	Fch,Nsc	16-dil-3	&(8μ	7 6			118		SN74HC161J	Tix	20-chip-2	&(8μ	25 25	62 62	21				
				Fch,Nsc	16-flat-1	&(8μ	7 6			118		SN74HC161J	Tix	20-chip-1	&(8μ	25 25	51 51	25				
				Fch,Nsc	20-chip-2	&(8μ	7 6			118		SN74HC161N	Tix	16-dil-3	&(8μ	25 25	62 62	21				
				Fch,Nsc	16-dil-2	&(8μ	7 6			118		T74HC161	Tix	16-dil-3	&(8μ	25 25	51 51	25				
		Fch,Nsc	16-smd-1	&(8μ	7 6		118	TD74HC161	Tix	16-dil-3	&(8μ	25 25	51 51	25								
								μPB74HC161	Sgs	16-dil	&(8μ		52 52	21								
ACT	CD74ACT161E	CD54ACT161E	Rca	16-dil-1	&(8μ		16.5 16.5	80	HCT	CD74HCT161E	CD54HCT161F CD54HCT161H	Rca	16-dil-1	&(8μ	16 16	49 49	24					
		CD54ACT161H	Rca	16-dil-1	&(8μ		15 15	91				Rca	16-dil-3	&(8μ	16 16	59 59	20					
		CD54ACT161M	Rca	chip	&(8μ		16.5 16.5	80				Rca	chip	&(8μ	16 16	59 59	20					
		74ACT161D	74ACT161P	Fch,Nsc	16-smd-1	&(8μ		16.5 16.5				80	CD74HCT161M	Rca	16-smd-1	&(8μ	16 16	49 49	24			
			74ACT161S	Fch,Nsc	16-smd-1	&(8μ		15 15				91	MM74HCT161J	Nsc	16-dil-3	&(2μ	21 17	41 34	27			
				Fch,Nsc	16-dil-3	&(8μ	6 5.5					100	MM74HCT161N	Nsc	16-dil-1	&(2μ	21 17	41 34	27			
				Fch,Nsc	16-dil-2	&(8μ	6 5.5					100	PC74HCT161P	Phi,Val	16-dil-2	&(8μ	23 23	54 54	18			
				Fch,Nsc	16-smd-1	&(8μ	6 5.5					100	PC74HCT161T	Phi,Val	16-smd-1	&(8μ	23 23	54 54	18			
		C	MM74C161J	MM54C161J	Nsc	16-dil-3	50n	250 250				400 400	2									
				MM74C161N	Nsc	16-dil-1	50n	250 250				400 400	2									
MM54C161W	Nsc			16-flat-3	50n	250 250	400 400	2														
HC	CD74HC161M	CD54HC161E	Rca	16-dil-1	&(8μ	15 15	46 46	24	HD74HC161 M74HC161 MB74HC161	CD74HC161M	MC74HC161D MC54HC161J MC74HC161N MM54HC161J	Rca	16-dil-3	&(8μ	15 15	56 56	20					
		CD54HC161F	Rca	chip	&(8μ		15 15	56 56				20	Rca	chip	&(8μ	15 15	56 56	20				
		CD54HC161H	Rca	16-smd-1	&(8μ		15 15	46 46				24	Rca	16-smd-1	&(8μ	15 15	46 46	24				
		MM74HC161J	MM54HC161J	Mot	16-dil	&(8μ		52 52				21	Hit	16-dil	&(8μ		52 52	21				
			MM74HC161N	Mot	16-dil	&(8μ		52 52				21	Mit	16-dil	&(8μ		52 52	21				
		MN74HC161	MM54HC161J	Mot	16-dil	&(8μ		52 52				21	Fui	16-dil	&(8μ		52 52	21				
			MM74HC161N	Mot	16-smd-1	(8μ	17 14					35 29	30	Mot	16-smd-1	(8μ	17 14	35 29	30			
			MM74HC161N	Mot	16-dil-3	(8μ	17 14					35 29	30	Mot	16-dil-3	(8μ	17 14	35 29	30			
			MN74HC161	Nsc	16-dil-1	(8μ	17 14					35 29	30	Mot	16-dil-1	(8μ	17 14	35 29	30			
				Nsc	16-dil-3	(8μ	26 14					35 29	32	Nsc	16-dil-3	(8μ	26 14	35 29	32			
		Mat	16-dil-1	(8μ	26 14		35 29	32	Nsc	16-dil-1	(8μ	26 14	35 29	32								
							52 52	21	Mat	16-dil-1	&(8μ		52 52	21								

74162 Output: TP		Synchronous programmable decade counter		74162		Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>q</sub> mA	I <sub>PD</sub> E-Q ns <sub>typ</sub> ↓ ↑ ↑	I <sub>PD</sub> E-Q ns <sub>max</sub> ↓ ↑ ↑	Note f <sub>T</sub> S <sub>FZ</sub> &E MHz																																																																												
				0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Type																																																																																		
<table border="1"> <thead> <tr> <th rowspan="2">Pin</th> <th colspan="3">FI</th> </tr> <tr> <th>N</th> <th>LS</th> <th>S</th> </tr> </thead> <tbody> <tr> <td>T</td> <td>3</td> <td>3,3</td> <td>1</td> </tr> <tr> <td>FE2</td> <td>2</td> <td>2,2</td> <td>2</td> </tr> <tr> <td>R,S</td> <td>1</td> <td>2,2</td> <td>1</td> </tr> </tbody> </table>		Pin	FI			N	LS	S	T	3	3,3	1	FE2	2	2,2	2	R,S	1	2,2	1			AC		74AC162D 74AC162P 74AC162S	Fch,Nsc Fch,Nsc Fch,Nsc	16-dil-3 16-dil-2 16-smd-1	&(8μ &(8μ &(8μ	6 5.5 6 5.5 6 5.5			118 118 118																																																									
			Pin	FI																																																																																					
N	LS	S																																																																																							
T	3	3,3	1																																																																																						
FE2	2	2,2	2																																																																																						
R,S	1	2,2	1																																																																																						
ACT		74ACT162D 74ACT162P 74ACT162S	Fch,Nsc Fch,Nsc Fch,Nsc	16-dil-3 16-dil-2 16-smd-1	&(8μ &(8μ &(8μ	6 5.5 6 5.5 6 5.5			118 118 118																																																																																
		C		MM74C162J MM74C162N	MM54C162J MM54C162W	Nsc Nsc Nsc	16-dil-3 16-dil-1 16-flat-3	50n 50n 50n	250 250 250 250 250 250	400 400 400 400 400 400			2 2 2																																																																												
		HC		CD74HC162E  CD74HC162M	CD54HC162F CD54HC162H	Rca Rca Rca Rca Hit Mit	16-dil-1 16-dil-3 chip 16-smd-1 16-dil 16-dil	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ	15 15 15 15 15 15 15 15 52 52 52 52	46 46 56 56 56 56 46 46 52 52	46 46 20 20 21 21		24 20 20 24 21																																																																												
		HD74HC162 M74HC162		MM74HC162J MM74HC162N MN74HC162 MN74HC162S PC74HC162P PC74HC162T	MM54HC162J MM54HC162J	Nsc Nsc Mat Mat Phi,Val Phi,Val	16-dil-3 16-dil-1 16-dil-1 16-smd-1 16-dil-2 16-smd-1	(8μ (8μ (8μ (8μ (8μ (8μ	26 14 26 14 26 14 21 21 21 21	35 29 35 29 35 29 52 52 48 48 48 48	32 32 30 21 24 24		32 32 30 21 24 24																																																																												
		SN74HC162D		SN74HC162FH  SN74HC162FN  SN74HC162J SN74HC162N	SN54HC162FH  SN54HC162FK  SN54HC162J	Tix Tix Tix Tix Tix Tix Sgs Nec	16-smd-1 20-chip-3 20-chip-3 20-chip-2 20-chip-1 16-dil-3 16-dil-3 16-dil-1 16-dil	(8μ (8μ (8μ (8μ (8μ (8μ (8μ (8μ	25 25 25 25 25 25 25 25 25 25 25 25 25 25	62 62 51 51 62 62 51 51 62 62 51 51 51 51	25 25 25 25 25 25		25 25 25 25 25 25 21																																																																												
		T74HC162 μPB74HC162																																																																																							
<table border="1"> <thead> <tr> <th colspan="2">Input</th> <th colspan="4">Output</th> </tr> <tr> <th>R</th> <th>S</th> <th>FE1</th> <th>FE2</th> <th>T</th> <th>QA</th> <th>QB</th> <th>QC</th> <th>QD</th> <th>Ü</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>X</td> <td>X</td> <td>X</td> <td>↑</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> </tr> <tr> <td>H</td> <td>L</td> <td>X</td> <td>X</td> <td>↑</td> <td colspan="4">Load</td> <td></td> </tr> <tr> <td>H</td> <td>H</td> <td>L</td> <td>X</td> <td>X</td> <td colspan="4">Keine Veränderung*</td> <td></td> </tr> <tr> <td>H</td> <td>H</td> <td>X</td> <td>L</td> <td>X</td> <td colspan="4"></td> <td></td> </tr> <tr> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td>↑</td> <td colspan="4">Count</td> <td></td> </tr> <tr> <td colspan="5"></td> <td>H</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> </tr> </tbody> </table>		Input		Output				R	S	FE1	FE2	T	QA	QB	QC	QD	Ü	L	X	X	X	↑	L	L	L	L	L	H	L	X	X	↑	Load					H	H	L	X	X	Keine Veränderung*					H	H	X	L	X						H	H	H	H	↑	Count										H	L	L	H	H												
Input		Output																																																																																							
R	S	FE1	FE2	T	QA	QB	QC	QD	Ü																																																																																
L	X	X	X	↑	L	L	L	L	L																																																																																
H	L	X	X	↑	Load																																																																																				
H	H	L	X	X	Keine Veränderung*																																																																																				
H	H	X	L	X																																																																																					
H	H	H	H	↑	Count																																																																																				
					H	L	L	H	H																																																																																
* No change · Pas de modification Senza alterazione · Sin modificación																																																																																									

74162	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n#typ	t <sub>PD</sub> E-Q n#max	Note f <sub>T</sub> §f <sub>Z</sub> &f <sub>E</sub>	74163	Synchronous programmable decade counter	
	0...70°C §0...75°C	-40...85°C §-25...85°C									-55...125°C
HCT	CD74HCT162E	Rca	16-dil-1	&(8μ	16	16	49	49	24		
		CD54HCT162F CD54HCT162H	Rca chip	16-dil-3 16-dil-3	&(8μ	16	16	59	59		20
	CD74HCT162M	Rca	16-smd-1	&(8μ	16	16	49	49	24		
		MMS54HCT162J	Nsc	16-dil-3	&(2μ	21	17	41	34		27
	MM74HCT162J	Nsc	16-dil-1	&(2μ	21	17	41	34	27		
	MM74HCT162N	Phi, Val	16-dil-2	&(8μ	24	24	54	54	14		
	PC74HCT162P	Phi, Val	16-smd-1	&(8μ	24	24	54	54	14		
	PC74HCT162T										

Pin	FI		
	N	LS	S
T	2	3,3	1
FE2	2	2,2	2
R, S	1	2,2	1

Input					Output				
R	S	FE1	FE2	T	QA	QB	QC	QD	Ü
L	X	X	X	↑	L	L	L	L	L
H	L	X	X	↑	Load				
H	H	L	X	X	Keine Veränderung*				
H	H	H	L	X	Count				
H	H	H	H	↑	H	H	H	H	H

\* No change · Pas de modification  
Senza alterazione · Sin modificación

74163	Type		Production	Bldg Sec. 3	IS &IR	tPD E-Q n <sub>typ</sub>	tPD E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>	74163	Type		Production	Bldg Sec. 3	IS &IR	tPD E-Q n <sub>typ</sub>	tPD E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>						
	0...70°C \$0...75°C	-40...85°C \$-25...85°C								-55...125°C	0...70°C \$0...75°C							-40...85°C \$-25...85°C	-55...125°C				
			Pins- Art-Nr.	mA			↓ ↑ ↑			↓ ↑ ↑			MHz										
AC	CD74AC163E	CD54AC163E	Rca	16-dil-1	&(8μ		16.5 16.5	90	SN74HC163D	PC74HC163P PC74HC163T	SN54HC163FH	Phi,Val	16-dil-2	&(8μ	20 20	51 51	22						
		CD54AC163H CD54AC163M	Rca	16-dil-1	&(8μ		15 15	103		Phi,Val		16-smd-1	&(8μ	20 20	51 51	22							
	CD74AC163M	54AC163D	Rca	chip	&(8μ		16.5 16.5	90		SN74HC163FH		Tix	16-smd-1	&(8μ	25 25	51 51	25						
			Rca	16-smd-1	&(8μ		16.5 16.5	90		SN74HC163FH		Tix	20-chip-3	&(8μ	25 25	62 62	21						
	74AC163D	54AC163F 54AC163L	Fch,Nsc	16-dil-3	&(8μ	6 5.5				SN74HC163FN		Tix	20-chip-3	&(8μ	25 25	51 51	25						
			Fch,Nsc	16-flat-1	&(8μ	6 5.5	10 9.5	95		SN74HC163J		Tix	20-chip-2	&(8μ	25 25	62 62	21						
	74AC163P 74AC163S		Fch,Nsc	20-chip-2	&(8μ	6 5.5				SN74HC163J		Tix	16-dil-3	&(8μ	25 25	51 51	25						
			Fch,Nsc	16-dil-2	&(8μ	6 5.5	10 9.5	95		SN74HC163N		Tix	16-dil-1	&(8μ	25 25	51 51	25						
	Fch,Nsc	16-smd-1	&(8μ	6 5.5	10 9.5	95				Sgs		16-dil	&(8μ		52 52	21							
	Fch,Nsc	16-smd-1	&(8μ	6 5.5	10 9.5	95				Nec		16-dil	&(8μ		52 52	21							
ACT	CD74ACT163E	CD54ACT163E	Rca	16-dil-1	&(8μ		16.5 16.5	80	HCT	CD74HCT163E	CD54HCT163F CD54HCT163H	Rca	16-dil-1	&(8μ	16 16	49 49	24						
		CD54ACT163H CD54ACT163M	Rca	16-dil-1	&(8μ		15 15	91		Rca		16-dil-3	&(8μ	16 16	59 59	20							
	CD74ACT163M	74ACT163D 74ACT163P 74ACT163S	Rca	chip	&(8μ		16.5 16.5	80		CD74HCT163M		Rca	chip	&(8μ	16 16	59 59	20						
			Rca	16-smd-1	&(8μ		16.5 16.5	80		MM74HCT163J		Rca	16-smd-1	&(8μ	16 16	49 49	24						
	74ACT163D 74ACT163P 74ACT163S		Rca	16-smd-1	&(8μ		15 15	91		MM74HCT163N		Nsc	16-dil-3	&(2μ	21 17	41 34	27						
			Fch,Nsc	16-dil-3	&(8μ	6 5.5	12 11	105		MM74HCT163N		Nsc	16-dil-1	&(2μ	21 17	41 34	27						
	Fch,Nsc	16-dil-2	&(8μ	6 5.5	12 11	105				PC74HCT163P		Phi,Val	16-dil-2	&(8μ	23 23	54 54	22						
	Fch,Nsc	16-smd-1	&(8μ	6 5.5	12 11	105				PC74HCT163T		Phi,Val	16-smd-1	&(8μ	23 23	54 54	22						
	C	MM74C163J MM74C163N	MM54C163J	Nsc	16-dil-3	50n	250 250	400 400		2													
			MM54C163N	Nsc	16-dil-1	50n	250 250	400 400		2													
MM54C163W		Nsc	16-flat-3	50n	250 250	400 400	2																
HC	CD74HC163E	CD54HC163F CD54HC163H	Rca	16-dil-1	&(8μ	15 15	46 46	24															
		CD74HC163M	Rca	16-dil-3	&(8μ	15 15	56 56	20										Rca	chip	&(8μ	15 15	56 56	20
	HD74HC163 M74HC163	MC74HC163D MC54HC163J MC74HC163N MM74HC163J	Rca	chip	&(8μ	15 15	56 56	20										Rca	16-smd-1	&(8μ	15 15	46 46	24
			Rca	16-smd-1	&(8μ	15 15	46 46	24										Hit	16-dil	&(8μ	52 52	21	
	MM74HC163J MM74HC163N MM74HC163S		Hit	16-dil	&(8μ		52 52	21										Mit	16-dil	&(8μ		52 52	21
			Mot	16-smd-1	(8μ	17 14	35 29	30										Mot	16-smd-1	(8μ	17 14	35 29	30
	MM74HC163N MM74HC163S		Mot	16-dil-3	(8μ	17 14	35 29	30										Mot	16-dil-1	(8μ	17 14	35 29	30
			Mot	16-dil-1	(8μ	17 14	35 29	30										Nsc	16-dil-3	(8μ	26 14	35 29	32
	MM74HC163S		Nsc	16-dil-3	(8μ	26 14	35 29	32										Nsc	16-dil-1	(8μ	26 14	35 29	32
			Nsc	16-dil-1	(8μ	26 14	35 29	32										Mat	16-dil-1	&(8μ	52 52	21	
Mat	16-dil-1	&(8μ	52 52	21				Mat	16-smd-1	&(8μ	52 52	21											

74164 Output: TP		8-bit shift register with parallel outputs			74164		Type		Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>styp</sub>	t <sub>PD</sub> E → Q n <sub>max</sub>	Note t <sub>r</sub> f <sub>SZ</sub> & f <sub>E</sub>																																																		
					0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.							mA	↓ ↑ ↑	↓ ↓ ↑	MHz																																														
					ACT		CD74ACT164E	CD54ACT164E	Rca	14-dil-1	&(8μ	14.9	14.9	70																																																		
					C		MM74C164J MM74C164N	MM54C164J MM54C164W	Nsc	14-dil-4	50n	280 230	380 310																																																			
FI (L) = 4,5 FQ (N) = 5					HC		CD74HC164E	CD54HC164F CD54HC164H	Rca	14-dil-1	&(8μ	14	14	43 43	24																																																	
					HD74HC164 MB74HC164		MM74HC164J MM74HC164N MN74HC164 MN74HC164S	MC74HC164N MM54HC164J	Nsc	14-dil-1	50n	280 230	380 310																																																			
<table border="1"> <thead> <tr> <th colspan="2">Input t<sub>n</sub></th> <th colspan="2">Output t<sub>n+1</sub></th> </tr> <tr> <th>R</th> <th>T</th> <th>A</th> <th>B</th> <th>QA</th> <th>QB...QH</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>X</td> <td>X</td> <td>X</td> <td>L</td> <td>L...L</td> </tr> <tr> <td>H</td> <td>L</td> <td>X</td> <td>X</td> <td>keine Veränderung*</td> <td>shift**</td> </tr> <tr> <td>H</td> <td>↑</td> <td>H</td> <td>H</td> <td>H</td> <td>shift**</td> </tr> <tr> <td>H</td> <td>↑</td> <td>L</td> <td>X</td> <td>L</td> <td>shift**</td> </tr> <tr> <td>H</td> <td>↑</td> <td>X</td> <td>L</td> <td>L</td> <td>shift**</td> </tr> </tbody> </table> <p>* No change · Pas de modification            Senza alterazione · Sin modificación            ** Rechtsschieben · Pousser vers la droite · Spostare verso destra            Desplazar a la derecha</p>					Input t <sub>n</sub>		Output t <sub>n+1</sub>		R	T	A	B	QA	QB...QH	L	X	X	X	L	L...L	H	L	X	X	keine Veränderung*	shift**	H	↑	H	H	H	shift**	H	↑	L	X	L	shift**	H	↑	X	L	L	shift**	MSM74HC164		PC74HC164P PC74HC164T	SN54HC164FH SN74HC164FH SN54HC164FK SN74HC164FN SN54HC164J	Phi, Val	14-smd-1	&(8μ	15	15	43 43	24									
					Input t <sub>n</sub>		Output t <sub>n+1</sub>																																																									
R	T	A	B	QA	QB...QH																																																											
L	X	X	X	L	L...L																																																											
H	L	X	X	keine Veränderung*	shift**																																																											
H	↑	H	H	H	shift**																																																											
H	↑	L	X	L	shift**																																																											
H	↑	X	L	L	shift**																																																											
<table border="1"> <thead> <tr> <th>74164</th> <th colspan="2">Type</th> <th rowspan="2">Production</th> <th rowspan="2">Bild Sec. 3</th> <th rowspan="2">I<sub>S</sub> &amp; I<sub>R</sub></th> <th rowspan="2">t<sub>PD</sub> E → Q n<sub>styp</sub></th> <th rowspan="2">t<sub>PD</sub> E → Q n<sub>max</sub></th> <th rowspan="2">Note t<sub>r</sub> f<sub>SZ</sub> &amp; f<sub>E</sub></th> </tr> <tr> <th>0...70°C §0...75°C</th> <th>-40...85°C §-25...85°C</th> <th>-55...125°C</th> <th>Pins- Art-Nr.</th> <th>mA</th> <th>↓ ↑ ↑</th> <th>↓ ↓ ↑</th> <th>MHz</th> </tr> </thead> <tbody> <tr> <td rowspan="3">AC</td> <td rowspan="3">CD74AC164E</td> <td>CD54AC164E</td> <td>Rca</td> <td>14-dil-1</td> <td>&amp;(8μ</td> <td>12.5</td> <td>12.5</td> <td>75</td> </tr> <tr> <td>CD54AC164H</td> <td>Rca</td> <td>14-dil-1 chip</td> <td>&amp;(8μ</td> <td>11.4</td> <td>11.4</td> <td>86</td> </tr> <tr> <td>CD54AC164M</td> <td>Rca</td> <td>14-smd-1</td> <td>&amp;(8μ</td> <td>12.5</td> <td>12.5</td> <td>75</td> </tr> <tr> <td>CD74AC164M</td> <td></td> <td></td> <td>Rca</td> <td>14-smd-1</td> <td>&amp;(8μ</td> <td>11.4</td> <td>11.4</td> <td>86</td> </tr> </tbody> </table>					74164	Type		Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>styp</sub>	t <sub>PD</sub> E → Q n <sub>max</sub>	Note t <sub>r</sub> f <sub>SZ</sub> & f <sub>E</sub>	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz	AC	CD74AC164E	CD54AC164E	Rca	14-dil-1	&(8μ	12.5	12.5	75	CD54AC164H	Rca	14-dil-1 chip	&(8μ	11.4	11.4	86	CD54AC164M	Rca	14-smd-1	&(8μ	12.5	12.5	75	CD74AC164M			Rca	14-smd-1	&(8μ	11.4	11.4	86	T74HC164 TD74HC164 μPB74HC164		SN74HC164J SN74HC164N	Sgs Tos Nec	14-dil	&(8μ	14	14	44 44	21	
					74164	Type								Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>styp</sub>	t <sub>PD</sub> E → Q n <sub>max</sub>	Note t <sub>r</sub> f <sub>SZ</sub> & f <sub>E</sub>																																													
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz																																																									
AC	CD74AC164E	CD54AC164E	Rca	14-dil-1	&(8μ	12.5	12.5	75																																																								
		CD54AC164H	Rca	14-dil-1 chip	&(8μ	11.4	11.4	86																																																								
		CD54AC164M	Rca	14-smd-1	&(8μ	12.5	12.5	75																																																								
CD74AC164M			Rca	14-smd-1	&(8μ	11.4	11.4	86																																																								
<table border="1"> <thead> <tr> <th>74164</th> <th colspan="2">Type</th> <th rowspan="2">Production</th> <th rowspan="2">Bild Sec. 3</th> <th rowspan="2">I<sub>S</sub> &amp; I<sub>R</sub></th> <th rowspan="2">t<sub>PD</sub> E → Q n<sub>styp</sub></th> <th rowspan="2">t<sub>PD</sub> E → Q n<sub>max</sub></th> <th rowspan="2">Note t<sub>r</sub> f<sub>SZ</sub> &amp; f<sub>E</sub></th> </tr> <tr> <th>0...70°C §0...75°C</th> <th>-40...85°C §-25...85°C</th> <th>-55...125°C</th> <th>Pins- Art-Nr.</th> <th>mA</th> <th>↓ ↑ ↑</th> <th>↓ ↓ ↑</th> <th>MHz</th> </tr> </thead> <tbody> <tr> <td rowspan="3">AC</td> <td rowspan="3">CD74AC164E</td> <td>CD54AC164E</td> <td>Rca</td> <td>14-dil-1</td> <td>&amp;(8μ</td> <td>12.5</td> <td>12.5</td> <td>75</td> </tr> <tr> <td>CD54AC164H</td> <td>Rca</td> <td>14-dil-1 chip</td> <td>&amp;(8μ</td> <td>11.4</td> <td>11.4</td> <td>86</td> </tr> <tr> <td>CD54AC164M</td> <td>Rca</td> <td>14-smd-1</td> <td>&amp;(8μ</td> <td>12.5</td> <td>12.5</td> <td>75</td> </tr> <tr> <td>CD74AC164M</td> <td></td> <td></td> <td>Rca</td> <td>14-smd-1</td> <td>&amp;(8μ</td> <td>11.4</td> <td>11.4</td> <td>86</td> </tr> </tbody> </table>					74164	Type		Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>styp</sub>	t <sub>PD</sub> E → Q n <sub>max</sub>	Note t <sub>r</sub> f <sub>SZ</sub> & f <sub>E</sub>	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz	AC	CD74AC164E	CD54AC164E	Rca	14-dil-1	&(8μ	12.5	12.5	75	CD54AC164H	Rca	14-dil-1 chip	&(8μ	11.4	11.4	86	CD54AC164M	Rca	14-smd-1	&(8μ	12.5	12.5	75	CD74AC164M			Rca	14-smd-1	&(8μ	11.4	11.4	86	HCT		CD74HCT164E	CD54HCT164F CD54HCT164H	Rca	14-dil-1	&(8μ	15	15	45 45	22
					74164	Type								Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>styp</sub>	t <sub>PD</sub> E → Q n <sub>max</sub>	Note t <sub>r</sub> f <sub>SZ</sub> & f <sub>E</sub>																																													
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz																																																									
AC	CD74AC164E	CD54AC164E	Rca	14-dil-1	&(8μ	12.5	12.5	75																																																								
		CD54AC164H	Rca	14-dil-1 chip	&(8μ	11.4	11.4	86																																																								
		CD54AC164M	Rca	14-smd-1	&(8μ	12.5	12.5	75																																																								
CD74AC164M			Rca	14-smd-1	&(8μ	11.4	11.4	86																																																								
<table border="1"> <thead> <tr> <th>74164</th> <th colspan="2">Type</th> <th rowspan="2">Production</th> <th rowspan="2">Bild Sec. 3</th> <th rowspan="2">I<sub>S</sub> &amp; I<sub>R</sub></th> <th rowspan="2">t<sub>PD</sub> E → Q n<sub>styp</sub></th> <th rowspan="2">t<sub>PD</sub> E → Q n<sub>max</sub></th> <th rowspan="2">Note t<sub>r</sub> f<sub>SZ</sub> &amp; f<sub>E</sub></th> </tr> <tr> <th>0...70°C §0...75°C</th> <th>-40...85°C §-25...85°C</th> <th>-55...125°C</th> <th>Pins- Art-Nr.</th> <th>mA</th> <th>↓ ↑ ↑</th> <th>↓ ↓ ↑</th> <th>MHz</th> </tr> </thead> <tbody> <tr> <td rowspan="3">AC</td> <td rowspan="3">CD74AC164E</td> <td>CD54AC164E</td> <td>Rca</td> <td>14-dil-1</td> <td>&amp;(8μ</td> <td>12.5</td> <td>12.5</td> <td>75</td> </tr> <tr> <td>CD54AC164H</td> <td>Rca</td> <td>14-dil-1 chip</td> <td>&amp;(8μ</td> <td>11.4</td> <td>11.4</td> <td>86</td> </tr> <tr> <td>CD54AC164M</td> <td>Rca</td> <td>14-smd-1</td> <td>&amp;(8μ</td> <td>12.5</td> <td>12.5</td> <td>75</td> </tr> <tr> <td>CD74AC164M</td> <td></td> <td></td> <td>Rca</td> <td>14-smd-1</td> <td>&amp;(8μ</td> <td>11.4</td> <td>11.4</td> <td>86</td> </tr> </tbody> </table>					74164	Type		Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>styp</sub>	t <sub>PD</sub> E → Q n <sub>max</sub>	Note t <sub>r</sub> f <sub>SZ</sub> & f <sub>E</sub>	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz	AC	CD74AC164E	CD54AC164E	Rca	14-dil-1	&(8μ	12.5	12.5	75	CD54AC164H	Rca	14-dil-1 chip	&(8μ	11.4	11.4	86	CD54AC164M	Rca	14-smd-1	&(8μ	12.5	12.5	75	CD74AC164M			Rca	14-smd-1	&(8μ	11.4	11.4	86	HCT		CD74HCT164M	MM54HCT164J	Nsc	14-dil-4	4μ	23	23	37 37	27
					74164	Type								Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>styp</sub>	t <sub>PD</sub> E → Q n <sub>max</sub>	Note t <sub>r</sub> f <sub>SZ</sub> & f <sub>E</sub>																																													
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz																																																									
AC	CD74AC164E	CD54AC164E	Rca	14-dil-1	&(8μ	12.5	12.5	75																																																								
		CD54AC164H	Rca	14-dil-1 chip	&(8μ	11.4	11.4	86																																																								
		CD54AC164M	Rca	14-smd-1	&(8μ	12.5	12.5	75																																																								
CD74AC164M			Rca	14-smd-1	&(8μ	11.4	11.4	86																																																								
<table border="1"> <thead> <tr> <th>74164</th> <th colspan="2">Type</th> <th rowspan="2">Production</th> <th rowspan="2">Bild Sec. 3</th> <th rowspan="2">I<sub>S</sub> &amp; I<sub>R</sub></th> <th rowspan="2">t<sub>PD</sub> E → Q n<sub>styp</sub></th> <th rowspan="2">t<sub>PD</sub> E → Q n<sub>max</sub></th> <th rowspan="2">Note t<sub>r</sub> f<sub>SZ</sub> &amp; f<sub>E</sub></th> </tr> <tr> <th>0...70°C §0...75°C</th> <th>-40...85°C §-25...85°C</th> <th>-55...125°C</th> <th>Pins- Art-Nr.</th> <th>mA</th> <th>↓ ↑ ↑</th> <th>↓ ↓ ↑</th> <th>MHz</th> </tr> </thead> <tbody> <tr> <td rowspan="3">AC</td> <td rowspan="3">CD74AC164E</td> <td>CD54AC164E</td> <td>Rca</td> <td>14-dil-1</td> <td>&amp;(8μ</td> <td>12.5</td> <td>12.5</td> <td>75</td> </tr> <tr> <td>CD54AC164H</td> <td>Rca</td> <td>14-dil-1 chip</td> <td>&amp;(8μ</td> <td>11.4</td> <td>11.4</td> <td>86</td> </tr> <tr> <td>CD54AC164M</td> <td>Rca</td> <td>14-smd-1</td> <td>&amp;(8μ</td> <td>12.5</td> <td>12.5</td> <td>75</td> </tr> <tr> <td>CD74AC164M</td> <td></td> <td></td> <td>Rca</td> <td>14-smd-1</td> <td>&amp;(8μ</td> <td>11.4</td> <td>11.4</td> <td>86</td> </tr> </tbody> </table>					74164	Type		Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>styp</sub>	t <sub>PD</sub> E → Q n <sub>max</sub>	Note t <sub>r</sub> f <sub>SZ</sub> & f <sub>E</sub>	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz	AC	CD74AC164E	CD54AC164E	Rca	14-dil-1	&(8μ	12.5	12.5	75	CD54AC164H	Rca	14-dil-1 chip	&(8μ	11.4	11.4	86	CD54AC164M	Rca	14-smd-1	&(8μ	12.5	12.5	75	CD74AC164M			Rca	14-smd-1	&(8μ	11.4	11.4	86	HCT		MM74HCT164J MM74HCT164N PC74HCT164P PC74HCT164T	Phi, Val	14-dil-1	&(8μ	17	17	45 45	22	
					74164	Type								Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>styp</sub>	t <sub>PD</sub> E → Q n <sub>max</sub>	Note t <sub>r</sub> f <sub>SZ</sub> & f <sub>E</sub>																																													
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz																																																									
AC	CD74AC164E	CD54AC164E	Rca	14-dil-1	&(8μ	12.5	12.5	75																																																								
		CD54AC164H	Rca	14-dil-1 chip	&(8μ	11.4	11.4	86																																																								
		CD54AC164M	Rca	14-smd-1	&(8μ	12.5	12.5	75																																																								
CD74AC164M			Rca	14-smd-1	&(8μ	11.4	11.4	86																																																								
<table border="1"> <thead> <tr> <th>74164</th> <th colspan="2">Type</th> <th rowspan="2">Production</th> <th rowspan="2">Bild Sec. 3</th> <th rowspan="2">I<sub>S</sub> &amp; I<sub>R</sub></th> <th rowspan="2">t<sub>PD</sub> E → Q n<sub>styp</sub></th> <th rowspan="2">t<sub>PD</sub> E → Q n<sub>max</sub></th> <th rowspan="2">Note t<sub>r</sub> f<sub>SZ</sub> &amp; f<sub>E</sub></th> </tr> <tr> <th>0...70°C §0...75°C</th> <th>-40...85°C §-25...85°C</th> <th>-55...125°C</th> <th>Pins- Art-Nr.</th> <th>mA</th> <th>↓ ↑ ↑</th> <th>↓ ↓ ↑</th> <th>MHz</th> </tr> </thead> <tbody> <tr> <td rowspan="3">AC</td> <td rowspan="3">CD74AC164E</td> <td>CD54AC164E</td> <td>Rca</td> <td>14-dil-1</td> <td>&amp;(8μ</td> <td>12.5</td> <td>12.5</td> <td>75</td> </tr> <tr> <td>CD54AC164H</td> <td>Rca</td> <td>14-dil-1 chip</td> <td>&amp;(8μ</td> <td>11.4</td> <td>11.4</td> <td>86</td> </tr> <tr> <td>CD54AC164M</td> <td>Rca</td> <td>14-smd-1</td> <td>&amp;(8μ</td> <td>12.5</td> <td>12.5</td> <td>75</td> </tr> <tr> <td>CD74AC164M</td> <td></td> <td></td> <td>Rca</td> <td>14-smd-1</td> <td>&amp;(8μ</td> <td>11.4</td> <td>11.4</td> <td>86</td> </tr> </tbody> </table>					74164	Type		Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>styp</sub>	t <sub>PD</sub> E → Q n <sub>max</sub>	Note t <sub>r</sub> f <sub>SZ</sub> & f <sub>E</sub>	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz	AC	CD74AC164E	CD54AC164E	Rca	14-dil-1	&(8μ	12.5	12.5	75	CD54AC164H	Rca	14-dil-1 chip	&(8μ	11.4	11.4	86	CD54AC164M	Rca	14-smd-1	&(8μ	12.5	12.5	75	CD74AC164M			Rca	14-smd-1	&(8μ	11.4	11.4	86	HCT		PC74HCT164P PC74HCT164T	Phi, Val	14-smd-1	&(8μ	17	17	45 45	22	
					74164	Type								Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>styp</sub>	t <sub>PD</sub> E → Q n <sub>max</sub>	Note t <sub>r</sub> f <sub>SZ</sub> & f <sub>E</sub>																																													
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz																																																									
AC	CD74AC164E	CD54AC164E	Rca	14-dil-1	&(8μ	12.5	12.5	75																																																								
		CD54AC164H	Rca	14-dil-1 chip	&(8μ	11.4	11.4	86																																																								
		CD54AC164M	Rca	14-smd-1	&(8μ	12.5	12.5	75																																																								
CD74AC164M			Rca	14-smd-1	&(8μ	11.4	11.4	86																																																								





**74166**

Output: TP

8-bit shift register with parallel inputs

**74166**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>  
E→Q

t<sub>PD</sub>  
E→Q

Note  
t<sub>r</sub> & t<sub>f</sub>

MHz

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

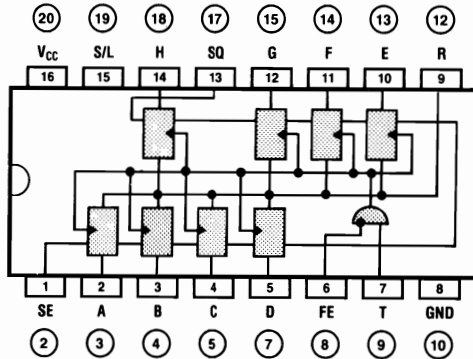
Pins-  
Art-Nr.

mA

↓ ↑ †

↓ ↑ †

MHz



HC

CD74HC166E

CD54HC166F  
CD54HC166H

Rca  
Rca  
Rca

16-dil-1  
16-dil-3  
chip

&(8μ  
&(8μ  
&(8μ

13 13  
13 13  
13 13

40 40  
48 48  
48 48

25  
20  
20

HD74HC166  
M74HC166

CD74HC166M

MC54HC166J  
MC74HC166N

Rca  
Hit  
Mit  
Mot

16-smd-1  
16-dil  
16-dil-3

&(8μ  
&(8μ  
&(8μ

13 13  
40 40  
18 18

26 26  
26 26

25

SN74HC166D

MM74HC166J  
MM74HC166N  
MN74HC166  
MN74HC166S  
PC74HC166P  
PC74HC166T

MM54HC166J

Nsc  
Nsc  
Mat

16-dil-3  
16-dil-1  
16-smd-1

(8μ  
(8μ  
&(8μ

18 18  
18 18  
18 18

26 26  
26 26

32  
32

SN74HC166FH

SN54HC166FH

Mat  
Phi,Val  
Phi,Val

16-smd-1  
16-dil-2  
16-smd-1

&(8μ  
&(8μ  
&(8μ

18 18  
18 18  
18 18

38 38  
38 38

24  
24

SN74HC166FH

SN54HC166FK

Tix  
Tix

16-smd-1  
20-chip-3

&(8μ  
&(8μ

15 15  
15 15

45 45  
38 38

21  
25

SN74HC166FN

SN54HC166J

Tix  
Tix

20-chip-2  
20-chip-1

&(8μ  
&(8μ

15 15  
15 15

45 45  
38 38

21  
25

T74HC166  
μPB74HC166

SN74HC166J  
SN74HC166N

SN54HC166J

Tix  
Sgs  
Nec

16-dil-3  
16-dil-1  
16-dil

&(8μ  
&(8μ  
&(8μ

15 15  
15 15  
15 15

38 38  
38 38

25  
25

HCT

CD74HCT166E

CD54HCT166F  
CD54HCT166H

Rca  
Rca  
Rca  
Rca

16-dil-1  
16-dil-3  
chip

&(8μ  
&(8μ  
&(8μ

17 17  
17 17  
17 17

50 50  
60 60  
60 60

20  
16  
16

CD74HCT166M

MM74HCT166J  
MM74HCT166N  
MN74HCT166  
MN74HCT166S  
PC74HCT166P  
PC74HCT166T

MM54HCT166J

Nsc  
Nsc  
Mat

16-smd-1  
16-dil-3  
16-dil-1

&(8μ  
(8μ  
(8μ

17 17  
21 21  
21 21

50 50  
30 30  
30 30

20  
27  
27

PC74HCT166P  
PC74HCT166T

Phi,Val  
Phi,Val

16-smd-1  
16-dil-2  
16-smd-1

&(8μ  
&(8μ  
&(8μ

23 23  
23 23

50 50  
50 50

20  
20

Input		Intern		Output
R	S/L FE T A...H SE	QA	QB...QG	QH = SQ
L	X X X X X X	L	L	L
H	X L L X X	keine Veränderung*		
H	X H X X X	keine Veränderung*		
H	L L ↑ X	A...H laden		
H	H L ↑ X	SE	schieben**	

\* No change · Pas de modification · Senza alterazione · Sin modificación

\*\* Shift right · Pousser vers la droite · Spostare verso destra · Desplazar a la derecha

**74168**

Output: TP

## Synchronous programmable binary counter

**74168**

Type

Production

Bild  
Sec. 3I<sub>S</sub>t<sub>PD</sub>  
E-Qt<sub>PD</sub>  
E-QNote  
ft, f<sub>tz</sub>  
& f<sub>E</sub>0...70°C  
§0...75°C-40...85°C  
§ -25...85°C

-55...125°C

Pins-  
Art-Nr.

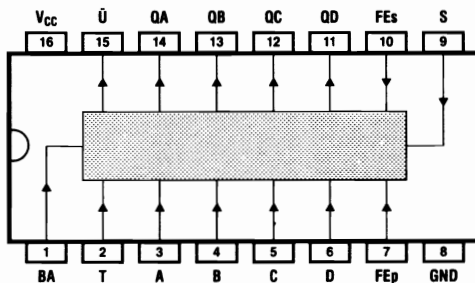
mA

↓ ↑ ↑

↓ ↓ ↑

MHz

Pin	FI	
	LS	S
FEp	3,3	1
FES	2,2	2
T	3,3	1



	Input t <sub>n</sub>								Output t <sub>n+1</sub>				
	FEp	FES	D	C	B	A	BA	T	QD	QC	QB	QA	Ü
1)	X	H	X	X	X	X	X	X	keine Veränderung*				H
2)	L	L						X ↑	D	C	B	A	H
3)	H	L	X	X	X	X	H	↑	vorwärts**				H
	H	L	X	X	X	X	L	↑	rückwärts***				H
4)	H	L	X	X	X	X	H	↑	H	L	L	L	H
	H	L	X	X	X	X	H	↑	H	L	L	H	┌
5)	H	L	X	X	X	X	L	↑	L	L	L	H	H
	H	L	X	X	X	X	L	↑	L	L	L	L	┌
	H	L	X	X	X	X	L	↑	H	L	L	H	H

\* No change  
Pas de modification  
Senza alterazione  
Sin modificación

\*\* Count up  
Compter vers l'avant  
Contare in avanti  
Cuenta adelante

\*\*\* Count down  
Vers l'arrière  
Contare indietro  
Cuenta atrás

AC

74AC168D  
74AC168P  
74AC168SFch.Nsc  
Fch.Nsc  
Fch.Nsc16-dil-3  
16-dil-2  
16-sm-d-1&(8μ  
&(8μ  
&(8μ7.5 7  
7.5 7  
7.5 7

# 74169

Output: TP

## Synchronous programmable binary counter

### 74169

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>  
E-Q  
n<sub>styp</sub>

t<sub>PD</sub>  
E-Q  
n<sub>max</sub>

Note  
I<sub>T</sub> S<sub>T</sub>  
&I<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Pins-  
Art-Nr.

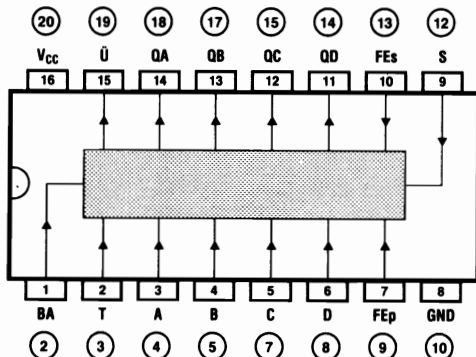
mA

↓ ↑ ↑

↓ ↑ ↑

MHz

Pin	FI	
	LS	S
FEp	3,3	1
FES	2,2	2
T	3,3	1



	Input t <sub>n</sub>								Output t <sub>n+1</sub>					
	FEp	FES	D	C	B	A	BA	T	QD	QC	QB	QA	U-bar	
1)	X	H	X	X	X	X	X	X	keine Veränderung*					H
2)	L	L						X ↑	D	C	B	A	H	
3)	H	L	X	X	X	X	H	↑	vorwärts**					H
	H	L	X	X	X	X	L	↑	rückwärts***					H
4)	H	L	X	X	X	X	H	↑	H	H	H	L	H	
	H	L	X	X	X	X	H	↑	H	H	H	H	H	
	H	L	X	X	X	X	H	↑	L	L	L	L	H	
5)	H	L	X	X	X	X	L	↑	L	L	L	H	H	
	H	L	X	X	X	X	L	↑	L	L	L	L	H	
	H	L	X	X	X	X	L	↑	H	H	H	H	H	

\* No change  
Pas de modification  
Senza alterazione  
Sin modificación

\*\* Count up  
Compter vers l'avant  
Contare in avanti  
Cuenta adelante

\*\*\* Count down  
Vers l'arrière  
Contare indietro  
Cuenta atrás

AC

HC

HCT

74AC169D

54AC169D

Fch, Nsc

16-dil-3

&(8μ

7.5

7

12

90

74AC169P

54AC169F

Fch, Nsc

16-dil-3

&(8μ

7.5

7

12

90

74AC169S

54AC169L

Fch, Nsc

20-chip-2

&(8μ

7.5

7

12

90

74AC169S

54AC169L

Fch, Nsc

16-dil-2

&(8μ

7.5

7

12

90

74AC169S

54AC169L

Fch, Nsc

16-smd-1

&(8μ

7.5

7

12

90

MM74HC169J

MM54HC169J

Nsc

16-dil-3

(8μ

21

21

30

32

MM74HC169N

MM54HC169N

Nsc

16-dil-1

(8μ

21

21

30

32

MM74HCT169J

MM54HCT169J

Nsc

16-dil-3

(8μ

22

22

35

27

MM74HCT169N

MM54HCT169N

Nsc

16-dil-1

(8μ

22

22

35

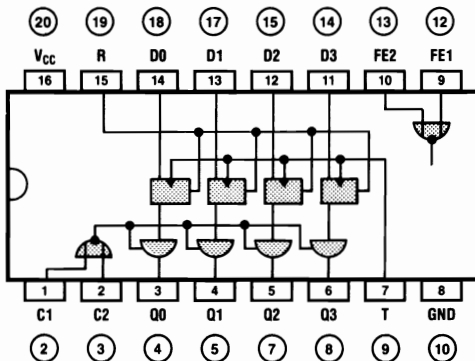
27

# 74173

Output: TS

## 4 D-type flip-flops

FI = 1  
FQ = 10



Input $I_n$	Output $O_{n+1}$
R FE1 FE2 D T	Q
H X X X X	L
L X X X L	$Q_n$
L H X X X	$Q_n$
L X H X X	$Q_n$
L L L L ↑	L
L L L H ↑	H

Wenn C1 und/oder C2 = H, dann Q = hochohmig, ohne die Funktion der Flipflops zu beeinträchtigen.  
When either C1 or C2 (or both) are high outputs is disabled to the high-impedance state; operation of flip-flops is not affected.

Si C1 et/ou C2 = H, alors Q = valeur ohmique élevée e sans entraver la fonction du flip-flop.

Se C1 e/o C2 = H, allora Q = ad alto valore omico, senza compromettere la funzione dei flipflop.

Cuando C1 y/o C2 = H, Q se pone a alta impedancia, sin influir sobre el funcionamiento del flipflop.

74173	Type		Production	Bild Sec. 3	$I_s$ & I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>typ</sub>	t <sub>PD</sub> E → Q n <sub>max</sub>	Note f <sub>T</sub> Stz & E
	0...70°C §0...75°C	-40...85°C §-25...85°C						
C	MM74C173J MM74C173N	MM54C173J	Nsc	16-dil-3	50n	220 220	400 400	3
		MM54C173W	Nsc	16-dil-1 16-flat-3	50n	220 220	400 400	3
	HC	CD74HC173E	Rca	16-dil-1	&(8μ	17 17	50 50	24
		CD54HC173F CD54HC173H	Rca	16-dil-3 chip	&(8μ	17 17	60 60	20
	HD74HC173 M74HC173	CD74HC173M	Rca	16-smd-1	&(8μ	17 17	50 50	24
		MC74HC173D MC54HC173J MC74HC173N	Hit Mit Mot	16-dil 16-dil 16-smd-1	&(8μ (8μ	17 17 15 15	44 44 30 30	21 30
	SN74HC173D	MN74HC173 MN74HC173S PC74HC173P PC74HC173T	Mat Mat Phi,Val	16-dil-1 16-smd-1 16-dil-2	&(8μ	20 20	44 44	24
		SN74HC173N T74HC173 μPB74HC173	SN54HC173FK SN54HC173J	Phi,Val Tix Tix	16-smd-1 20-chip-2 16-dil-3	&(8μ	21 21 21 21	38 38 45 45
	HCT	CD74HCT173E	Rca	16-dil-1	&(8μ	18 18	54 54	16
		CD74HCT173M PC74HCT173P PC74HCT173T	Rca Rca Phi,Val	16-dil-3 chip 16-smd-1 16-dil-2 16-smd-1	&(8μ (8μ (8μ (8μ	18 18 18 18 20 20 20 20	65 65 54 54 50 50 50 50	13 16 24 24

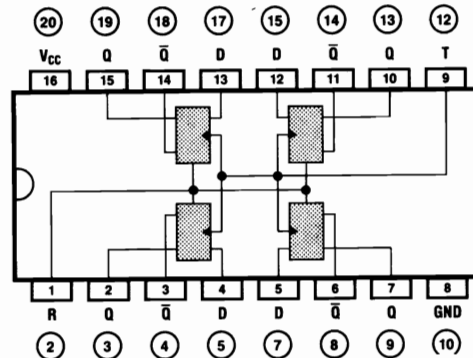
74174 Output: TP	6 D-type flip-flops							74174			Type	Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E→Q n <sub>styp</sub> ↓ ↓ ↑ ↑	t <sub>PD</sub> E→Q n <sub>max</sub> ↓ ↓ ↑ ↑	Note f <sub>T</sub> f <sub>Z</sub> &E MHz																				
	0...70°C §0...75°C			-40...85°C §-25...85°C			-55...125°C																														
	Production			Bild Sec. 3 Pins- Art-Nr.			I <sub>S</sub> &I <sub>R</sub> mA			t <sub>PD</sub> E→Q n <sub>styp</sub> ↓ ↓ ↑ ↑								t <sub>PD</sub> E→Q n <sub>max</sub> ↓ ↓ ↑ ↑			Note f <sub>T</sub> f <sub>Z</sub> &E MHz																
<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>R</th> <th>D</th> <th>T</th> <th>Q</th> </tr> </thead> <tbody> <tr> <td>L</td> <td>X</td> <td>X</td> <td>L</td> </tr> <tr> <td>H</td> <td>X</td> <td>L</td> <td>Q<sub>n</sub></td> </tr> <tr> <td>H</td> <td>L</td> <td>↑</td> <td>L</td> </tr> <tr> <td>H</td> <td>H</td> <td>↑</td> <td>H</td> </tr> </tbody> </table>																		R	D	T	Q	L	X	X	L	H	X	L	Q <sub>n</sub>	H	L	↑	L	H	H	↑	H
R	D	T	Q																																		
L	X	X	L																																		
H	X	L	Q <sub>n</sub>																																		
H	L	↑	L																																		
H	H	↑	H																																		
74174	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E→Q n <sub>styp</sub>	t <sub>PD</sub> E→Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Z</sub> &E																													
	0...70°C §0...75°C	-40...85°C §-25...85°C							-55...125°C	Pins- Art-Nr.	mA	↓ ↓ ↑ ↑	↓ ↓ ↑ ↑	MHz																							
AC	CD74AC174E	CD54AC174E	Rca	16-dil-1	&(8μ)		13.5 13.5	95	SN74HC174D	74AC174D	Fch,Nsc	16-dil-3	&(8μ)	6 6	10 10.5	90																					
		CD54AC174H	Rca	16-dil-1	&(8μ)		12.3 12.3	108		54AC174F	Fch,Nsc	16-flat-1	&(8μ)	6 6	9 9.5	100																					
			CD54AC174M	Rca	chip	&(8μ)		13.5 13.5		95	54AC174L	Fch,Nsc	20-chip-2	&(8μ)	6 6	10 10.5	90																				
		CD74AC174M	Rca	16-smd-1	&(8μ)		13.5 13.5	95		74AC174P	Fch,Nsc	16-dil-2	&(8μ)	6 6	9 9.5	100																					
			Rca	16-smd-1	&(8μ)		12.3 12.3	108		74AC174S	Fch,Nsc	16-smd-1	&(8μ)	6 6	9 9.5	100																					
	CD74HC174E	CD54HC174E	Rca	16-dil-1	&(8μ)		13.5 13.5	95		HD74HC174 M74HC174 MB74HC174	CD74HC174E	Rca	16-dil-1	&(8μ)	13 13	41 41	24																				
		CD54HC174H	Rca	chip	&(8μ)		13 13	50 50			20	CD54HC174F	Rca	16-dil-3	&(8μ)	13 13	50 50	20																			
			CD54HC174M	Rca	16-smd-1	&(8μ)		13 13			50 50	20	CD54HC174H	Rca	chip	&(8μ)	13 13	50 50	20																		
		MC74HC174D	MC54HC174J	Mot	16-dil-1	&(8μ)		16 16			28 28	30	MC74HC174D	Mot	16-smd-1	(8μ)	16 16	28 28	30																		
			MC74HC174N	Mot	16-dil-3	(8μ)		16 16			28 28	30	MC54HC174J	Mot	16-dil-3	(8μ)	16 16	28 28	30																		
AC	CD74AC174E	CD54AC174E	Rca	16-dil-1	&(8μ)		13.5 13.5	95	SN74HC174D	MM74HC174J	Nsc	16-dil-3	50n	150 150	300 300	2																					
		CD54AC174H	Rca	16-dil-1	50n	150 150	300 300	2		MM74HC174N	Nsc	16-dil-1	50n	150 150	300 300	2																					
			CD54AC174M	Rca	16-smd-1	50n	150 150	300 300		2	MM54C174W	Nsc	16-flat-3	50n	150 150	300 300	2																				
		CD74AC174M	CD74HC174E	Rca	16-dil-1	&(8μ)		13 13		41 41	24	CD74HC174E	Rca	16-dil-1	&(8μ)	13 13	41 41	24																			
			CD54HC174F	Rca	16-dil-3	&(8μ)		13 13		50 50	20	CD54HC174F	Rca	16-dil-3	&(8μ)	13 13	50 50	20																			
	CD74AC174M	CD54AC174E	Rca	16-smd-1	&(8μ)		13 13	41 41		24	CD74HC174M	Rca	16-smd-1	&(8μ)	13 13	41 41	24																				
		CD54HC174H	Mit	16-dil	&(8μ)		41 41	21		21	CD54HC174H	Mit	16-dil	&(8μ)	41 41	21	21																				
		MC74HC174D	Mit	16-dil	&(8μ)		41 41	21		21	MC74HC174D	Mit	16-dil	&(8μ)	41 41	21	21																				
		MC54HC174J	Phi,Val	16-smd-1	(8μ)		16 16	28 28		30	MC54HC174J	Phi,Val	16-smd-1	(8μ)	16 16	28 28	30																				
		MC74HC174N	Phi,Val	16-smd-1	(8μ)		16 16	28 28		31	MC74HC174N	Phi,Val	16-smd-1	(8μ)	16 16	28 28	31																				
CD74AC174M	CD54AC174E	Rca	16-dil-1	&(8μ)		13.5 13.5	95	SN74HC174D	SN74HC174F	Tix	20-chip-3	&(8μ)	17 17	48 48	21																						
	CD54AC174H	Rca	16-dil-1	&(8μ)		13.5 13.5	95		SN74HC174F	Tix	20-chip-3	&(8μ)	17 17	48 48	21																						
		CD54AC174M	Rca	16-smd-1	&(8μ)		13.5 13.5		95	SN74HC174F	Tix	20-chip-2	&(8μ)	17 17	48 48	21																					
	CD74AC174M	SN54HC174FH	Tix	16-dil-3	&(8μ)		17 17		40 40	25	SN54HC174FH	Tix	16-dil-3	&(8μ)	17 17	40 40	25																				
		SN54HC174FK	Tix	16-dil-3	&(8μ)		17 17		40 40	25	SN54HC174FK	Tix	16-dil-3	&(8μ)	17 17	40 40	25																				
SN74HC174J	SN54HC174J	Tix	16-dil-3	&(8μ)		17 17	40 40	25	SN54HC174J	Tix	16-dil-3	&(8μ)	17 17	40 40	25																						

74174	Type		Production	Bld Sec. 3	I <sub>S</sub> &I <sub>R</sub>	tpD E-Q n <sub>styp</sub>	tpD E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>	
	0...70°C §0...75°C	-40...85°C §-25...85°C							-55...125°C
T74HC174 μPB74HC174 HCT	SN74HC174N		Tix Sgs Nec	16-dil-1 16-dil 16-dil	&(8) <sub>μ</sub> &(8) <sub>μ</sub> &(8) <sub>μ</sub>	17 17 17 17 17 17	40 40 41 41 41 41	25 21 21	
	CD74HCT174E		Rca	16-dil-1	&(8) <sub>μ</sub>	17 17	50 50	20	
		CD54HCT174F CD54HCT174H		Rca Rca Rca	16-dil-3 chip	&(8) <sub>μ</sub> &(8) <sub>μ</sub>	17 17 17 17	60 60 60 60	17 17
		CD74HCT174M		Rca	16-smd-1	&(8) <sub>μ</sub>	17 17	50 50	20
		PC74HCT174P		Phi,Val	16-dil-2	&(8) <sub>μ</sub>	21 21	44 44	24
		PC74HCT174T		Phi,Val	16-smd-1	&(8) <sub>μ</sub>	21 21	44 44	24

## 74175

Output: TP

4 D-type flip-flops



R	D	T	Q	Q̄
L	X	X	L	H
H	X	L	Q <sub>n</sub>	Q̄ <sub>n</sub>
H	L	↑	L	H
H	H	↑	H	L

74175	Type		Production	Bld Sec. 3	I <sub>S</sub> &I <sub>R</sub>	tpD E-Q n <sub>styp</sub>	tpD E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>
	0...70°C §0...75°C	-40...85°C §-25...85°C						
AC			CD54AC175E	Rca	16-dil-1	&(8) <sub>μ</sub>	12.2 12.2	100
			CD74AC175E	Rca	16-dil-1	&(8) <sub>μ</sub>	11.1 11.1	114
			CD54AC175H	Rca	chip	&(8) <sub>μ</sub>	12.2 12.2	100
			CD54AC175M	Rca	16-smd-1	&(8) <sub>μ</sub>	12.2 12.2	100
			CD74AC175M	Rca	16-smd-1	&(8) <sub>μ</sub>	11.1 11.1	114

74175	Type		Production	Bldg Sec. 3	IS &R	tpD E→Q ns*typ	tpD E→Q ns*max	Note Tt Sz &E	74175	Type		Production	Bldg Sec. 3	IS &R	tpD E→Q ns*typ	tpD E→Q ns*max	Note Tt Sz &E				
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C							-40...85°C §-25...85°C	-55...125°C		
			Pins- Art-Nr.		mA	↓ ↓ ↑	↓ ↓ ↑	MHz				Pins- Art-Nr.		mA	↓ ↓ ↑	↓ ↓ ↑	MHz				
ACT	74AC175D	54AC175D	Fch,Nsc	16-dil-3	8(8μ	6	7		T74HC175 TD74HC175 μPB74HC175  HCT	CD74HCT175E	CD54HCT175F CD54HCT175H	Sgs	16-dil	8(8μ	13	13	41	41	20		
		54AC175F	Fch,Nsc	16-dil-3	8(8μ	6	7					Tos	16-dil	8(8μ	13	13	50	50	16	24	
	54AC175L	Fch,Nsc	16-flat-1	8(8μ	6	7		Nec				16-dil	8(8μ	13	13	50	50	16	24		
	74AC175P	Fch,Nsc	20-chip-2	8(8μ	6	7															
	74AC175S	Fch,Nsc	16-dil-2	8(8μ	6	7															
			Fch,Nsc	16-smd-1	8(8μ	6	7														
	C																				
HC																					
HD74HC175 MB74HC175																					
SN74HC175D																					

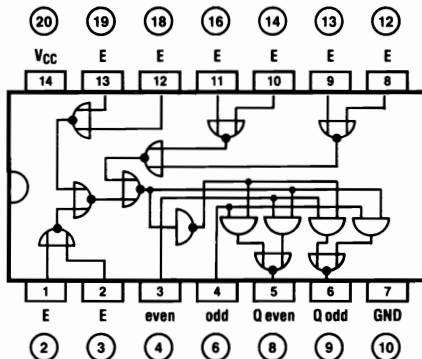


# 74180

Output: TP

## 9-bit parity checker

Fl (even, odd) = 2

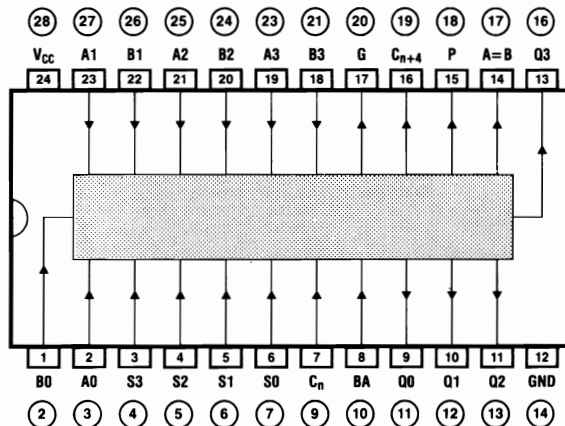


$\Sigma$ H's	even	odd	Q even	Q odd
even	H	L	H	L
even	L	H	L	H
odd	H	L	L	H
odd	L	H	H	L
X	H	H	L	L
X	L	L	H	H

# 74181

Output: TP

## 4-bit ALU (arithmetic and logic unit)



### 74180

Type

Production

Bild  
Sec. 3

IS

tpD

tpD

Note

0...70°C

-40...85°C

-55...125°C

50...75°C

5-25...85°C

Pins-  
Art-Nr.

mA

ns typ

ns max

fT

fz

fE

MHz

HC  
HD74HC180  
SN74HC180D  
SN54HC180FK  
SN54HC180J  
SN74HC180N

Hit  
Tix  
Tix  
Tix  
Tix

14-dil  
14-smd-1  
20-chip-2  
14-dil-4  
14-dil-1

8(8μ)  
8(8μ)  
8(8μ)  
8(8μ)

65 65  
78 78  
78 78  
65 65

Pin	Fl		
	N	LS	S
Cn	5	5, 6	5
S	4	4	4
A, B	3	3	3

**74181**

Output: TP

4-bit ALU (arithmetic and logic unit)

**74181**

Type

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Production

Bild  
Sec. 3

IS  
&Iq

tpD  
E-Q  
nstyp

tpD  
E-Q  
nmax

Note  
fT §fz  
&E

Pins-  
Art-Nr.

mA

↓ ↑ †

↓ ↑ †

MHz

HC

CD74HC181E

CD54HC181F  
CD54HC181H

Rca  
Rca  
Rca  
Rca

24-dil-1  
24-dil-4  
chip  
24-smd-2

&(8μ  
&(8μ  
&(8μ  
&(8μ

13 13  
13 13  
13 13  
13 13

41 41  
50 50  
50 50  
41 41

HD74HC181  
MB74HC181

CD74HC181M

MC54HC181J  
MC74HC181N  
MM54HC181J

Hit  
Fui  
Mot  
Mot

24-dil  
24-dil  
24-dil-6  
24-dil-2

&(8μ  
&(8μ  
(8μ  
(8μ

14 14  
14 14  
14 14  
14 14

20 20  
20 20  
20 20  
20 20

MM74HC181J  
MM74HC181N  
PC74HC181P  
PC74HC181T

Nsc  
Nsc  
Phi,Val  
Phi,Val

24-dil-1  
24-dil-1  
24-smd-2  
24-dil

(8μ  
(8μ  
&(8μ  
&(8μ

20 20  
20 20  
20 20  
20 20

41 41  
41 41  
41 41  
41 41

T74HC181  
TD74HC181

PC74HC181T

Sgs  
Tos

24-dil  
24-dil

&(8μ  
&(8μ

20 20  
20 20

41 41  
41 41

HCT

CD74HCT181E

CD54HCT181F  
CD54HCT181H

Rca  
Rca  
Rca

24-dil-1  
24-dil-4  
chip

&(8μ  
&(8μ  
&(8μ

18 18  
18 18  
18 18

53 53  
63 63  
63 63

CD74HCT181M  
PC74HCT181P  
PC74HCT181T

Rca  
Phi,Val  
Phi,Val  
Tos

24-smd-2  
24-dil-1  
24-smd-2  
24-dil

&(8μ  
&(8μ  
&(8μ  
&(8μ

18 18  
25 25  
25 25  
25 25

53 53  
53 53  
53 53  
53 53

TD74HCT181

Mode Inputs					Data Outputs Q0...Q3		
S3	S2	S1	S0	BA = H, Logic Function	BA = L, Arithmetic function		
					Cn = H	Cn = L	
L	L	L	L	$\bar{A}$	A	A plus 1	
L	L	L	H	$\bar{A} + \bar{B}$	A + B	(A + B) plus 1	
L	L	H	L	$\bar{A} \cdot B$	A + $\bar{B}$	(A + $\bar{B}$ ) plus 1	
L	L	H	H	L	minus 1	zero	
L	H	L	L	$\bar{A} \cdot \bar{B}$	A plus (A · $\bar{B}$ )	A plus (A · $\bar{B}$ ) plus 1	
L	H	L	H	$\bar{B}$	(A + B) plus (A · $\bar{B}$ )	(A + B) plus (A · $\bar{B}$ ) plus 1	
L	H	H	L	A ⊕ B	A minus B minus 1	A minus B	
L	H	H	H	A · $\bar{B}$	(A · $\bar{B}$ ) minus 1	A · $\bar{B}$	
H	L	L	L	$\bar{A} + B$	A plus (A · B)	A plus (A · B) plus 1	
H	L	L	H	$\bar{A} \oplus \bar{B}$	A plus B	A plus B plus 1	
H	L	H	L	B	(A + $\bar{B}$ ) plus (A · B)	(A + $\bar{B}$ ) plus (A · B) plus 1	
H	L	H	H	A · B	(A · B) minus 1	A · B	
H	H	L	L	H	A plus A	A plus A plus 1	
H	H	L	H	A + $\bar{B}$	(A + B) plus A	(A + B) plus A plus 1	
H	H	H	L	A + B	(A + $\bar{B}$ ) plus A	(A + $\bar{B}$ ) plus A plus 1	
H	H	H	H	A	A minus 1	A	

⊕ = exclusive-OR

# 74182

Output: TP

Look-ahead carry generator for  
74160-74163, 74181, 74281, 74381

## 74182

Type

Production

Bhd  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>  
E-Q  
n<sub>styp</sub>

t<sub>PD</sub>  
E-Q  
n<sub>smax</sub>

Note  
t<sub>T</sub> f<sub>TZ</sub>  
&f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

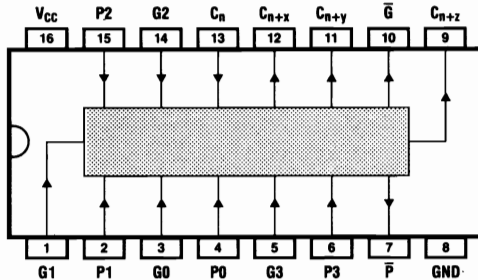
Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz



Pin	FI	
	N	S
G1	10	8
G0, G2	9	7
G3	5	4
P0, P1	5	4
P2	4	3
P3	3	2
Cn	2	1

$$\begin{aligned}
 C_{n+x} &= G0 + (P0 \cdot Cn) \\
 C_{n+y} &= G1 + (P1 \cdot G0) + (P1 \cdot P0 \cdot Cn) \\
 C_{n+z} &= G2 + (P2 \cdot G1) + (P2 \cdot P1 \cdot G0) + (P2 \cdot P1 \cdot P0 \cdot Cn) \\
 \bar{G} &= \bar{G3} + (P3 \cdot G2) + (P3 \cdot P2 \cdot G1) + (P3 \cdot P2 \cdot P0 \cdot G0) \\
 \bar{P} &= \bar{P3} + \bar{P2} + \bar{P1} + \bar{P0}
 \end{aligned}$$

HC

CD74HC182E

CD54HC182F

Rca

16-dil-1

&(8μ

12 12

38 38

Rca

16-dil-4

&(8μ

12 12

45 45

Rca

chip

&(8μ

12 12

45 45

Rca

16-smd-1

&(8μ

12 12

38 38

Hit

16-dil

&(8μ

HD74HC182

CD74HC182M

MC54HC182J

Mot

16-dil-3

&(8μ

Mot

16-dil-1

Nsc

16-dil-3

(8μ

16 16

24 24

Nsc

16-dil-1

(8μ

16 16

24 24

Phi\_Val

16-dil-2

&(8μ

20 20

43 43

Phi\_Val

16-smd-1

&(8μ

20 20

43 43

T74HC182

PC74HC182P

PC74HC182T

Sgs

16-dil

&(8μ

Tos

16-dil

&(8μ

HCT

CD74HCT182E

CD54HCT182F

Rca

16-dil-1

&(8μ

17 17

50 50

Rca

16-dil-4

&(8μ

17 17

60 60

Rca

chip

&(8μ

17 17

60 60

Rca

16-smd-1

&(8μ

17 17

50 50

Phi\_Val

16-dil-2

&(8μ

26 26

54 54

Phi\_Val

16-smd-1

&(8μ

26 26

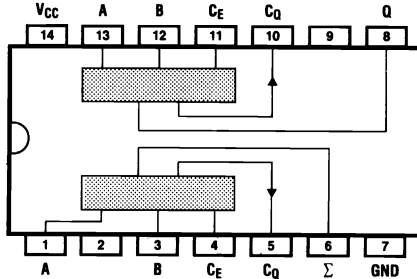
54 54

# 74183

Output: TP

## 2 1-bit full adders

FI = 3



Input		Output		
C <sub>E</sub>	B	A	Σ	C <sub>Q</sub>
L	L	L	L	L
L	L	H	H	L
L	H	L	H	L
L	H	H	L	H
H	L	L	H	L
H	L	H	L	H
H	H	L	L	H
H	H	H	H	H

# 74183

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E-Q  
n<sub>S</sub>typ

t<sub>PD</sub>  
E-Q  
n<sub>S</sub>max

Note  
f<sub>T</sub> f<sub>S</sub>  
& f<sub>E</sub>

Pin-  
Art-Nr.

mA

↓ ↓ ↑ ↑

↓ ↓ ↑ ↑

MHz

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

HC  
MB74HC183

MN74HC183  
MN74HC183S

Fui  
Mat  
Mat

14-dil  
14-dil-1  
14-smd-1

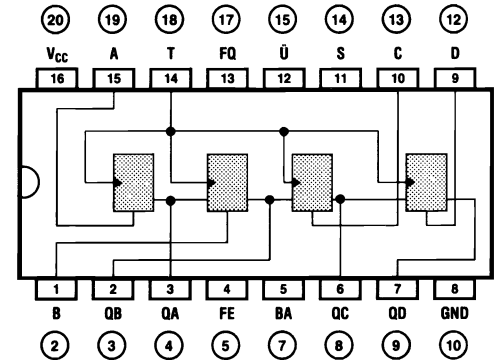
8(I<sub>S</sub>)  
& 8(I<sub>R</sub>)  
& 8(I<sub>R</sub>)

# 74190

Output: TP

## Synchronous programmable decade counter

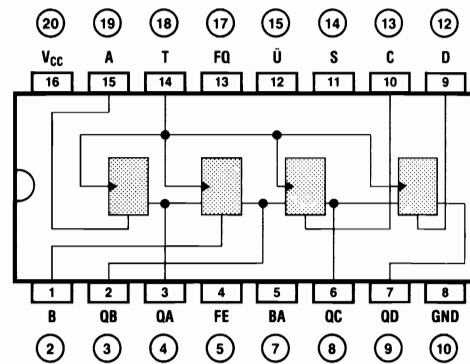
FI = 1  
FI (FE) = 3



	Input t <sub>n</sub>							Output t <sub>n+1</sub>						
	FE	S	D	C	B	A	T	QD	QC	QB	QA	Ü	FQ	
1)	H	H	X	X	X	X	X	keine Veränderung*				L	H	
2)	X	L					X	X	D	C	B	A	L	H
3)	L	H	X	X	X	X	L	↑	vorwärts**				L	H
	L	H	X	X	X	X	H	↑	rückwärts***				L	H
4)	L	H	X	X	X	X	L	↑	H	L	L	L	L	H
	L	H	X	X	X	X	L	↑	H	L	L	H	L	H
	L	H	X	X	X	X	L	↑	L	L	L	L	L	H

\* No change · Pas de modification · Senza alterazione · Sin modificación  
 \*\* Count up · Compter vers l'avant · Contare in avanti · Cuenta adelante  
 \*\*\* Count down · Vers l'arrière · Contare indietro · Cuenta atrás

74190	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E → Q ns <sub>typ</sub>	t <sub>PD</sub> E → Q ns <sub>max</sub>	Note f <sub>T</sub> f <sub>SZ</sub> &f <sub>E</sub>	74191 Output: TP	Synchronous programmable binary counter	
	0...70°C §0...75°C	-40...85°C §-25...85°C									-55...125°C
AC	74AC190D		Fch,Nsc	16-dil-3	&(8μ)	7 7.5					
	74AC190P		Fch,Nsc	16-dil-2	&(8μ)	7 7.5					
	74AC190S		Fch,Nsc	16-smd-1	&(8μ)	7 7.5					
HC	CD74HC190E		Rca	16-dil-1	&(8μ)	14 14	44 44	25			
		CD54HC190F CD54HC190H	Rca Rca	16-dil-3 chip	&(8μ) &(8μ)	14 14 14 14	53 53 53 53	20 20			
HD74HC190 M74HC190 MB74HC190	CD74HC190M		Rca	16-smd-1	&(8μ)	14 14	44 44	25			
		MC54HC190J MC74HC190N MM54HC190J	Mot Mot Nsc	16-dil-3 16-dil-1 16-dil-3	&(8μ) (8μ)	25 25 25 25	39 39 39 39	23 23			
		MM74HC190J MM74HC190N PC74HC190P PC74HC190T	Phi,Val Phi,Val Phi,Val Phi,Val	16-dil-2 16-smd-1 20-chip-3 20-chip-3	&(8μ) &(8μ) &(8μ) &(8μ)	23 23 23 23 36 36 36 36	55 55 55 55 60 60 72 72	12 12 17 14			
	SN74HC190DW		SN54HC190FH	Tix	16-smd-2	&(8μ)	36 36	60 60	17		
			SN74HC190FH	Tix	20-chip-3	&(8μ)	36 36	72 72	14		
			SN54HC190FK	Tix	20-chip-2	&(8μ)	36 36	72 72	14		
	T74HC190 TD74HC190 μPB74HC190		SN74HC190FN	Tix	20-chip-1	&(8μ)	36 36	60 60	17		
			SN74HC190J	Tix	16-dil-3	&(8μ)	36 36	72 72	14		
			SN74HC190N	Tix	16-dil-3	&(8μ)	36 36	60 60	17		
				Sgs	16-dil	&(8μ)	36 36	60 60	17		
			Tos Nec	16-dil 16-dil	&(8μ) &(8μ)	36 36	60 60	17			
HCT	CD74HCT190E		Rca	16-dil-1	&(8μ)	16 16	48 48	25			
		CD54HCT190F CD54HCT190H	Rca Rca	16-dil-3 chip	&(8μ) &(8μ)	16 16 16 16	57 57 57 57	20 20			
	CD74HCT190M		Rca	16-smd-1	&(8μ)	16 16	48 48	25			
	PC74HCT190P PC74HCT190T		Phi,Val Phi,Val	16-dil-2 16-smd-1	&(8μ) &(8μ)	24 24 24 24	55 55 55 55	13 13			



FI = 1  
FI (FE) = 3

	Input t <sub>n</sub>							Output t <sub>n+1</sub>								
	FE	S	D	C	B	A	BA	T	QD	QC	QB	QA	Ü	FQ		
1)	H	H	X	X	X	X	X	X	keine Veränderung*				L	H		
2)	X	L							X	X	D	C	B	A	L	H
3)	L	H	X	X	X	X	X	L	↑	vorwärts**			L	H		
	L	H	X	X	X	X	H	↑	rückwärts***			L	H			
4)	L	H	X	X	X	X	L	↑	H	H	H	L	L	H		
	L	H	X	X	X	X	L	↑	H	H	H	H	L	H		

\* No change · Pas de modification · Senza alterazione · Sin modificación  
 \*\* Count up · Compter vers l'avant · Contare in avanti · Cuenta adelante  
 \*\*\* Count down · Vers l'arrière · Contare indietro · Cuenta atrás

74191	Type		Production	Bild Sec. 3	IS &IR	tpD E-Q n*typ	tpD E-Q n*max	Note t <sub>T</sub> §fz &fE	74191	Type		Production	Bild Sec. 3	IS &IR	tpD E-Q n*typ	tpD E-Q n*max	Note t <sub>T</sub> §fz &fE												
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C							-40...85°C §-25...85°C	-55...125°C										
AC	CD74AC191E	CD54AC191E	Rca	16-dil-1	&(8μ		15.2 15.2	60	T74HC191 TD74HC191 μPB74HC191  HCT	CD74HCT191E	CD54HCT191F CD54HCT191H	Sgs	16-dil	&(8μ															
		Rca	16-dil-1	&(8μ		13.8 13.8	68	Tos				16-dil	&(8μ																
	Rca	chip	&(8μ		15.2 15.2	60	Nec	16-dil				&(8μ																	
	CD74AC191M	CD54AC191H	Rca	16-smd-1	&(8μ		15.2 15.2	60				CD74HCT191M MM74HCT191J MM74HCT191N PC74HCT191P PC74HCT191T	Rca	16-dil-1	&(8μ	16 16	48 48	25											
		CD54AC191M	Rca	16-smd-1	&(8μ		13.8 13.8	68											Rca	16-dil-3	&(8μ	16 16	57 57	20					
	74AC191D	54AC191D	Fch,Nsc	16-dil-3	&(8μ	5.5 5.5	11.5 11.5	80											Rca	chip	&(8μ	16 16	57 57	20					
		Fch,Nsc	16-dil-3	&(8μ	5.5 5.5	10.5 10.5	85	Rca											16-smd-1	&(8μ	16 16	48 48	25						
	74AC191P	54AC191F	Fch,Nsc	16-flat-1	&(8μ	5.5 5.5	11.5 11.5	80											Nsc	16-dil-3	(8μ	28 28	46 46	20					
		Fch,Nsc	20-chip-2	&(8μ	5.5 5.5	11.5 11.5	85	Nsc											16-dil-1	(8μ	28 28	46 46	20						
	74AC191S	54AC191L	Fch,Nsc	16-dil-2	&(8μ	5.5 5.5	10.5 10.5	85											Phi,Val	16-dil-2	&(8μ	22 22	55 55	16					
Fch,Nsc	16-smd-1	&(8μ	5.5 5.5	10.5 10.5	85	Phi,Val	16-smd-1	&(8μ	22 22	55 55	16																		
ACT	CD74ACT191E	CD54ACT191E	Rca	16-dil-1	&(8μ		15.2 15.2	60																					
		Rca	16-dil-1	&(8μ		13.8 13.8	68																						
		Rca	chip	&(8μ		15.2 15.2	60																						
		Rca	16-smd-1	&(8μ		15.2 15.2	60																						
CD74ACT191M	CD54ACT191H	Rca	16-smd-1	&(8μ		13.8 13.8	68																						
HC	CD74HC191E	CD54HC191F	Rca	16-dil-1	&(8μ	14 14	44 44	25																					
		Rca	16-dil-3	&(8μ	14 14	53 53	20																						
	CD74HC191M	CD54HC191H	Rca	chip	&(8μ	14 14	53 53	20																					
		Rca	16-smd-1	&(8μ	14 14	44 44	25																						
	HD74HC191 M74HC191 MB74HC191			Hit	16-dil	&(8μ																							
				Mit	16-dil	&(8μ																							
	SN74HC191DW			Fui	16-dil	&(8μ																							
				Mot	16-dil-3																								
				Mot	16-dil-1																								
				Nsc	16-dil-3	(8μ	25 25	39 39										23											
Nsc				16-dil-1	(8μ	25 25	39 39	23																					
MM74HC191J				MM54HC191J	Phi,Val	16-dil-2	&(8μ	22 22	55 55	16																			
MM74HC191N					Phi,Val	16-smd-1	&(8μ	22 22	55 55	16																			
PC74HC191P					Tix	16-smd-2	&(8μ	36 36	60 60	17																			
PC74HC191T					Tix	20-chip-3	&(8μ	36 36	72 72	14																			
					Tix	20-chip-3	&(8μ	36 36	60 60	17																			
		Tix	20-chip-2	&(8μ	36 36	72 72	14																						
		Tix	20-chip-1	&(8μ	36 36	60 60	17																						
		Tix	16-dil-3	&(8μ	36 36	72 72	14																						
		Tix	16-dil-3	&(8μ	36 36	60 60	17																						
		Tix	16-dil-1	&(8μ	36 36	60 60	17																						

74192 Output: TP	Synchronous programmable decade counter	74192			Production	Bldg Sec. 3 Pina-Art-Nr.	I <sub>S</sub> mA	I <sub>PD</sub> E-Q n <sub>typ</sub>	I <sub>PD</sub> E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Z</sub> & E MHz																																																																																																																																																																																																																																																			
		Type	0...70°C §0...75°C	- 40...85°C § - 25...85°C							- 55...125°C																																																																																																																																																																																																																																																		
<table border="1"> <thead> <tr> <th></th> <th colspan="7">Input t<sub>n</sub></th> <th colspan="7">Output t<sub>n+1</sub></th> </tr> <tr> <th></th> <th>F</th> <th>S</th> <th>D</th> <th>C</th> <th>B</th> <th>A</th> <th>Tv</th> <th>Tr</th> <th>QD</th> <th>QC</th> <th>QB</th> <th>QA</th> <th>Üv</th> <th>Ür</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>1)</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2)</td> <td>L</td> <td>L</td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>D</td> <td>C</td> <td>B</td> <td>A</td> <td>H</td> <td>H</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="2">3)</td> <td>L</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>↑</td> <td>H</td> <td colspan="7">vorwärts*</td> <td>H</td> <td>H</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>L</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>H</td> <td>↑</td> <td colspan="7">rückwärts**</td> <td>H</td> <td>H</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="3">4)</td> <td>L</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>↑</td> <td>H</td> <td>H</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>L</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>↑</td> <td>H</td> <td>H</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>L</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>↑</td> <td>H</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="3">5)</td> <td>-</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>H</td> <td>↑</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> <td>H</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>L</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>H</td> <td>↑</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>L</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>H</td> <td>↑</td> <td>H</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> <td>H</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>												Input t <sub>n</sub>							Output t <sub>n+1</sub>								F	S	D	C	B	A	Tv	Tr	QD	QC	QB	QA	Üv	Ür							1)	H	X	X	X	X	X	X	X	L	L	L	L	H	H							2)	L	L					X	X	D	C	B	A	H	H							3)	L	H	X	X	X	X	↑	H	vorwärts*							H	H					L	H	X	X	X	X	H	↑	rückwärts**							H	H					4)	L	H	X	X	X	X	↑	H	H	L	L	L	H	H							L	H	X	X	X	X	↑	H	H	L	L	L	H	H							L	H	X	X	X	X	↑	H	L	L	L	L	H	H							5)	-	H	X	X	X	X	H	↑	L	L	L	H	H	H							L	H	X	X	X	X	H	↑	L	L	L	L	H	H							L	H	X	X	X	X	H	↑	H	L	L	H	H	H						
	Input t <sub>n</sub>							Output t <sub>n+1</sub>																																																																																																																																																																																																																																																					
	F	S	D	C	B	A	Tv	Tr	QD	QC	QB	QA	Üv	Ür																																																																																																																																																																																																																																															
1)	H	X	X	X	X	X	X	X	L	L	L	L	H	H																																																																																																																																																																																																																																															
2)	L	L					X	X	D	C	B	A	H	H																																																																																																																																																																																																																																															
3)	L	H	X	X	X	X	↑	H	vorwärts*							H	H																																																																																																																																																																																																																																												
	L	H	X	X	X	X	H	↑	rückwärts**							H	H																																																																																																																																																																																																																																												
4)	L	H	X	X	X	X	↑	H	H	L	L	L	H	H																																																																																																																																																																																																																																															
	L	H	X	X	X	X	↑	H	H	L	L	L	H	H																																																																																																																																																																																																																																															
	L	H	X	X	X	X	↑	H	L	L	L	L	H	H																																																																																																																																																																																																																																															
5)	-	H	X	X	X	X	H	↑	L	L	L	H	H	H																																																																																																																																																																																																																																															
	L	H	X	X	X	X	H	↑	L	L	L	L	H	H																																																																																																																																																																																																																																															
	L	H	X	X	X	X	H	↑	H	L	L	H	H	H																																																																																																																																																																																																																																															
<p>* Count up · Compter vers l'avant · Contare in avanti · Cuenta adelante  ** Count down · Vers l'arrière · Contare indietro · Cuenta atrás</p>																																																																																																																																																																																																																																																													
<table border="1"> <thead> <tr> <th>AC</th> <th colspan="2"></th> <th>Fch,Nsc</th> <th>16-dil-3</th> <th>&amp;(8μ</th> <th>7.5</th> <th>7</th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td rowspan="3">74AC192D 74AC192P 74AC192S</td> <td colspan="2"></td> <td>Fch,Nsc</td> <td>16-dil-2</td> <td>&amp;(8μ</td> <td>7.5</td> <td>7</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2"></td> <td>Fch,Nsc</td> <td>16-smd-1</td> <td>&amp;(8μ</td> <td>7.5</td> <td>7</td> <td></td> <td></td> <td></td> </tr> <tr> <td>C</td> <td>MM74C192J MM74C192N</td> <td>MM54C192J MM54C192W</td> <td>Nsc Nsc Nsc</td> <td>16-dil-3 16-dil-1 16-flat-3</td> <td>50n 50n 50n</td> <td>250 250 250</td> <td>250 250 250</td> <td>400 400 400</td> <td>400 400 400</td> <td>2.5 2.5 2.5</td> </tr> <tr> <td rowspan="2">HC Am74HC192</td> <td colspan="2"></td> <td>Amd</td> <td>16-dil</td> <td>(8μ</td> <td></td> <td></td> <td></td> <td></td> <td>24</td> </tr> <tr> <td colspan="2"></td> <td>Rca</td> <td>16-dil-1 16-dil-3 chip</td> <td>&amp;(8μ &amp;(8μ &amp;(8μ</td> <td>18 18 18</td> <td>18 18 18</td> <td>54 65 65</td> <td>54 65 65</td> <td>18 15 15</td> </tr> <tr> <td rowspan="2">HD74HC192 M74HC192</td> <td colspan="2"></td> <td>Rca</td> <td>16-smd-1</td> <td>&amp;(8μ</td> <td>18</td> <td>18</td> <td>54</td> <td>54</td> <td>18</td> </tr> <tr> <td colspan="2"></td> <td>Hit Mit</td> <td>16-dil 16-dil</td> <td>&amp;(8μ &amp;(8μ</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="2">MSM74HC192</td> <td colspan="2"></td> <td>Mot</td> <td>16-dil-3</td> <td>(8μ</td> <td>39</td> <td>30</td> <td>49</td> <td>39</td> <td></td> </tr> <tr> <td colspan="2"></td> <td>Nsc</td> <td>16-dil-1</td> <td>(8μ</td> <td>39</td> <td>30</td> <td>49</td> <td>39</td> <td></td> </tr> <tr> <td rowspan="2">SN74HC192DW</td> <td colspan="2"></td> <td>Oki</td> <td>16-dil</td> <td>&amp;(8μ</td> <td></td> <td></td> <td></td> <td></td> <td>16</td> </tr> <tr> <td colspan="2"></td> <td>Phi,Val</td> <td>16-dil-2 16-smd-1</td> <td>&amp;(8μ &amp;(8μ</td> <td>24 24</td> <td>24 24</td> <td>54 54</td> <td>54 54</td> <td>16 16</td> </tr> <tr> <td rowspan="2">T74HC192 TD74HC192 μPB74HC192</td> <td colspan="2"></td> <td>Tix</td> <td>16-smd-2 20-chip-3</td> <td>&amp;(8μ &amp;(8μ</td> <td>24 24</td> <td>24 24</td> <td>41 50</td> <td>41 50</td> <td>17 14</td> </tr> <tr> <td colspan="2"></td> <td>Tix</td> <td>20-chip-3 20-chip-1</td> <td>&amp;(8μ &amp;(8μ</td> <td>24 24</td> <td>24 24</td> <td>41 41</td> <td>41 41</td> <td>17 14</td> </tr> <tr> <td rowspan="2">HCT</td> <td colspan="2"></td> <td>Tix</td> <td>20-chip-2</td> <td>&amp;(8μ</td> <td>24</td> <td>24</td> <td>50</td> <td>50</td> <td>14</td> </tr> <tr> <td colspan="2"></td> <td>Tix</td> <td>20-chip-1</td> <td>&amp;(8μ</td> <td>24</td> <td>24</td> <td>41</td> <td>41</td> <td>17</td> </tr> <tr> <td rowspan="3">CD74HCT192E CD74HCT192M</td> <td colspan="2"></td> <td>Nsc</td> <td>16-dil-3</td> <td>&amp;(8μ</td> <td>24</td> <td>24</td> <td>41</td> <td>41</td> <td>17</td> </tr> <tr> <td colspan="2"></td> <td>Nsc</td> <td>16-dil-1</td> <td>&amp;(8μ</td> <td>24</td> <td>24</td> <td>41</td> <td>41</td> <td>17</td> </tr> <tr> <td colspan="2"></td> <td>Sgs Tos Nec</td> <td>16-dil 16-dil 16-dil</td> <td>&amp;(8μ &amp;(8μ &amp;(8μ</td> <td>24 24 24</td> <td>24 24 24</td> <td>41 41 41</td> <td>41 41 41</td> <td>17 14 17</td> </tr> <tr> <td rowspan="3">CD54HCT192F CD54HCT192H</td> <td colspan="2"></td> <td>Rca</td> <td>16-dil-1</td> <td>&amp;(8μ</td> <td>17</td> <td>17</td> <td>50</td> <td>50</td> <td>18</td> </tr> <tr> <td colspan="2"></td> <td>Rca</td> <td>16-dil-3</td> <td>&amp;(8μ</td> <td>17</td> <td>17</td> <td>60</td> <td>60</td> <td>15</td> </tr> <tr> <td colspan="2"></td> <td>Rca</td> <td>chip</td> <td>&amp;(8μ</td> <td>17</td> <td>17</td> <td>60</td> <td>60</td> <td>15</td> </tr> <tr> <td rowspan="2">CD74HCT192M</td> <td colspan="2"></td> <td>Rca</td> <td>16-smd-1</td> <td>&amp;(8μ</td> <td>17</td> <td>17</td> <td>50</td> <td>50</td> <td>18</td> </tr> </tbody> </table>											AC			Fch,Nsc	16-dil-3	&(8μ	7.5	7				74AC192D 74AC192P 74AC192S			Fch,Nsc	16-dil-2	&(8μ	7.5	7						Fch,Nsc	16-smd-1	&(8μ	7.5	7				C	MM74C192J MM74C192N	MM54C192J MM54C192W	Nsc Nsc Nsc	16-dil-3 16-dil-1 16-flat-3	50n 50n 50n	250 250 250	250 250 250	400 400 400	400 400 400	2.5 2.5 2.5	HC Am74HC192			Amd	16-dil	(8μ					24			Rca	16-dil-1 16-dil-3 chip	&(8μ &(8μ &(8μ	18 18 18	18 18 18	54 65 65	54 65 65	18 15 15	HD74HC192 M74HC192			Rca	16-smd-1	&(8μ	18	18	54	54	18			Hit Mit	16-dil 16-dil	&(8μ &(8μ						MSM74HC192			Mot	16-dil-3	(8μ	39	30	49	39				Nsc	16-dil-1	(8μ	39	30	49	39		SN74HC192DW			Oki	16-dil	&(8μ					16			Phi,Val	16-dil-2 16-smd-1	&(8μ &(8μ	24 24	24 24	54 54	54 54	16 16	T74HC192 TD74HC192 μPB74HC192			Tix	16-smd-2 20-chip-3	&(8μ &(8μ	24 24	24 24	41 50	41 50	17 14			Tix	20-chip-3 20-chip-1	&(8μ &(8μ	24 24	24 24	41 41	41 41	17 14	HCT			Tix	20-chip-2	&(8μ	24	24	50	50	14			Tix	20-chip-1	&(8μ	24	24	41	41	17	CD74HCT192E CD74HCT192M			Nsc	16-dil-3	&(8μ	24	24	41	41	17			Nsc	16-dil-1	&(8μ	24	24	41	41	17			Sgs Tos Nec	16-dil 16-dil 16-dil	&(8μ &(8μ &(8μ	24 24 24	24 24 24	41 41 41	41 41 41	17 14 17	CD54HCT192F CD54HCT192H			Rca	16-dil-1	&(8μ	17	17	50	50	18			Rca	16-dil-3	&(8μ	17	17	60	60	15			Rca	chip	&(8μ	17	17	60	60	15	CD74HCT192M			Rca	16-smd-1	&(8μ	17	17	50	50	18	
AC			Fch,Nsc	16-dil-3	&(8μ	7.5	7																																																																																																																																																																																																																																																						
74AC192D 74AC192P 74AC192S			Fch,Nsc	16-dil-2	&(8μ	7.5	7																																																																																																																																																																																																																																																						
			Fch,Nsc	16-smd-1	&(8μ	7.5	7																																																																																																																																																																																																																																																						
	C	MM74C192J MM74C192N	MM54C192J MM54C192W	Nsc Nsc Nsc	16-dil-3 16-dil-1 16-flat-3	50n 50n 50n	250 250 250	250 250 250	400 400 400	400 400 400	2.5 2.5 2.5																																																																																																																																																																																																																																																		
HC Am74HC192			Amd	16-dil	(8μ					24																																																																																																																																																																																																																																																			
			Rca	16-dil-1 16-dil-3 chip	&(8μ &(8μ &(8μ	18 18 18	18 18 18	54 65 65	54 65 65	18 15 15																																																																																																																																																																																																																																																			
HD74HC192 M74HC192			Rca	16-smd-1	&(8μ	18	18	54	54	18																																																																																																																																																																																																																																																			
			Hit Mit	16-dil 16-dil	&(8μ &(8μ																																																																																																																																																																																																																																																								
MSM74HC192			Mot	16-dil-3	(8μ	39	30	49	39																																																																																																																																																																																																																																																				
			Nsc	16-dil-1	(8μ	39	30	49	39																																																																																																																																																																																																																																																				
SN74HC192DW			Oki	16-dil	&(8μ					16																																																																																																																																																																																																																																																			
			Phi,Val	16-dil-2 16-smd-1	&(8μ &(8μ	24 24	24 24	54 54	54 54	16 16																																																																																																																																																																																																																																																			
T74HC192 TD74HC192 μPB74HC192			Tix	16-smd-2 20-chip-3	&(8μ &(8μ	24 24	24 24	41 50	41 50	17 14																																																																																																																																																																																																																																																			
			Tix	20-chip-3 20-chip-1	&(8μ &(8μ	24 24	24 24	41 41	41 41	17 14																																																																																																																																																																																																																																																			
HCT			Tix	20-chip-2	&(8μ	24	24	50	50	14																																																																																																																																																																																																																																																			
			Tix	20-chip-1	&(8μ	24	24	41	41	17																																																																																																																																																																																																																																																			
CD74HCT192E CD74HCT192M			Nsc	16-dil-3	&(8μ	24	24	41	41	17																																																																																																																																																																																																																																																			
			Nsc	16-dil-1	&(8μ	24	24	41	41	17																																																																																																																																																																																																																																																			
			Sgs Tos Nec	16-dil 16-dil 16-dil	&(8μ &(8μ &(8μ	24 24 24	24 24 24	41 41 41	41 41 41	17 14 17																																																																																																																																																																																																																																																			
CD54HCT192F CD54HCT192H			Rca	16-dil-1	&(8μ	17	17	50	50	18																																																																																																																																																																																																																																																			
			Rca	16-dil-3	&(8μ	17	17	60	60	15																																																																																																																																																																																																																																																			
			Rca	chip	&(8μ	17	17	60	60	15																																																																																																																																																																																																																																																			
CD74HCT192M			Rca	16-smd-1	&(8μ	17	17	50	50	18																																																																																																																																																																																																																																																			

74192	Type		Production	Bild Sec. 3	$I_S$ & $I_R$	$t_{PD}$ E-Q ns <sub>typ</sub>	$t_{PD}$ E-Q ns <sub>max</sub>	Note $t_T$ §fz & E	74193 Output: TP	Synchronous programmable binary counter																																																																																																																																																																												
	0...70°C §0...75°C	-40...85°C §-25...85°C									-55...125°C	Pls- Art-Nr.	mA	↓ ↑ †	↓ ↑ †	MHz																																																																																																																																																																						
	PC74HCT192P PC74HCT192T		Phi_Val Phi_Val	16-dil-2 16-sm-d-1	&(8μ &(8μ	23 23 23 23	54 54 54 54	16 16																																																																																																																																																																														
										<table border="1"> <thead> <tr> <th></th> <th colspan="7">Input <math>t_n</math></th> <th colspan="4">Output <math>t_{n+1}</math></th> </tr> <tr> <th></th> <th>R</th> <th>S</th> <th>D</th> <th>C</th> <th>B</th> <th>A</th> <th>Tv</th> <th>Tr</th> <th>QD</th> <th>QC</th> <th>QB</th> <th>QA</th> <th>Üv</th> <th>Ür</th> </tr> </thead> <tbody> <tr> <td>1)</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> </tr> <tr> <td>2)</td> <td>L</td> <td>L</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>D</td> <td>C</td> <td>B</td> <td>A</td> <td>H</td> </tr> <tr> <td rowspan="2">3)</td> <td>L</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>†</td> <td>H</td> <td colspan="4">vorwärts*</td> <td>H</td> <td>H</td> </tr> <tr> <td>L</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>H</td> <td>†</td> <td colspan="4">rückwärts**</td> <td>H</td> <td>H</td> </tr> <tr> <td rowspan="3">4)</td> <td>L</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>†</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td>L</td> <td>H</td> <td>H</td> </tr> <tr> <td>L</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>†</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td>⌋</td> <td>H</td> </tr> <tr> <td>L</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>†</td> <td>H</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> </tr> <tr> <td rowspan="3">5)</td> <td>L</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>H</td> <td>†</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>H</td> <td>H</td> </tr> <tr> <td>L</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>H</td> <td>†</td> <td>L</td> <td>L</td> <td>L</td> <td>L</td> <td>H</td> <td>⌋</td> </tr> <tr> <td>L</td> <td>H</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>H</td> <td>†</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> <td>H</td> </tr> </tbody> </table> <p>* Count up · Compter vers l'avant · Contare in avanti · Cuenta adelante  ** Count down · Vers l'arrière · Contare indietro · Cuenta atrás</p>		Input $t_n$							Output $t_{n+1}$					R	S	D	C	B	A	Tv	Tr	QD	QC	QB	QA	Üv	Ür	1)	H	X	X	X	X	X	X	X	L	L	L	L	H	H	2)	L	L						X	X	D	C	B	A	H	3)	L	H	X	X	X	X	†	H	vorwärts*				H	H	L	H	X	X	X	X	H	†	rückwärts**				H	H	4)	L	H	X	X	X	X	†	H	H	H	H	L	H	H	L	H	X	X	X	X	†	H	H	H	H	H	⌋	H	L	H	X	X	X	X	†	H	L	L	L	L	H	H	5)	L	H	X	X	X	X	H	†	L	L	L	H	H	H	L	H	X	X	X	X	H	†	L	L	L	L	H	⌋	L	H	X	X	X	X	H	†	H	H	H	H	H	H
	Input $t_n$							Output $t_{n+1}$																																																																																																																																																																														
	R	S	D	C	B	A	Tv	Tr	QD	QC	QB	QA	Üv	Ür																																																																																																																																																																								
1)	H	X	X	X	X	X	X	X	L	L	L	L	H	H																																																																																																																																																																								
2)	L	L						X	X	D	C	B	A	H																																																																																																																																																																								
3)	L	H	X	X	X	X	†	H	vorwärts*				H	H																																																																																																																																																																								
	L	H	X	X	X	X	H	†	rückwärts**				H	H																																																																																																																																																																								
4)	L	H	X	X	X	X	†	H	H	H	H	L	H	H																																																																																																																																																																								
	L	H	X	X	X	X	†	H	H	H	H	H	⌋	H																																																																																																																																																																								
	L	H	X	X	X	X	†	H	L	L	L	L	H	H																																																																																																																																																																								
5)	L	H	X	X	X	X	H	†	L	L	L	H	H	H																																																																																																																																																																								
	L	H	X	X	X	X	H	†	L	L	L	L	H	⌋																																																																																																																																																																								
	L	H	X	X	X	X	H	†	H	H	H	H	H	H																																																																																																																																																																								



74193	Type		Production	Blid Sec. 3	IS &IR	tpD E -Q nstyp	tpD E -Q n <sup>o</sup> max	Note fT fZ &E	74193	Type		Production	Blid Sec. 3	IS &IR	tpD E -Q nstyp	tpD E -Q n <sup>o</sup> max	Note fT fZ &E		
	0...70°C	-40...85°C								-55...125°C	0...70°C							-40...85°C	-55...125°C
	§0...75°C	§-25...85°C									§0...75°C							§-25...85°C	
AC	CD74AC193E  CD74AC193M 74AC193D 74AC193P 74AC193S	CD54AC193E	Rca	16-dil-1	&(8μ		14 14	75	T74HC193	CD74HCT193E  CD54HCT193F CD54HCT193H  CD74HCT193M MM74HCT193J MM74HCT193N PC74HCT193P PC74HCT193T	Tix	16-dil-3	&(8μ	24 24	41 41	17			
		Rca	16-dil-1	&(8μ		12.7 12.7	86	TD74HC193	Tix		16-dil-1	&(8μ	24 24	41 41	17				
		Rca	chip	&(8μ		14 14	75	μPB74HC193	Sgs		16-dil	&(8μ							
		Rca	16-smd-1	&(8μ		14 14	75		Tos		16-dil	&(8μ							
		Rca	16-smd-1	&(8μ		12.7 12.7	86	HCT	Nec		16-dil	&(8μ							
		Fch,Nsc	16-dil-3	&(8μ	7.5 7						Rca	16-dil-1	&(8μ	17 17	50 50	18			
		Fch,Nsc	16-dil-2	&(8μ	7.5 7						Rca	16-dil-3	&(8μ	17 17	60 60	15			
		Fch,Nsc	16-smd-1	&(8μ	7.5 7						Rca	chip	&(8μ	17 17	60 60	15			
											Rca	16-smd-1	&(8μ	17 17	50 50	18			
											Nsc	16-dil-3	(4μ	30 30	40 40	20			
ACT	CD74ACT193E  CD74ACT193M	CD54ACT193E	Rca	16-dil-1	&(8μ		14 14	65		MM54HCT193J	Nsc	16-dil-1	(4μ	30 30	40 40	20			
		Rca	16-dil-1	&(8μ		12.7 12.7	86	TD74HCT193	Nsc		16-dil-1	(4μ	30 30	40 40	20				
		Rca	chip	&(8μ		14 14	65		Phi,Val		16-dil-2	&(8μ	23 23	54 54	16				
Rca	16-smd-1	&(8μ		14 14	65			Phi,Val	16-smd-1	&(8μ	23 23	54 54	16						
Rca	16-smd-1	&(8μ		12.7 12.7	86			Tos	16-dil	&(8μ									
C	MM74C193J MM74C193N	MM54C193J	Nsc	16-dil-3	50n	250 250	400 400	2.5											
		Nsc	16-dil-1	50n	250 250	400 400	2.5												
		Nsc	16-flat-3	50n	250 250	400 400	2.5												
HC	CD74HC193E  CD74HC193M  HD74HC193 M74HC193  MSM74HC193  SN74HC193DW	CD54HC193F	Rca	16-dil-1	&(8μ	18 18	54 54	20											
		CD54HC193H	Rca	16-dil-3	&(8μ	18 18	65 65	17											
		Rca	chip	&(8μ	18 18	65 65	17												
		Rca	16-smd-1	&(8μ	18 18	54 54	20												
		Hit	16-dil	&(8μ															
		Mit	16-dil	&(8μ															
		Mot	16-dil-3																
		Mot	16-dil-1																
		Nsc	16-dil-3	(8μ	39 30	49 39													
		Nsc	16-dil-1	(8μ	39 30	49 39													
Ok	16-dil	&(8μ																	
Phi,Val	16-dil-2	&(8μ	23 23	54 54	16														
Phi,Val	16-smd-1	&(8μ	23 23	54 54	16														
Tix	16-smd-2	&(8μ	24 24	41 41	17														
Tix	20-chip-3	&(8μ	24 24	50 50	14														
Tix	20-chip-3	&(8μ	24 24	41 41	17														
Tix	20-chip-2	&(8μ	24 24	50 50	14														
Tix	20-chip-1	&(8μ	24 24	41 41	17														
Tix	16-dil-3	&(8μ	24 24	50 50	14														

**74194**

Output: TP

4-bit universal shift register

**74194**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E → Q  
n<sub>styp</sub>

t<sub>PD</sub>  
E → Q  
n<sub>max</sub>

Note  
f<sub>T</sub> f<sub>SZ</sub>  
& f<sub>E</sub>

0...70°C  
§0...75°C

- 40...85°C  
§ - 25...85°C

- 55...125°C

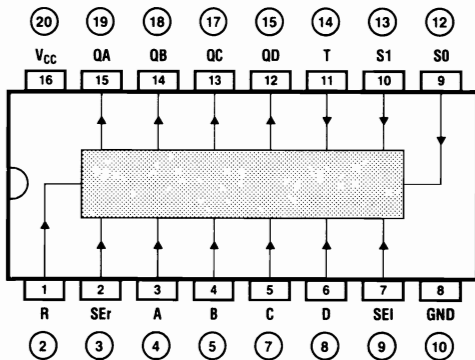
Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz



Input		Output							
R	S1	S0	T	SEl	SEr	QA	QB	QC	QD
H	L	L	X	X	X	keine Veränderung*			
H	X	X	L	X	X	keine Veränderung*			
L	X	X	X	X	X	L	L	L	L
H	H	H	↑	X	X	A	B	C	D
H	L	H	↑	X	H	rechts**			
H	L	H	↑	X	L	rechts**			
H	H	L	↑	H	X	links*** H			
H	H	L	↑	L	X	links*** L			

\* No change · Pas de modification · Senza alterazione · Sin modificación

\*\* Shift right · Pousser vers la droite · Spostare verso destra · Desplazar a la derecha

\*\*\* Shift left · Pousser vers la gauche · Spostare verso sinistra · Desplazar a la izquierda

HC

CD74HC194E

CD54HC194F  
CD54HC194H

Rca  
Rca  
Rca  
Rca

16-dil-1  
16-dil-3  
chip  
16-smd-1

&(8μ  
&(8μ  
&(8μ  
&(8μ

14 14  
14 14  
14 14  
14 14

44 44  
53 53  
53 53  
44 44

24  
20  
20  
24

HD74HC194  
M74HC194  
MB74HC194

CD74HC194M

Hit  
Mit  
Fui  
Mot

16-dil  
16-dil  
16-dil  
16-dil-3

&(8μ  
&(8μ  
&(8μ  
(8μ

12 12  
12 12  
12 12  
12 12

25 25  
37 37  
37 37  
25 25

35  
24  
24  
35

SN74HC194DW

MM74HC194J  
MC74HC194N

MM54HC194J

Nsc  
Nsc  
Mat  
Mat

16-dil-1  
16-dil-1  
16-dil-3  
16-dil-1

(8μ  
(8μ  
(8μ  
(8μ

12 12  
12 12  
12 12  
12 12

25 25  
25 25  
25 25  
25 25

35  
35  
24  
24

SN74HC194N  
T74HC194  
μPB74HC194

MN74HC194  
MN74HC194S  
PC74HC194P  
PC74HC194T

SN54HC194FK  
SN54HC194J

Phi, Val  
Phi, Val  
Tix  
Tix  
Tix

16-dil-2  
16-smd-1  
16-smd-2  
16-dil-3

&(8μ  
&(8μ  
&(8μ  
&(8μ

17 17  
17 17  
17 17  
17 17

36 36  
36 36  
36 36  
44 44

24  
24  
25  
21

HCT

CD74HCT194E

CD54HCT194F  
CD54HCT194H

Rca  
Rca  
Rca  
Rca

16-dil-1  
16-dil-3  
chip  
16-smd-1

&(8μ  
&(8μ  
&(8μ  
&(8μ

15 15  
15 15  
15 15  
15 15

46 46  
56 56  
56 56  
46 46

22  
18  
18  
22

CD74HCT194M  
PC74HCT194P  
PC74HCT194T

Phi, Val  
Phi, Val

16-dil-2  
16-smd-1

&(8μ  
&(8μ

18 18  
18 18

40 40  
40 40

24  
24

74195 Output: TP	4-bit universal shift register	74195		Type	Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q ns <sub>typ</sub>	t <sub>PD</sub> E-Q ns <sub>max</sub>	Note t <sub>r</sub> t <sub>fz</sub> &t <sub>E</sub> MHz	
		0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C
		C									
		MM74C195J MM74C195N	MM54C195J MM54C195W	Nsc Nsc Nsc	16-dil-3 16-dil-1 16-flat-3	50n 50n 50n	150 150 150 150 150 150	300 300 300 300 300 300	2 2 2		
		<p>HC</p> <p>HD74HC195 M74HC195 MB74HC195</p> <p>SN74HC195DW</p> <p>SN74HC195N T74HC195 TD74HC195 µPB74HC195</p> <p>HCT</p>		CD74HC195E	CD54HC195F CD54HC195H	Rca Rca Rca Rca Hit Mit Fui	16-dil-1 16-dil-3 chip 16-smd-1 16-dil 16-dil 16-dil-3	&(8µ) &(8µ) &(8µ) &(8µ)	14 14 14 14 14 14 14 14	44 44 53 53 53 53 44 44	25 20 25 24 24 24 24
				MM74HC195J MM74HC195N MN74HC195 MN74HC195S PC74HC195P PC74HC195T	MCS4HC195J MC74HC195N MMS4HC195J	Mot Mot Nsc Nsc Mat	16-dil-3 16-dil-1 16-dil-3 16-dil-1 16-smd-1	&(8µ) &(8µ) &(8µ) &(8µ)	12 12 12 12 12 12 12 12	25 25 25 25 25 25 25 25	35 35 35 35
				SN54HC195FK SN54HC195J	Tix Tix	16-smd-2 20-chip-2	&(8µ) &(8µ)	17 17 17 17	36 36 44 44	25 21	
				SN54HC195FK SN54HC195J	Tix Tix	16-dil-3 16-dil-2	&(8µ) &(8µ)	17 17 17 17	44 44 36 36	25 21	
					Sgs Tos Nec	16-dil 16-dil 16-dil			37 37 37 37 37 37	24 24 24	
				CD74HCT195E	CD54HCT195F CD54HCT195H	Rca Rca Rca Rca	16-dil-1 16-dil-3 chip 16-smd-1	&(8µ) &(8µ) &(8µ) &(8µ)	14 14 14 14 14 14 14 14	44 44 53 53 53 53 44 44	20 16 16 20
				CD74HCT195M PC74HCT195P PC74HCT195T		Phi, Val Phi, Val Phi, Val	16-dil-2 16-dil-2 16-smd-1	&(8µ) &(8µ) &(8µ)	18 18 18 18 18 18	40 40 40 40 40 40	22 22 22

Input		Output			
R	S/L T J K	QA	QB	QC	QD
H	H L X X	keine Veränderung*			
H	H ↑ L H	keine Veränderung*			
L	X X X X	L	L	L	L
H	L ↑ X X	A	B	C	D
H	H ↑ L L	L rechts**			
H	H ↑ H H	H rechts**			
H	H ↑ H L	Qn rechts**			

\* No change · Pas de modification · Senza alterazione · Sin modificación  
 \*\* Shift right · Pousser vers la droite · Spostare verso destra · Desplazar à la derecha

**74200**

Output: TS

256x1-bit RAM (random access memory)

**74200**

Type

Production

Bild  
Sec. 3I<sub>S</sub>  
&I<sub>R</sub>t<sub>PD</sub>  
E → Q  
n<sub>S</sub>typt<sub>PD</sub>  
E → Q  
n<sub>S</sub>maxNote  
t<sub>r</sub> §fz  
&t<sub>E</sub>0...70°C  
§0...75°C- 40...85°C  
§ - 25...85°C

- 55...125°C

Pins-  
Art-Nr.

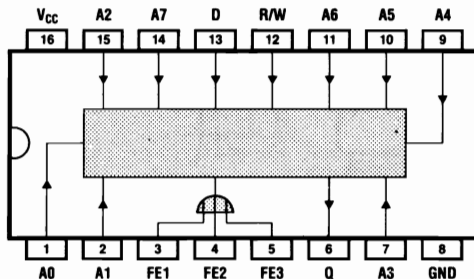
mA

↓ ↑ ↑

↓ ↓ ↑

MHz

FI (74S200) = 0.5



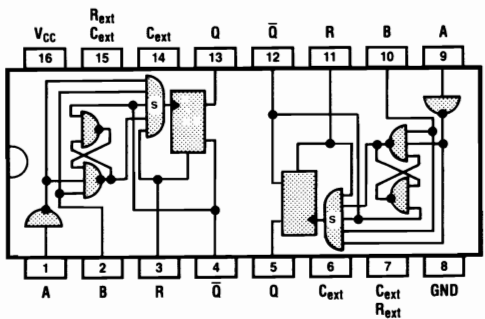
Siehe auch Section 4  
See also section 4  
Voir aussi section 4  
Vedi anche sezione 4  
Veasé tambien sección 4

FE1	FE2	FE3	W/R	Q	Funktion*
H	X	X	X	Z	—
X	H	X	X	Z	—
X	X	H	X	Z	—
L	L	L	L	Z	schreiben · write · mémorisation · immissione · escritura
L	L	L	H	$\bar{D}$	lesen · read · balaiement · estrazione · lectura

\* Funktion · Fonction · Funzione · Función

C

MM74C200J  
MM74C200NMM54C200J  
MM54C200WNsc  
Nsc  
Nsc16-dil-3  
16-dil-1  
16-flat-30.1  
0.1  
0.1450 450  
450 450  
450 450900 900  
900 900  
900 900

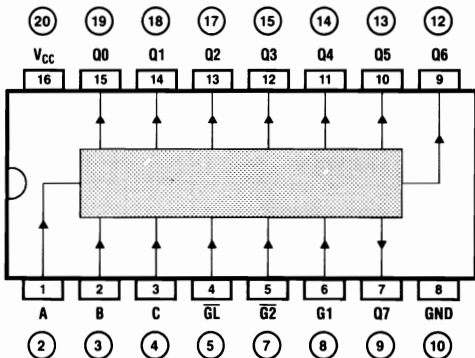
74221 Output: TP	Monostable multivibrators with Schmitt-Trigger input	74221		Type	Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	I <sub>PD</sub> E · Q n <sub>styp</sub>	I <sub>PD</sub> E · Q n <sub>smax</sub>	Note f <sub>T</sub> f <sub>stz</sub> & f <sub>E</sub>	
		0...70°C §0...75°C	- 40...85°C § - 25...85°C								- 55...125°C
FI (B, R) = 2  	C	MM74C221J MM74C221N	MM54C221J MM54C221W	Nsc Nsc Nsc	16-dil-3 16-dil-1 16-flat-3	50n 50n 50n	250 250 250	250 250 250	500 500 500	500 500 500	
	HC	CD74HC221E	CD54HC221F CD54HC221H	Rca Rca Rca Rca	16-dil-1 16-dil-3 chip 16-smd-1	&(8μ &(8μ &(8μ &(8μ	18 18 18 18	18 18 18 18	53 63 63 53	53 63 63 53	
	HD74HC221 M74HC221	CD74HC221M	MC54HC221J MC74HC221N MM74HC221J MM74HC221N MN74HC221 MN74HC221S PC74HC221P PC74HC221T	Hit Mit Mot Mot Nsc Nsc Mat Mat Phi, Val Phi, Val Nec Ray	16-dil 16-dil 16-dil-3 16-dil-1 16-dil-3 16-dil-1 16-smd-1 16-dil-2 16-smd-1 16-dil 16-dil	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ	18 18 19 19 19 19 19 19 19 19	18 18 24 24 24 24 24 24 24 24	43 43 43 43 43 43 43 43 43 43	53 53 53 53 53 53 53 53 53 53	
	μPB74HC221 74HC221	HCT	CD74HCT221E	CD54HCT221F CD54HCT221H	Rca Rca Rca Rca	16-dil-1 16-dil-3 chip 16-smd-1	&(8μ &(8μ &(8μ &(8μ	18 18 18 18	18 18 18 18	53 63 63 53	53 63 63 53
			CD74HCT221M PC74HCT221P PC74HCT221T	Phi, Val Phi, Val Phi, Val Phi, Val	16-dil-2 16-smd-1 16-dil 16-smd-1	&(8μ &(8μ &(8μ &(8μ	26 26 26 26	30 30 30 30	55 55 55 55	63 63 63 63	

Input	Output		
R A B	Q	Q̄	
L X X	L	H	
X H X	L	H	
X X L	L	H	
H L ↑	[Timing diagram: square wave]		
H ↓ H	[Timing diagram: square wave]		

# 74237

Output: TP

## 3-bit binary decoder



Inputs						Outputs							
$\overline{G1}$	$\overline{G2}$	G1	C	B	A	Q0	Q1	Q2	Q3	Q4	Q5	Q6	Q7
X	X	H	X	X	X	L	L	L	L	L	L	L	L
X	L	X	X	X	X	L	L	L	L	L	L	L	L
H	H	L	X	X	X	Buffer → Output							
L	H	L	L	L	L	H	L	L	L	L	L	L	L
L	H	L	L	L	H	L	H	L	L	L	L	L	L
L	H	L	L	H	L	L	L	H	L	L	L	L	L
L	H	L	H	L	L	L	L	L	L	H	L	L	L
L	H	L	H	L	H	L	L	L	L	L	H	L	L
L	H	L	H	H	L	L	L	L	L	L	L	H	L
L	H	L	H	H	H	L	L	L	L	L	L	L	H

### 74237

### Type

0...70°C 90...75°C	-40...85°C §-25...85°C	-55...125°C
-----------------------	---------------------------	-------------

### Production

Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E→Q n <sub>styp</sub>	t <sub>PD</sub> E→Q n <sub>max</sub>	Note f <sub>T</sub> §f <sub>Z</sub> & f <sub>E</sub>
Pin-Art-Nr.	mA	↓ ↑ ↑	↓ ↑ ↑	MHz

HC	MB74HC237	MM74HC237J	SN74HC237DW	SN74HC237N	HCT	SN74HCT237DW	SN74HCT237N
CD74HC237E	CD54HC237F CD54HC237H	MC74HC237D MC54HC237J MC74HC237N MM54HC237J	MM74HC237N MN74HC237 MN74HC237S PC74HC237P PC74HC237T	SN54HC237FK SN54HC237J	CD74HCT237E CD54HCT237F CD54HCT237H	CD74HCT237M PC74HCT237P PC74HCT237T	SN54HCT237FK SN54HCT237J
Rca	Rca	Fui	Nsc	Tix	Rca	Phi, Val	Tix
16-dil-1	16-dil-4 chip	16-smd-1	16-dil-1	16-dil-2	16-dil-1	16-dil-2	16-dil-2
		(8μ)	(8μ)	(8μ)	(8μ)	(8μ)	(8μ)
		16 20	17 20	19 19	22 22	24 24	24 24
		31 40	31 40	48 48	48 48	48 48	48 48
		46 59	46 59	48 48	48 48	48 48	48 48
		25	25				



**74239**  
Output: TP

Dual 2-line-to-4-line demultiplexer

**74239**

Type

Production

Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n#typ	t <sub>PD</sub> E-Q n#max	Note f <sub>T</sub> f <sub>z</sub> &I <sub>E</sub>
Pins- Art-Nr.				

0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C
-----------------------	---------------------------	-------------

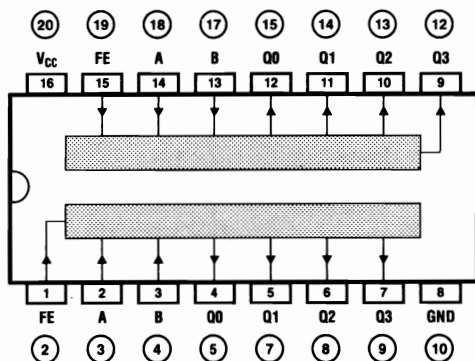
HC  
SN74HC239DW

SN54HC239FK  
SN54HC239J

SN74HC239N  
µPB74HC239

Tix  
Tix  
Tix  
Tix  
Nec

16-smd-2	&(8µ	18	18	38	38
20-chip-2	&(8µ	18	18	45	45
16-dil-3	&(8µ	18	18	45	45
16-dil-2	&(8µ	18	18	38	38
16-dil	&(8µ			44	44



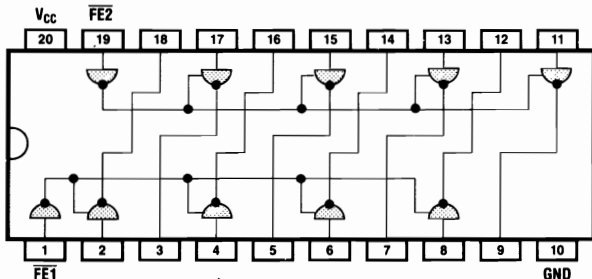
Input		Outp.
FE	B A	Q=H
H	X X	—
L	L L	0
L	L H	1
L	H L	2
L	H H	3



# 74240

Output: TS

## 8-bit inverting bus driver



FQ (LS240) = 66.7

FQ (S240) = 32

FE1	E	Q
H	X	Z
L	L	H
L	H	L

FE2	E	Q
H	X	Z
L	L	H
L	H	L

### 74240

#### Type

0...70°C \$0...75°C	-40...85°C \$-25...85°C	-55...125°C
------------------------	----------------------------	-------------

#### Production

Bld Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>S</sub> typ	t <sub>PD</sub> E-Q n <sub>S</sub> max	Note
				f <sub>T</sub> &f <sub>Z</sub> &f <sub>E</sub> MHz

#### AC

CD74AC240E	CD54AC240E	Rca	20-dil-1	&(8μ	7.2	7.2		
	Rca	20-dil-1	&(8μ	6.5	6.5			
CD74AC240M	CD54AC240H	Rca	chip	&(8μ	7.2	7.2		
	CD54AC240M	Rca	20-smd-2	&(8μ	7.2	7.2		
CD74AC240M	CD54AC240M	Rca	20-smd-2	&(8μ	6.5	6.5		
	Hit	20-dil	&(8μ	9.5	10.5			
74AC240D	54AC240D	Mit	20-dil	&(8μ	9.5	10.5		
	Fch,Nsc	20-dil-4	&(8μ	4.5	4.5	8	8.5	
74AC240P	54AC240F	Fch,Nsc	20-dil-4	&(8μ	4.5	4.5	6.5	7
	54AC240L	Fch,Nsc	20-flat-2	&(8μ	4.5	4.5	8	8.5
74AC240S	54AC240F	Fch,Nsc	20-chip-2	&(8μ	4.5	4.5	8	8.5
	54AC240L	Fch,Nsc	20-dil-1	&(8μ	4.5	4.5	6.5	7

#### ACT

CD74ACT240E	CD54ACT240E	Rca	20-dil-1	&(8μ	8.6	8.6		
	Rca	20-dil-1	&(8μ	7.8	7.8			
CD74ACT240M	CD54ACT240H	Rca	chip	&(8μ	8.6	8.6		
	CD54ACT240M	Rca	20-smd-2	&(8μ	8.6	8.6		
74ACT240D	54ACT240D	Rca	20-smd-2	&(8μ	7.8	7.8		
	Hit	20-dil	&(8μ	9	9.5			
74ACT240P	54ACT240D	Fch,Nsc	20-dil-4	&(8μ	5.5	6	9	9.5
	54ACT240F	Fch,Nsc	20-dil-4	&(8μ	5.5	6	8.5	9.5
74ACT240S	54ACT240F	Fch,Nsc	20-flat-2	&(8μ	5.5	6	9	9.5
	54ACT240L	Fch,Nsc	20-chip-2	&(8μ	5.5	6	9	9.5
MM74C240J	MM54C240D	Fch,Nsc	20-dil-1	&(8μ	5.5	6	8.5	9.5
	MM54C240J	Fch,Nsc	20-smd-2	&(8μ	5.5	6	8.5	9.5

#### C

MM74C240J	MM54C240D	Nsc	20-dil-4	50n	60	60	90	90
	MM54C240J	Nsc	20-dil-4	50n	60	60	90	90
	MM74C240N	Nsc	20-dil-1	50n	60	60	90	90

#### HC

##### BU74HC240

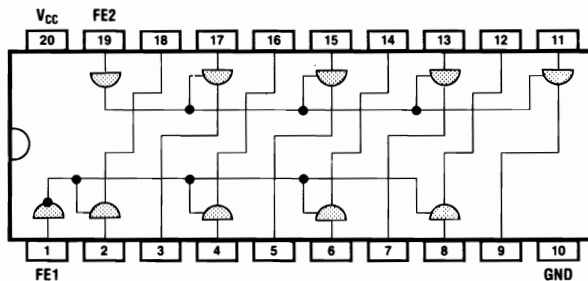
CD74HC240E	CD54HC240F	Toy	20-dil	&(8μ	25	25		
	CD54HC240H	Rca	20-dil-1	&(8μ	8	8	25	25
CD74HC240M	CD54HC240F	Rca	20-dil-4	&(8μ	8	8	30	30
	CD54HC240H	Rca	chip	&(8μ	8	8	30	30
HD74HC240	CD54HC240F	Rca	20-smd-2	&(8μ	8	8	25	25
	CD54HC240H	Hit	20-dil	&(8μ	25	25		
M74HC240	CD54HC240F	Mit	20-dil	&(8μ	25	25		
	CD54HC240H	Mit	20-dil	&(8μ	25	25		

74240	Type			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>pD</sub> E-Q n <sub>styp</sub>	t <sub>pD</sub> E-Q n <sub>smax</sub>	Note f <sub>T</sub> f <sub>SZ</sub> &f <sub>E</sub>		
	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C							Pins- Art-Nr.	mA
MB74HC240				Fui	20-dil	&(8μ		25	25		
				Mot	20-dil-4	(8μ	9	9	17	17	
				Mot	20-dil-1	(8μ	9	9	17	17	
				Mot	20-smd-2	&(4μ			24	24	
				Mot	20-dil-4	&(4μ			24	24	
				Mot	20-dil-1	&(4μ			24	24	
				Mot	20-dil-1	(8μ	11	11	17	17	
				Mot	20-dil-1	(8μ	11	11	17	17	
				Mot	20-dil-1	&(8μ			25	25	
				Mot	20-smd-3	&(8μ			25	25	
				Mot	20-dil-1	&(8μ	11	11	25	25	
SN74HC240DW				Phi,Val	20-smd-2	&(8μ	11	11	25	25	
				Tix	20-smd-2	&(8μ	10	10	25	25	
				Tix	20-chip-3	&(8μ	10	10	30	30	
				Tix	20-chip-3	&(8μ	10	10	25	25	
				Tix	20-chip-2	&(8μ	10	10	30	30	
				Tix	20-chip-1	&(8μ	10	10	25	25	
				Tix	20-dil-4	&(8μ	10	10	30	30	
				Tix	20-dil-4	&(8μ	10	10	25	25	
				Tix	20-dil-1	&(8μ	10	10	25	25	
				Tix	20-dil	&(8μ			25	25	
				Tix	20-dil	&(8μ			25	25	
T74HC240 μPB74HC240				Sgs	20-dil	&(8μ		25	25		
				Nec	20-dil	&(8μ			25	25	
HCT				Rca	20-dil-1	&(8μ	9	9	28	28	
				Rca	20-dil-4	&(8μ	9	9	33	33	
HD74HCT240 M74HCT240				Rca	chip	&(8μ	9	9	33	33	
				Rca	20-smd-2	&(8μ	9	9	28	28	
				Hit	20-dil	&(8μ			25	25	
SN74HCT240DW				Mit	20-dil	&(8μ			25	25	
				Mot	20-dil	&(8μ			25	25	
				Mot	20-dil-4	&(8μ			30	30	
				Mot	20-dil-1	&(8μ			30	30	
				Mot	20-smd-2	&(4μ			30	30	
				Mot	20-dil-4	&(4μ			30	30	
				Mot	20-dil-1	&(4μ			30	30	
				Mot	20-dil-1	(8μ	14	14	20	20	
				Mot	20-dil-1	(8μ	14	14	20	20	
				Mot	20-dil-1	&(8μ	11	11	25	25	
				Mot	20-smd-2	&(8μ	11	11	25	25	
T74HCT240 μPB74HCT240				Phi,Val	20-dil-1	&(8μ	11	11	25	25	
				Phi,Val	20-smd-2	&(8μ	11	11	25	25	
				Tix	20-smd-2	&(8μ	13	13	32	32	
				Tix	20-chip-3	&(8μ	13	13	37	37	
				Tix	20-chip-3	&(8μ	13	13	32	32	
				Tix	20-chip-2	&(8μ	13	13	37	37	
				Tix	20-chip-1	&(8μ	13	13	32	32	
				Tix	20-dil-4	&(8μ	13	13	37	37	
				Tix	20-dil-4	&(8μ	13	13	32	32	
				Tix	20-dil-1	&(8μ	13	13	32	32	
				Tix	20-dil-1	&(8μ			25	25	
Tix	20-dil	&(8μ			25	25					

74241			Type			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>pD</sub> E-Q n <sub>styp</sub>	t <sub>pD</sub> E-Q n <sub>smax</sub>	Note f <sub>T</sub> f <sub>SZ</sub> &f <sub>E</sub>	
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	mA	↓ ↑ †							↓ ↑ †
AC			CD74AC241E	CD54AC241E	Rca	20-dil-1	&(8μ			8.2	8.2	
					Rca	20-dil-1	&(8μ				7.5	7.5
					Rca	chip	&(8μ				8.2	8.2
			CD74AC241M	CD54AC241M	Rca	20-smd-2	&(8μ			8.2	8.2	
					Rca	20-smd-2	&(8μ				7.5	7.5

**74241**  
Output: TS

8-bit bus driver



FQ (LS241) = 66,7  
FQ (S241) = 32

FE1	E	Q
H	X	Z
L	L	L
L	H	H

FE2	E	Q
L	X	Z
H	L	L
H	H	H

V<sub>cc</sub> = 5V  
V<sub>cc</sub> = 5V  
V<sub>cc</sub> = 5V

74241	Type		Production	Bild Sec. 3	Is &IR	tpD E-Q nstyp	tpD E-Q n\$max	Note Tr \$fZ &fE	74241	Type		Production	Bild Sec. 3	Is &IR	tpD E-Q n\$typ	tpD E-Q n\$max	Note Tr \$fZ &fE
	0...70°C \$0...75°C	-40...85°C \$-25...85°C								-55...125°C	0...70°C \$0...75°C						
				Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz				Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz	
ACT	HD74AC241		Hit	20-dil	&(8μ		9.5 10.5		T74HC241 μPB74HC241		Sgs Nec	20-dil	&(8μ		29 29		
	74AC241D	54AC241D	Fch,Nsc	20-dil-4	&(8μ	4.5 5	9 9.5		HCT	CD74HCT241E	Rca	20-dil-1	&(8μ	10 10	31 31		
		54AC241F	Fch,Nsc	20-dil-4	&(8μ	4.5 5	7.5 7.5				Rca	20-dil-4	&(8μ	10 10	38 38		
	74AC241P	54AC241L	Fch,Nsc	20-flat-2	&(8μ	4.5 5	9 9.5				Rca	chip	&(8μ	10 10	38 38		
	74AC241S		Fch,Nsc	20-chip-2	&(8μ	4.5 5	9 9.5				Rca	20-smd-2	&(8μ	10 10	31 31		
			Fch,Nsc	20-dil-1	&(8μ	4.5 5	7.5 7.5				Hit	20-dil	&(8μ		29 29		
			Fch,Nsc	20-smd-2	&(8μ	4.5 5	7.5 7.5				Mit	20-dil-4	&(8μ		29 29		
		CD54ACT241E	Rca	20-dil-1	&(8μ		9.6 9.6				Mot	20-dil-1					
		CD54ACT241H	Rca	20-dil-1	&(8μ		8.7 8.7				Mot	20-smd-2					
		CD54ACT241M	Rca	chip	&(8μ		9.6 9.6				Mot	20-dil-1					
	HD74AC241	CD54ACT241M	Rca	20-smd-2	&(8μ		9.6 9.6				MM74HCT241J	MM74HCT241N	Nsc	20-dil-4	&(4μ		35 35
HC	74ACT241D	54ACT241D	Fch,Nsc	20-dil-4	&(8μ	7 6.5	10 10		SN74HCT241DW	SN74HCT241FH	Phi_Val	20-dil-1	&(8μ	14 14	18 18		
	74ACT241P	54ACT241F	Fch,Nsc	20-flat-2	&(8μ	7 6.5	10 10		SN74HCT241FN	SN74HCT241FK	Phi_Val	20-dil-1	&(8μ	14 14	18 18		
	74ACT241S	54ACT241L	Fch,Nsc	20-chip-2	&(8μ	7 6.5	10 10		SN74HCT241J	SN74HCT241J	Phi_Val	20-smd-2	&(8μ	13 13	28 28		
			Fch,Nsc	20-dil-1	&(8μ	7 6.5	10 10		SN74HCT241N		Tix	20-smd-2	&(8μ	13 13	32 32		
			Fch,Nsc	20-smd-2	&(8μ	7 6.5	10 10				Tix	20-chip-3	&(8μ	13 13	37 37		
		CD74HC241E	Rca	20-dil-1	&(8μ	9 9	28 28				Tix	20-chip-2	&(8μ	13 13	32 32		
		CD54HC241F	Rca	20-dil-4	&(8μ	9 9	33 33				Tix	20-chip-1	&(8μ	13 13	32 32		
		CD54HC241H	Rca	chip	&(8μ	9 9	33 33				Tix	20-dil-4	&(8μ	13 13	32 32		
		CD74HC241M	Rca	20-smd-2	&(8μ	9 9	28 28				Tix	20-dil-1	&(8μ	13 13	37 37		
			Hit	20-dil	&(8μ		29 29				Tix	20-dil-4	&(8μ	13 13	32 32		
HD74HC241 LR74HC241 M74HC241		Sha	20-dil	&(8μ		29 29				Tix	20-dil-1	&(8μ	13 13	32 32			
		Mit	20-dil	&(8μ		29 29				Sgs	20-dil	&(8μ		29 29			
		Mot	20-dil-4	(8μ	10 10	20 20				Nec	20-dil	&(8μ		29 29			
		Mot	20-dil-1	(8μ	10 10	20 20											
		Mot	20-smd-2	&(4μ		27 27											
		Mot	20-dil-4	&(4μ		27 27											
		Mot	20-dil-1	&(4μ		27 27											
	MM74HC241J	MM54HC241J	Nsc	20-dil-4	(8μ	11 11	17 17										
	MM74HC241N		Nsc	20-dil-1	(8μ	11 11	17 17										
	MN74HC241		Mat	20-dil-1	&(8μ		29 29										
	MN74HC241S		Mat	20-smd-3	&(8μ		29 29										
	PC74HC241P		Phi_Val	20-dil-1	&(8μ	9 9	25 25										
	PC74HC241T		Phi_Val	20-smd-2	&(8μ	9 9	25 25										
SN74HC241DW			Tix	20-smd-2	&(8μ	12 12	29 29										
	SN74HC241FH	SN54HC241FH	Tix	20-chip-3	&(8μ	12 12	34 34										
	SN74HC241FN	SN54HC241FK	Tix	20-chip-2	&(8μ	12 12	34 34										
	SN74HC241J	SN54HC241J	Tix	20-chip-1	&(8μ	12 12	29 29										
			Tix	20-dil-4	&(8μ	12 12	34 34										
			Tix	20-dil-4	&(8μ	12 12	29 29										
			Tix	20-dil-1	&(8μ	12 12	29 29										

74242 Output: TS		4-bit bi-directional inverting bus driver				74242		Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>styp</sub>	t <sub>PD</sub> E → Q n <sub>smax</sub>	Note t <sub>T</sub> f <sub>STZ</sub> &f <sub>E</sub>
						0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C							
		HD74HC242 N74HC242	CD74HC242M	Rca Hit Mit	14-smd-1 14-dil 14-dil	&(8μ &(8μ &(8μ	7 7 7 7 9 9	23 23 25 25 25 25							
			MM74HC242J MM74HC242N MN74HC242 MN74HC242S PC74HC242P PC74HC242T	MC54HC242J MC74HC242N MM54HC242J	Nsc Nsc Mat Mat	14-dil-4 14-dil-1 14-dil-1 14-smd-1	(8μ (8μ (8μ (8μ	9 9 9 9 11 11 11 11	17 17 17 17 25 25 25 25						
		SN74HC242D		Phi, Val Phi, Val	14-dil-1 14-smd-1	(8μ (8μ	9 9 9 9	23 23 23 23							
			SN74HC242FH SN74HC242FN SN74HC242J SN74HC242N	SN54HC242FH SN54HC242FK SN54HC242J	Tix Tix Tix Tix	14-smd-1 20-chip-3 20-chip-2 14-dil-4	(8μ (8μ (8μ (8μ	12 12 15 15 15 15 15 15	25 25 38 38 25 25 38 38						
		T74HC242 TD74HC242 μPB74HC242		Sgs Tos Nec	14-dil 14-dil 14-dil	(8μ (8μ (8μ	9 9 9 9 9 9	23 23 25 25 25 25							
		HCT	CD74HCT242E	Rca	14-dil-1	(8μ	8 8	25 25							
			CD74HCT242M PC74HCT242P PC74HCT242T	Rca Rca Rca	14-dil-4 chip 14-smd-1	(8μ (8μ (8μ	8 8 8 8 8 8	30 30 30 30 25 25							
		HD74HCT242		Phi, Val Phi, Val	14-dil-1 14-smd-1	(8μ (8μ	12 12 12 12	25 25 25 25							
		SN74HCT242D		Tix Tix	14-smd-1 20-chip-3	(8μ (8μ	12 12 15 15	25 25 45 45							
			SN74HCT242FH SN74HCT242FN SN74HCT242J SN74HCT242N	SN54HCT242FH SN54HCT242FK SN54HCT242J	Tix Tix Tix Tix	20-chip-2 20-chip-1 14-dil-4 14-dil-1	(8μ (8μ (8μ (8μ	12 12 12 12 15 15 15 15	25 25 25 25 45 45 45 45						
74242	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>styp</sub>	t <sub>PD</sub> E → Q n <sub>smax</sub>	Note t <sub>T</sub> f <sub>STZ</sub> &f <sub>E</sub>							
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C													
AC	HD74AC242		Hit	14-dil	&(8μ										
HC	CD74HC242E		Rca Rca Rca	14-dil-1 14-dil-4 chip	&(8μ &(8μ &(8μ	7 7 7 7 7 7	23 23 27 27 27 27								
		CD54HC242F CD54HC242H													
								μPB74HCT242							

74243 Output: TS	4-bit bi-directional bus driver			74243		Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E-Q n <sub>S</sub> typ	I <sub>PD</sub> E-Q n <sub>S</sub> max	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>																																																																												
	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	-40...85°C §-25...85°C	-55...125°C																																																																																				
<table border="1"> <thead> <tr> <th>Input</th> <th>Funktion</th> </tr> <tr> <th>AB BA</th> <th>Function · Fonction · Funzione · Función</th> </tr> </thead> <tbody> <tr> <td>H H</td> <td>B → A</td> </tr> <tr> <td>L L</td> <td>A → B</td> </tr> <tr> <td>H L</td> <td>sperren · inhibit · bloçage · bloccare · bloqueo</td> </tr> <tr> <td>L H</td> <td>unzulässig · not valid · inadmissible · inammissibile · inadmissible</td> </tr> </tbody> </table>														Input	Funktion	AB BA	Function · Fonction · Funzione · Función	H H	B → A	L L	A → B	H L	sperren · inhibit · bloçage · bloccare · bloqueo	L H	unzulässig · not valid · inadmissible · inammissibile · inadmissible																																																																
Input	Funktion																																																																																								
AB BA	Function · Fonction · Funzione · Función																																																																																								
H H	B → A																																																																																								
L L	A → B																																																																																								
H L	sperren · inhibit · bloçage · bloccare · bloqueo																																																																																								
L H	unzulässig · not valid · inadmissible · inammissibile · inadmissible																																																																																								
74243	Type			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E-Q n <sub>S</sub> typ	I <sub>PD</sub> E-Q n <sub>S</sub> max	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>																																																																																
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	0...70°C §0...75°C							-40...85°C §-25...85°C	-55...125°C																																																																														
HC	CD74HC243E	CD54HC243F CD54HC243H	Rca Rca Rca Rca Hit Mit	14-dil-1 14-dil-4 chip 14-smd-1 14-dil 14-dil	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ	7 7 7 7 7 7 7 7 25 25 25 25	23 23 27 27 27 27 23 23 25 25 25 25	23 23 27 27 27 27 23 23 25 25 25 25																																																																																	
HD74HC243 M74HC243	CD74HC243M		Rca Hit	14-dil-1 14-smd-1	&(8μ &(8μ	13 13 15 15	28 28 38 38	28 28 38 38																																																																																	
<table border="1"> <thead> <tr> <th>74243</th> <th colspan="3">Type</th> <th rowspan="2">Production</th> <th rowspan="2">Bild Sec. 3</th> <th rowspan="2">I<sub>S</sub> &amp;I<sub>R</sub></th> <th rowspan="2">I<sub>PD</sub> E-Q n<sub>S</sub>typ</th> <th rowspan="2">I<sub>PD</sub> E-Q n<sub>S</sub>max</th> <th rowspan="2">Note f<sub>T</sub> f<sub>Z</sub> &amp;f<sub>E</sub></th> </tr> <tr> <th>0...70°C §0...75°C</th> <th>-40...85°C §-25...85°C</th> <th>-55...125°C</th> <th>0...70°C §0...75°C</th> <th>-40...85°C §-25...85°C</th> <th>-55...125°C</th> </tr> </thead> <tbody> <tr> <td>SN74HC243D</td> <td>MM74HC243J MM74HC243N MN74HC243 MN74HC243S PC74HC243P PC74HC243T</td> <td>MC54HC243J MC74HC243N MM54HC243J</td> <td>Mot Mot Nsc Nsc Mat Mat Phi,Val Phi,Val Tix</td> <td>14-dil-4 14-dil-1 14-dil-4 14-dil-1 14-smd-1 14-smd-1 14-smd-1 14-smd-1 20-chip-3 20-chip-3</td> <td>&amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ</td> <td>9 9 9 9 11 11 11 11 25 25 25 25 8 8 8 8 12 12 12 12</td> <td>9 9 9 9 11 11 11 11 25 25 25 25 8 8 8 8 12 12 12 12</td> <td>17 17 17 17 17 17 17 17 25 25 25 23 23 23 25 25 30 30 30 30</td> <td></td> </tr> <tr> <td>T74HC243 TD74HC243 μPB74HC243</td> <td>SN74HC243FH SN74HC243FN SN74HC243J SN74HC243N</td> <td>SN54HC243FH SN54HC243FK SN54HC243J</td> <td>Tix Tix Tix Tix Tix Tix Sgs Tos Nec</td> <td>20-chip-3 20-chip-2 14-dil-4 14-dil-1 14-dil 14-dil 14-dil 14-dil 14-dil</td> <td>&amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ</td> <td>12 12 12 12 12 12 12 12 12 12 12 12 25 25 25 25 25 25</td> <td>12 12 12 12 12 12 12 12 12 12 12 12 25 25 25 25 25 25</td> <td>30 30 30 30 30 30 30 30 25 25 25 25 25 25 25 25</td> <td></td> </tr> <tr> <td>HCT</td> <td>CD74HCT243E</td> <td>CD54HCT243F CD54HCT243H</td> <td>Rca Rca Rca Rca Hit</td> <td>14-dil-1 14-dil-4 chip 14-smd-1 14-dil</td> <td>&amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ</td> <td>9 9 9 9 9 9 9 9 9 9</td> <td>9 9 33 33 33 33 28 28</td> <td>28 28 33 33 33 33 28 28</td> <td></td> </tr> <tr> <td>HD74HCT243</td> <td>CD74HCT243M</td> <td></td> <td>Rca Hit Phi,Val Phi,Val Tix</td> <td>14-dil-1 14-smd-1 14-smd-1 14-smd-1 14-smd-1</td> <td>&amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ</td> <td>13 13 13 13 15 15 15 15 15 15</td> <td>28 28 28 28 38 38 45 45 45 45</td> <td>28 28 28 28 38 38 45 45 45 45</td> <td></td> </tr> <tr> <td>SN74HCT243D</td> <td>PC74HCT243P PC74HCT243T</td> <td>SN54HCT243FH SN54HCT243FK SN54HCT243J</td> <td>Phi,Val Phi,Val Tix Tix Tix Tix Tix Tix Tix Nec</td> <td>14-dil-1 14-smd-1 14-smd-1 20-chip-3 20-chip-2 20-chip-1 14-dil-4 14-dil-1 14-dil-1</td> <td>&amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ</td> <td>13 13 13 13 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15</td> <td>28 28 28 28 38 38 45 45 45 45 45 45 45 45 38 38 38 38 38 38</td> <td>28 28 28 28 38 38 45 45 45 45 45 45 45 45 38 38 38 38 38 38</td> <td></td> </tr> <tr> <td>μPB74HC243</td> <td>SN74HC243J SN74HC243N</td> <td></td> <td>Tix Tix Tix Nec</td> <td>14-dil-4 14-dil-1 14-dil-1</td> <td>&amp;(8μ &amp;(8μ &amp;(8μ</td> <td>15 15 15 15 15 15</td> <td>45 45 38 38 38 38</td> <td>45 45 38 38 38 38</td> <td></td> </tr> </tbody> </table>														74243	Type			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E-Q n <sub>S</sub> typ	I <sub>PD</sub> E-Q n <sub>S</sub> max	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	SN74HC243D	MM74HC243J MM74HC243N MN74HC243 MN74HC243S PC74HC243P PC74HC243T	MC54HC243J MC74HC243N MM54HC243J	Mot Mot Nsc Nsc Mat Mat Phi,Val Phi,Val Tix	14-dil-4 14-dil-1 14-dil-4 14-dil-1 14-smd-1 14-smd-1 14-smd-1 14-smd-1 20-chip-3 20-chip-3	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ	9 9 9 9 11 11 11 11 25 25 25 25 8 8 8 8 12 12 12 12	9 9 9 9 11 11 11 11 25 25 25 25 8 8 8 8 12 12 12 12	17 17 17 17 17 17 17 17 25 25 25 23 23 23 25 25 30 30 30 30		T74HC243 TD74HC243 μPB74HC243	SN74HC243FH SN74HC243FN SN74HC243J SN74HC243N	SN54HC243FH SN54HC243FK SN54HC243J	Tix Tix Tix Tix Tix Tix Sgs Tos Nec	20-chip-3 20-chip-2 14-dil-4 14-dil-1 14-dil 14-dil 14-dil 14-dil 14-dil	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ	12 12 12 12 12 12 12 12 12 12 12 12 25 25 25 25 25 25	12 12 12 12 12 12 12 12 12 12 12 12 25 25 25 25 25 25	30 30 30 30 30 30 30 30 25 25 25 25 25 25 25 25		HCT	CD74HCT243E	CD54HCT243F CD54HCT243H	Rca Rca Rca Rca Hit	14-dil-1 14-dil-4 chip 14-smd-1 14-dil	&(8μ &(8μ &(8μ &(8μ &(8μ	9 9 9 9 9 9 9 9 9 9	9 9 33 33 33 33 28 28	28 28 33 33 33 33 28 28		HD74HCT243	CD74HCT243M		Rca Hit Phi,Val Phi,Val Tix	14-dil-1 14-smd-1 14-smd-1 14-smd-1 14-smd-1	&(8μ &(8μ &(8μ &(8μ &(8μ	13 13 13 13 15 15 15 15 15 15	28 28 28 28 38 38 45 45 45 45	28 28 28 28 38 38 45 45 45 45		SN74HCT243D	PC74HCT243P PC74HCT243T	SN54HCT243FH SN54HCT243FK SN54HCT243J	Phi,Val Phi,Val Tix Tix Tix Tix Tix Tix Tix Nec	14-dil-1 14-smd-1 14-smd-1 20-chip-3 20-chip-2 20-chip-1 14-dil-4 14-dil-1 14-dil-1	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ	13 13 13 13 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15	28 28 28 28 38 38 45 45 45 45 45 45 45 45 38 38 38 38 38 38	28 28 28 28 38 38 45 45 45 45 45 45 45 45 38 38 38 38 38 38		μPB74HC243	SN74HC243J SN74HC243N		Tix Tix Tix Nec	14-dil-4 14-dil-1 14-dil-1	&(8μ &(8μ &(8μ	15 15 15 15 15 15	45 45 38 38 38 38	45 45 38 38 38 38	
74243	Type			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E-Q n <sub>S</sub> typ	I <sub>PD</sub> E-Q n <sub>S</sub> max	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>																																																																																
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	0...70°C §0...75°C							-40...85°C §-25...85°C	-55...125°C																																																																														
SN74HC243D	MM74HC243J MM74HC243N MN74HC243 MN74HC243S PC74HC243P PC74HC243T	MC54HC243J MC74HC243N MM54HC243J	Mot Mot Nsc Nsc Mat Mat Phi,Val Phi,Val Tix	14-dil-4 14-dil-1 14-dil-4 14-dil-1 14-smd-1 14-smd-1 14-smd-1 14-smd-1 20-chip-3 20-chip-3	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ	9 9 9 9 11 11 11 11 25 25 25 25 8 8 8 8 12 12 12 12	9 9 9 9 11 11 11 11 25 25 25 25 8 8 8 8 12 12 12 12	17 17 17 17 17 17 17 17 25 25 25 23 23 23 25 25 30 30 30 30																																																																																	
T74HC243 TD74HC243 μPB74HC243	SN74HC243FH SN74HC243FN SN74HC243J SN74HC243N	SN54HC243FH SN54HC243FK SN54HC243J	Tix Tix Tix Tix Tix Tix Sgs Tos Nec	20-chip-3 20-chip-2 14-dil-4 14-dil-1 14-dil 14-dil 14-dil 14-dil 14-dil	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ	12 12 12 12 12 12 12 12 12 12 12 12 25 25 25 25 25 25	12 12 12 12 12 12 12 12 12 12 12 12 25 25 25 25 25 25	30 30 30 30 30 30 30 30 25 25 25 25 25 25 25 25																																																																																	
HCT	CD74HCT243E	CD54HCT243F CD54HCT243H	Rca Rca Rca Rca Hit	14-dil-1 14-dil-4 chip 14-smd-1 14-dil	&(8μ &(8μ &(8μ &(8μ &(8μ	9 9 9 9 9 9 9 9 9 9	9 9 33 33 33 33 28 28	28 28 33 33 33 33 28 28																																																																																	
HD74HCT243	CD74HCT243M		Rca Hit Phi,Val Phi,Val Tix	14-dil-1 14-smd-1 14-smd-1 14-smd-1 14-smd-1	&(8μ &(8μ &(8μ &(8μ &(8μ	13 13 13 13 15 15 15 15 15 15	28 28 28 28 38 38 45 45 45 45	28 28 28 28 38 38 45 45 45 45																																																																																	
SN74HCT243D	PC74HCT243P PC74HCT243T	SN54HCT243FH SN54HCT243FK SN54HCT243J	Phi,Val Phi,Val Tix Tix Tix Tix Tix Tix Tix Nec	14-dil-1 14-smd-1 14-smd-1 20-chip-3 20-chip-2 20-chip-1 14-dil-4 14-dil-1 14-dil-1	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ	13 13 13 13 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15	28 28 28 28 38 38 45 45 45 45 45 45 45 45 38 38 38 38 38 38	28 28 28 28 38 38 45 45 45 45 45 45 45 45 38 38 38 38 38 38																																																																																	
μPB74HC243	SN74HC243J SN74HC243N		Tix Tix Tix Nec	14-dil-4 14-dil-1 14-dil-1	&(8μ &(8μ &(8μ	15 15 15 15 15 15	45 45 38 38 38 38	45 45 38 38 38 38																																																																																	

74244 Output: TS	8-bit bus driver			74244		Type	Production	Bilid Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>styp</sub>	t <sub>PD</sub> E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>												
				0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C											
<table border="1" style="margin-left: 20px;"> <thead> <tr> <th>FE</th> <th>E</th> <th>Q</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>X</td> <td>Z</td> </tr> <tr> <td>L</td> <td>L</td> <td>L</td> </tr> <tr> <td>L</td> <td>H</td> <td>H</td> </tr> </tbody> </table>													FE	E	Q	H	X	Z	L	L	L	L	H	H
FE	E	Q																						
H	X	Z																						
L	L	L																						
L	H	H																						
74244	Type			Production	Bilid Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>styp</sub>	t <sub>PD</sub> E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>															
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C																						
AC	CD74AC244E	CD54AC244E	Rca	20-dil-1	&(8μ		8.2	8.2	SN74HC244DW	MC54HC244J	20-dil-4	(8μ	10	10	20	20								
			Rca	20-dil-1	&(8μ		7.5	7.5		MC74HC244N	20-dil-4	(8μ	10	10	20	20								
			Rca	chip	&(8μ		8.2	8.2		MC74HC244ADW	20-smd-2	&(4μ					27	27						
			Rca	20-smd-2	&(8μ		8.2	8.2		MC54HC244AJ	20-dil-4	&(4μ					27	27						
			Rca	20-smd-2	&(8μ		7.5	7.5		MC74HC244AN	20-dil-1	&(4μ					27	27						
			Hit	20-dil	&(8μ		9.5	10.5		MM74HC244J	20-dil-4	(8μ	10	10	20	20								
	CD74AC244M HD74AC244	CD54AC244M	Rca	20-dil-1	&(8μ		8.2	8.2		MM74HC244N	20-dil-1	(8μ	10	10	20	20								
			Rca	chip	&(8μ		8.2	8.2		MN74HC244	20-dil-1	(8μ	10	10	20	20								
			Rca	20-smd-2	&(8μ		8.2	8.2		PC74HC244P	20-smd-3	&(8μ	11	11	28	28								
			Rca	20-smd-2	&(8μ		7.5	7.5		PC74HC244T	20-dil-1	&(8μ	11	11	28	28								
			Hit	20-dil	&(8μ		9.5	10.5		PC74HC244T	20-smd-2	&(8μ	13	13	29	29								
			Hit	20-dil	&(8μ		9.5	10.5		Tix	20-chip-3	&(8μ	13	13	34	34								
C	CD74ACT244E	CD54ACT244E	Rca	20-dil-1	&(8μ		9.6	9.6	SN74HC244FH	MM54HC244J	20-dil-4	50n	45	45	70	70								
			Rca	20-dil-1	&(8μ		8.7	8.7		Nsc	20-dil-4	50n	45	45	70	70								
			Rca	chip	&(8μ		9.6	9.6		Nsc	20-dil-1	50n	45	45	70	70								
			Rca	20-smd-2	&(8μ		9.6	9.6		CD74HC244E	20-dil-1	&(8μ	9	9	28	28								
			Rca	20-smd-2	&(8μ		8.7	8.7		CD54HC244F	20-dil-4	&(8μ	9	9	33	33								
			Hit	20-dil	&(8μ		8.7	8.7		Rca	chip	&(8μ	9	9	33	33								
	74ACT244D	54ACT244D	Fch,Nsc	20-dil-4	&(8μ	7	6.5	10		10	HD74HC244	20-dil	&(8μ			29	29							
			Fch,Nsc	20-dil-4	&(8μ	7	6.5	10		10	LC74HC244	20-dil	&(8μ			29	29							
			Fch,Nsc	20-flat-2	&(8μ	7	6.5	10		10	M74HC244	20-dil	&(8μ			29	29							
			Fch,Nsc	20-chip-2	&(8μ	7	6.5	10		10	M74HC244	20-dil	&(8μ			29	29							
			Fch,Nsc	20-dil-1	&(8μ	7	6.5	10		10	MB74HC244	20-dil	&(8μ			29	29							
			Fch,Nsc	20-smd-2	&(8μ	7	6.5	10		10														
HC	CD74HC244E	CD54HC244F	Rca	20-dil-1	&(8μ	9	9	28	28	SN74HC244FH	MC74HC244N	20-dil-1	(8μ	10	10	20	20							
			Rca	20-dil-4	&(8μ	9	9	33	33		MC74HC244ADW	20-smd-2	&(4μ			27	27							
			Rca	chip	&(8μ	9	9	33	33		MC54HC244AJ	20-dil-4	&(4μ			27	27							
			Rca	20-smd-2	&(8μ	9	9	28	28		MC74HC244AN	20-dil-1	&(4μ			27	27							
			Hit	20-dil	&(8μ			29	29		MM54HC244J	20-dil-4	(8μ	10	10	20	20							
			Say	20-dil	&(8μ			29	29		Nsc	20-dil-1	(8μ	10	10	20	20							
	74ACT244P	54ACT244P	Fch,Nsc	20-dil-1	&(8μ	7	6.5	10	10		Nsc	20-dil-1	(8μ	10	10	20	20							
			Fch,Nsc	20-smd-2	&(8μ	7	6.5	10	10		Mat	20-dil-1	(8μ	10	10	20	20							
			Fch,Nsc	20-dil-1	&(8μ	7	6.5	10	10		Mat	20-smd-3	&(8μ			29	29							
			Fch,Nsc	20-smd-2	&(8μ	7	6.5	10	10		Phi, Val	20-dil-1	&(8μ	11	11	28	28							
			Fch,Nsc	20-dil-1	&(8μ	7	6.5	10	10		Phi, Val	20-smd-2	&(8μ	11	11	28	28							
			Fch,Nsc	20-smd-2	&(8μ	7	6.5	10	10		Tix	20-smd-2	&(8μ	13	13	29	29							

74244	Type		Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E-Q ns <sub>typ</sub>	t <sub>PD</sub> E-Q ns <sub>max</sub>	Note f <sub>T</sub> §f <sub>Z</sub> & f <sub>E</sub>	74245	Output: TS	8-bit bi-directional bus driver							
	0...70°C §0...75°C	-40...85°C §-25...85°C										-55...125°C	Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↑ ↑	MHz	
T74HC244 μPB74HC244	SN74HC244FN	SN54HC244J	Tix	20-chip-2	8(8μ)	13 13	34 34			Vcc = 5V Vcc = 5V								
			Tix	20-chip-1	8(8μ)	13 13	29 29											
			Tix	20-dil-4	8(8μ)	13 13	34 34											
			Tix	20-dil-4	8(8μ)	13 13	29 29											
			Tix	20-dil-1	8(8μ)	13 13	29 29											
	HCT	CD74HCT244E	CD54HCT244F CD54HCT244H	Rca	20-dil-1	8(8μ)	10 10	31 31										
				Rca	20-dil-4	8(8μ)	10 10	38 38										
				Rca	chip	8(8μ)	10 10	38 38										
		CD74HCT244M	MC54HCT244J MC74HCT244N	Rca	20-smd-2	8(8μ)	10 10	31 31										
				Hit	20-dil	8(8μ)		29 29										
Mit				20-dil	8(8μ)		29 29											
HD74HCT244 M74HCT244		MM74HCT244J MM74HCT244N PC74HCT244P PC74HCT244T	MM54HCT244J	Mot	20-dil-4													
				Mot	20-dil-1													
				Mot	20-smd-2	8(4μ)		30 30										
				Mot	20-dil-4	8(4μ)		30 30										
	Mot			20-dil-1	8(4μ)		30 30											
	SN74HCT244DW	SN74HCT244FH	SN54HCT244FH	Nsc	20-dil-4	8(8μ)	14 14	18 18										
				Nsc	20-dil-1	8(8μ)	14 14	18 18										
				Phi,Val	20-dil-1	8(8μ)	13 13	28 28										
				Phi,Val	20-smd-2	8(8μ)	13 13	28 28										
				Tix	20-smd-2	8(8μ)	15 15	35 35										
T74HCT244 μPB74HCT244		SN74HCT244FN	SN54HCT244FN	Tix	20-chip-3	8(8μ)	15 15	42 42										
				Tix	20-chip-3	8(8μ)	15 15	35 35										
				Tix	20-chip-2	8(8μ)	15 15	42 42										
				Tix	20-chip-1	8(8μ)	15 15	35 35										
				Tix	20-dil-4	8(8μ)	15 15	42 42										
	SN74HCT244J SN74HCT244N	SN54HCT244J	SN54HCT244J	Tix	20-dil-4	8(8μ)	15 15	42 42										
				Tix	20-dil-4	8(8μ)	15 15	35 35										
				Tix	20-dil-1	8(8μ)	15 15	35 35										
				Tix	20-dil-1	8(8μ)	15 15	35 35										
				Sgs	20-dil	8(8μ)		29 29										
Nec	20-dil	8(8μ)		29 29														

Input	Funktion*
FE DIR	
H X	A = B = Z
L L	A = B
L H	B = A

\* Funktion · Fonction · Funzione · Función

74245	Type		Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E-Q ns <sub>typ</sub>	t <sub>PD</sub> E-Q ns <sub>max</sub>	Note f <sub>T</sub> §f <sub>Z</sub> & f <sub>E</sub>
	0...70°C §0...75°C	-40...85°C §-25...85°C						
AC	CD74AC245E	CD54AC245E	Rca	20-dil-1	8(8μ)		8.5 8.5	
		CD54AC245H	Rca	20-dil-1	8(8μ)		7.7 7.7	
		CD54AC245M	Rca	chip	8(8μ)		8.5 8.5	
CD74AC245M	54AC245D	CD54AC245M	Rca	20-smd-2	8(8μ)		8.5 8.5	
		Fch,Nsc	Rca	20-smd-2	8(8μ)		7.7 7.7	
				20-dil-4	8(8μ)	3.5 3.5	7.5 8.5	

74245	Type		Production	Blld Sec. 3	IS &IR	tpD E-Q ns typ	tpD E-Q ns max	Note tT \$fz &fE	74245	Type		Production	Blld Sec. 3	IS &IR	tpD E-Q ns typ	tpD E-Q ns max	Note tT \$fz &fE	
	0...70°C \$0...75°C	-40...85°C \$-25...85°C								-55...125°C	0...70°C \$0...75°C							-40...85°C \$-25...85°C
				Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz					Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz	
ACT	74AC245D		Fch,Nsc	20-dil-4	&(8μ	3.5 3.5	7 7		HCT	CD74HCT245E	Rca	20-dil-1	&(8μ	10 10				
	54AC245F		Fch,Nsc	20-flat-2	&(8μ	3.5 3.5	7.5 8.5				CD54HCT245F CD54HCT245H	Rca	20-dil-4	&(8μ	10 10	33 33		
	74AC245P	54AC245L	Fch,Nsc	20-chip-2	&(8μ	3.5 3.5	7.5 8.5					Rca	chip	&(8μ	10 10	39 39		
	74AC245S		Fch,Nsc	20-dil-1	&(8μ	3.5 3.5	7 7					Rca	20-smd-2	&(8μ	10 10	33 33		
			Fch,Nsc	20-smd-2	&(8μ	3.5 3.5	7 7					Hit	20-dil	&(8μ		29 29		
												Mit	20-smd-2	&(8μ		29 29		
												Mot	20-smd-2	&(8μ		39 39		
												Mot	20-dil-4	&(8μ		39 39		
												Mot	20-dil-1	&(8μ		39 39		
												Nsc	20-dil-4	(8μ	14 14	23 23		
								Nsc	20-dil-1	(8μ		14 14	23 23					
HC	CD74ACT245E	CD54ACT245E	Rca	20-dil-1	&(8μ	9 9	28 28		HD74HCT245 M74HCT245	CD74HCT245M	Rca	20-dil-4	&(8μ	9 9	33 33			
			Rca	20-dil-4	&(8μ	9 9	33 33				Rca	chip	&(8μ	9 9	33 33			
			Rca	chip	&(8μ	9 9	33 33				Rca	20-smd-2	&(8μ	9 9	28 28			
			Rca	20-smd-2	&(8μ	9 9	28 28				Hit	20-dil	&(8μ		22 22			
											Mit	20-dil	&(8μ		22 22			
											Mot	20-dil-4			22 22			
											Mot	20-dil-1			22 22			
											Mot	20-smd-2	&(4μ		22 22			
											Mot	20-dil-4	&(4μ		22 22			
											Mot	20-dil-1	&(4μ		22 22			
MSM74HC245	MM74HC245J	MM74HC245N	Nsc	20-dil-4	(8μ	14 14	18 18		SN74HCT245DW T74HCT245 μPB74HCT245	PC74HCT245T	Phi,Val	20-dil-1	&(8μ	9 9	23 23			
	MM74HC245N	MM74HC245S	Nsc	20-dil-1	(8μ	14 14	18 18				Phi,Val	20-smd-2	&(8μ	9 9	23 23			
	MN74HC245		Mat	20-dil-1	&(8μ		22 22				Tix	20-smd-2	&(8μ	15 15	26 26			
	MN74HC245S		Mat	20-smd-3	&(8μ		22 22				Tix	20-chip-3	&(8μ	15 15	32 32			
			OkI	20-dil	&(8μ		22 22				Tix	20-chip-3	&(8μ	15 15	26 26			
			Phi,Val	20-dil-1	&(8μ	9 9	23 23				Tix	20-chip-2	&(8μ	15 15	32 32			
			Phi,Val	20-smd-2	&(8μ	9 9	23 23				Tix	20-chip-1	&(8μ	15 15	26 26			
			Tix	20-smd-2	&(8μ	15 15	26 26				Tix	20-dil-4	&(8μ	15 15	32 32			
			Tix	20-chip-3	&(8μ	15 15	26 26				Tix	20-dil-4	&(8μ	15 15	26 26			
			Tix	20-chip-2	&(8μ	15 15	32 32				Tix	20-dil-1	&(8μ	15 15	26 26			
SN74HC245DW	SN74HC245FH	SN54HC245FH	Tix	20-chip-3	&(8μ	15 15	26 26		T74HC245 μPB74HC245	SN74HC245N	Sgs	20-dil	&(8μ		22 22			
	SN74HC245FK	SN54HC245FK	Tix	20-chip-2	&(8μ	15 15	32 32				Nec	20-dil	&(8μ		22 22			
	SN74HC245FN	SN54HC245J	Tix	20-chip-1	&(8μ	15 15	26 26											
	SN74HC245J		Tix	20-dil-4	&(8μ	15 15	32 32											
	SN74HC245N		Tix	20-dil-4	&(8μ	15 15	26 26											
			Tix	20-dil-1	&(8μ	15 15	26 26											
			Sgs	20-dil	&(8μ		22 22											
			Nec	20-dil	&(8μ		22 22											

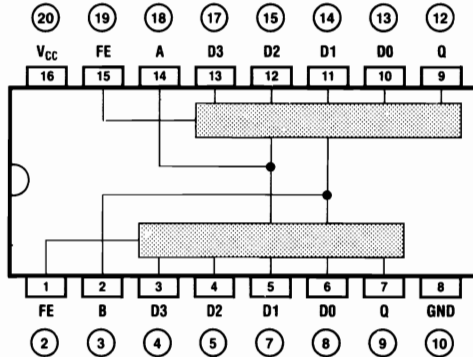


74251 Output: TS	8-line-to-1-line multiplexers							74251		Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	I <sub>PD</sub> E · Q n <sub>styp</sub> ↓ ↑ ↑	I <sub>PD</sub> E · Q n <sub>smax</sub> ↓ ↓ ↑	Note I <sub>T</sub> I <sub>FZ</sub> &I <sub>E</sub> MHz												
	0...70°C §0...75°C		- 40...85°C § - 25...85°C		- 55...125°C			Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	I <sub>PD</sub> E · Q n <sub>styp</sub> ↓ ↑ ↑							I <sub>PD</sub> E · Q n <sub>smax</sub> ↓ ↓ ↑	Note I <sub>T</sub> I <sub>FZ</sub> &I <sub>E</sub> MHz										
<table border="1"> <thead> <tr> <th>Input</th> <th>Output</th> </tr> </thead> <tbody> <tr> <td>FE C B A</td> <td>Q Q̄</td> </tr> <tr> <td>H X X X</td> <td>Z Z̄</td> </tr> <tr> <td>L L L L</td> <td>D0 D0̄</td> </tr> <tr> <td>L L L H</td> <td>D1 D1̄</td> </tr> <tr> <td>L H H H</td> <td>D7 D7̄</td> </tr> </tbody> </table>		Input	Output	FE C B A	Q Q̄	H X X X	Z Z̄	L L L L	D0 D0̄	L L L H	D1 D1̄	L H H H	D7 D7̄																
Input	Output																												
FE C B A	Q Q̄																												
H X X X	Z Z̄																												
L L L L	D0 D0̄																												
L L L H	D1 D1̄																												
L H H H	D7 D7̄																												
74251	Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	I <sub>PD</sub> E · Q n <sub>styp</sub> ↓ ↑ ↑	I <sub>PD</sub> E · Q n <sub>smax</sub> ↓ ↓ ↑	Note I <sub>T</sub> I <sub>FZ</sub> &I <sub>E</sub> MHz	74251		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	I <sub>PD</sub> E · Q n <sub>styp</sub> ↓ ↑ ↑	I <sub>PD</sub> E · Q n <sub>smax</sub> ↓ ↓ ↑	Note I <sub>T</sub> I <sub>FZ</sub> &I <sub>E</sub> MHz													
0...70°C §0...75°C		- 40...85°C § - 25...85°C							- 55...125°C								Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	I <sub>PD</sub> E · Q n <sub>styp</sub> ↓ ↑ ↑	I <sub>PD</sub> E · Q n <sub>smax</sub> ↓ ↓ ↑	Note I <sub>T</sub> I <sub>FZ</sub> &I <sub>E</sub> MHz							
AC	CD74AC251E  CD74AC251M	CD54AC251E CD54AC251H CD54AC251M	Rca	16-dil-1	&(8μ		13.5 13.5			74251D	54AC251F 54AC251L	Fch,Nsc	16-dil-3	&(8μ	6.5 7	11 11													
			Rca	16-dil-1	&(8μ		12.3 12.3			74251P 74251S	Fch,Nsc	16-flat-1 20-chip-2	&(8μ	6.5 7	12 12	12 12													
AC	CD74AC251M	54ACT251D	Rca	16-smd-1	&(8μ		13.5 13.5			ACT	CD54ACT251E CD54ACT251H CD54ACT251M	Rca	16-dil-1	&(8μ		13.5 13.5													
			Rca	16-smd-1	&(8μ		12.3 12.3					Rca	16-smd-1	&(8μ		13.5 13.5													
			Rca	16-smd-1	&(8μ		13.5 13.5						Rca	16-smd-1	&(8μ		12.3 12.3												
			Fch,Nsc	16-dil-3	&(8μ	6.5 5.5	13 13						54ACT251D	Fch,Nsc	16-dil-3	&(8μ	6.5 5.5	12 10.5											
			Fch,Nsc	16-dil-3	&(8μ	6.5 5.5	12 10.5						74ACT251D	Fch,Nsc	16-dil-3	&(8μ	6.5 5.5	13 13											
			Fch,Nsc	20-chip-2	&(8μ	6.5 5.5	13 13						74ACT251P 74ACT251S	Fch,Nsc	16-dil-2	&(8μ	6.5 5.5	12 10.5											
			Fch,Nsc	16-smd-1	&(8μ	6.5 5.5	12 10.5							Fch,Nsc	16-smd-1	&(8μ	6.5 5.5	12 10.5											
			Rca	16-dil-1	&(8μ	12 12	44 44							CD74HC251E	Rca	16-dil-1	&(8μ	12 12	44 44										
			Rca	16-dil-3	&(8μ	12 12	53 53							CD74HC251M	Rca	16-dil-3	&(8μ	12 12	53 53										
			Rca	chip	&(8μ	12 12	53 53								Rca	chip	&(8μ	12 12	53 53										
			Rca	16-smd-1	&(8μ	12 12	44 44								Rca	16-smd-1	&(8μ	12 12	44 44										
			Hit	16-dil	&(8μ		49 49						HD74HC251 M74HC251	MM74HC251J MM74HC251N MN74HC251 MN74HC251S PC74HC251P PC74HC251T	Hit	16-dil	&(8μ		49 49										
Mot	16-smd-1	(8μ	23 23	33 33								Mot	16-smd-1	(8μ	23 23	33 33													
Mot	16-dil-3	(8μ	23 23	33 33								Mot	16-dil-3	(8μ	23 23	33 33													
Mot	16-dil-1	(8μ	23 23	33 33								Mot	16-dil-1	(8μ	23 23	33 33													
Nsc	16-dil-3	(8μ	23 23	33 33								Nsc	16-dil-3	(8μ	23 23	33 33													
Nsc	16-dil-1	(8μ	23 23	33 33								Nsc	16-dil-1	(8μ	23 23	33 33													
Mat	16-dil-1	&(8μ		49 49								Mat	16-dil-1	&(8μ		49 49													
Mat	16-smd-1	&(8μ		49 49								Mat	16-smd-1	&(8μ		49 49													
Phi,Val	16-dil-2	&(8μ	18 18	43 43								Phi,Val	16-dil-2	&(8μ	18 18	43 43													
Phi,Val	16-smd-1	&(8μ	18 18	43 43								Phi,Val	16-smd-1	&(8μ	18 18	43 43													
Tix	16-smd-1	&(8μ	21 21	75 75								Tix	16-smd-1	&(8μ	21 21	75 75													
Tix	20-chip-2	&(8μ	21 21	90 90								Tix	20-chip-2	&(8μ	21 21	90 90													
Tix	16-dil-3	&(8μ	21 21	90 90								Tix	16-dil-3	&(8μ	21 21	90 90													
Tix	16-dil-2	&(8μ	21 21	75 75								Tix	16-dil-2	&(8μ	21 21	75 75													
Sgs	16-dil	&(8μ		49 49								Sgs	16-dil	&(8μ		49 49													
Nec	16-dil	&(8μ		49 49								Nec	16-dil	&(8μ		49 49													
AC	CD74HCT251E	CD54HCT251F CD54HCT251H	Rca	16-dil-1	&(8μ		12 12	44 44					Rca	16-dil-1	&(8μ	12 12	44 44												
			Rca	16-dil-3	&(8μ		12 12	53 53					Rca	16-dil-3	&(8μ	12 12	53 53												
			Rca	chip	&(8μ		12 12	53 53					Rca	chip	&(8μ	12 12	53 53												
			Rca	16-smd-1	&(8μ		12 12	44 44					Rca	16-smd-1	&(8μ	12 12	44 44												
AC	CD74HCT251M	54ACT251D	Rca	16-smd-1	&(8μ	12.3 12.3						Phi,Val	16-dil-2	&(8μ	22 22	44 44													
			Fch,Nsc	16-dil-3	&(8μ	6.5 7	12 12					Phi,Val	16-smd-1	&(8μ	22 22	44 44													

# 74253

Output: TS

## 4-line-to-1-line multiplexers



Input	Output		
FE B A Q			
H X X	X	X	Z
L L L	L	L	D0
L L H	L	H	D1
L H L	L	L	D2
L H H	L	H	D3

### 74253

0...70°C	-40...85°C	-55...125°C
0...75°C	5-25...85°C	

### Type

Production

Blld Sec. 3	IS &IR	Ipd E-Q n%typ	Ipd E-Q n%max	Note fr sfz &IE						
					Pins- Art-Nr.	↓ ↑ ↑	↓ ↓ ↑	MHz		
AC	CD74AC253E	CD54AC253E	Rca	16-dil-1	&(8μ		13.3	13.3		
			Rca	16-dil-1	&(8μ		12.1	12.1		
			Rca	chip	&(8μ		13.3	13.3		
			Rca	16-smd-1	&(8μ		13.3	13.3		
			Rca	16-smd-1	&(8μ		12.1	12.1		
			Rca	16-smd-1	&(8μ		13.3	13.3		
	74AC253D		54AC253D	Fch,Nsc	16-dil-3	&(8μ	5.5	5.5	12	13
				Fch,Nsc	16-dil-3	&(8μ	5.5	5.5	11	11.5
			54AC253F	Fch,Nsc	16-flat-1	&(8μ	5.5	5.5	12	13
			54AC253L	Fch,Nsc	20-chip-2	&(8μ	5.5	5.5	12	13
			74AC253P	Fch,Nsc	16-dil-2	&(8μ	5.5	5.5	11	11.5
			74AC253S	Fch,Nsc	16-smd-1	&(8μ	5.5	5.5	11	11.5
ACT	CD74ACT253E	CD54ACT253E	Rca	16-dil-1	&(8μ			18	18	
			Rca	16-dil-1	&(8μ			16.4	16.4	
			Rca	chip	&(8μ			18	18	
			Rca	16-smd-1	&(8μ			18	18	
			Rca	16-smd-1	&(8μ			16.4	16.4	
			Rca	16-smd-1	&(8μ			16.4	16.4	
	74ACT253D		54ACT253D	Fch,Nsc	16-dil-3	&(8μ	6.5	5.5	13.5	12
				Fch,Nsc	16-dil-3	&(8μ	6.5	5.5	12.5	11
			54ACT253F	Fch,Nsc	16-flat-1	&(8μ	6.5	5.5	13.5	12
			54ACT253L	Fch,Nsc	20-chip-2	&(8μ	6.5	5.5	13.5	12
			74ACT253P	Fch,Nsc	16-dil-2	&(8μ	6.5	5.5	12.5	11
			74ACT253S	Fch,Nsc	16-smd-1	&(8μ	6.5	5.5	12.5	11
HC	CD74HC253E		Rca	16-dil-1	&(8μ	14	14	44	44	
			Rca	16-dil-3	&(8μ	14	14	53	53	
			Rca	chip	&(8μ	14	14	53	53	
			Rca	16-smd-1	&(8μ	14	14	44	44	
			Hit	16-dil	&(8μ			35	35	
			Mil	16-dil	&(8μ			35	35	
	HD74HC253 M74HC253		MC74HC253D	Mot	16-smd-1	(8μ	19	19	23	23
			MC54HC253J	Mot	16-dil-3	(8μ	19	19	23	23
			MC74HC253N	Mot	16-dil-1	(8μ	19	19	23	23
			MM74HC253J	Nsc	16-dil-3	(8μ	19	19	23	23
			MM74HC253N	Nsc	16-dil-1	(8μ	19	19	23	23
			MN74HC253	Mat	16-dil-1	(8μ			35	35
MM74HC253J MM74HC253N MN74HC253 MN74HC253S PC74HC253P PC74HC253T		MM54HC253J	Mat	16-smd-1	&(8μ			35	35	
			Phi,Val	16-dil-2	&(8μ	20	20	44	44	
			Phi,Val	16-smd-1	&(8μ	20	20	44	44	

74253			Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>styp</sub>	t <sub>PD</sub> E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>	74257		2-line-to-1-line multiplexers		
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	mA							↓ ↓ ↑	↓ ↓ ↑	MHz	Output: TS	
T74HC253 μPB74HC253  HCT	SN74HC253FH  SN74HC253FN  SN74HC253J  SN74HC253N	SN54HC253FH	Tix	20-chip-3	&(8μ	16 16	42 42				FI (SEL) = 2				
		SN54HC253FK	Tix	20-chip-3	&(8μ	16 16	35 35								
		SN54HC253J	Tix	20-chip-2	&(8μ	16 16	42 42								
		SN54HC253J	Tix	20-chip-1	&(8μ	16 16	35 35								
		SN54HC253J	Tix	16-dil-3	&(8μ	16 16	42 42								
		SN54HC253N	Tix	16-dil-3	&(8μ	16 16	35 35								
	CD74HCT253E	Rca	16-dil-1	&(8μ	16 16	35 35									
	CD54HCT253F	Rca	16-dil-1	&(8μ	16 16	35 35									
	CD54HCT253H	Rca	16-dil-1	&(8μ	16 16	35 35									
	CD74HCT253M	Rca	16-smd-1	&(8μ	16 16	48 48									
	PC74HCT253P	Phi,Val	16-dil-2	&(8μ	20 20	48 48									
	PC74HCT253T	Phi,Val	16-smd-1	&(8μ	20 20	48 48									

FE	SEL	Q
H	X	Z
L	L	A
L	H	B

74257			Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>styp</sub>	t <sub>PD</sub> E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	mA						
AC	CD74AC257E	CD54AC257E	Rca	16-dil-1	&(8μ					9.3 9.3
		CD54AC257H	Rca	16-dil-1	&(8μ					8.5 8.5
	CD74AC257M	CD54AC257M	Rca	chip	&(8μ					9.3 9.3
		54AC257D	Rca	16-smd-1	&(8μ					9.3 9.3
			Fch,Nsc	16-smd-3	&(8μ	4.5	4			8.5 8.5

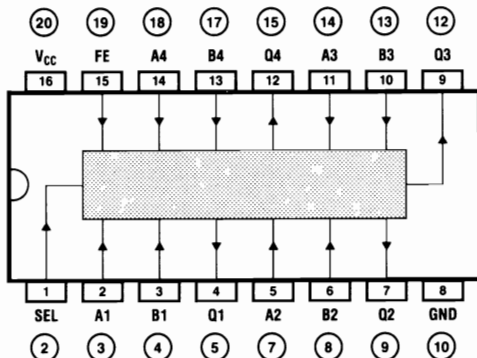
74257	Type		Production	Bild Sec. 3	IS & R	tPD E-Q	tPD E-Q n <sub>s</sub> max	Note f <sub>T</sub> §fZ &fE	74257	Type		Production	Bild Sec. 3	IS & R	tPD E-Q	tPD E-Q n <sub>s</sub> max	Note f <sub>T</sub> §fZ &fE			
	0...70°C §0...75°C	-40...85°C §-25...85°C		-55...125°C		Pins- Art-Nr.				mA	↓ ↑ ↑		↓ ↑ ↑		MHz			0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C
ACT	74AC257D	54AC257F 54AC257L	Fch,Nsc Fch,Nsc Fch,Nsc Fch,Nsc	16-dil-3 16-flat-1 20-chip-2 16-dil-2 16-smd-1	&(8μ &(8μ &(8μ &(8μ &(8μ	4.5 4 4.5 4 4.5 4 4.5 4 4.5 4			74257	CD74HCT257M MM74HCT257N PC74HCT257P PC74HCT257T	MM54HCT257J	Rca Nsc Nsc Phi,Val Phi,Val	16-smd-1 16-dil-3 16-dil-1 16-dil-2 16-smd-1	&(8μ (8μ (8μ &(8μ &(8μ	13 13 15 15 15 15 16 16 16 16	41 41 30 30 30 30 38 38 38 38	C L=150pF C L=150pF			
	74AC257P 74AC257S																			
	CD74ACT257E	CD54ACT257E CD54ACT257H CD54ACT257M	Rca Rca Rca Rca	16-dil-1 16-dil-1 chip 16-smd-1 16-smd-1	&(8μ &(8μ &(8μ &(8μ &(8μ	10.7 10.7 9.7 9.7 10.7 10.7 10.7 10.7 9.7 9.7														
	CD74ACT257M	54ACT257D	Fch,Nsc Fch,Nsc	16-dil-3 16-dil-3	&(8μ &(8μ	6 5 6 5	9.5 8 8.5 7.5													
	74ACT257D	54ACT257F 54ACT257L	Fch,Nsc Fch,Nsc	16-flat-1 20-chip-2	&(8μ &(8μ	6 5 6 5	9.5 8 9.5 8													
	74ACT257P 74ACT257S		Fch,Nsc Fch,Nsc	16-dil-2 16-smd-1	&(8μ &(8μ	6 5 6 5	8.5 7.5 8.5 7.5													
	HC	CD74HC257E	CD54HC257F CD54HC257H	Rca Rca Rca	16-dil-1 16-dil-3 chip	&(8μ &(8μ &(8μ	12 12 12 12 12 12	38 38 45 45 45 45												
		CD74HC257M	MC74HC257D MC54HC257J MC74HC257N	Hit Mit Mot	16-dil 16-dil 16-smd-1	&(8μ &(8μ (8μ	25 25 25 25 9 9	25 25 17 17 17 17												
		HD74HC257 M74HC257	MM74HC257J MM74HC257N MN74HC257 MN74HC257S PC74HC257P PC74HC257T	Nsc Nsc Mat Mat Phi,Val Phi,Val	16-dil-3 16-dil-1 16-dil-1 16-smd-1 16-dil-2 16-smd-1	(8μ (8μ (8μ &(8μ &(8μ &(8μ	9 9 9 9 9 9 25 25 13 13 13 13	17 17 17 17 17 17 25 25 28 28 28 28												
			SN54HC257FH	Tix	20-chip-3	&(8μ	10 10	30 30												
		SN74HC257FH	Tix	20-chip-3	&(8μ	10 10	25 25													
		SN54HC257FK	Tix	20-chip-2	&(8μ	10 10	30 30													
		SN74HC257FN	Tix	20-chip-1	&(8μ	10 10	25 25													
		SN74HC257J SN74HC257N	Tix Tix	16-dil-3 16-dil-3	&(8μ &(8μ	10 10 10 10	30 30 25 25													
T74HC257 μPB74HC257			Sgs Nec	16-dil 16-dil	&(8μ &(8μ	25 25 25 25	25 25 25 25													
HCT		CD74HCT257E	CD54HCT257F CD54HCT257H	Rca Rca Rca	16-dil-1 16-dil-3 chip	&(8μ &(8μ &(8μ	13 13 13 13 13 13	41 41 50 50 50 50												

**74258**

Output: TS

**2-line-to-1-line multiplexers**

FI (SEL) = 2



FE	SEL	Q
H	X	Z
L	L	A
L	H	B

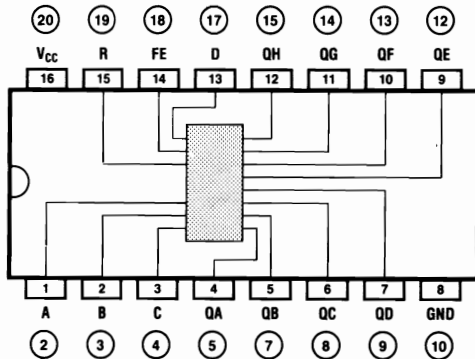
74258	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>S</sub> typ	t <sub>PD</sub> E-Q n <sub>S</sub> max	Note f <sub>T</sub> &f <sub>Z</sub> &f <sub>E</sub>	
	0...70°C §0...75°C	-40...85°C §-25...85°C							-55...125°C
AC	CD74AC258E	CD54AC258E	Rca	16-dil-1	&(8μ		8 8		
		Rca	16-dil-1	&(8μ	7.3 7.3				
		Rca	chip	&(8μ	8 8				
		Rca	16-smd-1	&(8μ	8 8				
		Rca	16-smd-1	&(8μ	7.3 7.3				
	CD74AC258M	54AC258D	Fch,Nsc	16-dil-3	&(8μ	4 4.5	7.5 9.5		
		ACT	74ACT258D	74ACT258D	Fch,Nsc	16-dil-3	&(8μ	5.5 6.5	8 9.5
				74ACT258F	Fch,Nsc	16-flat-1	&(8μ	5.5 6.5	
				74ACT258P	Fch,Nsc	20-chip-2	&(8μ	5.5 6.5	8 9.5
				74ACT258S	Fch,Nsc	16-smd-1	&(8μ	5.5 6.5	8 9.5
74ACT258S	Fch,Nsc			16-smd-1	&(8μ	5.5 6.5	8 9.5		
HC	CD74HC258E		CD54HC258E	Rca	16-dil-1	&(8μ	7 7	24 24	
			Rca	16-dil-4	&(8μ	7 7	29 29		
			Rca	chip	&(8μ	7 7	29 29		
			CD74HC258M	Rca	16-smd-1	&(8μ	7 7	24 24	
			Hit	16-dil					
HCT	CD74HCT258E	MN74HC258	Mat	16-dil-1					
		MN74HC258S	Mat	16-smd-1					
		PC74HC258P	Phi,Val	16-dil-2	&(8μ	11 11	24 24		
		PC74HC258T	Phi,Val	16-smd-1	&(8μ	11 11	24 24		
		SN54HC258FH	Tix	20-chip-3	&(8μ	13 13	30 30		
	CD74HCT258M	CD54HCT258F	Rca	16-dil-4	&(8μ	11 11	41 41		
		Rca	chip	&(8μ	11 11	41 41			
		Rca	16-smd-1	&(8μ	11 11	34 34			
		PC74HCT258P	Phi,Val	16-dil-2	&(8μ	16 16	34 34		
		PC74HCT258T	Phi,Val	16-smd-1	&(8μ	16 16	34 34		

**74259**

Output: TP

8-bit latch

Pin	FI
	N LS
FE	1,5 1,1



Input					Output							
R	FE	C	B	A	QA	QB	QC	QD	QE	QF	QG	QH
L	H	X	X	X	L	L	L	L	L	L	L	L
H	H	X	X	X	*	*	*	*	*	*	*	*
H	L	L	L	L	D	*	*	*	*	*	*	*
H	L	L	L	H	*	D	*	*	*	*	*	*
H	L	L	H	L	*	*	D	*	*	*	*	*
.	.	.	.	.	.	.	.	.	.	.	.	.
H	L	H	H	H	.	.	.	.	.	.	.	D
L	L	L	L	L	D	L	L	L	L	L	L	L
L	L	L	L	H	L	D	L	L	L	L	L	L
.	.	.	.	.	.	.	.	.	.	.	.	.
L	L	H	H	H	L	L	L	L	L	L	L	D

- \* Keine Veränderung
- \* No change
- \* Pas de modification
- \* Senza alterazione
- \* Sin modificación

**74259**

Type

0...70°C §0...75°C	-40...85°C § -25...85°C	-55...125°C
-----------------------	----------------------------	-------------

Production

Bild Sec. 3

Pin-Art-Nr.

IS &IR  
mA

tPD E-Q  
n&typ  
↓ ↑ ↑

tPD E-Q  
n&max  
↓ ↑ ↑

Note  
fT &fz &fE  
MHz

HC

CD74HC259E

Rca

16-dil-1

&(8μ

15 15

46 46

CD54HC259F  
CD54HC259H

Rca  
chip

16-dil-3

&(8μ

15 15

56 56

CD74HC259M

Rca

16-smd-1

&(8μ

15 15

46 46

HD74HC259  
MB74HC259

Hit  
Fu

16-dil  
16-dil

&(8μ

46 46

MC74HC259D  
MC54HC259J  
MC74HC259N

Mot  
Mot  
Mot

16-smd-1  
16-dil-3  
16-dil-1

&(8μ

56 56

MM74HC259J  
MM74HC259N  
PC74HC259P  
PC74HC259T

Nsc  
Nsc  
Phi,Val  
Phi,Val

16-dil-3  
16-dil-1  
16-dil-2  
16-smd-1

(8μ

17 17

32 32

SN74HC259D

Tix

16-smd-1

&(8μ

17 17

33 33

SN74HC259N

Tix

20-chip-2

&(8μ

17 17

39 39

T74HC259  
TD74HC259  
μPB74HC259

Tos  
Sgs  
Tos  
Nec

16-dil  
16-dil  
16-dil  
16-dil

&(8μ

46 46

SN54HC259FK  
SN54HC259J

Tix

16-dil-3

&(8μ

17 17

33 33

HCT

CD74HCT259E

Rca

16-dil-1

&(8μ

16 16

49 49

CD54HCT259F  
CD54HCT259H

Rca  
Rca

16-dil-3  
chip

&(8μ

16 16

59 59

CD74HCT259M  
PC74HCT259P  
PC74HCT259T

Rca  
Phi,Val  
Phi,Val  
Tos

16-smd-1  
16-dil-2  
16-smd-1  
16-dil

&(8μ

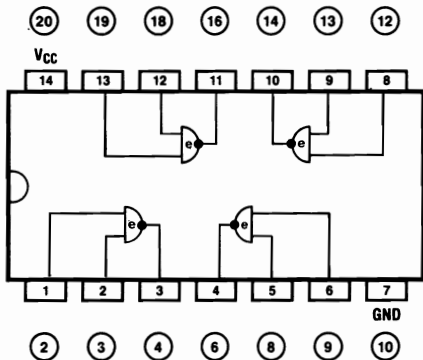
16 16

49 49

TD74HCT259

**74266**  
Output: OD

EX-NOR gates



FI = 2

FQ = 22

Logiktablelle siehe Section 1  
Function table see section 1  
Tableau logique voir section 1  
Per tavola di logica vedi sezione 1  
Tabla de verdad, ver sección 1

**74266**

Type

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Production

Bild  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>  
E-Q  
n<sub>typ</sub>

t<sub>PD</sub>  
E-Q  
n<sub>max</sub>

Note  
f<sub>T</sub> §f<sub>Z</sub>  
&f<sub>E</sub>

Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz

HC

HD74HC266

SN74HC266D

„PB74HC266

MC54HC266J  
MC74HC266N  
MM54HC266J

MM74HC266J  
MM74HC266N  
MN74HC266  
MN74HC266S

SN54HC266FH

SN74HC266FH

SN54HC266FK

SN74HC266FN

SN54HC266J

SN74HC266J

SN74HC266N

Hil

Mot

Mot

Nsc

Nsc

Mat

Mat

Tix

Tix

Tix

Tix

Tix

Tix

Tix

Tix

Tix

Nec

14-dil

14-dil-4

14-dil-1

14-dil-4

14-dil-1

14-dil-1

14-smd-1

14-smd-1

20-chip-3

20-chip-2

20-chip-1

14-dil-4

14-dil-4

14-dil-1

14-dil

8(2μ

8(2μ

8(2μ

8(2μ

8(2μ

8(2μ

8(2μ

8(2μ

8(2μ

8(2μ

8(2μ

8(2μ

8(2μ

8(2μ

8(2μ

8(2μ

8(2μ

10 10

10 10

10 10

10 10

10 10

13 13

13 13

13 13

13 13

13 13

13 13

13 13

13 13

13 13

13 13

13 13

13 13

30 30

20 20

20 20

20 20

20 20

30 30

30 30

25 31

30 38

25 31

30 38

25 31

30 38

25 31

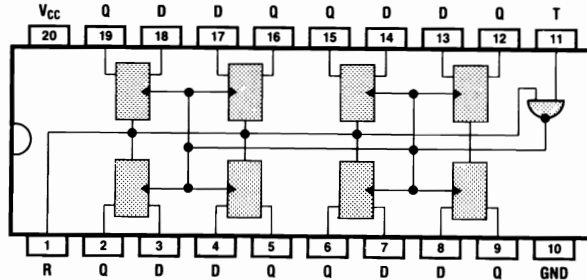
25 31

30 30

**74273**

Output: TP

**8 D-type flip-flops**



Pin	FI
	N LS
R	2 1,1

Input	Output
R D T	Q
L X X	L
H X L	·
H H ↑	H
H L ↑	L

- \* Keine Veränderung
- \* No change
- \* Pas de modification
- \* Senza alterazione
- \* Sin modificación

**74273**

Type

0...70°C  
§0...75°C

- 40...85°C  
§ - 25...85°C

- 55...125°C

Production

Bild  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>

E -Q

t<sub>PD</sub>

E -Q

n<sub>s</sub>max

Note

t<sub>T</sub> t<sub>FZ</sub>

&t<sub>E</sub>

MHz

AC

CD74AC273E

CD54AC273E  
CD54AC273H  
CD54AC273M

Rca  
Rca  
Rca  
Rca

20-dil-1  
20-dil-1  
chip  
20-smd-2

&(8μ  
&(8μ  
&(8μ  
&(8μ

13.5 13.5  
12.3 12.3  
13.5 13.5  
13.5 13.5

12.3 12.3

95

125

95

125

125

125

ACT

CD74ACT273E

CD54ACT273E  
CD54ACT273H  
CD54ACT273M

Rca  
Rca  
Rca  
Rca

20-dil-1  
20-dil-1  
chip  
20-smd-2

&(8μ  
&(8μ  
&(8μ  
&(8μ

13.5 13.5  
12.3 12.3  
13.5 13.5  
13.5 13.5

12.3 12.3

6.5 6

6.5 6

6.5 6

HC

CD74HC273E

CD54HC273F  
CD54HC273H

Rca  
Rca  
Rca  
Rca

20-dil-1  
20-dil-4  
chip  
20-smd-2

&(8μ  
&(8μ  
&(8μ  
&(8μ

12 12  
12 12  
12 12  
12 12

38 38

25

20

20

25

21

21

21

30

30

30

31

31

21

21

24

24

21

18

18

48 48

18

HD74HC273  
M74HC273  
MB74HC273

CD74HC273M

MC74HC273DW  
MC54HC273J  
MC74HC273N  
MM54HC273J

Hit  
Mit  
Fui  
Mot  
Mot  
Mot

20-dil  
20-dil  
20-dil  
20-smd-2

&(8μ  
&(8μ  
&(8μ  
(8μ

40 40  
40 40  
40 40  
27 27

40 40

27 27

30

30

30

SN74HC273DW

MM74HC273J  
MM74HC273N  
MN74HC273  
MN74HC273S  
PC74HC273P  
PC74HC273T

SN54HC273FH

Nsc  
Nsc  
Mat  
Mat  
Phi, Val  
Phi, Val  
Tix  
Tix

20-dil-4  
20-dil-1  
20-dil-4  
20-dil-1  
20-smd-3  
20-dil-1  
20-smd-2  
20-smd-2  
20-chp-3

(8μ  
(8μ  
(8μ  
(8μ  
(8μ  
(8μ  
(8μ  
(8μ  
(8μ

14 14  
14 14  
14 14  
19 19  
19 19  
19 19  
18 18  
18 18  
15 15  
15 15

27 27

27 27

30

30

30

31

31

21

21

24

24

21

18

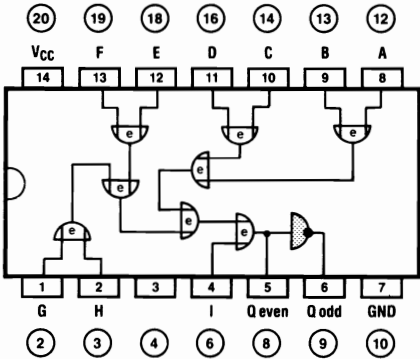
18



74273	Type		Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E · Q n <sub>styp</sub>	t <sub>PD</sub> E · Q n <sub>smax</sub>	Note f <sub>T</sub> §f <sub>Z</sub> & f <sub>E</sub>	74279	Output: TP	RS-flip-flops
	0...70°C §0...75°C	- 40...85°C § - 25...85°C									
T74HC273 μPB74HC273 HCT	SN74HC273FH SN74HC273FN SN74HC273J SN74HC273N	SN54HC273FK SN54HC273J	Tix	20-chip-3	8(8μ)	15 15	40 40	21			
			Tix	20-chip-2	8(8μ)	15 15	48 48	18			
			Tix	20-chip-1	8(8μ)	15 15	40 40	21			
			Tix	20-dil-4	8(8μ)	15 15	48 48	18			
			Tix	20-dil-4	8(8μ)	15 15	40 40	21			
	M74HCT273	CD74HCT273E CD54HCT273F CD54HCT273H CD74HCT273M	MM54HCT273J	Rca	20-dil-1	8(8μ)	12 12	38 38		20	
				Rca	20-dil-4	8(8μ)	12 12	45 45		16	
				Rca	chip	8(8μ)	12 12	45 45		16	
				Rca	20-smd-2	8(8μ)	12 12	38 38		20	
				Mit	20-dil						
M74HCT273	MM74HCT273J MM74HCT273N PC74HCT273P PC74HCT273T	MM54HCT273J	Nsc	20-dil-4	(8μ)	22 22	35 35	27			
			Nsc	20-dil-1	(8μ)	22 22	35 35	27			
			Phi,Val	20-dil-1	8(8μ)	18 18	44 44	15			
			Phi,Val	20-smd-2	8(8μ)	18 18	44 44	15			

74279	Type		Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E · Q n <sub>styp</sub>	t <sub>PD</sub> E · Q n <sub>smax</sub>	Note f <sub>T</sub> §f <sub>Z</sub> & f <sub>E</sub>
	0...70°C §0...75°C	- 40...85°C § - 25...85°C						
HC HD74HC279 M74HC279 T74HC279 TD74HC279			Hit Mit Sgs Tos	16-dil 16-dil 16-dil 16-dil				

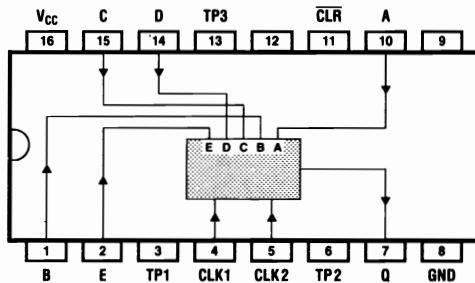
74280		9-bit priority checker			74280		Type		Production	Bld Sec. 3	I <sub>S</sub> & I <sub>R</sub>	I <sub>PD</sub> E · Q nstyp	I <sub>PD</sub> E · Q nsmax	Note I <sub>T</sub> I <sub>Z</sub> & I <sub>E</sub>										
Output: TP					0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins-Art-Nr.							mA	↓ ↑ ↑	↓ ↓ ↑	MHz						
 <table border="1" data-bbox="87 644 306 722"> <thead> <tr> <th>Σ H's (A...I)</th> <th>Q even</th> <th>Q odd</th> </tr> </thead> <tbody> <tr> <td>even</td> <td>H</td> <td>L</td> </tr> <tr> <td>odd</td> <td>L</td> <td>H</td> </tr> </tbody> </table>					Σ H's (A...I)	Q even	Q odd	even	H	L	odd	L	H	ACT	74AC280P 74AC280S	Fch,Nsc Fch,Nsc	14-dil-1 14-smd-1							
					Σ H's (A...I)	Q even	Q odd																	
even	H	L																						
odd	L	H																						
HC	CD74ACT280E CD74ACT280H CD74ACT280M	Rca Rca Rca Rca	14-dil-1 14-dil-1 chip 14-smd-1	&(8μ &(8μ &(8μ &(8μ	21.6 21.6 19.6 19.6 21.6 21.6 21.6 21.6																			
HD74HC280 M74HC280 MB74HC280	CD74HC280E CD74HC280M	Rca Rca Rca	14-dil-1 14-dil-4 chip 14-smd-1	&(8μ &(8μ &(8μ &(8μ	17 17 60 60 60 60 50 50																			
SN74HC280D	MM74HC280J MM74HC280N MN74HC280 MN74HC280S PC74HC280P PC74HC280T	Mot Mot Mot Nsc Nsc Mat Mat Phi,Val Phi,Val	14-dil-4 14-dil-1 14-dil-1 14-dil-4 14-dil-1 14-dil-1 14-smd-1 14-dil-1 14-smd-1	(8μ (8μ (8μ (8μ (8μ (8μ (8μ (8μ (8μ	17 17 35 35 35 35 17 17 35 35 52 52 52 52 20 20 20 50																			
	SN74HC280F	Tix	20-chip-3	&(8μ	21 21 61 61																			
	SN74HC280FN	Tix	20-chip-2	&(8μ	21 21 61 61																			
	SN74HC280J	Tix	20-chip-1	&(8μ	21 21 52 52																			
	SN74HC280J	Tix	14-dil-4	&(8μ	21 21 61 61																			
	SN74HC280J	Tix	14-dil-4	&(8μ	21 21 52 52																			
	SN74HC280N	Tix	14-dil-1	&(8μ	21 21 52 52																			
	T74HC280 μPB74HC280	Sgs Nec	14-dil	&(8μ	52 52 52 52																			
	HCT	CD74HCT280E	Rca	14-dil-1	&(8μ	19 19 56 56																		
		CD74HCT280M	Rca	14-dil-4	&(8μ	19 19 68 68																		
		CD54HCT280F CD54HCT280H	Rca Rca	chip 14-smd-1	&(8μ &(8μ	19 19 68 68																		
AC	CD74AC280E CD74AC280M 74AC280D	CD54AC280E CD54AC280H CD54AC280M	Rca Rca Rca Rca	14-dil-1 14-dil-1 chip 14-smd-1 14-smd-1	&(8μ &(8μ &(8μ &(8μ &(8μ	19.1 19.1 21 21 21 21 19.1 19.1																		
			Rca	14-dil-4	&(8μ	19.1 19.1																		

74283 Output: TP	4-bit full adder				74283			Type	Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n*typ	t <sub>PD</sub> E-Q n*max	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>																																																																																																																																															
					Type																																																																																																																																																								
					0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C																																																																																																																																																						
<p>LS283: FI (A, B) = 2,2 283 + S283: FQ (C4) = 5</p>																																																																																																																																																													
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="2">Input</th> <th colspan="2">Output</th> </tr> <tr> <th>A<sub>n+1</sub></th> <th>B<sub>n+1</sub></th> <th>Σ<sub>n</sub> *C<sub>E</sub></th> <th>Σ<sub>n+1</sub> **C<sub>Q</sub></th> <th>Σ<sub>n+1</sub></th> <th>Σ<sub>n+2</sub></th> </tr> </thead> <tbody> <tr><td>L</td><td>L</td><td>L</td><td>L</td><td>L</td><td>L</td></tr> <tr><td>H</td><td>L</td><td>L</td><td>L</td><td>H</td><td>L</td></tr> <tr><td>L</td><td>H</td><td>L</td><td>H</td><td>L</td><td>L</td></tr> <tr><td>H</td><td>H</td><td>L</td><td>L</td><td>L</td><td>H</td></tr> <tr><td>L</td><td>L</td><td>H</td><td>H</td><td>L</td><td>L</td></tr> <tr><td>H</td><td>L</td><td>H</td><td>L</td><td>H</td><td>H</td></tr> <tr><td>L</td><td>H</td><td>H</td><td>L</td><td>H</td><td>H</td></tr> <tr><td>H</td><td>H</td><td>H</td><td>H</td><td>H</td><td>H</td></tr> </tbody> </table>															Input		Output		A <sub>n+1</sub>	B <sub>n+1</sub>	Σ <sub>n</sub> *C <sub>E</sub>	Σ <sub>n+1</sub> **C <sub>Q</sub>	Σ <sub>n+1</sub>	Σ <sub>n+2</sub>	L	L	L	L	L	L	H	L	L	L	H	L	L	H	L	H	L	L	H	H	L	L	L	H	L	L	H	H	L	L	H	L	H	L	H	H	L	H	H	L	H	H	H	H	H	H	H	H																																																																																					
Input		Output																																																																																																																																																											
A <sub>n+1</sub>	B <sub>n+1</sub>	Σ <sub>n</sub> *C <sub>E</sub>	Σ <sub>n+1</sub> **C <sub>Q</sub>	Σ <sub>n+1</sub>	Σ <sub>n+2</sub>																																																																																																																																																								
L	L	L	L	L	L																																																																																																																																																								
H	L	L	L	H	L																																																																																																																																																								
L	H	L	H	L	L																																																																																																																																																								
H	H	L	L	L	H																																																																																																																																																								
L	L	H	H	L	L																																																																																																																																																								
H	L	H	L	H	H																																																																																																																																																								
L	H	H	L	H	H																																																																																																																																																								
H	H	H	H	H	H																																																																																																																																																								
<p>* für/when/pour/per/para A1, B1 ** für/when/pour/per/para A4, B4</p>																																																																																																																																																													
74283	Type			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n*typ	t <sub>PD</sub> E-Q n*max	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>																																																																																																																																																				
Type																																																																																																																																																													
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C																																																																																																																																																											
AC	CD74AC283E	CD54AC283E CD54AC283H	Rca Rca Rca	16-dil-1 16-dil-1 chip	&(8μ &(8μ &(8μ			18.2 18.2 16.5 16.5 18.2 18.2																																																																																																																																																					
<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="3">74283</th> <th rowspan="3">Production</th> <th rowspan="3">Bild Sec. 3</th> <th rowspan="3">I<sub>S</sub> &amp;I<sub>R</sub></th> <th rowspan="3">t<sub>PD</sub> E-Q n*typ</th> <th rowspan="3">t<sub>PD</sub> E-Q n*max</th> <th rowspan="3">Note f<sub>T</sub> f<sub>z</sub> &amp;f<sub>E</sub></th> </tr> <tr> <th colspan="3">Type</th> </tr> <tr> <th>0...70°C §0...75°C</th> <th>-40...85°C §-25...85°C</th> <th>-55...125°C</th> </tr> </thead> <tbody> <tr> <td>ACT</td> <td>CD74AC283M</td> <td>CD54AC283M</td> <td>Rca Rca</td> <td>16-smd-1 16-smd-1</td> <td>&amp;(8μ &amp;(8μ</td> <td></td> <td></td> <td>18.2 18.2 16.5 16.5</td> </tr> <tr> <td rowspan="2">HC</td> <td>CD74ACT283E</td> <td>CD54ACT283E</td> <td>Rca Rca</td> <td>16-dil-1 16-dil-1</td> <td>&amp;(8μ &amp;(8μ</td> <td></td> <td></td> <td>18.2 18.2 16.5 16.5</td> </tr> <tr> <td>CD74ACT283M</td> <td>CD54ACT283H CD54ACT283M</td> <td>Rca Rca</td> <td>16-smd-1 16-smd-1</td> <td>&amp;(8μ &amp;(8μ</td> <td></td> <td></td> <td>18.2 18.2 16.5 16.5</td> </tr> <tr> <td rowspan="2">HD74HC283 MB74HC283</td> <td>CD74HC283E</td> <td>CD54HC283E CD54HC283H</td> <td>Rca Rca Rca</td> <td>16-dil-1 16-dil-4 chip</td> <td>&amp;(8μ &amp;(8μ &amp;(8μ</td> <td>18 18</td> <td>53 53</td> <td>53 53 63 63 63 63</td> </tr> <tr> <td>CD74HC283M</td> <td>CD54HC283M</td> <td>Rca</td> <td>16-smd-1</td> <td>&amp;(8μ</td> <td>18 18</td> <td>53 53</td> <td>53 53</td> </tr> <tr> <td rowspan="2">MSM74HC283</td> <td>MM74HC283J</td> <td>MC54HC283J MC74HC283N</td> <td>Mot Mot</td> <td>16-dil-3 16-dil-1</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>MM74HC283N</td> <td>MM54HC283J</td> <td>Nsc</td> <td>16-dil-3</td> <td>(8μ</td> <td>18 18</td> <td>26 26</td> <td>26 26</td> </tr> <tr> <td rowspan="2">SN74HC283D</td> <td>PC74HC283P</td> <td>SN54HC283FK</td> <td>Phi,Val Phi,Val</td> <td>16-dil-2 16-smd-1</td> <td>&amp;(8μ &amp;(8μ</td> <td>25 25</td> <td>53 53</td> <td>53 53</td> </tr> <tr> <td>PC74HC283T</td> <td>SN54HC283J</td> <td>Tix</td> <td>16-smd-1</td> <td>&amp;(8μ</td> <td>25 25</td> <td>44 44</td> <td>44 44</td> </tr> <tr> <td rowspan="2">SN74HC283N T74HC283 TD74HC283 μPB74HC283</td> <td></td> <td></td> <td>Tix</td> <td>20-chip-2</td> <td>&amp;(8μ</td> <td>25 25</td> <td>52 52</td> <td>52 52</td> </tr> <tr> <td></td> <td></td> <td>Tix</td> <td>16-dil-3</td> <td>&amp;(8μ</td> <td>25 25</td> <td>52 52</td> <td>52 52</td> </tr> <tr> <td rowspan="2">HCT</td> <td></td> <td></td> <td>Sgs</td> <td>16-dil-2</td> <td>&amp;(8μ</td> <td>25 25</td> <td>44 44</td> <td>44 44</td> </tr> <tr> <td></td> <td></td> <td>Tos Nec</td> <td>16-dil 16-dil</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="2">TD74HCT283</td> <td>CD74HCT283E</td> <td>CD54HCT283F CD54HCT283H</td> <td>Rca Rca</td> <td>16-dil-1 16-dil-4</td> <td>&amp;(8μ &amp;(8μ</td> <td>21 21</td> <td>61 61</td> <td>61 61</td> </tr> <tr> <td>CD74HCT283M PC74HCT283P PC74HCT283T</td> <td></td> <td>Rca Phi,Val Phi,Val Tos</td> <td>chip 16-smd-1 16-dil-2 16-smd-1 16-dil</td> <td>&amp;(8μ &amp;(8μ &amp;(8μ &amp;(8μ</td> <td>21 21 21 21 29 29 29 29</td> <td>74 74 61 61 61 61 61 61</td> <td>74 74 61 61 61 61 61 61</td> </tr> </tbody> </table>															74283			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n*typ	t <sub>PD</sub> E-Q n*max	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>	Type			0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	ACT	CD74AC283M	CD54AC283M	Rca Rca	16-smd-1 16-smd-1	&(8μ &(8μ			18.2 18.2 16.5 16.5	HC	CD74ACT283E	CD54ACT283E	Rca Rca	16-dil-1 16-dil-1	&(8μ &(8μ			18.2 18.2 16.5 16.5	CD74ACT283M	CD54ACT283H CD54ACT283M	Rca Rca	16-smd-1 16-smd-1	&(8μ &(8μ			18.2 18.2 16.5 16.5	HD74HC283 MB74HC283	CD74HC283E	CD54HC283E CD54HC283H	Rca Rca Rca	16-dil-1 16-dil-4 chip	&(8μ &(8μ &(8μ	18 18	53 53	53 53 63 63 63 63	CD74HC283M	CD54HC283M	Rca	16-smd-1	&(8μ	18 18	53 53	53 53	MSM74HC283	MM74HC283J	MC54HC283J MC74HC283N	Mot Mot	16-dil-3 16-dil-1					MM74HC283N	MM54HC283J	Nsc	16-dil-3	(8μ	18 18	26 26	26 26	SN74HC283D	PC74HC283P	SN54HC283FK	Phi,Val Phi,Val	16-dil-2 16-smd-1	&(8μ &(8μ	25 25	53 53	53 53	PC74HC283T	SN54HC283J	Tix	16-smd-1	&(8μ	25 25	44 44	44 44	SN74HC283N T74HC283 TD74HC283 μPB74HC283			Tix	20-chip-2	&(8μ	25 25	52 52	52 52			Tix	16-dil-3	&(8μ	25 25	52 52	52 52	HCT			Sgs	16-dil-2	&(8μ	25 25	44 44	44 44			Tos Nec	16-dil 16-dil					TD74HCT283	CD74HCT283E	CD54HCT283F CD54HCT283H	Rca Rca	16-dil-1 16-dil-4	&(8μ &(8μ	21 21	61 61	61 61	CD74HCT283M PC74HCT283P PC74HCT283T		Rca Phi,Val Phi,Val Tos	chip 16-smd-1 16-dil-2 16-smd-1 16-dil	&(8μ &(8μ &(8μ &(8μ	21 21 21 21 29 29 29 29	74 74 61 61 61 61 61 61	74 74 61 61 61 61 61 61
74283			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n*typ	t <sub>PD</sub> E-Q n*max	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>																																																																																																																																																					
Type																																																																																																																																																													
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C																																																																																																																																																											
ACT	CD74AC283M	CD54AC283M	Rca Rca	16-smd-1 16-smd-1	&(8μ &(8μ			18.2 18.2 16.5 16.5																																																																																																																																																					
HC	CD74ACT283E	CD54ACT283E	Rca Rca	16-dil-1 16-dil-1	&(8μ &(8μ			18.2 18.2 16.5 16.5																																																																																																																																																					
	CD74ACT283M	CD54ACT283H CD54ACT283M	Rca Rca	16-smd-1 16-smd-1	&(8μ &(8μ			18.2 18.2 16.5 16.5																																																																																																																																																					
HD74HC283 MB74HC283	CD74HC283E	CD54HC283E CD54HC283H	Rca Rca Rca	16-dil-1 16-dil-4 chip	&(8μ &(8μ &(8μ	18 18	53 53	53 53 63 63 63 63																																																																																																																																																					
	CD74HC283M	CD54HC283M	Rca	16-smd-1	&(8μ	18 18	53 53	53 53																																																																																																																																																					
MSM74HC283	MM74HC283J	MC54HC283J MC74HC283N	Mot Mot	16-dil-3 16-dil-1																																																																																																																																																									
	MM74HC283N	MM54HC283J	Nsc	16-dil-3	(8μ	18 18	26 26	26 26																																																																																																																																																					
SN74HC283D	PC74HC283P	SN54HC283FK	Phi,Val Phi,Val	16-dil-2 16-smd-1	&(8μ &(8μ	25 25	53 53	53 53																																																																																																																																																					
	PC74HC283T	SN54HC283J	Tix	16-smd-1	&(8μ	25 25	44 44	44 44																																																																																																																																																					
SN74HC283N T74HC283 TD74HC283 μPB74HC283			Tix	20-chip-2	&(8μ	25 25	52 52	52 52																																																																																																																																																					
			Tix	16-dil-3	&(8μ	25 25	52 52	52 52																																																																																																																																																					
HCT			Sgs	16-dil-2	&(8μ	25 25	44 44	44 44																																																																																																																																																					
			Tos Nec	16-dil 16-dil																																																																																																																																																									
TD74HCT283	CD74HCT283E	CD54HCT283F CD54HCT283H	Rca Rca	16-dil-1 16-dil-4	&(8μ &(8μ	21 21	61 61	61 61																																																																																																																																																					
	CD74HCT283M PC74HCT283P PC74HCT283T		Rca Phi,Val Phi,Val Tos	chip 16-smd-1 16-dil-2 16-smd-1 16-dil	&(8μ &(8μ &(8μ &(8μ	21 21 21 21 29 29 29 29	74 74 61 61 61 61 61 61	74 74 61 61 61 61 61 61																																																																																																																																																					

# 74292

Output: TP

Frequency divider, programmable up to 1:2<sup>31</sup>



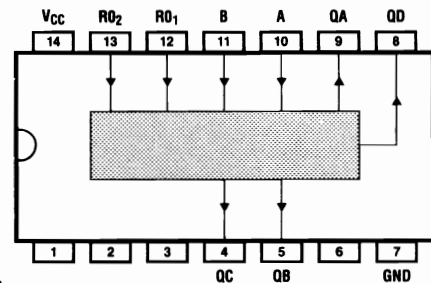
E	D	C	B	A	Divide
L	L	L	L	L	—
L	L	L	L	H	—
L	L	L	H	L	1:2 <sup>2</sup>
L	L	L	H	H	1:2 <sup>3</sup>
L	L	H	L	L	1:2 <sup>4</sup>
.	.	.	.	.	.
.	.	.	.	.	.
H	H	H	H	L	1:2 <sup>30</sup>
H	H	H	H	H	1:2 <sup>31</sup>

CLR	CLK1	CLK2	Function
L	X	X	clear
H	L	L	count
H	L	L	count
H	H	X	—
H	X	H	—

# 74293

Output: TP

4-bit binary counter



Pin	FI	
	N	LS
A	2	6,7
B	2	4,4

Input			Output			
R01	R02	*	QD	QC	QB	QA
H	H	X	L	L	L	L
.	.	.	.	.	.	.
1	.	.	L	L	L	H
2	.	.	L	L	H	L
.	.	.	.	.	.	.
.	.	.	.	.	.	.
15	.	.	H	H	H	H
16	.	.	L	L	L	L
.	.	.	.	.	.	.
.	.	.	.	.	.	.

- \* Anzahl der Taktimpulse
- Number of clock pulses
- Nombre des impulsions d'horloge
- Numero di impulsi di cadenza
- Número de pulsos de reloj

74292	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>styp</sub>	t <sub>PD</sub> E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>	74293	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>styp</sub>	t <sub>PD</sub> E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C						
HC	MM74HC292J MM74HC292N	MC54HC292J MC74HC292N MM54HC292J	Mot Mot Nsc Nsc	16-dil-3 16-dil-1 16-dil-3 16-dil-1	(8μ (8μ	70 70 70 70	100 100 100 100	32 32	HC MB74HC293 T74HC293	Fui Sgs	14-dil 14-dil						

# 74294

Output: TP

Frequency divider, programmable up to 1:2<sup>15</sup>

74294

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E · Q  
n<sub>S</sub>typ

t<sub>PD</sub>  
E · Q  
n<sub>S</sub>max

Note  
f<sub>T</sub> f<sub>Z</sub>  
& t<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

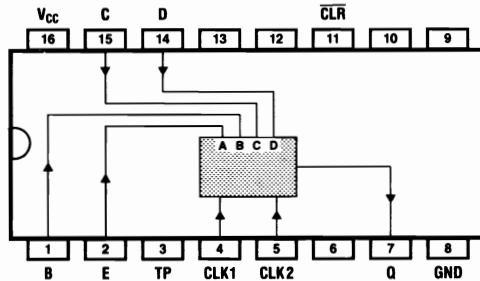
Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz



CLR	CLK1	CLK2	Function
L	X	X	clear count
H	L	L	count
H	L	L	count
H	H	X	—
H	X	H	—

D	C	B	A	Divide
L	L	L	L	—
L	L	L	H	—
L	L	H	L	1:2 <sup>2</sup>
L	L	H	H	1:2 <sup>3</sup>
.	.	.	.	.
.	.	.	.	.
H	H	H	L	1:2 <sup>14</sup>
H	H	H	H	1:2 <sup>15</sup>

HC

MM74HC294J  
MM74HC294N

MCS54HC294J  
MC74HC294N  
MM54HC294J

Mot  
Mot  
Nsc  
Nsc

16-dil-3  
16-dil-1  
16-dil-3  
16-dil-1

(8μ  
(8μ

70 70  
70 70

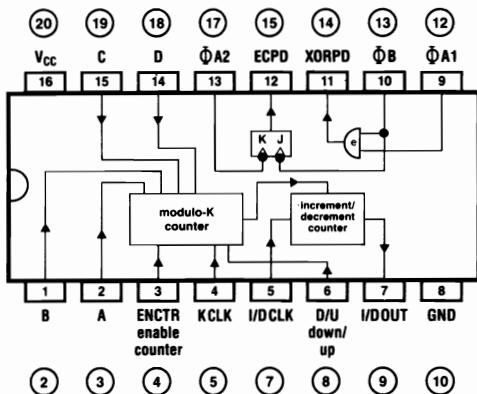
100 100  
100 100

32  
32

# 74297

Output: TP

## Digital PLL filter



D	C	B	A	Modulo (K)
L	L	L	L	—
L	L	L	H	23
L	L	H	L	24
L	L	H	H	25
L	H	L	L	26
L	H	L	H	27
L	H	H	L	28
L	H	H	H	29
H	L	L	L	210
H	L	L	H	211
H	L	H	L	212
H	L	H	H	213
H	H	L	L	214
H	H	L	H	215
H	H	H	L	216
H	H	H	H	217

Exclusive-OR phase detector		
ΦA1	ΦB	XORPD
L	L	L
L	H	H
H	L	H
H	H	L

Edge-controlled phase detector		
ΦA2	ΦB	ECPD
X	L	H
L	X	L
X	L	no change
L	X	no change

### 74297

Type

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Production

Bild  
Sec. 3

Is

Pin-  
Art-Nr.

tpD

E → Q

nstyp

tpD

E → Q

nmax

Note

tT

tZ

& tE

MHz

AC

CD74AC297E

CD54AC297E

Rca

16-dil-1

&(8μ

Rca

16-dil-1

&(8μ

Rca

chip

&(8μ

CD74AC297M

CD54AC297M

Rca

16-smd-1

&(8μ

Rca

16-smd-1

&(8μ

ACT

CD74ACT297E

CD54ACT297E

Rca

16-dil-1

&(8μ

Rca

16-dil-1

&(8μ

Rca

chip

&(8μ

CD74ACT297M

CD54ACT297M

Rca

16-smd-1

&(8μ

Rca

16-smd-1

&(8μ

HC

CD74HC297E

CD54HC297F

Rca

16-dil-1

&(8μ

44 44

CD74HC297M

CD54HC297H

Rca

16-dil-3

&(8μ

53 53

CD74HC297P

PC74HC297P

Rca

chip

&(8μ

53 53

PC74HC297T

PC74HC297T

Phi, Val

16-smd-1

&(8μ

44 44

Phi, Val

16-dil-2

&(8μ

44 44

Phi, Val

18 18

18 18

44 44

16

HCT

CD74HCT297E

CD54HCT297F

Rca

16-dil-1

&(8μ

44 44

CD74HCT297M

CD54HCT297H

Rca

16-dil-3

&(8μ

53 53

PC74HCT297P

PC74HCT297P

Rca

chip

&(8μ

53 53

PC74HCT297T

PC74HCT297T

Rca

16-smd-1

&(8μ

44 44

Phi, Val

16-dil-2

&(8μ

44 44

Phi, Val

21 21

21 21

44 44

16

**74298**  
Output: TP

4 2-line-to-1-line multiplexers with latch

**74298**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>

t<sub>PD</sub>  
E-Q

t<sub>PD</sub>  
E-Q

Note

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>  
E-Q  
n<sub>S</sub>typ

t<sub>PD</sub>  
E-Q  
n<sub>S</sub>max

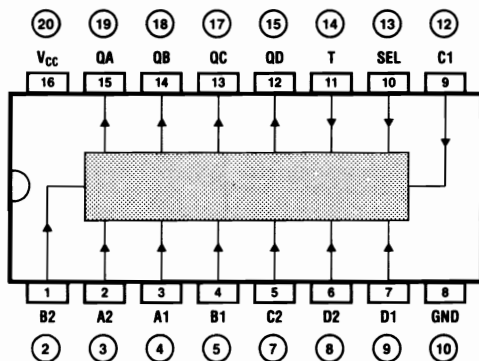
f<sub>T</sub> §f<sub>T</sub>  
&f<sub>E</sub>

Pin-  
Art-Nr.

mA

↓ ↑ ↑

MHz



HC  
HD74HC298  
MB74HC298  
  
SN74HC298DW  
  
SN74HC298N  
TD74HC298

MM74HC298J  
MM74HC298N

MC54HC298J  
MC74HC298N  
MM54HC298J

SN54HC298FK  
SN54HC298J

Hit  
Fui  
Mot  
Mot  
Nsc  
Nsc  
Tix  
Tix  
Tix  
Tix  
Tos

16-dil  
16-dil  
16-dil-3  
16-dil-1  
16-dil-3  
16-dil-1  
16-smd-2  
20-chip-2  
16-dil-3  
16-dil-2  
16-dil

&(8μ  
&(8μ  
(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ

20 20  
20 20  
15 15  
15 15  
15 15  
15 15

31 31  
31 31  
31 31  
36 38  
38 38  
31 31

27  
22  
22  
27

Input	Output
SEL T	QA QB QC QD
X H	keine Veränderung*
L ↓	A1 B1 C1 D1
H ↓	A2 B2 C2 D2

- \* No change
- \* Pas de modification
- \* Senza alterazione
- \* Sin modificación

**74299**

Output: TS

8-bit universal shift register

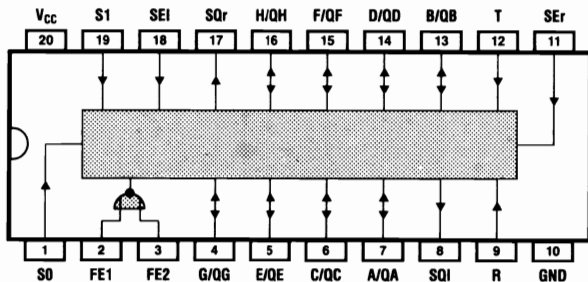
**74299**

Type

0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C
-----------------------	---------------------------	-------------

Production

Bild Sec. 3	IS &IR	tpd E-Q ns typ	tpd E-Q ns max	Note	
				tT	stz &IE
Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz	



FQ (SQl, SQr) = 3

Input		Input / Output		Output	
FE1	FE2	R	S1 S0 T SEI SEr	A/QA B/QB...G/QG H/QH	SQl SQr
H	X	X	X X X X X X	Z Z..Z Z	
X	H	X	X X X X X X	Z Z..Z Z	
L	L	L	L X X X X X	L L...L L	L L
L	L	L	X L X X X X	L L...L L	L L
L	L	H	L L X X X	keine Veränderung*	
L	L	H	X X L X X	keine Veränderung*	
X	X	H	H H 1 X X	A B...G H	A H
L	L	H	L H 1 X	SEr QA...QF QG	SEr QG
L	L	H	H L 1 X	QB QC...QH SEI	QB SEI

\* No change · Pas de modification · Senza alterazioni · Sin modificación

AC

CD74AC299E	CD54AC299E	Rca	20-dil-1	&(8µ	13.5	13.5	90
	CD54AC299H	Rca	20-dil-1	&(8µ	12.3	12.3	103
CD74AC299M	CD54AC299M	Rca	chip	&(8µ	13.5	13.5	90
		Rca	20-smd-2	&(8µ	13.5	13.5	90
74AC299D	54AC299D	Rca	20-smd-2	&(8µ	12.3	12.3	103
		Fch,Nsc	20-dil-4	&(8µ	13	12	
74AC299P	54AC299F	Fch,Nsc	20-dil-4	&(8µ	13	12	
	54AC299L	Fch,Nsc	20-flat-2	&(8µ	13	12	
74AC299S		Fch,Nsc	20-chip-2	&(8µ	13	12	
		Fch,Nsc	20-dil-1	&(8µ	13	12	
		Fch,Nsc	20-smd-2	&(8µ	13	12	

ACT

CD74ACT299E	CD54ACT299E	Rca	20-dil-1	&(8µ	14.5	14.5	90
	CD54ACT299H	Rca	20-dil-1	&(8µ	13.2	13.2	103
CD74ACT299M	CD54ACT299M	Rca	chip	&(8µ	14.5	14.5	90
		Rca	20-smd-2	&(8µ	14.5	14.5	90
74ACT299D	54ACT299D	Rca	20-smd-2	&(8µ	13.2	13.2	103
		Fch,Nsc	20-dil-4	&(8µ	12	11	
74ACT299P	54ACT299F	Fch,Nsc	20-dil-4	&(8µ	12	11	
	54ACT299L	Fch,Nsc	20-flat-2	&(8µ	12	11	
74ACT299S		Fch,Nsc	20-chip-2	&(8µ	12	11	
		Fch,Nsc	20-dil-1	&(8µ	12	11	
		Fch,Nsc	20-smd-2	&(8µ	12	11	

HC

CD74HC299E	CD54HC299F	Rca	20-dil-1	&(8µ	17	17	50	50	25
	CD54HC299H	Rca	20-dil-4	&(8µ	17	17	60	60	20
CD74HC299M		Rca	chip	&(8µ	17	17	60	60	20
		Rca	20-smd-2	&(8µ	17	17	50	50	25
HD74HC299		Hit	20-dil	&(8µ			48	48	20
	M74HC299	Mit	20-dil	&(8µ			48	48	20
M74HC299J	MC74HC299DW	Mot	20-smd-2	&(8µ			48	48	17
	MC54HC299J	Mot	20-dil-4	&(8µ			48	48	17
MM74HC299N	MC74HC299N	Mot	20-dil-1	&(8µ			48	48	17
	MM54HC299J	Nsc	20-dil-4	(8µ	25	25	35	35	29
PC74HC299P		Nsc	20-dil-1	(8µ	25	25	35	35	29
	PC74HC299T	Phi,Val	20-dil-1	&(8µ	24	24	50	50	20
SN74HC299DW		Phi,Val	20-smd-2	&(8µ	24	24	50	50	20
	SN54HC299FK	Tix	20-smd-2	&(8µ	16	16	48	48	25
		Tix	20-chip-2	&(8µ	16	16	57	57	21



74299		Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sup>s</sup> typ ↓ ↓ ↑ ↑	t <sub>PD</sub> E-Q n <sup>s</sup> max ↓ ↓ ↑ ↑	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub> MHz	74299			Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sup>s</sup> typ ↓ ↓ ↑ ↑	t <sub>PD</sub> E-Q n <sup>s</sup> max ↓ ↓ ↑ ↑	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub> MHz		
0...70°C §0...75°C		- 40...85°C § - 25...85°C	- 55...125°C							0...70°C §0...75°C									- 40...85°C § - 25...85°C	- 55...125°C
SN74HC299N										Tix	20-dil-4	&(8μ							16 16	57 57
TD74HC299				Tix	20-dil-1	&(8μ	16 16	48 48	25											
μPB74HC299				Tos	20-dil	&(8μ		48 48	20											
				Nec	20-dil	&(8μ		48 48	20											
HCT																				
	CD74HCT299E			Rca	20-dil-1	&(8μ	19 19	56 56	20											
		CD54HCT299F		Rca	20-dil-4	&(8μ	19 19	68 68	16											
		CD54HCT299H		Rca	chip	&(8μ	19 19	68 68	16											
	CD74HCT299M			Rca	20-smd-2	&(8μ	19 19	56 56	20											
	MM74HCT299J			Nsc	20-dil-4															
	MM74HCT299N			Nsc	20-dil-1															
	PC74HCT299P			Phi.Val	20-dil-1	&(8μ	22 22	46 46	20											
	PC74HCT299T			Phi.Val	20-smd-2	&(8μ	22 22	46 46	20											
TD74HCT299				Tos	20-dil															

**74323**

Output: TS

8-bit universal shift register with latch

**74323**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>  
E-Q  
n<sub>typ</sub>

t<sub>PD</sub>  
E-Q  
n<sub>max</sub>

Note  
f<sub>T</sub> f<sub>SZ</sub>  
&f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

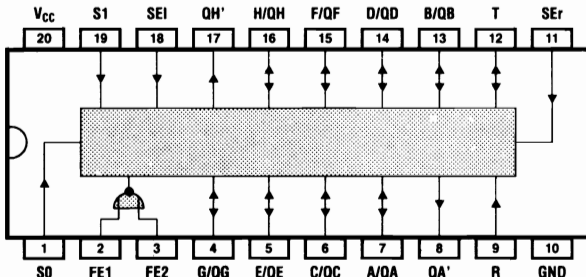
Pins-  
Art-Nr.

mA

↓ ↑

↓ ↑

MHz



FI (SEI, SEr) = 3

	Input					Input / Output			
	R	S1	S0	T	SEI SEr	A/QA	B/QB...G/QG	H/QH	QA' QH'
clear	L	X	L	↑	X X	L	L	L	L L
	L	L	X	↑	X X	L	L	L	L L
hold	H	L	L	X	X X	keine Veränderung*			keine Veränd.*
	H	X	X	L	X X	keine Veränderung*			keine Veränd.*
load	H	H	H	↑	X X	a	b...g	h	a h
shift	H	L	H	↑	X	SEr rechts schieben**			SEr QG
	H	H	L	↑	X	links schieben*** SEI			QB SEI

\* No change · Pas de modification · Senza alterazione · Sin modificación  
 \*\* Shift right · Pousser vers la droite · Spostare verso destra · Desplazar a la derecha  
 \*\*\* Shift left · Pousser vers la gauche · Spostare verso sinistra · Desplazar a la izquierda

Wenn FE1 und/oder FE2 = H, dann Q = hochohmig, ohne die Funktion des Schieberegisters zu beeinflussen.

If FE1 and/or FE2 = H then Q = high impedance, sequential operation of the register is not affected.

Si FE1 et/ou FE2 = H, alors Q = valeur ohmique élevé e sans entraver la fonction du registre de décalage.

Se FE1 e/o FE2 = H, allora Q = ad alto valore omico, senza compromettere la funzione del registro scorrevole.

Cuando FE1 y/o FE2 = H, Q se pone a alta impedancia, sin influir sobre el funcionamiento del registro de desplazamiento.

AC

CD74AC323E

CD54AC323E

Rca

20-dil-1

&(8μ

13.5 13.5

90

Rca

20-dil-1

&(8μ

12.3 12.3

103

Rca

chip

&(8μ

13.5 13.5

90

Rca

20-sm-d-2

&(8μ

13.5 13.5

90

Rca

20-sm-d-2

&(8μ

12.3 12.3

103

Fch,Nsc

20-dil-4

&(8μ

13 12

Fch,Nsc

20-dil-1

&(8μ

13 12

Fch,Nsc

20-sm-d-2

&(8μ

13 12

ACT

CD74ACT323E

CD54ACT323E

Rca

20-dil-1

&(8μ

14.5 14.5

90

Rca

20-dil-1

&(8μ

13.2 13.2

103

Rca

chip

&(8μ

14.5 14.5

90

Rca

20-sm-d-2

&(8μ

14.5 14.5

90

Rca

20-sm-d-2

&(8μ

13.2 13.2

103

Fch,Nsc

20-dil-4

&(8μ

13 12

Fch,Nsc

20-dil-4

&(8μ

13 12

Fch,Nsc

20-flat-2

&(8μ

13 12

Fch,Nsc

20-chip-2

&(8μ

13 12

Fch,Nsc

20-dil-1

&(8μ

13 12

Fch,Nsc

20-sm-d-2

&(8μ

13 12

HC

HD74HC323

Hit

20-dil

M74HC323

Mit

20-dil

T74HC323

Sgs

20-dil

TD74HC323

Tos

20-dil

HCT

MM74HCT323J

Nsc

20-dil-4

MM74HCT323N

Nsc

20-dil-1

**74352**

Output: TP

2 4-line-to-1-line multiplexers

**74352**

Type

Production

Bild Sec. 3

I<sub>S</sub> & I<sub>R</sub>

t<sub>PD</sub> E-Q n<sub>styp</sub>

t<sub>PD</sub> E-Q n<sub>smax</sub>

Note f<sub>T</sub> s<sub>fz</sub> & I<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

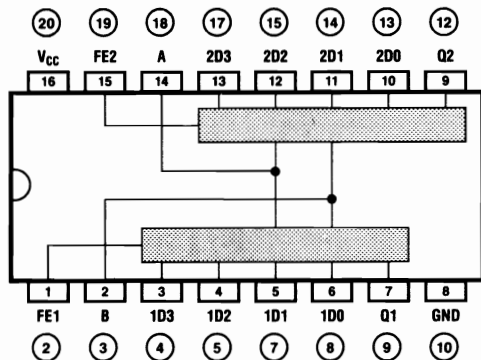
Pina- Art-Nr.

mA

↓ ↑ †

↓ ↑ †

MHz



Input		Outp.	
FE	B	A	Q
H	X	X	H
L	L	L	D <sub>0</sub>
L	L	H	D <sub>1</sub>
L	H	L	D <sub>2</sub>
L	H	H	D <sub>3</sub>

AC

74AC352D  
74AC352P  
74AC352S

Fch,Nsc  
Fch,Nsc  
Fch,Nsc

16-dil-3  
16-dil-2  
16-smd-1

&(8)<sub>μ</sub>  
&(8)<sub>μ</sub>  
&(8)<sub>μ</sub>

6 6  
6 6  
6 6

ACT

74ACT352D  
74ACT352P  
74ACT352S

Fch,Nsc  
Fch,Nsc  
Fch,Nsc

16-dil-3  
16-dil-2  
16-smd-1

&(8)<sub>μ</sub>  
&(8)<sub>μ</sub>  
&(8)<sub>μ</sub>

6.5 6.5  
6.5 6.5  
6.5 6.5

HC

HD74HC352  
JRC74HC352

Hit  
Njr

16-dil  
16-dil

MN74HC352  
MN74HC352S

16-dil-1  
16-smd-1

SN74HC352DW

SN54HC352FH

Mat  
Mat

16-smd-2  
20-chip-3

&(8)<sub>μ</sub>  
&(8)<sub>μ</sub>

17 17  
17 17

46 46  
56 56

SN74HC352FH

SN74HC352FH

Tix

20-chip-3

&(8)<sub>μ</sub>

17 17

46 46

SN74HC352FN

SN74HC352FN

Tix

20-chip-2

&(8)<sub>μ</sub>

17 17

56 56

SN74HC352J

SN74HC352J

Tix

20-chip-1

&(8)<sub>μ</sub>

17 17

46 46

SN74HC352N

SN74HC352N

Tix

16-dil-3

&(8)<sub>μ</sub>

17 17

56 56

SN74HC352N

SN74HC352N

Tix

16-dil-1

&(8)<sub>μ</sub>

17 17

46 46

# 74353

Output: OD

2 4-line-to-1-line multiplexers

74353

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E-Q  
n<sub>st</sub>typ

t<sub>PD</sub>  
E-Q  
n<sub>st</sub>max

Note  
f<sub>T</sub> f<sub>Z</sub>  
& f<sub>E</sub>

0...70°C  
50...75°C

-40...85°C  
§ -25...85°C

-55...125°C

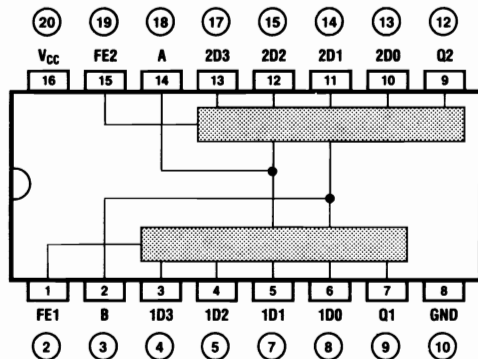
Pins-  
Art-Nr.

mA

↓ ↓ ↑

↓ ↓ ↑

MHz



Input		Outp.	
FE	B	A	Q
H	X	X	Z
L	L	L	D0
L	L	H	D1
L	H	L	D2
L	H	H	D3

AC

74AC353D  
74AC353P  
74AC353S

Fch.Nsc  
Fch.Nsc  
Fch.Nsc

16-dil-3  
16-dil-2  
16-smd-1

&(8μ  
&(8μ  
&(8μ

5 5  
5 5  
5 5

ACT

74ACT353D  
74ACT353P  
74ACT353S

Fch.Nsc  
Fch.Nsc  
Fch.Nsc

16-dil-3  
16-dil-2  
16-smd-1

&(8μ  
&(8μ  
&(8μ

5.5 5.5  
5.5 5.5  
5.5 5.5

HC

HD74HC353

MN74HC353  
MN74HC353S

Hit  
Mat  
Mat

16-dil  
16-dil-1  
16-smd-1

SN74HC353DW

MN74HC353S

SN54HC353FH

Tix

16-smd-2

&(8μ

17 17

46 46

SN74HC353FH

SN74HC353FH

SN54HC353FK

Tix

20-chip-3

&(8μ

17 17

56 56

SN74HC353FN

SN74HC353FN

SN54HC353J

Tix

20-chip-2

&(8μ

17 17

56 56

SN74HC353J

SN74HC353J

Tix

16-dil-3

&(8μ

17 17

46 46

SN74HC353N

SN74HC353N

Tix

16-dil-1

&(8μ

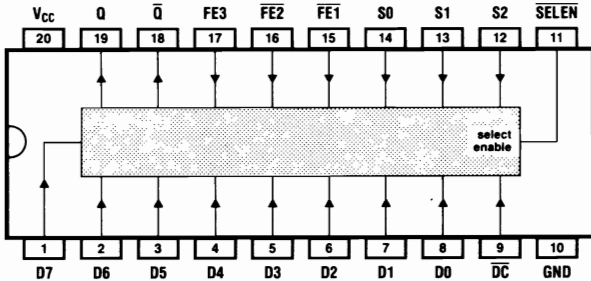
17 17

46 46

**74354**

Output: TS

8-line-to-1-line multiplexers



Inputs								Outputs	
FE1	FE2	FE3	DC	S2	S1	S0	Q	Q̄	
H	X	X	X	X	X	X	Z	Z	
X	H	X	X	X	X	X	Z	Z	
X	X	L	X	X	X	X	Z	Z	
L	L	H	H	X	X	X	Q <sub>n</sub>	Q̄ <sub>n</sub>	
L	L	H	L	L	L	L	D0	D0̄	
L	L	H	L	L	L	H	D1	D1̄	
L	L	H	L	L	H	L	D2	D2̄	
L	L	H	L	L	H	H	D3	D3̄	
L	L	H	L	H	L	L	D4	D4̄	
L	L	H	L	H	L	H	D5	D5̄	
L	L	H	L	H	H	L	D6	D6̄	
L	L	H	L	H	H	H	D7	D7̄	

**74354**

Type

0...70°C	-40...85°C	-55...125°C
§0...75°C	§-25...85°C	

Production

Bild Sec. 3  
Pins-  
Art-Nr.

I<sub>S</sub>  
&I<sub>R</sub>  
mA

t<sub>pD</sub>  
E-Q  
n<sub>typ</sub>

t<sub>pD</sub>  
E-Q  
n<sub>max</sub>

Note  
t<sub>r</sub> s<sub>fz</sub>  
&t<sub>E</sub>  
MHz

HC	CD74HC354E	Rca	20-dil-1	&(8μ	18	18	53	53
	CD54HC354F CD54HC354H	Rca Rca	20-dil-4 chip	&(8μ &(8μ	18	18	63	63
HD74HC354	CD74HC354M	Rca	20-sm-d-2	&(8μ	18	18	53	53
	MC74HC354DW MC54HC354J MC74HC354N	Hit Mot Mot	20-dil 20-sm-d-4 20-dil-1	&(8μ &(8μ &(8μ			63	63
SN74HC354DW	MM74HC354J MM74HC354N	Nsc	20-dil-4	(8μ	26	26	40	40
	PC74HC354P PC74HC354T	Nsc Phi,Val Phi,Val	20-dil-1 20-sm-d-2	&(8μ &(8μ	22	22	53	53
SN74HC354N TD74HC354	SN54HC354FK SN54HC354J	Tix Tix	20-sm-d-2 20-chip-2	&(8μ &(8μ	29	29	59	59
	TD74HC354	Tix Tos	20-dil-4 20-dil-1	&(8μ &(8μ	29	29	59	59
HCT	CD74HCT354E	Rca	20-dil-1	&(8μ	20	20	59	59
	CD54HCT354F CD54HCT354H	Rca Rca	20-dil-4 chip	&(8μ &(8μ	20	20	71	71
TD74HCT354	CD74HCT354M PC74HCT354P PC74HCT354T	Rca Phi,Val Phi,Val Tos	20-sm-d-2 20-dil-1 20-sm-d-2 20-dil	&(8μ &(8μ &(8μ &(8μ	20	20	59	59

**74356**

Output: TS

8-line-to-1-line multiplexers

**74356**

Type

Production

Bild Sec. 3

I<sub>S</sub> & I<sub>R</sub>

t<sub>PD</sub> E-Q n<sub>styp</sub>

t<sub>PD</sub> E-Q n<sub>max</sub>

Note t<sub>r</sub> S<sub>fz</sub> & f<sub>E</sub>

0...70°C  
§0...75°C

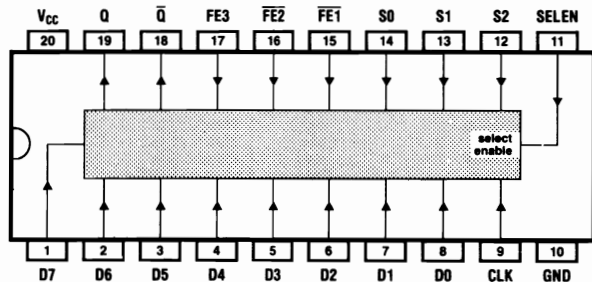
-40...85°C  
§-25...85°C -55...125°C

Pins- Art-Nr.

mA ↓ ↓ ↑

↓ ↓ ↑

MHz



Inputs							Outputs	
FE1	FE2	FE3	CLK	S2	S1	S0	Q	Q̄
H	X	X	X	X	X	X	Z	Z
X	H	X	X	X	X	X	Z	Z
X	X	L	X	X	X	X	Z	Z
L	L	H	L	X	X	X	Q <sub>n</sub>	Q̄ <sub>n</sub>
L	L	H	H	X	X	X	Q <sub>n</sub>	Q̄ <sub>n</sub>
L	L	H	∫	L	L	L	D0	D0
L	L	H	∫	L	L	H	D1	D1
L	L	H	∫	L	H	L	D2	D2
L	L	H	∫	L	H	H	D3	D3
L	L	H	∫	H	L	L	D4	D4
L	L	H	∫	H	L	H	D5	D5
L	L	H	∫	H	H	L	D6	D6
L	L	H	∫	H	H	H	D7	D7

HC

CD74HC356E

CD54HC356F  
CD54HC356H

Rca  
Rca  
Rca

20-dil-1  
20-dil-4  
chip

&(8μ  
&(8μ  
&(8μ

18 18  
18 18  
18 18

53 53  
63 63  
63 63

HD74HC356

CD74HC356M

MC54HC356J  
MC74HC356N

Rca  
Hit  
Mot

20-smd-2  
20-dil  
20-dil-1

&(8μ  
&(8μ  
&(8μ

18 18  
60 60

63 63  
53 53  
60 60

SN74HC356DW

MM74HC356J  
MM74HC356N  
PC74HC356P  
PC74HC356T

Nsc  
Nsc  
Phi,Val

20-dil-4  
20-dil-1  
20-smd-2

(8μ  
&(8μ  
&(8μ

28 28  
28 28

43 43  
43 43

SN74HC356N  
TD74HC356

SN54HC356FK  
SN54HC356J

Tix  
Tix  
Tix

20-smd-2  
20-chip-2  
20-dil-4

&(8μ  
&(8μ  
&(8μ

50 50  
50 50  
50 50

81 81  
97 97  
97 97

HCT

CD74HCT356E

CD54HCT356F  
CD54HCT356H

Rca  
Rca  
Rca

20-dil-1  
20-dil-4  
chip

&(8μ  
&(8μ  
&(8μ

20 20  
20 20  
20 20

59 59  
71 71  
71 71

TD74HCT356

CD74HCT356M  
PC74HCT356P  
PC74HCT356T

Rca  
Phi,Val  
Phi,Val  
Tos

20-smd-2  
20-dil-1  
20-smd-2  
20-dil

&(8μ  
&(8μ  
&(8μ  
&(8μ

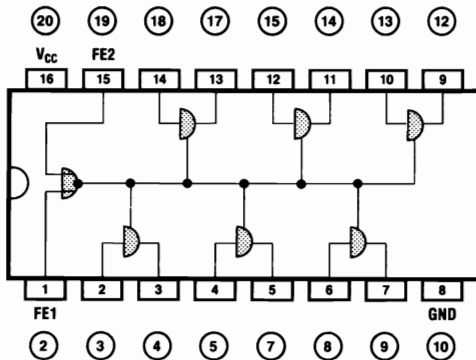
20 20  
59 59

59 59

**74365**  
Output: TS

6 bus line drivers

Pin	N	LS
FI	1	1,1
FQ	20	44,4



Input		Outp.	
FE1	FE2	E	Q
H	X	X	Z
X	H	X	Z
L	L	L	L
L	L	H	H

**74365**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E→Q  
n<sub>typ</sub>

t<sub>PD</sub>  
E→Q  
n<sub>max</sub>

Note  
f<sub>T</sub> f<sub>SZ</sub>  
& f<sub>E</sub>

0...70°C  
§0...75°C

- 40...85°C  
§ - 25...85°C

- 55...125°C

mA

↓ ↑ ↑

↓ ↑ ↑

MHz

HC

CD74HC365E

CD54HC365F  
CD54HC365H

Rca

16-dil-1

8

8 8

26 26

Rca

16-dil-3

8

8 8

32 32

Rca

chip

8

8 8

32 32

CD74HC365M

Rca

16-smd-1

8

8 8

26 26

Hit

16-dil

8

8

30 30

Fui

16-dil

8

8

30 30

HD74HC365  
MB74HC365

MC54HC365J  
MC74HC365N

Mot

16-dil-3

8,8

36 36

Mot

16-dil-3

8,8

36 36

Nsc

16-dil-3

8

11 11

19 19

Nsc

16-dil-1

8

11 11

19 19

Mat

16-dil-1

8

8

30 30

Mat

16-smd-1

8

8

30 30

SN74HC365DW

MM74HC365J  
MM74HC365N  
MN74HC365  
MN74HC365S  
PC74HC365P  
PC74HC365T

Phi, Val

16-dil-2

8

8

24 24

Phi, Val

16-smd-1

8

8

24 24

Tix

16-smd-2

8

11 11

24 24

Tix

20-chip-3

8

12 12

24 24

Tix

20-chip-2

8

12 12

29 29

SN74HC365FN

SN74HC365FN

SN54HC365FH  
SN54HC365FK

Tix

20-chip-1

8

12 12

29 29

Tix

16-dil-3

8

12 12

29 29

SN74HC365J

SN74HC365J

Tix

16-dil-3

8

12 12

24 24

SN74HC365N

SN74HC365N

Tix

16-dil-1

8

12 12

24 24

µPB74HC365

Nec

16-dil

8

8

30 30

HCT

CD74HCT365E

CD54HCT365F  
CD54HCT365H

Rca

16-dil-1

8

9 9

32 32

Rca

16-dil-3

8

9 9

38 38

Rca

chip

8

9 9

38 38

CD74HCT365M  
PC74HCT365P  
PC74HCT365T

Rca

16-smd-1

8

9 9

32 32

Phi, Val

16-dil-2

8

14 14

31 31

Phi, Val

16-smd-1

8

14 14

31 31

# 74366

Output: TS

## 6 inverting bus line drivers

### 74366

Type

Production

Bild Sec. 3

I<sub>S</sub> & I<sub>R</sub>

t<sub>PD</sub> E · Q n#typ

t<sub>PD</sub> E - Q nsmax

Note f<sub>T</sub> §f<sub>Z</sub> &f<sub>E</sub>

0...70°C  
§0...75°C

- 40...85°C  
§ - 25...85°C

- 55...125°C

mA

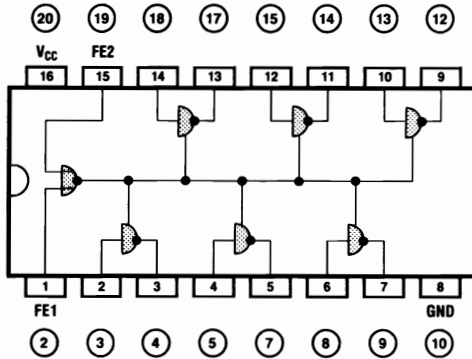
↓ ↑ †

↓ ↑ †

↓ ↑ †

MHz

P <sub>in</sub>	N	LS
FI	1	1,1
FQ	20	44,4



Input	FE1 FE2		Output
	E		Q
H	X	X	Z
X	H	X	Z
L	L	L	H
L	L	H	L

HC	HD74HC366 MB74HC366	SN74HC366DW	SN74HC366FH	SN74HC366FN	SN74HC366J SN74HC366N µPB74HC366	HCT
CD74HC366E						CD74HCT366E
CD54HC366F						CD54HCT366F
CD54HC366H						CD54HCT366H
CD74HC366M						CD74HCT366M
	MC54HC366J MC74HC366N MM54HC366J		SN54HC366FH			Rca
	MM74HC366J MM74HC366N MN74HC366		SN54HC366FK			Rca
	MN74HC366S PC74HC366P PC74HC366T		SN54HC366J			Rca
						chip
						16-smd-1
						Phi, Val
						16-smd-1
						Phi, Val
						16-dil-1
						16-dil-3
						16-dil-3
						chip
						16-smd-1
						Phi, Val
						16-dil-2
						16-smd-1
						Phi, Val
						16-dil-1
						16-dil-3
						chip
						16-smd-1
						Phi, Val
						16-dil-2
						16-smd-1
						Phi, Val



**74367**

Output: TS

6 bus line drivers

**74367**

Type

Production

Blid  
Sec. 3I<sub>S</sub>  
& I<sub>R</sub>t<sub>PD</sub>  
E-Q  
n<sub>typ</sub>t<sub>PD</sub>  
E-Q  
n<sub>max</sub>Note  
f<sub>T</sub> f<sub>z</sub>  
& E0...70°C  
§0...75°C-40...85°C  
§ -25...85°C

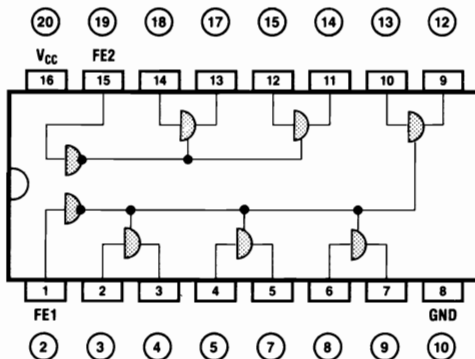
-55...125°C

Pins-  
Art-Nr.mA  
↓ ↑ ↑

↓ ↑ ↑

MHz

Pin	N	LS
FI	1	1,1
FQ	20	44,4



Input	Outp.	
FE	E	Q
H	X	Z
L	L	L
L	H	H

HC

CD74HC367E

CD54HC367F  
CD54HC367H

Rca

16-dil-1

&amp;(8μ

8 8

26 26

Rca

16-dil-3

&amp;(8μ

8 8

32 32

Rca

chip

&amp;(8μ

8 8

32 32

Rca

16-smd-1

&amp;(8μ

8 8

26 26

Hit

16-dil

&amp;(8μ

30 30

Fui

16-dil

&amp;(8μ

30 30

Mot

16-dil-3

&amp;(8μ

36 36

Mot

16-dil-1

&amp;(8μ

36 36

Nsc

16-dil-3

(8μ

11 11

19 19

Nsc

16-dil-1

(8μ

11 11

19 19

Mat

16-dil-1

&amp;(8μ

30 30

Mat

16-smd-1

&amp;(8μ

30 30

Phi, Val

16-dil-2

&amp;(8μ

10 10

24 24

Phi, Val

16-smd-1

&amp;(8μ

10 10

24 24

Tix

16-smd-2

&amp;(8μ

12 12

24 24

Tix

20-chip-3

&amp;(8μ

12 12

29 29

Tix

20-chip-3

&amp;(8μ

12 12

24 24

Tix

20-chip-2

&amp;(8μ

12 12

29 29

Tix

20-chip-1

&amp;(8μ

12 12

24 24

Tix

16-dil-3

&amp;(8μ

12 12

29 29

Tix

16-dil-3

&amp;(8μ

12 12

24 24

Tix

16-dil-1

&amp;(8μ

12 12

24 24

Nec

16-dil

&amp;(8μ

30 30

HCT

CD74HCT367E

CD54HCT367F  
CD54HCT367H

Rca

16-dil-1

&amp;(8μ

9 9

31 31

Rca

16-dil-3

&amp;(8μ

9 9

38 38

Rca

chip

&amp;(8μ

9 9

38 38

Rca

16-smd-1

&amp;(8μ

9 9

31 31

Phi, Val

16-dil-2

&amp;(8μ

14 14

31 31

Phi, Val

16-smd-1

&amp;(8μ

14 14

31 31

CD74HCT367M

PC74HCT367P

PC74HCT367T

# 74368

Output: TS

## 6 inverting bus line drivers

### 74368

Type

0...70°C    -40...85°C    -55...125°C  
 §0...75°C    §-25...85°C

Production

Bild  
Sec. 3

I<sub>S</sub>

&I<sub>R</sub>

t<sub>PD</sub>

E-Q

n#typ

t<sub>PD</sub>

E-Q

n#max

Note

t<sub>T</sub> §I<sub>Z</sub>

&I<sub>E</sub>

Pins-  
Art-Nr.

mA

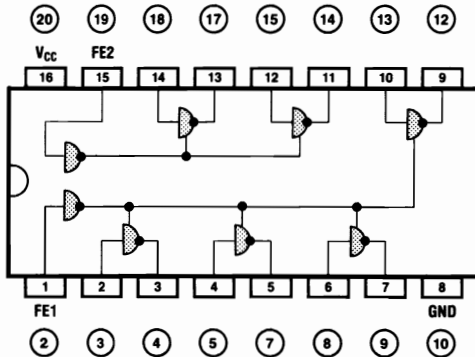
↓ ↑ ↑

↓ ↓ ↑

↓ ↓ ↑

MHz

Pin	N	LS
FI	1	1,1
FQ	20	44,4



Input	Outp.	
FE	E	Q
H	X	Z
L	L	H
L	H	L

HC

CD74HC368E

CD54HC368F  
CD54HC368H

Rca  
Rca  
Rca  
chip

16-dil-1  
16-dil-3  
16-dil-3

&(8μ  
&(8μ  
&(8μ

9 9  
9 9  
9 9

26 26  
32 32  
32 32

26 26  
24 24  
24 24

24 24  
29 29  
29 29

24 24  
24 24  
24 24

HD74HC368  
M74HC368  
MB74HC368

CD74HC368M

MC54HC368J  
MC74HC368N  
MM54HC368J

Rca  
Hit  
Mit  
Fui  
Mot  
Mot  
Nsc  
Nsc  
Mat

16-smd-1  
16-dil  
16-dil  
16-dil  
16-dil-3  
16-dil-1  
16-dil-3

&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ  
(8μ  
(8μ

9 9  
24 24  
24 24  
24 24  
29 29  
29 29  
10 10  
10 10

26 26  
24 24  
24 24  
24 24  
24 24  
16 16  
16 16

24 24  
24 24  
24 24  
24 24  
24 24  
16 16  
16 16

24 24  
24 24  
24 24  
24 24  
24 24  
16 16  
16 16

24 24  
24 24  
24 24  
24 24  
24 24  
16 16  
16 16

SN74HC368DW

SN74HC368FH

SN54HC368FH

Phi,Val  
Phi,Val  
Tix  
Tix

16-smd-1  
16-smd-2  
16-smd-1  
16-smd-2

&(8μ  
&(8μ  
&(8μ  
&(8μ

11 11  
11 11  
12 12  
12 12

24 24  
24 24  
24 24  
24 24

24 24  
24 24  
24 24  
24 24

24 24  
24 24  
24 24  
24 24

24 24  
24 24  
24 24  
24 24

SN74HC368FH

SN74HC368FN

SN54HC368FK

Phi,Val  
Tix

16-smd-1  
20-chip-3

&(8μ  
&(8μ

11 11  
12 12

24 24  
24 24

24 24  
24 24

24 24  
24 24

24 24  
24 24

SN74HC368FN

SN74HC368J

SN54HC368J

Tix

16-dil-3

&(8μ

12 12

24 24

24 24

24 24

24 24

SN74HC368J

SN74HC368N

SN74HC368N

Tix

16-dil-1

&(8μ

12 12

24 24

24 24

24 24

24 24

μPB74HC368

Nec

16-dil

&(8μ

24 24

24 24

24 24

24 24

HCT

CD74HCT368E

CD54HCT368F  
CD54HCT368H

Rca  
Rca  
Rca  
chip

16-dil-1  
16-dil-3  
16-dil-3

&(8μ  
&(8μ  
&(8μ

11 11  
11 11  
11 11

38 38  
45 45  
45 45

38 38

38 38

38 38

CD74HCT368M

PC74HCT368P  
PC74HCT368T

Rca  
Mit  
Phi,Val  
Phi,Val

16-smd-1  
16-dil  
16-dil-2  
16-smd-1

&(8μ  
&(8μ  
&(8μ  
&(8μ

11 11  
13 13  
13 13

38 38  
30 30  
30 30

38 38

30 30  
30 30

30 30  
30 30

M74HCT368

**74373**  
Output: TS

8 D-type latches

**74373**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E-Q  
n<sub>styp</sub>

t<sub>PD</sub>  
E-Q  
n<sub>max</sub>

Note  
ft f<sub>z</sub>  
& I<sub>E</sub>

0...70°C  
§0...75°C

- 40...85°C  
§ - 25...85°C

- 55...125°C

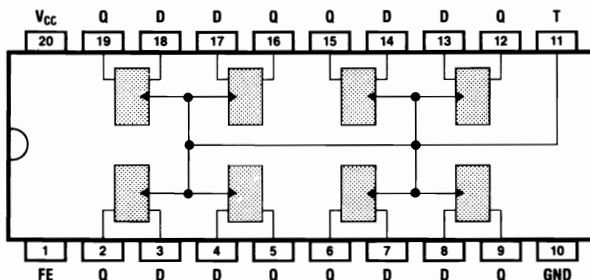
Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz



AC

	CD54AC373E	Rca	20-dil-1	&(8μ		8.5	8.5	
	CD74AC373E	Rca	20-dil-1	&(8μ		7.7	7.7	
	CD54AC373H	Rca	chip	&(8μ		8.5	8.5	
	CD54AC373M	Rca	20-smd-2	&(8μ		8.5	8.5	
	CD74AC373M	Rca	20-smd-2	&(8μ		7.7	7.7	
	HD74AC373	Hit	20-dil	&(8μ		11	11	
	M74AC373	Mit	20-dil	&(8μ		11	11	
	54AC373D	Fch,Nsc	20-dil-4	&(8μ	7	7	11.5	11.5
	74AC373D	Fch,Nsc	20-dil-4	&(8μ	7	7	10.5	10.5
	54AC373F	Fch,Nsc	20-flat-2	&(8μ	7	7	11.5	11.5
	54AC373L	Fch,Nsc	20-chip-2	&(8μ	7	7	11.5	11.5
	74AC373P	Fch,Nsc	20-dil-1	&(8μ	7	7	10.5	10.5
	74AC373S	Fch,Nsc	20-smd-2	&(8μ	7	7	10.5	10.5

ACT

	CD54ACT373E	Rca	20-dil-1	&(8μ		10.4	10.4	
	CD74ACT373E	Rca	20-dil-1	&(8μ		9.5	9.5	
	CD54ACT373H	Rca	chip	&(8μ		10.4	10.4	
	CD54ACT373M	Rca	20-smd-2	&(8μ		10.4	10.4	
	CD74ACT373M	Rca	20-smd-2	&(8μ		9.5	9.5	
	HD74ACT373	Hit	20-dil	&(8μ				
	54ACT373D	Fch,Nsc	20-dil-4	&(8μ	8	8.5	12.5	12.5
	74ACT373D	Fch,Nsc	20-dil-4	&(8μ	8	8.5	11.5	11.5
	54ACT373F	Fch,Nsc	20-flat-2	&(8μ	8	8.5	12.5	12.5
	54ACT373L	Fch,Nsc	20-chip-2	&(8μ	8	8.5	12.5	12.5
	74ACT373P	Fch,Nsc	20-dil-1	&(8μ	8	8.5	11.5	11.5
	74ACT373S	Fch,Nsc	20-smd-2	&(8μ	8	8.5	11.5	11.5

C

	MM54C373D	Nsc	20-dil-4	50n	155	155	310	310	3.3
	MM74C373J	Nsc	20-dil-4	50n	155	155	310	310	3.3
	MM74C373N	Nsc	20-dil-1	50n	155	155	310	310	3.3

HC

	CD74HC373E	Rca	20-dil-1	&(8μ	12	12	38	38	
	CD54HC373F	Rca	20-dil-4	&(8μ	12	12	45	45	
	CD54HC373H	Rca	chip	&(8μ	12	12	45	45	
	CD74HC373M	Rca	20-smd-2	&(8μ	12	12	38	38	
	HD74HC373	Hit	20-dil	&(8μ			38	38	
	M74HC373	Mit	20-dil	&(8μ			38	38	
	MB74HC373	Fui	20-dil	&(8μ			38	38	

Input	Output		
FE · T · D	Q		
H · X · X	Z		
L · L · X	.		
L · H · L	L		
L · H · H	H		

- \* Keine Veränderung
- \* No change
- \* Pas de modification
- \* Senza alterazione
- \* Sin modificación

74373	Type			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E - Q n <sub>typ</sub>	I <sub>PD</sub> E - Q n <sub>max</sub>	Note f <sub>r</sub> S <sub>fz</sub> &E
	0...70°C §0...75°C	-40...85°C § -25...85°C	-55...125°C						
MSM74HC373	MM74HC373J MM74HC373N MN74HC373 MN74HC373S	MC74HC373DW	Mot	20-smd-2	(8μ	13 13	26 26		
		MC54HC373J	Mot	20-dil-4	(8μ	13 13	26 26		
		MC74HC373N	Mot	20-dil-1	(8μ	13 13	26 26		
		MM54HC373J	Nsc	20-dil-4	(8μ	19 19	26 26		
			Nsc	20-dil-1	(8μ	19 19	26 26		
			Mat	20-dil-1	&(8μ		38 38		
			Mat	20-smd-3	&(8μ		38 38		
			OkI	20-dil	&(8μ		38 38		
			Phi_Val	20-dil-1	&(8μ	15 15	38 38		
			Phi_Val	20-smd-2	&(8μ	15 15	38 38		
SN74HC373DW	PC74HC373P PC74HC373T		Tix	20-smd-2	&(8μ	22 22	50 50		
			Tix	20-smd-2	&(8μ	15 15	38 38		
SN74HC373FH	SN74HC373FH	SN54HC373FH	Tix	20-chip-3	&(8μ	22 22	60 60		
			Tix	20-chip-3	&(8μ	22 22	50 50		
SN74HC373FN	SN74HC373FN	SN54HC373FK	Tix	20-chip-2	&(8μ	22 22	60 60		
			Tix	20-chip-1	&(8μ	22 22	50 50		
SN74HC373J	SN74HC373J SN74HC373N	SN54HC373J	Tix	20-dil-4	&(8μ	22 22	80 80		
			Tix	20-dil-4	&(8μ	22 22	50 50		
T74HC373 μPB74HC373			Tix	20-dil-1	&(8μ	22 22	50 50		
			Sgs	20-dil	&(8μ		38 38		
HCT	CD74HCT373E		Nec	20-dil	&(8μ		38 38		
			Rca	20-dil-1	&(8μ	13 13	40 40		
HD74HCT373 M74HCT373	CD74HCT373M	CD54HCT373F	Rca	20-dil-4	&(8μ	13 13	48 48		
		CD54HCT373H	Rca	chip	&(8μ	13 13	48 48		
			Rca	20-smd-2	&(8μ	13 13	40 40		
			Hit	20-dil	&(8μ		37 37		
			Mit	20-dil	&(8μ		37 37		
			Mot	20-dil-4	&(8μ		45 45		
			Mot	20-dil-1	&(8μ		45 45		
			Mot	20-smd-2	&(4μ		42 42		
			Mot	20-dil-4	&(4μ		42 42		
			Mot	20-dil-1	&(4μ		42 42		
SN74HCT373DW	MM74HCT373J MM74HCT373N PC74HCT373P PC74HCT373T	MC54HCT373J	Nsc	20-dil-4	(8μ	25 25	35 35		
		MC74HCT373N	Nsc	20-dil-1	(8μ	25 25	35 35		
		MC74HCT373ADW	Nsc	20-dil-1	(8μ	17 17	38 38		
		MC54HCT373AJ	Nsc	20-smd-2	&(8μ	17 17	38 38		
		MC74HCT373AN	Nsc	20-smd-2	(2.9	25 25	44 44		
		MM54HCT373J	Nsc	20-chip-2	(3	25 25	53 53		
			Nsc	20-dil-4	(3	25 25	53 53		
			Nsc	20-dil-1	(2.9	25 25	44 44		
			Sgs	20-dil	&(8μ		37 37		
			Nec	20-dil	&(8μ		37 37		

# 74374

Output: TS

## 8 D-type flip-flops

V<sub>CC</sub> = 5V  
V<sub>CC</sub> = 5V  
V<sub>CC</sub> = 5V

Input		Outp.	
FE	T	D	Q
H	X	X	Z
L	L	X	*
L	↑	L	L
L	↑	H	H

- \* Keine Veränderung
- \* No change
- \* Pas de modification
- \* Senza alterazione
- \* Sin modificación

74374	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>P</sub> D E -Q n <sub>styp</sub>	I <sub>P</sub> D E -Q n <sub>max</sub>	Note fr S <sub>TZ</sub> &E	74374	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>P</sub> D E -Q n <sub>styp</sub>	I <sub>P</sub> D E -Q n <sub>max</sub>	Note fr S <sub>TZ</sub> &E						
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C							-40...85°C §-25...85°C	-55...125°C				
AC	CD74AC374E	CD54AC374E CD54AC374H CD54AC374M	Rca	20-dil-1	&(8μ		10.8 10.8	125	MSM74HC374 SN74HC374D SN74HC374FH SN74HC374FN SN74HC374J SN74HC374N T74HC374 μPB74HC374 HCT	MM74HC374J MM74HC374N MM74HC374 MN74HC374 MN74HC374S PC74HC374P PC74HC374T SN54HC374FH SN74HC374FH SN54HC374FK SN54HC374J SN74HC374J SN74HC374N	MC74HC374DW MC54HC374J MC74HC374N MM54HC374J	Mot	20-smd-2	(8μ	15 15	31 31	35						
			Rca	20-dil-1	&(8μ		9.8 9.8	143				Mot	20-dil-4	(8μ	15 15	31 31	35						
			Rca	chip	&(8μ		10.8 10.8	125				Nsc	20-dil-4	(8μ	15 15	31 31	35						
			Rca	20-smd-2	&(8μ		10.8 10.8	125				Nsc	20-dil-1	(8μ				35					
			Rca	20-smd-2	&(8μ		9.8 9.8	143				Mat	20-dil-1	&(8μ			45 45	24					
			Hit	20-dil	&(8μ		11 11	100				Ok	20-smd-3	&(8μ			45 45	24					
			Mit	20-dil	&(8μ		11 11	100				Phi, Val	20-dil-1	&(8μ	18 18	41 41	41 24	24					
			Fch, Nsc	20-dil-4	&(8μ	7 8	11 12	95				Phi, Val	20-smd-2	&(8μ	18 18	41 41	41 24	24					
			Fch, Nsc	20-dil-4	&(8μ	7 8	10 10.5	100				Tix	20-smd-2	&(8μ	17 17	45 45	45 24	24					
			Fch, Nsc	20-flat-2	&(8μ	7 8	11 12	95				Tix	20-chip-3	&(8μ	17 17	54 54	54 20	20					
			Fch, Nsc	20-chip-2	&(8μ	7 8	11 12	95				Tix	20-chip-3	&(8μ	17 17	45 45	45 24	24					
			Fch, Nsc	20-dil-1	&(8μ	7 8	10 10.5	100				Tix	20-chip-2	&(8μ	17 17	54 54	54 20	20					
			Fch, Nsc	20-smd-2	&(8μ	7 8	10 10.5	100				Tix	20-chip-1	&(8μ	17 17	45 45	45 24	24					
			Fch, Nsc	20-smd-2	&(8μ	7 8	10 10.5	100				Tix	20-dil-4	&(8μ	17 17	54 54	54 20	20					
			ACT	CD74ACT374E	CD54ACT374E CD54ACT374H CD54ACT374M	Rca	20-dil-1	&(8μ					11.2 11.2	110	HCT	CD74HCT374E CD54HCT374F CD54HCT374H CD74HCT374M	MC54HCT374J MC74HCT374N MC74HCT374DW MC54HCT374AJ MC74HCT374AN MM74HCT374J MM74HCT374N PC74HCT374P PC74HCT374T	Rca	20-dil-1	&(8μ	15 15	41 41	25
Rca	20-dil-1	&(8μ					10.2 10.2	125	Rca	20-dil-4	&(8μ	15 15	50 50	20									
Rca	chip	&(8μ					11.2 11.2	110	Rca	chip	&(8μ	15 15	50 50	20									
Rca	20-smd-2	&(8μ					11.2 11.2	110	Rca	20-smd-2	&(8μ	15 15	41 41	25									
Rca	20-smd-2	&(8μ					10.2 10.2	125	Hit	20-dil	&(8μ		45 45	24									
Hit	20-dil	&(8μ							Mit	20-dil	&(8μ		45 45	24									
Fch, Nsc	20-dil-4	&(8μ				8 8.5	12 12.5	70	Mit	20-dil	&(8μ		54 54	20									
Fch, Nsc	20-dil-4	&(8μ				8 8.5	11 11.5	90	Mot	20-dil-1	&(8μ		54 54	20									
Fch, Nsc	20-flat-2	&(8μ				8 8.5	12 12.5	70	Mot	20-smd-2	&(4μ		47 47	20									
Fch, Nsc	20-chip-2	&(8μ				8 8.5	12 12.5	70	Mot	20-dil-4	&(4μ		47 47	20									
Fch, Nsc	20-dil-1	&(8μ				8 8.5	11 11.5	90	Mot	20-dil-1	&(4μ		47 47	20									
Fch, Nsc	20-smd-2	&(8μ				8 8.5	11 11.5	90	Mot	20-dil-4	&(4μ		47 47	20									
Fch, Nsc	20-smd-2	&(8μ				8 8.5	11 11.5	90	Mot	20-dil-1	&(4μ		47 47	20									
Fch, Nsc	20-smd-2	&(8μ				8 8.5	11 11.5	90	Mot	20-dil-4	&(4μ		47 47	20									
C	MM74C374J MM74C374N	MM54C374D MM54C374J				Nsc	20-dil-4	50n	150 150	300 300	3.5	MM74HCT374J MM74HCT374N PC74HCT374P PC74HCT374T	MM74HCT374J MM74HCT374N PC74HCT374P PC74HCT374T	MM54HCT374J					Nsc	20-dil-4	(8μ	22 22	36 36
			Nsc	20-dil-4	50n	150 150	300 300	3.5	Nsc	20-dil-1	(8μ				22 22	36 36	30						
			Nsc	20-dil-1	50n	150 150	300 300	3.5	Nsc	20-dil-4	(8μ				16 16	40 40	21						
			HC	CD74HC374E	CD54HC374F CD54HC374H	Rca	20-dil-1	&(8μ	15 15	41 41	25				SN74HCT374DW	SN74HCT374N T74HCT374 μPB74HCT374	SN54HCT374FK SN54HCT374J	Phi, Val	20-dil-1	&(8μ	16 16	40 40	21
						Rca	20-dil-4	&(8μ	15 15	50 50	20							Tix	20-smd-2	(2.9 30 30	45 45	25	
						Rca	chip	&(8μ	15 15	50 50	20							Tix	20-chip-2	(3 30 30	54 54	21	
						Rca	20-smd-2	&(8μ	15 15	41 41	25							Tix	20-dil-4	(3 30 30	54 54	21	
						Hit	20-dil	&(8μ		45 45	24							Tix	20-dil-1	(2.9 30 30	45 45	25	
						Mit	20-dil	&(8μ		45 45	24							Sgs	20-dil	&(8μ		45 45	24
						Fui	20-dil	&(8μ		45 45	24							Nec	20-dil	&(8μ		45 45	24

**74375**

Output: TP

4 D-type latches

**74375**

Type

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Production

Bild  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>  
E · Q  
n<sub>S</sub>typ

t<sub>PD</sub>  
E · Q  
n<sub>S</sub>max

Note  
t<sub>r</sub> §I<sub>Z</sub>  
&f<sub>E</sub>

Pins-  
Art-Nr.

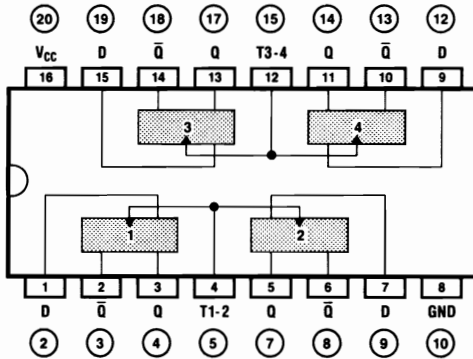
mA

↓ ↑ ↑

↓ ↑ \*

MHz

Pin	FI
T	4,4
D	1,1



Input		Output	
T	D	Q	Q̄
L	X	.	.
H	L	L	H
H	H	H	L

- Keine Veränderung
- No change
- Pas de modification
- Senza alterazione
- Sin modificación

HC  
HD74HC375  
MB74HC375  
  
SN74HC375D  
  
SN74HC375N  
µPB74HC375

MN74HC375  
MN74HC375S

SN54HC375FK  
SN54HC375J

Hit  
Fu  
Mat  
Mat  
Tix  
Tix  
Tix  
Nec

16-dil  
16-dil  
16-dil-1  
16-smd-1  
16-smd-1  
20-chip-2  
16-dil-3  
16-dil-2  
16-dil

&(4µ  
&(4µ  
&(4µ  
&(4µ

14 14  
14 14  
14 14  
14 14

30 30  
36 36  
36 36  
30 30

74377 Output: TP	8 D-type flip-flops				74377		Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>Q</sub> mA	I <sub>PD</sub> E-Q nStyp	I <sub>PD</sub> E-Q n <sub>max</sub>	Note I <sub>T</sub> I <sub>FZ</sub> &I <sub>E</sub> MHz
	0...70°C §0...75°C		-40...85°C §-25...85°C		-55...125°C									
					ACT		74ACT377D		Fch,Nsc	20-dil-4	&(8μ	7 6.5	12 11	85
					74ACT377F		54ACT377F		Fch,Nsc	20-dil-4	&(8μ	7 6.5	11 10	125
					74ACT377P		54ACT377L		Fch,Nsc	20-flat-2	&(8μ	7 6.5	12 11	85
					74ACT377S				Fch,Nsc	20-chip-2	&(8μ	7 6.5	12 11	125
									Fch,Nsc	20-dil-1	&(8μ	7 6.5	11 10	85
									Fch,Nsc	20-sm-d-2	&(8μ	7 6.5	11 10	125
					HC		CD74HC377E		Rca	20-dil-1	&(8μ	14 14	44 44	25
							CD54HC377F		Rca	20-dil-4	&(8μ	14 14	53 53	20
							CD54HC377H		Rca	chip	&(8μ	14 14	53 53	20
							CD74HC377M		Rca	20-sm-d-2	&(8μ	14 14	44 44	25
					HD74HC377				Hit	20-dil				
					M74HC377				Mit	20-dil				
					MB74HC377				Fui	20-dil				
									Mat	20-dil-1				
									Mat	20-sm-d-3				
					SN74HC377DW		MN74HC377		Phi,Val	20-dil-1	&(8μ	16 16	40 40	24
							MN74HC377S		Phi,Val	20-sm-d-2	&(8μ	16 16	40 40	24
							PC74HC377P		Tix	20-sm-d-2	&(8μ	15 15	40 40	20
							PC74HC377T		Tix	20-chip-3	&(8μ	15 15	48 48	16
							SN54HC377FH		Tix	20-chip-3	&(8μ	15 15	48 48	16
					SN74HC377FH		SN74HC377FH		Tix	20-chip-3	&(8μ	15 15	40 40	20
							SN54HC377FK		Tix	20-chip-2	&(8μ	15 15	48 48	16
					SN74HC377FN		SN74HC377FN		Tix	20-chip-1	&(8μ	15 15	40 40	20
							SN54HC377J		Tix	20-dil-4	&(8μ	15 15	48 48	16
					SN74HC377J		SN74HC377J		Tix	20-dil-4	&(8μ	15 15	40 40	20
					SN74HC377N		SN74HC377N		Tix	20-dil-1	&(8μ	15 15	40 40	20
					T74HC377				Sgs	20-dil				
					HCT		CD74HCT377E		Rca	20-dil-1	&(8μ	16 16	48 48	20
							CD54HCT377F		Rca	20-dil-4	&(8μ	16 16	57 57	16
							CD54HCT377H		Rca	chip	&(8μ	16 16	57 57	16
									Rca	20-sm-d-2	&(8μ	16 16	48 48	20
									Mat	20-dil-1				
									Mat	20-sm-d-3				
									Phi,Val	20-dil-1	&(8μ	17 17	40 40	22
									Phi,Val	20-sm-d-2	&(8μ	17 17	40 40	22
74377	Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>Q</sub> mA	I <sub>PD</sub> E-Q nStyp	I <sub>PD</sub> E-Q n <sub>max</sub>	Note I <sub>T</sub> I <sub>FZ</sub> &I <sub>E</sub> MHz						
0...70°C §0...75°C		-40...85°C §-25...85°C							-55...125°C					
AC	74AC377D	54AC377D	Fch,Nsc	20-dil-4	&(8μ	6.5 6	11 10	95						
			Fch,Nsc	20-dil-4	&(8μ	6.5 6	11 10	125						
		54AC377F	Fch,Nsc	20-flat-2	&(8μ	6.5 6	11 10	95						
		54AC377L	Fch,Nsc	20-chip-2	&(8μ	6.5 6	11 10	95						
	74AC377P		Fch,Nsc	20-dil-1	&(8μ	6.5 6	11 10	125						
	74AC377S		Fch,Nsc	20-sm-d-2	&(8μ	6.5 6	11 10	125						

Input	Outp.		
FE T D	Q		
H X X	•		
L L X	•		
L ↑ L	L		
L ↑ H	H		

- Keine Veränderung
- No change
- Pas de modification
- Senza alterazione
- Sin modificación

**74378**

Output: TP

6 D-type flip-flops

**74378**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E-Q  
n<sub>s</sub>typ

t<sub>PD</sub>  
E-Q  
n<sub>s</sub>max

Note  
f<sub>T</sub> f<sub>SZ</sub>  
& f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§ -25...85°C

-55...125°C

Pins-  
Art-Nr.

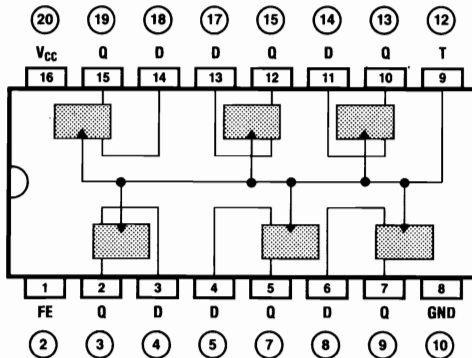
mA

↓ ↓ ↑

↓ ↓ ↑

MHz

FI = 1,1



Input	Output		
FE	T	D	Q
H	X	X	.
L	L	X	.
L	↑	L	L
L	↑	H	H

- Keine Veränderung
- No change
- Pas de modification
- Senza alterazione
- Sin modificación

AC

74AC378P  
74AC378S

Fch,Nsc  
Fch,Nsc

16-dil-2  
16-smd-1

&(8μ  
&(8μ

5.5 6  
5.5 6

ACT

74ACT378P  
74ACT378S

Fch,Nsc  
Fch,Nsc

16-dil-2  
16-smd-1

&(8μ  
&(8μ

5.5 6  
5.5 6

HC

JRC74HC378  
MB74HC378  
SN74HC378D

Njr  
Fui  
Tix

16-dil  
16-dil  
16-smd-1

&(8μ  
&(8μ  
&(8μ

15 15  
15 15  
15 15

40 40  
48 48  
40 40

20  
16  
20

SN74HC378FH SN74HC378FH

SN54HC378FH

SN74HC378FN SN74HC378FN

SN54HC378FK

SN74HC378J SN74HC378J

SN54HC378J

SN74HC378N SN74HC378N

SN54HC378J

Tix  
Tix  
Tix  
Tix  
Tix  
Tix

20-chip-3  
20-chip-3  
20-chip-2  
20-chip-1  
16-dil-3  
16-dil-3

15 15  
15 15  
15 15  
15 15  
15 15  
15 15

40 40  
48 48  
40 40  
40 40  
48 48  
40 40

16  
16  
16  
16  
16  
20



**74379**

Output: TP

4 D-type flip-flops

**74379**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

I<sub>PD</sub>  
E-Q  
n<sub>styp</sub>

I<sub>PD</sub>  
E-Q  
n<sub>max</sub>

Note  
f<sub>T</sub> Stz  
& f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz

AC

74AC379D  
74AC379P  
74AC379S

Fch,Nsc  
Fch,Nsc  
Fch,Nsc

16-dil-3  
16-dil-2  
16-smd-1

&(8μ  
&(8μ  
&(8μ

6 7  
6 7  
6 7

ACT

74ACT379D  
74ACT379P  
74ACT379S

Fch,Nsc  
Fch,Nsc  
Fch,Nsc

16-dil-3  
16-dil-2  
16-smd-1

&(8μ  
&(8μ  
&(8μ

6 7  
6 7  
6 7

HC

BU74HC379  
MB74HC379  
SN74HC379D

Toy  
Fui

16-dil  
16-dil

&(8μ

15 15

40 40

20

SN74HC379FH

SN74HC379FH

SN54HC379FH

Tix

16-smd-1

&(8μ

15 15

48 48

16

SN74HC379FN

SN74HC379FN

SN54HC379FK

Tix

20-chip-3

&(8μ

15 15

40 40

20

SN74HC379J

SN74HC379J

SN54HC379J

Tix

20-chip-2

&(8μ

15 15

48 48

16

SN74HC379N

SN74HC379N

Tix

20-chip-1

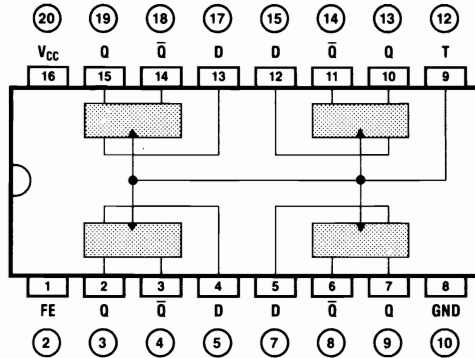
&(8μ

15 15

40 40

20

FI (FE,T) = 1,1



Input	Output	
	Q	Q̄
FE T D	Q	Q̄
H X X	•	•
L L X	•	•
L ↑ L	L	H
L ↑ H	H	L

- \* Keine Veränderung
- \* No change
- \* Pas de modification
- \* Senza alterazione
- \* Sin modificación

**74381**

Output: TP

**4-bit ALU (arithmetic and logic unit)****74381**

Type

Production

Bild  
Sec. 3 $I_S$   
&  $I_R$  $t_{PD}$   
E-Q  
nstyp $t_{PD}$   
E-Q  
nsmaxNote  
 $t_T$   $t_Z$   
&  $t_E$ 0...70°C  
§0...75°C- 40...85°C  
§ - 25...85°C

- 55...125°C

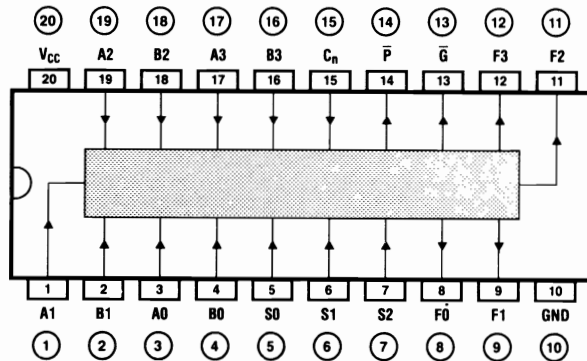
Pins-  
Art-Nr.

mA

↓ ↑ †

↓ ↑ †

MHz



FI = 4

FI (S) = 1

Input	Funktion*
S2 S1 S0	
L L L	Clear
L L H	B minus A
L H L	A minus B
L H H	A plus B
H L L	A ⊕ B
H L H	A + B
H H L	A - B
H H H	Preset

\* Function · Fonction · Funzione · Función

HC  
MB74HC381

Fui

20-dil

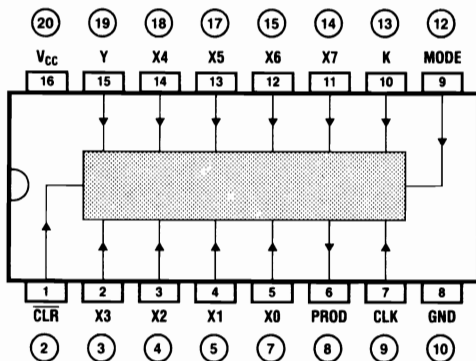
74384

Output: TP

## 8-bit-by-1-bit 2's complement rate multiplier

74384

Output: TP



Durch CLR = Low wird der Multiplikand über X0...X7 parallel geladen. Multipliziert wird bei jedem Taktzyklus an CLK mit dem an Y anliegenden Bit. Somit muß der Multiplikator seriell (LSB zuerst) übertragen werden, ebenso wie das Produkt, das bitweise an PROD zur Verfügung steht. Zur Kaskadierung kann PROD an den K-Anschluß des nächsten (höherwertigeren) Schaltkreises angeschlossen werden. Der MODE-Eingang muß bei dem IC, das das MSB enthält = Low sein, bei allen anderen = High.

With CLR = low, the multiplicand is loaded parallel via X0...X7. Multiplication is effected at each clock cycle at CLK with the bit at Y. The multiplier must therefore be transferred serially (LSB first), as must the product, which is available in bits at PROD. PROD can be connected to the channel trunk of the next (higher-order) circuit for cascading. In the IC that contains the MSB, the MODE input must be = low, and in all others it must be = high.

X0...X7 par CLR = Low. La multiplication est effectuée avec le bit appliqué à Y à chaque cycle d'horloge présent sur CLK. Le multiplicateur doit ainsi être transmis séquentiellement (le bit de poids faible [LSB] d'abord), de même que le produit qui est disponible à PROD. Pour une connexion en cascade, la broche PROD peut être reliée au raccordement K du circuit suivant (de poids fort). L'entrée MODE doit être celle du CI qui comporte le MSB (bit de poids fort) = Low, pour tous les autres = High.

Per mezzo del CLR = Low attraverso X0...X7 il moltiplicando viene caricato parallelamente. La moltiplicazione avviene ad ogni cadenza di ciclo al CLK col bit adiacente al Y. Con ciò il moltiplicatore dev'essere trasmesso in modo seriale (prima LSB) in pari modo come il prodotto che stà a disposizione al PROD in forma di bit. Per il collegamento in cascata il PROD può essere attaccato al collegamento K del prossimo circuito logico (di valore più alto). Presso IC, che contiene il MSB, l'entrata MODE dev'essere = Low, presso tutti gli altri = High.

Mediante señal low en CLR se carga el moltiplicando en paralelo a través de las entradas X0...X7. La moltiplicación con el bit aplicado a la entrada Y se efectúa con cada ciclo de reloj en CLK. Por tanto es preciso transmitir el moltiplicador en serie (primero el LSB), al igual que el producto, que aparece bit a bit en la salida PROD. En las conexiones en cascada puede conectarse PROD a la entrada K del circuito siguiente (de mayor peso). La entrada MODE debe estar a nivel low en el circuito integrado que contiene el MSB, y en todos los demás a nivel high.

74384	Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> & I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>S</sub> typ ↓ ↑ ↑	t <sub>PD</sub> E-Q n <sub>S</sub> max ↓ ↑ ↑	Note fr stz & IE MHz
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C						
HC	CD74HC384E	CD54HC384F	Rca Rca	16-dil-1 16-dil-3				
HCT	CD74HCT384E	CD54HCT384F	Rca Rca	16-dil-1 16-dil-3				

**74386**

Output: TP

EX-OR gates

**74386**

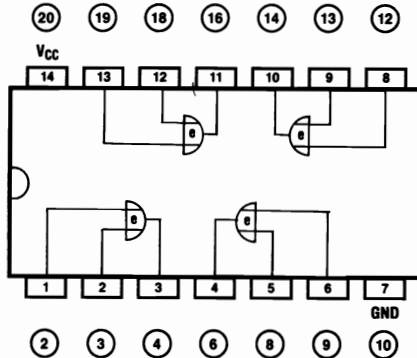
Type

0...70°C	-40...85°C	-55...125°C
§0...75°C	§-25...85°C	

Production

Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n#typ	t <sub>PD</sub> E-Q n#max	Note t <sub>r</sub> §fz &f <sub>E</sub>
Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz

FI = 2



HC	Type	Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n#typ	t <sub>PD</sub> E-Q n#max	Note t <sub>r</sub> §fz &f <sub>E</sub>
HD74HC386			14-dil			87 87	
		MC74HC386D	14-smd-1	&(2μ		36 36	
		MC54HC386J	14-dil-4	&(2μ		36 36	
		MC74HC386N	14-dil-1	&(2μ		36 36	
	MN74HC386		14-dil-1			87 87	
	MN74HC386S		14-smd-1			87 87	
SN74HC386D			14-smd-1			25 25	
		SN54HC386FH	Tix	&(2μ	12 12	25 25	
SN74HC386FH	SN74HC386FH		Tix	&(2μ	12 12	30 30	
		SN54HC386FK	Tix	&(2μ	12 12	25 25	
SN74HC386FN	SN74HC386FN		Tix	&(2μ	12 12	30 30	
		SN54HC386J	Tix	&(2μ	12 12	25 25	
SN74HC386J	SN74HC386J		Tix	&(2μ	12 12	30 30	
SN74HC386N	SN74HC386N		Tix	&(2μ	12 12	25 25	
TD74HC386			Tos	&(2μ	12 12	25 25	
				14-dil		87 87	

Logiktablelle siehe Section 1  
 Function table see section 1  
 Tableau logique voir section 1  
 Per tavola di logica vedi sezione 1  
 Tabla de verdad, ver sección 1

# 74390

Output: TP

## 2 decade counters

### 74390

Type

Production

Bld Sec. 3	I <sub>S</sub> ΔI <sub>R</sub>	I <sub>PD</sub> E→Q		I <sub>PD</sub> E←Q		Note f <sub>T</sub> Δfz &fE
		n <sub>styp</sub>	n <sub>max</sub>	n <sub>styp</sub>	n <sub>max</sub>	
Pin- Art-Nr.	mA	↓ ↑ ↑	↓ ↑ ↑	↓ ↑ ↑	↓ ↑ ↑	MHz

HC

HD74HC390

SN74HC390DW

SN74HC390FH

SN74HC390FN

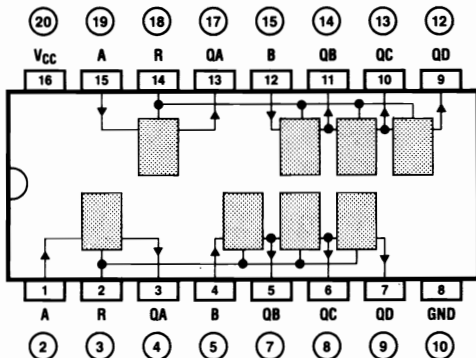
SN74HC390J

SN74HC390N

μPB74HC390

HCT

Type	Production	I <sub>S</sub> ΔI <sub>R</sub>	I <sub>PD</sub> E→Q n <sub>styp</sub>	I <sub>PD</sub> E←Q n <sub>max</sub>	Note f <sub>T</sub> Δfz &fE
CD74HC390E	Rca	16-dil-1	&(8μ	14 14	44 44 24
CD54HC390F	Rca	16-dil-3	&(8μ	14 14	53 53 20
CD54HC390H	Rca	chip	&(8μ	14 14	53 53 20
CD74HC390M	Rca	16-smd-1	&(8μ	14 14	44 44 24
MC54HC390J	Hit	16-dil	(8μ		30 30 21
MC74HC390N	Mot	16-dil-3	(8μ	13 13	21 21 30
MM54HC390J	Mot	16-dil-1	(8μ	13 13	21 21 30
MM74HC390J	Nsc	16-dil-3	(8μ	13 13	21 21 31
MM74HC390N	Nsc	16-dil-1	(8μ	13 13	21 21 31
MN74HC390	Mat	16-dil-1	&(8μ		30 30 21
MN74HC390S	Mat	16-smd-1	&(8μ		30 30 21
PC74HC390P	Phi,Val	16-dil-2	&(8μ	17 17	36 36 24
PC74HC390T	Phi,Val	16-smd-1	&(8μ	17 17	36 36 24
SN54HC390FH	Tix	16-smd-2	&(8μ	16 16	35 35 25
SN54HC390FK	Tix	20-chip-3	&(8μ	16 16	35 35 20
SN54HC390J	Tix	20-chip-2	&(8μ	16 16	35 35 20
SN54HC390N	Tix	20-chip-1	&(8μ	16 16	35 35 25
SN54HC390P	Tix	16-dil-3	&(8μ	16 16	35 35 20
SN54HC390T	Tix	16-dil-3	&(8μ	16 16	35 35 25
SN54HC390N	Tix	16-dil-1	&(8μ	16 16	35 35 25
μPB74HC390	Nec	16-dil	&(8μ		30 30 21
CD74HCT390E	Rca	16-dil-1	&(8μ	17 17	50 50 22
CD54HCT390F	Rca	16-dil-3	&(8μ	17 17	60 60 18
CD54HCT390H	Rca	chip	&(8μ	17 17	60 60 18
CD74HCT390M	Rca	16-smd-1	&(8μ	17 17	50 50 22
PC74HCT390P	Phi,Val	16-dil-2	&(8μ	21 21	43 43 21
PC74HCT390T	Phi,Val	16-smd-1	&(8μ	21 21	43 43 21



Pin	Fl
B	3
A	2

Input	Output
R	QA QC QB QA
H X	L L L L
L 0	L L L L
L 1	L L L H
.	.
.	.
L 9	H L L H
L 10	L L L L
.	.
.	.

Input	Output
R	QA QD QC QB
H X	L L L L
L 0	L L L L
L 1	L L L H
.	.
.	.
L 4	L H L L
L 5	H L L L
.	.
.	.

- \* Anzahl der Taktimpulse
- \* Number of clock pulses
- \* Nombre des impulsions d'horloge
- \* Numero di impulsi di cadenza
- \* Número de pulsos de reloj

BCD, QA mit B verbunden  
BCD, QA connected to B  
BCD, QA connecté à B  
BCD, QA collegato con B  
BCD, QA unido a B

bi-quinär, QD mit A verbunden  
bi-quinary, QD connected to A  
bi-quinaire, QD connecté à A  
bi-quinario, QD collegato con A  
bi-quinario, QD unido a A

**74393**  
Output: TP

2 binary counters

**74393**

Type

0...70°C      -40...85°C      -55...125°C  
§0...75°C      §-25...85°C

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E · Q  
n<sub>typ</sub>

t<sub>PD</sub>  
E · Q  
n<sub>max</sub>

Note  
t<sub>r</sub> §fz  
& f<sub>E</sub>  
MHz

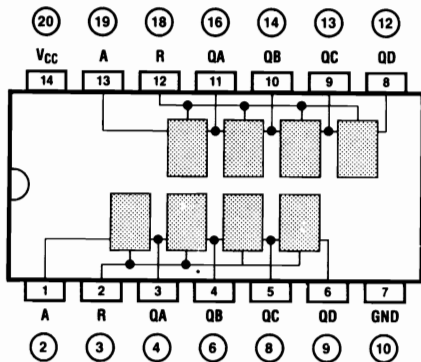
Pins-  
Art-Nr.

mA

↓ ↓ ↑

↓ ↓ ↑

Pin	Fl
A	2



Input		Output			
R	*	QA	QD	QC	QB
H	X	L	L	L	L
L	0	L	L	L	L
L	1	L	L	L	H
.	.	.	.	.	.
.	.	.	.	.	.
L	15	H	H	H	H
L	16	L	L	L	L
.	.	.	.	.	.
.	.	.	.	.	.

- \* Anzahl der Taktimpulse
- \* Number of clock pulses
- \* Nombre des impulsions d'horloge
- \* Numero di impulsi di cadenza
- \* Número de pulsos de reloj

HC

CD74HC393E

CD54HC393F  
CD54HC393H

Rca  
Rca  
Rca

14-dil-1  
14-dil-4  
chip

& (8u  
& (8u  
& (8u

12 12  
12 12  
12 12

38 38  
45 45  
45 45

24  
20  
20

HD74HC393

CD74HC393M

MC54HC393J  
MC74HC393N  
MM54HC393J

Rca  
Hit  
Mot  
Mot  
Nsc

14-smd-1  
14-dil  
14-dil-4  
14-dil-1

& (8u  
& (8u  
(8u  
(8u

12 12  
13 13  
13 13  
13 13

30 30  
21 21  
21 21  
21 21

24  
21  
30  
30

SN74HC393FH

SN74HC393FH

SN54HC393FH

Nsc  
Mat  
Mat

14-dil-4  
14-dil-1

(8u  
(8u

13 13  
13 13

21 21  
21 21

31  
31

SN74HC393FN

SN74HC393FN

SN54HC393FK

Phi, Val  
Phi, Val

14-dil-1  
14-smd-1

(8u  
(8u

15 15  
15 15

31 31  
31 31

24  
24

SN74HC393J

SN74HC393J

SN54HC393J

Tix  
Tix

20-chip-3  
20-chip-2

(8u  
(8u

15 15  
15 15

36 36  
36 36

21  
21

μPB74HC393

SN74HC393N

SN54HC393J

Nec

14-dil-1  
14-dil

(8u  
(8u

15 15  
15 15

30 30  
30 30

25  
21

HCT

CD74HCT393E

CD54HCT393F  
CD54HCT393H

Rca  
Rca  
Rca

14-dil-1  
14-dil-4  
chip

& (8u  
& (8u  
& (8u

13 13  
13 13  
13 13

40 40  
48 48  
48 48

22  
18  
18

CD74HCT393M

PC74HCT393P

PC74HCT393T

Rca  
Rca  
Phi, Val  
Phi, Val

14-smd-1  
14-dil-1  
14-smd-1

(8u  
(8u  
(8u

13 13  
15 15  
15 15

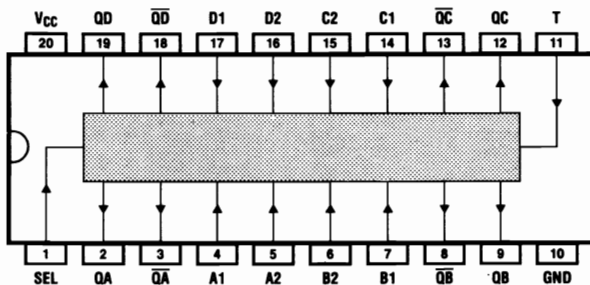
40 40  
31 31  
31 31

22  
22  
22

# 74398

Output: TP

## 4 2-line-to-1-line multiplexers



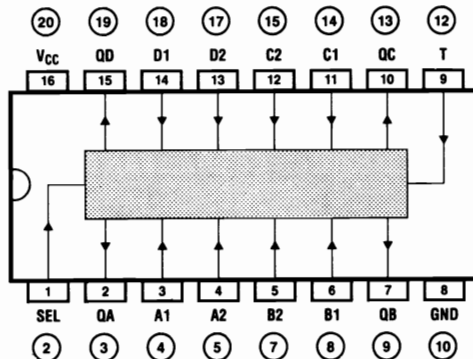
Input		Output							
SEL	T	QA	QB	QC	QD	QA	QB	QC	QD
X	L	keine Veränderung*							
L	↑	A1	B1	C1	D1	A1	B1	C1	D1
L	↑	A2	B2	C2	D2	A2	B2	C2	D2

- \* No change
- \* Pas de modification
- \* Senza alterazione
- \* Sin modificación

# 74399

Output: TP

## 4 2-line-to-1-line multiplexers



Input		Output			
SEL	T	QA	QB	QC	QD
X	L	keine Veränderung*			
L	↑	A1	B1	C1	D1
L	↑	A2	B2	C2	D2

- \* No change
- \* Pas de modification
- \* Senza alterazione
- \* Sin modificación

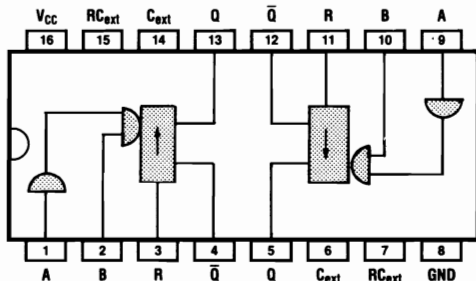
	74398			Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &R	I <sub>PD</sub> E-Q n <sub>typ</sub>	I <sub>PD</sub> E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>SZ</sub> &f <sub>E</sub>	74399			Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &R	I <sub>PD</sub> E-Q n <sub>typ</sub>	I <sub>PD</sub> E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>SZ</sub> &f <sub>E</sub>
	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C							0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C						
AC																		
ACT																		

# 74423

Output: TP

## Retriggerable monostable multivibrators

Pin	FI	
	N	L
A, B	1	4, 5
R	2	9



Input			Output	
R	A	B	Q	Q̄
L	X	X	L	H
X	H	X	L	H
X	X	L	L	H
H	L	↑	⌋	⌋
H	↓	H	⌋	⌋
↑	L	H	⌋	⌋

		min	typ	max	
A→Q	↑	22	33	ns	
A→Q	↓	30	40	ns	
B→Q	↑	19	28	ns	
B→Q	↓	27	36	ns	
R→Q	↓	18	27	ns	
R→Q	↑	30	40	ns	
t <sub>Q</sub>		45	65	ns	

### 74423

Type

0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C
-----------------------	---------------------------	-------------

Production

Blid  
Sec. 3  
Pins-  
Art-Nr.

I<sub>S</sub>  
&I<sub>R</sub>  
mA

t<sub>PD</sub>  
E-Q  
ns<sub>typ</sub>

t<sub>PD</sub>  
E-Q  
ns<sub>max</sub>

Note  
f<sub>T</sub> f<sub>sz</sub>  
&f<sub>E</sub>  
MHz

HC

CD74HC423E

CD54HC423F  
CD54HC423H

Rca  
Rca  
Rca

16-dil-1  
16-dil-3  
chip

HD74HC423

CD74HC423M

MC54HC423J  
JMC74HC423N  
MM54HC423J

Rca  
Hit  
Mot  
Mot  
Nsc

16-sm-d-1  
16-dil-3  
16-dil-3  
16-dil-1

TD74HC423

MM74HC423J  
MM74HC423N  
PC74HC423P  
PC74HC423T

Nsc  
Phi, Val  
Phi, Val  
Tos

16-dil-3  
16-dil-2  
16-sm-d-1  
16-dil

&(8μ

29 29

64 64

HCT

CD74HCT423E

CD54HCT423F  
CD54HCT423H

Rca  
Rca  
Rca

16-dil-1  
16-dil-3  
chip

TD74HCT423

CD74HCT423M  
PC74HCT423P  
PC74HCT423T

Rca  
Phi, Val  
Phi, Val  
Tos

16-sm-d-1  
16-dil-2  
16-sm-d-1  
16-dil

&(8μ

30 30

64 64



**74442**

Output: TS

4-bit tri-directional bus driver

**74442**

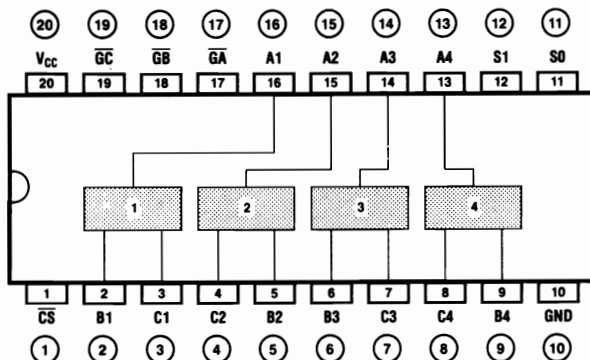
Type

Production

Bild  
Sec. 3  
Pins-  
Art-Nr.I<sub>S</sub>  
& I<sub>R</sub>  
mAI<sub>pD</sub>  
E-Q  
n<sub>styp</sub>  
↓ ↑ †I<sub>pD</sub>  
E-Q  
n<sub>max</sub>  
↓ ↑ †Note  
f<sub>T</sub> f<sub>z</sub>  
& f<sub>E</sub>  
MHzHC  
HD74HC442

Hit

20-dil



FE	Source Bus		Destination Bus			Function
CS	S1	S0	GA	GB	GC	Transfer
H	X	X	X	X	X	—
X	H	H	X	X	X	—
X	X	X	H	H	H	—
X	L	L	X	H	H	—
X	L	H	H	X	H	—
X	H	L	H	H	X	—
L	L	L	X	L	L	A→B, A→C
L	L	H	L	X	L	B→C, B→A
L	H	L	L	L	X	C→A, C→B
L	L	L	X	L	H	A→B
L	L	H	H	X	L	B→C
L	H	L	L	H	X	C→A
L	L	L	X	H	L	A→C
L	L	H	L	X	H	B→A
L	H	L	H	L	X	C→B

**74443**

Output: TS

4-bit tri-directional bus driver

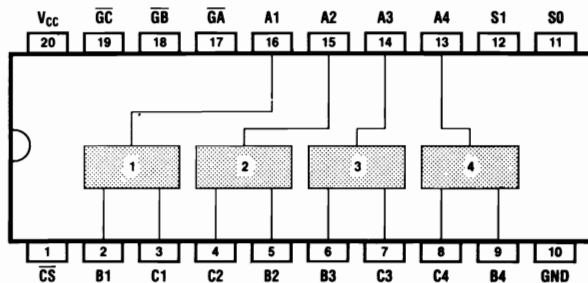
**74443**

Type

0...70°C  
§ 0...75°C-40...85°C  
§ -25...85°C

-55...125°C

Production

Blid  
Sec. 3IS  
& IqPin-  
Art-Nr.IPD  
E-Q  
n<sub>typ</sub>IPD  
E-Q  
n<sub>max</sub>Note  
f<sub>T</sub> Stz  
& f<sub>E</sub>  
MHzHC  
HD74HC443

Hit

20-dil

FE	Source Bus		Destination Bus			Function
CS	S1	S0	GA	GB	GC	Transfer
H	X	X	X	X	X	—
X	H	H	X	X	X	—
X	X	X	H	H	H	—
X	L	L	X	H	H	—
X	L	H	H	X	H	—
X	H	L	H	H	X	—
L	L	L	X	L	L	$\bar{A} \rightarrow B, \bar{A} \rightarrow C$
L	L	H	L	X	L	$\bar{B} \rightarrow C, \bar{B} \rightarrow A$
L	H	L	L	L	X	$\bar{C} \rightarrow A, \bar{C} \rightarrow B$
L	L	L	X	L	H	$\bar{A} \rightarrow B$
L	L	H	H	X	L	$\bar{B} \rightarrow C$
L	H	L	L	H	X	$\bar{C} \rightarrow A$
L	L	L	X	H	L	$\bar{A} \rightarrow C$
L	L	H	L	X	H	$\bar{B} \rightarrow A$
L	H	L	H	L	X	$\bar{C} \rightarrow B$

**74444**

Output: TS

4-bit tri-directional bus driver

**74444**

Type

Production

Bild  
Sec. 3 $I_S$   
&  $I_R$  $I_{PD}$   
E · Q  
 $n_{typ}$  $I_{PD}$   
E · Q  
 $n_{max}$ Note  
 $t_T$   $t_{SZ}$   
& E0...70°C  
§0...75°C-40...85°C  
§ -25...85°C

-55...125°C

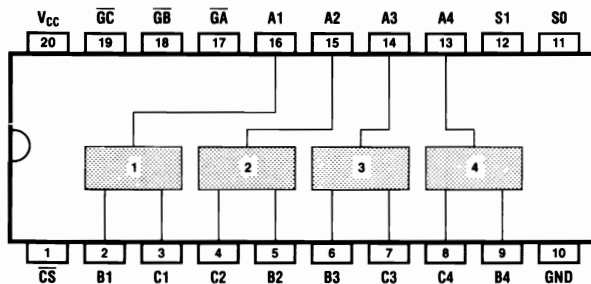
Pins-  
Art-Nr.

mA

↓ ↓ ↑

↓ ↓ ↑

MHz



FE	Source Bus		Destination Bus			Function
$\overline{CS}$	S1	S0	$\overline{GA}$	$\overline{GB}$	$\overline{GC}$	Transfer
H	X	X	X	X	X	—
X	H	H	X	X	X	—
X	X	X	H	H	H	—
X	L	L	X	H	H	—
X	L	H	H	X	H	—
X	H	L	H	H	X	—
L	L	L	X	L	L	$\overline{A} \rightarrow B, \overline{A} \rightarrow C$
L	L	H	L	X	L	$B \rightarrow C, B \rightarrow A$
L	H	L	L	L	X	$\overline{C} \rightarrow A, C \rightarrow B$
L	L	L	X	L	H	$\overline{A} \rightarrow B$
L	L	H	H	X	L	$B \rightarrow C$
L	H	L	L	H	X	$\overline{C} \rightarrow A$
L	L	L	X	H	L	$\overline{A} \rightarrow C$
L	L	H	L	X	H	$\overline{B} \rightarrow A$
L	H	L	H	L	X	$C \rightarrow B$

HC  
HD74HC444

Hit

20-dil

**74488**

Output: TP

IEEE-488 bus interface

**74488**

Type

0...70°C  
§0...75°C

- 40...85°C  
§ - 25...85°C

- 55...125°C

Production

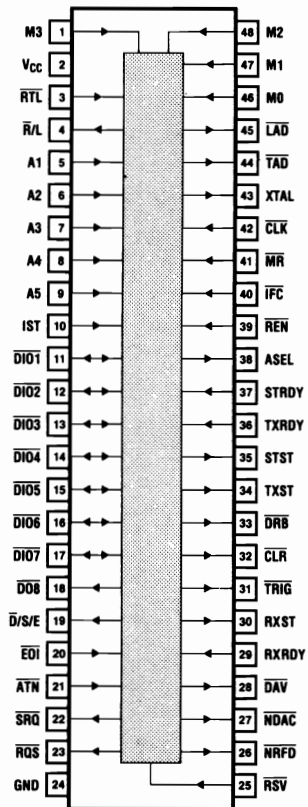
Bild  
Sec. 3  
Pins-  
Art-Nr.

I<sub>S</sub>  
&I<sub>R</sub>  
mA

t<sub>PD</sub>  
E→Q  
n#typ  
↓ ↑ ↑

t<sub>PD</sub>  
E→Q  
n#max  
↓ ↓ ↑

Note  
f<sub>T</sub> §f<sub>Z</sub>  
&f<sub>E</sub>  
MHz



ACT

74ACT488D  
74ACT488P

Fch,Nsc  
Fch,Nsc

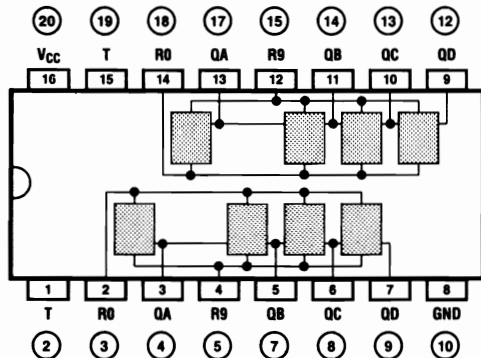
48-dil-1  
48-dil-1

&(8μ  
&(8μ

**74490**

Output: TP

2 decade counters



Input		Output				
R0	R9	T*	QD	QC	QB	QA
H	L	X	L	L	L	L
L	H	X	H	L	L	H
L	L	0	L	L	L	L
L	L	1	L	L	L	H
.	.	.	.	.	.	.
.	.	.	.	.	.	.
L	L	9	H	L	L	H

- \* Logikzustand oder Anzahl der Taktimpulse
- \* Logic level or number of clock pulses
- \* État logique ou nombre des impulsions d'horloge
- \* Stato logico o numero di impulsi di cadenza
- \* Estado lógico o número de pulsos de reloj

**74490**

Type

0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C
-----------------------	---------------------------	-------------

Production

Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E-Q		I <sub>PD</sub> E-Q		Note f <sub>T</sub> f <sub>Stz</sub> &E
		n <sub>typ</sub>	n <sub>max</sub>	n <sub>max</sub>	n <sub>max</sub>	
Pin- Art-Nr.	mA	↓ ↑ ↑	↓ ↑ ↑	↓ ↑ ↑	↓ ↑ ↑	MHz

HC HD74HC490 SN74HC490DW				Hit	16-dil						
SN74HC490FH	SN74HC490FH	SN54HC490FH		Tix	16-smd-2	&(8μ	15	15	31	31	25
SN74HC490FN	SN74HC490FN	SN54HC490FK		Tix	20-chip-3	&(8μ	15	15	38	38	21
SN74HC490J	SN74HC490J	SN54HC490J		Tix	20-chip-3	&(8μ	15	15	31	31	25
SN74HC490N	SN74HC490N			Tix	20-chip-2	&(8μ	15	15	38	38	21
				Tix	20-chip-1	&(8μ	15	15	31	31	25
				Tix	16-dil-3	&(8μ	15	15	38	38	21
				Tix	16-dil-3	&(8μ	15	15	31	31	25
				Tix	16-dil-1	&(8μ	15	15	31	31	25

**74520**

Output: TP

8-bit comparator

**74520**

Type

Production

Bld  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E-Q  
n<sup>o</sup>typ

t<sub>PD</sub>  
E-Q  
n<sup>o</sup>max

Note  
f<sub>T</sub> f<sub>z</sub>  
& f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↓ ↑

MHz

AC

74AC520D  
74AC520P  
74AC520S

Fch, Nsc  
Fch, Nsc  
Fch, Nsc

20-dil-4  
20-dil-1  
20-smd-2

8(8μ)  
8(8μ)  
8(8μ)

9.5 9.5  
9.5 9.5  
9.5 9.5

ACT

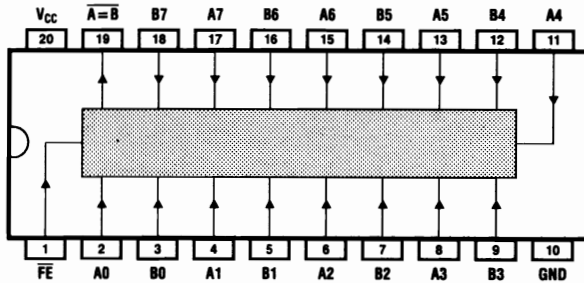
74ACT520D  
74ACT520P  
74ACT520S

Fch, Nsc  
Fch, Nsc  
Fch, Nsc

20-dil-4  
20-dil-1  
20-smd-2

8(8μ)  
8(8μ)  
8(8μ)

9.5 9.5  
9.5 9.5  
9.5 9.5



A, B	FE	A = B
X	H	H
A = B	L	L
A > B	X	H
A < B	X	H

With internal pull-up resistor

74521 Output: TP	8-bit comparator									74521	Type		Production	Bld Sec. 3 Pina- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>S</sub> typ ↓ ↑ ↑	t <sub>PD</sub> E-Q n <sub>S</sub> max ↓ ↑ ↑	Note f <sub>T</sub> §f <sub>Z</sub> &E MHz																		
										0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C																								
										AC	74AC521D 74AC521P 74AC521S	Fch,Nsc Fch,Nsc Fch,Nsc	20-dil-4 20-dil-1 20-smd-2	&(8μ &(8μ &(8μ	9.5 9.5 9.5 9.5 9.5 9.5																					
										ACT	74ACT521D 74ACT521P 74ACT521S	Fch,Nsc Fch,Nsc Fch,Nsc	20-dil-4 20-dil-1 20-smd-2	&(8μ &(8μ &(8μ	9.5 9.5 9.5 9.5 9.5 9.5																					
										HC	MM74HC521J MM74HC521N	Nsc Nsc	20-dil-4 20-dil-1	(8μ (8μ																						
										HCT	MM74HCT521J MM74HCT521N	Nsc Nsc	20-dil-4 20-dil-1	(8μ (8μ	23 16 23 16	35 24 35 24																				
										<table border="1"> <thead> <tr> <th>A, B</th> <th>FE</th> <th>A=B</th> </tr> </thead> <tbody> <tr> <td>X</td> <td>H</td> <td>H</td> </tr> <tr> <td>A=B</td> <td>L</td> <td>L</td> </tr> <tr> <td>A&gt;B</td> <td>X</td> <td>H</td> </tr> <tr> <td>A&lt;B</td> <td>X</td> <td>H</td> </tr> </tbody> </table>		A, B	FE	A=B	X	H	H	A=B	L	L	A>B	X	H	A<B	X	H										
A, B	FE	A=B																																		
X	H	H																																		
A=B	L	L																																		
A>B	X	H																																		
A<B	X	H																																		





74533	Typ - Type - Tipo		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E - Q n <sub>s</sub> typ	I <sub>PD</sub> E - Q n <sub>s</sub> max	Note f <sub>T</sub> §fz &f <sub>E</sub>	74534																																																																																														
	0...70°C §0...75°C	-40...85°C §-25...85°C							-55...125°C	Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↑ ↑	MHz	Output: TS	Inverting 8-bit D-type flip-flop																																																																																							
SN74HCT533DW			Tix	20-smd-2	&(8μ	38 38	44 44																																																																																																
SN74HCT533N			Tix	20-chip-2	&(8μ	38 38	53 53																																																																																																
			Tix	20-dil-4	&(8μ	38 38	53 53																																																																																																
			Tix	20-dil-1	&(8μ	38 38	44 44																																																																																																
									<table border="1"> <thead> <tr> <th>Input</th> <th>Output</th> </tr> </thead> <tbody> <tr> <td>FE T D</td> <td><math>\bar{Q}</math></td> </tr> <tr> <td>L J H</td> <td>L</td> </tr> <tr> <td>L J L</td> <td>H</td> </tr> <tr> <td>L L X</td> <td><math>\frac{Q\bar{Q}}</math></td> </tr> <tr> <td>H X X</td> <td>Z</td> </tr> </tbody> </table>		Input	Output	FE T D	$\bar{Q}$	L J H	L	L J L	H	L L X	$\frac{Q\bar{Q}}$	H X X	Z																																																																																	
Input	Output																																																																																																						
FE T D	$\bar{Q}$																																																																																																						
L J H	L																																																																																																						
L J L	H																																																																																																						
L L X	$\frac{Q\bar{Q}}$																																																																																																						
H X X	Z																																																																																																						
									<table border="1"> <thead> <tr> <th>74534</th> <th colspan="2">Type</th> <th rowspan="2">Production</th> <th rowspan="2">Bild Sec. 3</th> <th rowspan="2">I<sub>S</sub> &amp;I<sub>R</sub></th> <th rowspan="2">I<sub>PD</sub> E - Q n<sub>s</sub>typ</th> <th rowspan="2">I<sub>PD</sub> E - Q n<sub>s</sub>max</th> <th rowspan="2">Note f<sub>T</sub> §fz &amp;f<sub>E</sub></th> </tr> <tr> <td>0...70°C §0...75°C</td> <td>-40...85°C §-25...85°C</td> <td>-55...125°C</td> </tr> </thead> <tbody> <tr> <td>AC</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>CD74AC534E</td> <td>CD54AC534E</td> <td>Rca</td> <td>20-dil-1</td> <td>&amp;(8μ</td> <td></td> <td>10.8 10.8</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Rca</td> <td>20-dil-1</td> <td>&amp;(8μ</td> <td></td> <td>9.8 9.8</td> <td>143</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Rca</td> <td>chip</td> <td>&amp;(8μ</td> <td></td> <td>10.8 10.8</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>Rca</td> <td>20-smd-2</td> <td>&amp;(8μ</td> <td></td> <td>10.8 10.8</td> <td></td> </tr> <tr> <td></td> <td>CD74AC534M</td> <td>CD54AC534H</td> <td>Rca</td> <td>20-smd-2</td> <td>&amp;(8μ</td> <td></td> <td>9.8 9.8</td> <td>143</td> </tr> <tr> <td></td> <td>M74AC534</td> <td>CD54AC534M</td> <td>Mit</td> <td>20-dil</td> <td>&amp;(8μ</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>74AC534D</td> <td></td> <td>Fch.Nec</td> <td>20-dil-4</td> <td>&amp;(8μ</td> <td>6.5 7</td> <td></td> <td></td> </tr> <tr> <td></td> <td>74AC534P</td> <td></td> <td>Fch.Nec</td> <td>20-dil-1</td> <td>&amp;(8μ</td> <td>6.5 7</td> <td></td> <td></td> </tr> </tbody> </table>		74534	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E - Q n <sub>s</sub> typ	I <sub>PD</sub> E - Q n <sub>s</sub> max	Note f <sub>T</sub> §fz &f <sub>E</sub>	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	AC										CD74AC534E	CD54AC534E	Rca	20-dil-1	&(8μ		10.8 10.8					Rca	20-dil-1	&(8μ		9.8 9.8	143				Rca	chip	&(8μ		10.8 10.8					Rca	20-smd-2	&(8μ		10.8 10.8			CD74AC534M	CD54AC534H	Rca	20-smd-2	&(8μ		9.8 9.8	143		M74AC534	CD54AC534M	Mit	20-dil	&(8μ					74AC534D		Fch.Nec	20-dil-4	&(8μ	6.5 7				74AC534P		Fch.Nec	20-dil-1	&(8μ	6.5 7		
74534	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E - Q n <sub>s</sub> typ	I <sub>PD</sub> E - Q n <sub>s</sub> max	Note f <sub>T</sub> §fz &f <sub>E</sub>																																																																																															
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C																																																																																																					
AC																																																																																																							
	CD74AC534E	CD54AC534E	Rca	20-dil-1	&(8μ		10.8 10.8																																																																																																
			Rca	20-dil-1	&(8μ		9.8 9.8	143																																																																																															
			Rca	chip	&(8μ		10.8 10.8																																																																																																
			Rca	20-smd-2	&(8μ		10.8 10.8																																																																																																
	CD74AC534M	CD54AC534H	Rca	20-smd-2	&(8μ		9.8 9.8	143																																																																																															
	M74AC534	CD54AC534M	Mit	20-dil	&(8μ																																																																																																		
	74AC534D		Fch.Nec	20-dil-4	&(8μ	6.5 7																																																																																																	
	74AC534P		Fch.Nec	20-dil-1	&(8μ	6.5 7																																																																																																	

74534		Type		Production	Bild Sec. 3	IS &IR	tPD E-Q n <sub>typ</sub>	tPD E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>	74534		Type		Production	Bild Sec. 3	IS &IR	tPD E-Q n <sub>typ</sub>	tPD E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>				
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	0...70°C §0...75°C							-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	mA							↓ ↓ ↑	↓ ↓ ↑	MHz	Pins- Art-Nr.
ACT	74AC534S		Fch,Nsc	20-smd-2	&(8μ	6.5	7				SN74HCT534DW			Nsc	20-dil-1	(8μ	22	22	36	36	30		
	CD74ACT534E	CD54ACT534E	Rca	20-dil-1	&(8μ			11.7	11.7	110		MM74HCT534N PC74HCT534P PC74HCT534T	Phi,Val Phi,Val	20-dil-1	&(8μ	16	16	38	38	18	18		
		CD54ACT534H	Rca	chip	&(8μ			11.7	11.7	110		SN74HCT534N	SN54HCT534FK SN54HCT534J	Tix	20-smd-2	&(8μ	28	28	45	45	25	25	
	CD74ACT534M	CD54ACT534M	Rca	20-smd-2	&(8μ			10.6	10.6	125				Tix	20-smd-2	&(8μ	28	28	48	48	21	21	
	74ACT534D	54ACT534D	Fch,Nsc	20-dil-4	&(8μ	6	6.5							Tix	20-chip-2	&(8μ	28	28	48	48	21	21	
		54ACT534F	Fch,Nsc	20-dil-4	&(8μ	6	6.5							Tix	20-dil-4	&(8μ	28	28	48	48	21	21	
	74ACT534P	54ACT534L	Fch,Nsc	20-flat-2	&(8μ	6	6.5							Tix	20-dil-1	&(8μ	28	28	48	48	21	21	
	74ACT534S		Fch,Nsc	20-chip-2	&(8μ	6	6.5																
			Fch,Nsc	20-dil-1	&(8μ	6	6.5																
			Fch,Nsc	20-smd-2	&(8μ	6	6.5																
			Fch,Nsc	20-smd-2	&(8μ	6	6.5																
			Fch,Nsc	20-smd-2	&(8μ	6	6.5																
HC	CD74HC534E	CD54HC534F	Rca	20-dil-1	&(8μ	13	13	41	41	25													
	CD74HC534M	CD54HC534H	Rca	20-dil-4	&(8μ	13	13	50	50	20													
HD74HC534 M74HC534 MB74HC534			Rca	chip	&(8μ	13	13	50	50	20													
			Rca	20-smd-2	&(8μ	13	13	41	41	25													
			Hit	20-dil	&(8μ			45	45	24													
			Mit	20-dil	&(8μ			45	45	24													
			Fui	20-dil	&(8μ			45	45	24													
			Mot	20-smd-2	(8μ	15	15	31	31	35													
			Mot	20-dil-4	(8μ	15	15	31	31	35													
			Mot	20-dil-1	(8μ	15	15	31	31	35													
			Nsc	20-dil-4	(8μ	20	20	31	31	35													
			Nsc	20-dil-1	(8μ	20	20	31	31	35													
SN74HC534DW			Mat	20-dil-1	&(8μ			45	45	24													
			Mat	20-smd-3	&(8μ			45	45	24													
			Phi,Val	20-dil-1	&(8μ	15	15	41	41	24													
			Phi,Val	20-smd-2	&(8μ	15	15	41	41	24													
			Tix	20-smd-2	&(8μ	28	28	45	45	25													
			Tix	20-chip-2	&(8μ	28	28	54	54	21													
			Tix	20-dil-4	&(8μ	28	28	54	54	21													
			Tix	20-dil-1	&(8μ	28	28	45	45	25													
			Sgs	20-dil	&(8μ			45	45	24													
			Nec	20-dil	&(8μ			45	45	24													
HCT	CD74HCT534E	CD54HCT534F	Rca	20-dil-1	&(8μ	14	14	44	44	20													
	CD74HCT534M	CD54HCT534H	Rca	20-dil-4	&(8μ	14	14	53	53	16													
HD74HCT534			Rca	chip	&(8μ	14	14	53	53	16													
			Rca	20-smd-2	&(8μ	14	14	44	44	20													
			Hit	20-dil																			
			Mot	20-smd-2	&(8μ			53	53	38/5V													
			Mot	20-dil-4	&(8μ			53	53	38/5V													
		Mot	20-dil-1	&(8μ			53	53	38/5V														
		Nsc	20-dil-4	(8μ	22	22	36	36	30														

74540 Output: TS	8-bit inverting line driver				74540		Type	Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E-Q n <sub>styp</sub>	I <sub>PD</sub> E-Q n <sub>smax</sub>	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>																				
	0...70°C §0...75°C		- 40...85°C § - 25...85°C		- 55...125°C		Pins- Art-Nr.		mA	↓ ↑ ↑	↓ ↑ ↑	MHz																					
	74540																																
<table border="1"> <thead> <tr> <th>FE1</th> <th>FE2</th> <th>E</th> <th>Q</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>X</td> <td>X</td> <td>Z</td> </tr> <tr> <td>X</td> <td>H</td> <td>X</td> <td>Z</td> </tr> <tr> <td>L</td> <td>L</td> <td>L</td> <td>H</td> </tr> <tr> <td>L</td> <td>L</td> <td>H</td> <td>L</td> </tr> </tbody> </table>														FE1	FE2	E	Q	H	X	X	Z	X	H	X	Z	L	L	L	H	L	L	H	L
FE1	FE2	E	Q																														
H	X	X	Z																														
X	H	X	Z																														
L	L	L	H																														
L	L	H	L																														
74540	Type				Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E-Q n <sub>styp</sub>	I <sub>PD</sub> E-Q n <sub>smax</sub>	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>																							
0...70°C §0...75°C		- 40...85°C § - 25...85°C		- 55...125°C		Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↑ ↑	MHz																							
74540																																	
AC	CD74AC540E	CD54AC540E	Rca	20-dil-1	&(8μ		6.8	6.8																									
			Rca	20-dil-1	&(8μ		6.2	6.2																									
		CD54AC540H	Rca	chip	&(8μ		6.8	6.8																									
			Rca	20-smd-2	&(8μ		6.8	6.8																									
		CD54AC540M	Rca	20-smd-2	&(8μ		6.2	6.2																									
			Rca	20-smd-2	&(8μ		6.2	6.2																									
	CD74AC540M	54AC540D	Fch,Nsc	20-dil-4	&(8μ	4	4	6.5	7																								
			Fch,Nsc	20-dil-4	&(8μ	4	4	6	6.5																								
		54AC540F	Fch,Nsc	20-dil-4	&(8μ	4	4	6.5	7																								
			Fch,Nsc	20-flat-2	&(8μ	4	4	6.5	7																								
		HCT	CD74HCT540E	CD54HCT540F	Rca	20-dil-1	&(8μ		9	9	30	30																					
					Rca	20-dil-4	&(8μ		9	9	36	36																					
CD54HCT540H	Rca			chip	&(8μ		9	9	36	36																							
	Rca			20-smd-2	&(8μ		9	9	30	30																							
CD74HCT540M	MC74HCT540DW			Mot	20-smd-2	&(8μ				53	53																						
				Mot	20-dil-4	&(8μ				53	53																						
	MC54HCT540J		Mot	20-dil-1	&(8μ				53	53																							
			Mot	20-dil-1	&(8μ				53	53																							
	MM74HCT540J		Nsc	20-dil-4	(8μ	12	12	20	20																								
			Nsc	20-dil-1	(8μ	12	12	20	20																								
SN74HCT540DW	PC74HCT540P		Phi,Val	20-dil-1	&(8μ		13	13	30	30																							
			Phi,Val	20-smd-2	&(8μ		13	13	30	30																							
	SN54HCT540FK	Tix	20-smd-2	&(8μ		13	13	25	25																								
		Tix	20-chip-2	&(8μ		13	13	30	30																								
	SN54HCT540J	Tix	20-dil-1	&(8μ		10	10	25	25																								
		Sgs	20-dil	&(8μ		25	25	25	25																								
HCT	CD74HCT540E	CD54HCT540F	Rca	20-dil-1	&(8μ		9	9	30	30																							
			Rca	20-dil-4	&(8μ		9	9	36	36																							
		CD54HCT540H	Rca	chip	&(8μ		9	9	36	36																							
			Rca	20-smd-2	&(8μ		9	9	30	30																							
		CD74HCT540M	MC74HCT540DW	Mot	20-smd-2	&(8μ				53	53																						
				Mot	20-dil-4	&(8μ				53	53																						
	MC54HCT540J		Mot	20-dil-1	&(8μ				53	53																							
			Mot	20-dil-1	&(8μ				53	53																							
	MM74HCT540J		Nsc	20-dil-4	(8μ	12	12	20	20																								
			Nsc	20-dil-1	(8μ	12	12	20	20																								
	SN74HCT540DW	PC74HCT540P	Phi,Val	20-dil-1	&(8μ		13	13	30	30																							
			Phi,Val	20-smd-2	&(8μ		13	13	30	30																							
SN54HCT540FK		Tix	20-smd-2	&(8μ		13	13	25	25																								
		Tix	20-chip-2	&(8μ		13	13	30	30																								

74540		Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>S</sub> typ	t <sub>PD</sub> E-Q n <sub>S</sub> max	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>	74541		8-bit line driver																			
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.							mA	↓ ↓ ↑	↓ ↓ ↑	MHz	Output: TS																	
SN74HCT540N T74HCT540		SN54HCT540J	Tix Tix Sgs	20-dil-4 20-dil-1 20-dil	&(8) <sub>μ</sub> &(8) <sub>μ</sub>	13 13 13 13	30 30 25 25																								
										<table border="1"> <thead> <tr> <th>FE1</th> <th>FE2</th> <th>E</th> <th>Q</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>X</td> <td>X</td> <td>Z</td> </tr> <tr> <td>X</td> <td>H</td> <td>X</td> <td>Z</td> </tr> <tr> <td>L</td> <td>L</td> <td>L</td> <td>L</td> </tr> <tr> <td>L</td> <td>L</td> <td>H</td> <td>H</td> </tr> </tbody> </table>		FE1	FE2	E	Q	H	X	X	Z	X	H	X	Z	L	L	L	L	L	L	H	H
FE1	FE2	E	Q																												
H	X	X	Z																												
X	H	X	Z																												
L	L	L	L																												
L	L	H	H																												
74541		Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>S</sub> typ	t <sub>PD</sub> E-Q n <sub>S</sub> max	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>	AC																					
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.							mA	↓ ↓ ↑	↓ ↓ ↑	MHz																		
			CD74AC541E	CD54AC541E	Rca	20-dil-1	&(8) <sub>μ</sub>			7.8	7.8																				
				CD54AC541H	Rca	20-dil-1	&(8) <sub>μ</sub>			7.1	7.1																				
				CD54AC541M	Rca	chip	&(8) <sub>μ</sub>			7.8	7.8																				
			CD74AC541M	CD54AC541M	Rca	20-smd-2	&(8) <sub>μ</sub>			7.8	7.8																				
				54AC541D	Rca	20-smd-2	&(8) <sub>μ</sub>			7.1	7.1																				
			74AC541D	54AC541D	Fch,Nsc	20-dil-4	&(8) <sub>μ</sub>	4	4	7	7																				
				54AC541F	Fch,Nsc	20-dil-4	&(8) <sub>μ</sub>	4	4	6.5	6.5																				
					Fch,Nsc	20-flat-2	&(8) <sub>μ</sub>	4	4	7	7																				

74541	Type		Production	Bild Sec. 3	IS &lR	tPD E-Q n#typ	tPD E-Q n#max	Note fT §fz &fE	74541	Type		Production	Bild Sec. 3	IS &lR	tPD E-Q n#typ	tPD E-Q n#max	Note fT §fz &fE	
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C							-40...85°C §-25...85°C
			Pins- Art-Nr.		mA	↓ ↑ ↑	↓ ↓ ↑	MHz				Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz		
ACT	74AC541P 74AC541S	54AC541L	Fch,Nsc Fch,Nsc Fch,Nsc	20-chip-2 20-dil-1 20-smd-2	&(8μ &(8μ &(8μ	4 4 4 4 4 4	7 7 6.5 6.5 6.5 6.5		SN74HCT541DW  SN74HCT541N	PC74HCT541T  SN54HCT541FK SN54HCT541J	Phi,Val Tix Tix Tix Tix	20-smd-2 20-smd-2 20-chip-2 20-dil-4 20-dil-1 20-dil-1	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ	15 15 13 13 13 13 13 13 13 13 13 13	35 35 29 29 34 34 34 34 34 34 29 29			
		CD74ACT541E	Rca Rca Rca Rca	20-dil-1 20-dil-1 chip 20-smd-2	&(8μ &(8μ &(8μ &(8μ		8.2 8.2 7.5 7.5 8.2 8.2 8.2 8.2											
	CD74ACT541M	Rca	20-smd-2	&(8μ	7.5 7.5													
	74ACT541D 74ACT541P 74ACT541S	Fch,Nsc Fch,Nsc Fch,Nsc	20-dil-4 20-dil-1 20-smd-2	&(8μ &(8μ &(8μ	6 6 6 6 6 6													
	HC	CD74HC541E	Rca	20-dil-1	&(8μ	9 9	29 29											
			CD54HC541F CD54HC541H	Rca Rca Rca	20-dil-4 chip 20-smd-2	&(8μ &(8μ &(8μ	9 9 9 9 9 9	35 35 35 35 29 29										
		CD74HC541M	Rca	20-smd-2	&(8μ	9 9	29 29											
			HD74HC541 M74HC541	Hit Mit	20-dil 20-dil	&(8μ &(8μ		29 29 29 29										
		SN74HC541DW	MM74HC541J MM74HC541N MN74HC541 MN74HC541S PC74HC541P PC74HC541T	MC74HC541DW MC54HC541J MC74HC541N MM54HC541J	Mot Mot Mot Nsc Nsc Mat Mat Phi,Val Phi,Val Tix	20-smd-2 20-dil-4 20-dil-1 20-dil-4 20-dil-1 20-dil-1 20-smd-3 20-dil-1 20-smd-2 20-smd-2	&(8μ &(8μ &(8μ (8μ (8μ (8μ &(8μ &(8μ &(8μ &(8μ	11 11 11 11 11 11 11 11 11 11 11 11 12 12 12 12 12 12 12 12									20 20 20 20 20 20 29 29 29 29 29 29 29 29 29 29 29 29 29 29	
				SN54HC541FK SN54HC541J	Tix Tix	20-chip-2 20-dil-4	&(8μ &(8μ	12 12 12 12									34 34 34 34	
HCT			CD74HCT541E	Rca	20-dil-1	&(8μ	11 11	35 35										
				CD54HCT541F CD54HCT541H	Rca Rca Rca	20-dil-4 chip 20-smd-2	&(8μ &(8μ &(8μ	11 11 11 11 11 11	42 42 42 42 35 35									
			HD74HCT541	CD74HCT541M	Rca	20-smd-2	&(8μ	11 11	35 35									
				MM74HCT541J MM74HCT541N PC74HCT541P	MC74HCT541DW MC54HCT541J MC74HCT541N MM54HCT541J	Mot Mot Mot Nsc Nsc Phi,Val	20-smd-2 20-dil-4 20-dil-1 20-dil-4 20-dil-1 20-dil-1	&(8μ &(8μ &(8μ (8μ (8μ &(8μ	53 53 53 53 53 53 14 14 14 14 15 15	53 53 53 53 23 23 23 23 35 35	45/5V 45/5V 45/5V							

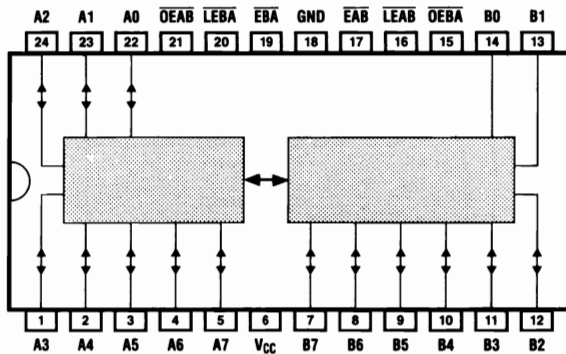
**74543**

Output: TS

## Bidirectional bus driver with latch

**74543**

Output: TS



Input			Output	Funktion
EAB	LEAB	OEAB	B0...B7	
H	X	X	Z	Inhibit
X	H	—	—	—
X	—	H	Z	Inhibit
L	L	L	A0...A7	Transparent
L	J	L	A0...A7	Latch A0...A7
L	H	L	Latch	Output Latched Data

Input			Output	Funktion
EBA	LEBA	OEBA	A0...A7	
H	X	X	Z	Inhibit
X	H	—	—	—
X	—	H	Z	Inhibit
L	L	L	B0...B7	Transparent
L	J	L	B0...B7	Latch B0...B7
L	H	L	Latch	Output Latched Data

74543	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E · Q n <sub>typ</sub>	I <sub>PD</sub> E · Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>
	0...70°C §0...75°C	-40...85°C §-25...85°C						
HC	MM74HC543J MM74HC543N	MM54HC543J	Nsc	24-dil-4				
			Nsc	24-dil-1				
HCT	MM74HCT543J MM74HCT543N	MM54HCT543J	Nsc	24-dil-4				
			Nsc	24-dil-1				

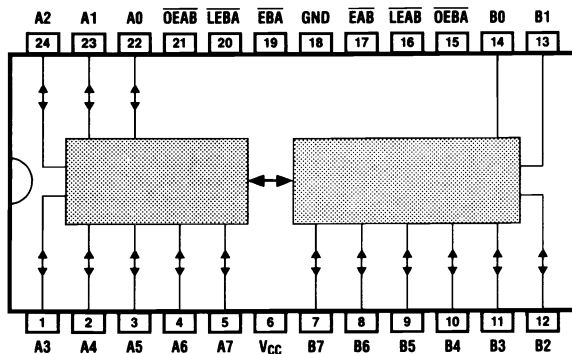
**74544**

Output: TS

## Bidirectional inverting bus driver with latch

**74544**

Output: TS



Input			Output	Funktion
EAB	LEAB	OEAB	B0...B7	
H	X	X	Z	Inhibit
X	H	—	—	—
X	—	H	Z	Inhibit
L	L	L	$\overline{A0...A7}$	Transparent
L	J	L	$\overline{A0...A7}$	Latch A0...A7
L	H	L	Latch	Output Latched Data

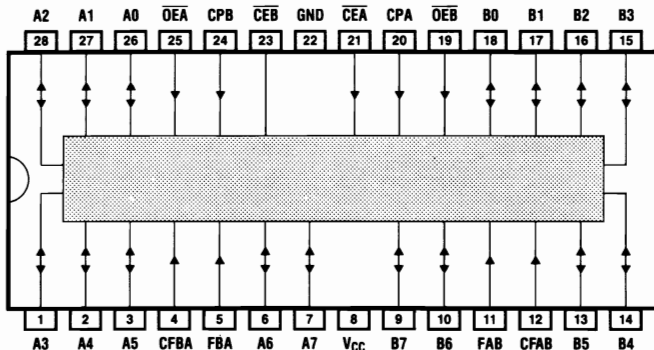
Input			Output	Funktion
EBA	LEBA	OEBA	A0...A7	
H	X	X	Z	Inhibit
X	H	—	—	—
X	—	H	Z	Inhibit
L	L	L	$\overline{B0...B7}$	Transparent
L	J	L	$\overline{B0...B7}$	Latch B0...B7
L	H	L	Latch	Output Latched Data

74544	Type		Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	I <sub>PD</sub> E → Q n <sub>styp</sub>	I <sub>PD</sub> E → Q n <sub>smax</sub>	Note I <sub>T</sub> I <sub>fz</sub> & I <sub>E</sub>
	0...70°C §0...75°C	-40...85°C §-25...85°C						
HC	MM74HC544J MM74HC544N	MM54HC544J	Nsc Nsc	24-dil-4 24-dil-1				
HCT	MM74HCT544J MM74HCT544N	MM54HCT544J	Nsc Nsc	24-dil-4 24-dil-1				

**74550**

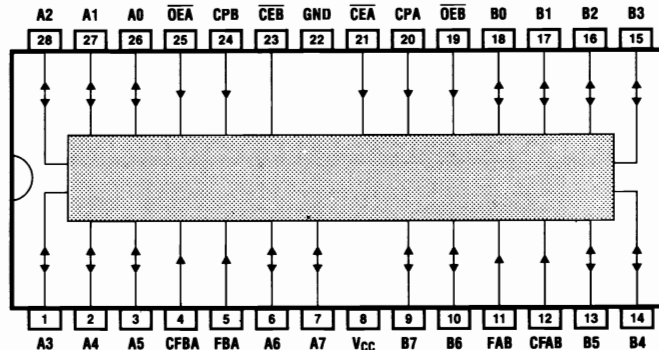
Output: TS

Bidirectional bus driver with latch

**74551**

Output: TS

Bidirectional inverting bus driver with latch

**74550**

Type

Production

Bild  
Sec. 3I<sub>S</sub>  
& I<sub>R</sub>t<sub>PD</sub>  
E → Q  
n<sub>styp</sub>t<sub>PD</sub>  
E → Q  
n<sub>max</sub>Note  
f<sub>T</sub> f<sub>z</sub>  
& f<sub>E</sub>0...70°C  
§0...75°C-40...85°C  
§-25...85°C

-55...125°C

HC

MM74HC550J  
MM74HC550NMM54HC550J  
MM54HC550NNsc  
Nsc28-dil-4  
28-dil-1

HCT

MM74HCT550J  
MM74HCT550NMM54HCT550J  
MM54HCT550NNsc  
Nsc28-dil-4  
28-dil-1**74551**

Type

Production

Bild  
Sec. 3I<sub>S</sub>  
& I<sub>R</sub>t<sub>PD</sub>  
E → Q  
n<sub>styp</sub>t<sub>PD</sub>  
E → Q  
n<sub>max</sub>Note  
f<sub>T</sub> f<sub>z</sub>  
& f<sub>E</sub>0...70°C  
§0...75°C-40...85°C  
§-25...85°C

-55...125°C

HC

MM74HC550J  
MM74HC550NMM54HC550J  
MM54HC550NNsc  
Nsc28-dil-4  
28-dil-1

HCT

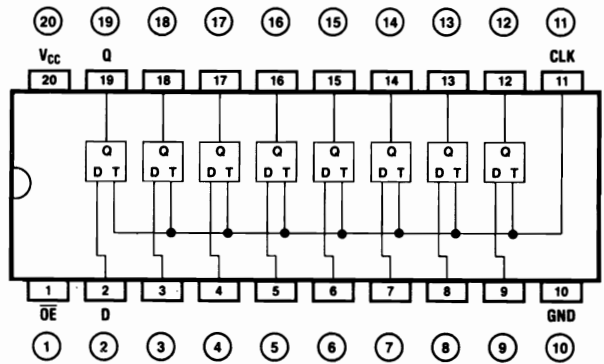
MM74HCT550J  
MM74HCT550NMM54HCT550J  
MM54HCT550NNsc  
Nsc28-dil-4  
28-dil-1



74563 Output: TS	Inverting 8-bit D-type latch	74563			Type	Production	Bild Sec. 3	I <sub>S</sub> &R	t <sub>PD</sub> E · Q n#typ	t <sub>PD</sub> E · Q n#max	Note f <sub>T</sub> §f <sub>Z</sub> &f <sub>E</sub>
		0...70°C §0...75°C	- 40...85°C § - 25...85°C	- 55...125°C							
		<b>AC</b>	CD74AC563E	CD54AC563E	Rca	20-dil-1	&(8μ		10.5 10.5		
		CD74AC563M 74AC563D 74AC563P 74AC563S	CD54AC563H CD54AC563M	Rca Rca Rca Fch,Nsc Fch,Nsc Fch,Nsc	20-dil-1 20-dil-1 20-smd-2 20-dil-4 20-dil-1 20-smd-2	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ		9.5 9.5 10.5 10.5 10.5 10.5 9.5 9.5 4.5 5 4.5 5 4.5 5			
		<b>ACT</b>	CD74ACT563E	CD54ACT563E	Rca	20-dil-1	&(8μ		11.4 11.4		
		CD74ACT563M 74ACT563D 74ACT563P 74ACT563S	CD54ACT563H CD54ACT563M	Rca Rca Rca Fch,Nsc Fch,Nsc Fch,Nsc	20-dil-1 20-dil-1 20-smd-2 20-dil-4 20-dil-1 20-smd-2	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ		10.4 10.4 11.4 11.4 11.4 11.4 10.4 10.4 6 7 6 7 6 7 6 7			
		<b>HC</b>	CD74HC563E	CD54HC563E	Rca	20-dil-1	&(8μ	12 12	38 38		
		HD74HC563 LR74HC563 M74HC563	CD54HC563H CD74HC563M	Rca Rca Rca Hit Sha Mit	20-dil-4 20-dil-1 20-smd-2 20-dil 20-dil 20-dil	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ		12 12 12 12 12 12 28 28 28 28 28 28	45 45 45 45 38 38 28 28 28 28 28 28		
			MM74HC563J MM74HC563N MN74HC563 MN74HC563S PC74HC563P PC74HC563T	MC74HC563DW MCS4HC563J MC74HC563N MM54HC563J	Mot Mot Mot Nsc Nsc Mat Mat Phi,Val Phi,Val	20-smd-2 20-dil-4 20-dil-1 20-dil-4 20-dil-1 20-smd-3 20-dil-1 20-smd-2	&(8μ &(8μ &(8μ (8μ (8μ &(8μ &(8μ &(8μ		53 53 53 53 53 53 12 12 12 12 28 28 28 28 17 17 17 17	19 19 19 19 28 28 28 28 36 36 36 36	
		SN74HC563DW SN74HC563FH	SN74HC563FH	Tix Tix Tix	20-smd-2 20-smd-3 20-chip-2	&(8μ &(8μ &(8μ		26 26 26 26 26 26	44 44 44 44 53 53		
				SN54HC563FH SN54HC563FK	Tix Tix	20-chip-3 20-chip-2	&(8μ &(8μ	26 26 26 26	44 44 53 53		

Input	Output
OE T D	$\bar{Q}$
L H H	L
L H L	H
L L X	$\bar{Q}0$
H X X	Z

74563		Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E-Q n <sub>styp</sub>	I <sub>PD</sub> E-Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>FZ</sub> &E	74564 Output: TS	Inverting 8-bit D-type flip-flop
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.								
SN74HC563FN	SN74HC563FN	SN54HC563J	Tix	20-chip-1	&(8μ	26 26	44 44	24			
SN74HC563J	SN74HC563J		Tix	20-dil-4	&(8μ	26 26	53 53				
SN74HC563N	SN74HC563N		Tix	20-dil-4	&(8μ	26 26	44 44				
μPB74HC563			Nec	20-dil-1	&(8μ	26 26	44 44				
HCT											
	CD74HCT563E	CD54HCT563F CD54HCT563H	Rca	20-dil-1	&(8μ	12 12	38 38				
			Rca	20-dil-4	&(8μ	12 12	45 45				
			Rca	chip	&(8μ	12 12	45 45				
	CD74HCT563M		Rca	20-smd-2	&(8μ	12 12	38 38				
HD74HCT563			Hit	20-dil	&(8μ						
	MM74HCT563J	MM54HCT563J	Nsc	20-dil-4	(8μ	22 22	30 30				
	MM74HCT563N		Nsc	20-dil-1	(8μ	22 22	30 30				
	PC74HCT563P		Phi,Val	20-dil-1	&(8μ	18 18	38 38				
	PC74HCT563T		Phi,Val	20-smd-2	&(8μ	18 18	38 38				
SN74HCT563DW		SN54HCT563FH	Tix	20-smd-2	&(8μ	28 28	44 44				
SN74HCT563FH	SN74HCT563FH		Tix	20-chip-3	&(8μ	28 28	53 53				
SN74HCT563FN	SN74HCT563FN	SN54HCT563FK	Tix	20-chip-2	&(8μ	28 28	53 53				
SN74HCT563J	SN74HCT563J		Tix	20-chip-1	&(8μ	28 28	44 44				
SN74HCT563N	SN74HCT563N	SN54HCT563J	Tix	20-dil-4	&(8μ	28 28	53 53				
SN74HCT563N	SN74HCT563N		Tix	20-dil-1	&(8μ	28 28	44 44				



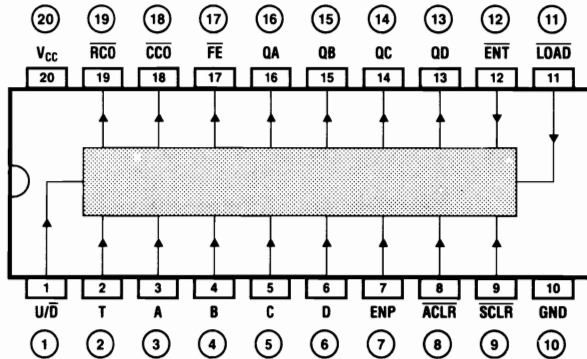
Input	Output
OE CLK D	$\bar{Q}$
L J H	L
L J L	H
L L X	$\bar{Q}0$
H X X	Z

74564	Type		Production	Blld Sec. 3	IS &R	tpD E · Q ns typ	tpD E · Q ns max	Note fT fZ &fE	74564	Type		Production	Blld Sec. 3	IS &R	tpD E · Q ns typ	tpD E · Q ns max	Note fT fZ &fE		
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C							-40...85°C §-25...85°C	-55...125°C
	Pins- Art-Nr.	mA								↓ ↑ *	↓ ↑ *							↓ ↑ *	MHz
AC	CD74AC564E  CD74AC564M 74AC564D 74AC564P 74AC564S	CD54AC564E	Rca	20-dil-1	&(8μ		11.3 11.3	125	SN74HC564N μPB74HC564  HCT  HD74HCT564  SN74HCT564DW  SN74HCT564N	CD74HCT564E  CD74HCT564M  MM74HCT564J MM74HCT564N PC74HCT564P PC74HCT564T	Tix Nec	20-dil-1	&(8μ	18 18	45 45	25			
		Rca	20-dil-1	&(8μ		10.3 10.3	143	20-dil-1				&(8μ	18 18	45 45	24				
		Rca	chip	&(8μ		11.3 11.3	125	Rca				20-dil-1	&(8μ	14 14	44 44	20			
		Rca	20-smd-2	&(8μ		11.3 11.3	125	Rca				20-dil-4	&(8μ	14 14	53 53	16			
		Rca	20-smd-2	&(8μ		10.3 10.3	143	Rca				chip	&(8μ	14 14	53 53	16			
		Fch,Nsc	20-dil-4	&(8μ	6 7			Rca				20-smd-2	&(8μ	14 14	44 44	20			
		Fch,Nsc	20-dil-1	&(8μ	6 7			Hit				20-dil-1	&(8μ						
		Fch,Nsc	20-smd-2	&(8μ	6 7			Nsc				20-dil-4	(8μ	22 22	36 36	30			
								Nsc				20-dil-1	(8μ	22 22	36 36	30			
								Phi,Val				20-dil-1	&(8μ	19 19	44 44	22			
ACT	CD74ACT564E  CD74ACT564M 74ACT564D 74ACT564F 74ACT564P 74ACT564S	CD54ACT564E	Rca	20-dil-1	&(8μ		11.7 11.7	110	SN74HCT564DW	MM54HCT564J CD54HCT564F	Phi,Val Phi,Val Tix Tix Tix	20-dil-1	&(8μ	19 19	44 44	22			
		Rca	20-dil-1	&(8μ		10.6 10.6	125	20-smd-2				&(8μ	19 19	44 44	22				
		Rca	chip	&(8μ		11.7 11.7	110	20-smd-2				&(8μ	18 18	45 45	25				
		Rca	20-smd-2	&(8μ		11.7 11.7	110	Tix				20-smd-2	&(8μ	18 18	54 54	21			
		Rca	20-smd-2	&(8μ		10.6 10.6	125	SN54HCT564FK				20-dil-4	&(8μ	18 18	54 54	21			
		Fch,Nsc	20-dil-4	&(8μ	6 6.5	11.5 12.5	65	SN54HCT564J				20-dil-1	&(8μ	18 18	45 45	25			
		Fch,Nsc	20-dil-4	&(8μ	6 6.5	10.5 11.5	75												
		Fch,Nsc	20-flat-2	&(8μ	6 6.5	11.5 12.5	65												
		Fch,Nsc	20-chip-2	&(8μ	6 6.5	11.5 12.5	65												
		Fch,Nsc	20-dil-1	&(8μ	6 6.5	10.5 11.5	75												
Fch,Nsc	20-smd-2	&(8μ	6 6.5	10.5 11.5	75														
HC	CD74HC564E  CD74HC564M	CD54HC564F	Rca	20-dil-1	&(8μ	13 13	41 41	25	MM74HC564N MN74HC564 MN74HC564S PC74HC564P PC74HC564T	SN74HC564DW	SN54HC564FK SN54HC564J	20-dil-1	&(8μ	13 13	50 50	20			
		Rca	20-dil-4	&(8μ	13 13	50 50	20	20-dil-4				&(8μ	12 12	20 20	35				
		Rca	chip	&(8μ	13 13	50 50	20	Nsc				20-dil-4	(8μ	12 12	20 20	35			
		Rca	20-smd-2	&(8μ	13 13	41 41	25	Mat				20-dil-1	&(8μ						
		Hit	20-dil-1	&(8μ			24	Mat				20-smd-3	&(8μ						
		Mit	20-dil-1	&(8μ			24	Phi,Val				20-dil-1	&(8μ	18 18	41 41	24			
		Mot	20-smd-2	&(8μ			20	Phi,Val				20-smd-2	&(8μ	18 18	41 41	24			
		Mot	20-dil-4	&(8μ			20	Tix				20-smd-2	&(8μ	18 18	45 45	25			
		Mot	20-dil-1	&(8μ			20	Tix				20-chip-2	&(8μ	18 18	54 54	21			
		Nsc	20-dil-4	(8μ	12 12	20 20	35	Tix				20-dil-4	&(8μ	18 18	54 54	21			

# 74568

Output: TS

## Synchronous decade counter

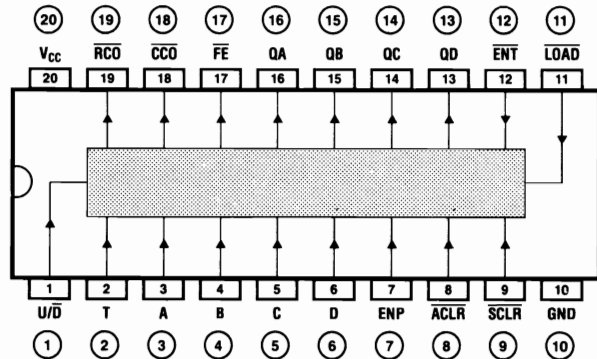


Input								Funktion
FE	ACLR	SCLR	LOAD	ENT	ENP	U/D	T	
H	X	X	X	X	X	X	X	High Impedance
L	L	X	X	X	X	X	X	Asynchronous Clear
L	H	L	X	X	X	X	X	Synchronous Clear
L	H	H	L	X	X	X	J	Synchronous Load
L	H	H	H	L	L	H	J	Count Up
L	H	H	H	L	L	L	J	Count Down
L	H	H	H	H	X	X	X	Inhibit Count
L	H	H	H	X	H	X	X	Inhibit Count

# 74569

Output: TS

## Synchronous 4-bit binary counter



Input								Funktion
FE	ACLR	SCLR	LOAD	ENT	ENP	U/D	T	
H	X	X	X	X	X	X	X	High Impedance
L	L	X	X	X	X	X	X	Asynchronous Clear
L	H	L	X	X	X	X	X	Synchronous Clear
L	H	H	L	X	X	X	J	Synchronous Load
L	H	H	H	L	L	H	J	Count Up
L	H	H	H	L	L	L	J	Count Down
L	H	H	H	H	X	X	X	Inhibit Count
L	H	H	H	X	H	X	X	Inhibit Count

74568	Type			Production	Blld Sec. 3	I <sub>S</sub> & I <sub>R</sub>	I <sub>PD</sub> E-Q n <sub>styp</sub>	I <sub>PD</sub> E-Q n <sub>smax</sub>	Note f <sub>T</sub> f <sub>SZ</sub> & f <sub>E</sub>	74569	Type			Production	Blld Sec. 3	I <sub>S</sub> & I <sub>R</sub>	I <sub>PD</sub> E-Q n <sub>styp</sub>	I <sub>PD</sub> E-Q n <sub>smax</sub>	Note f <sub>T</sub> f <sub>SZ</sub> & f <sub>E</sub>
	0...70°C	-40...85°C	-55...125°C								0...70°C	-40...85°C	-55...125°C						
	0...70°C	-40...85°C	-55...125°C								0...70°C	-40...85°C	-55...125°C						
	\$0...75°C	\$-25...85°C			Pins-Art-Nr.	mA	↓ ↓ ↑	↓ ↓ ↑	MHz		\$0...75°C	\$-25...85°C			Pins-Art-Nr.	mA	↓ ↓ ↑	↓ ↓ ↑	MHz
AC	74AC568D	74AC568P	74AC568S	Fch,Nsc	20-dil-4	&(8μ	8 7.5			AC	74AC569D	74AC569P	74AC569S	Fch,Nsc	20-dil-4	&(8μ	8 7.5		
				Fch,Nsc	20-dil-1	&(8μ	8 7.5							Fch,Nsc	20-dil-1	&(8μ	8 7.5		
				Fch,Nsc	20-smd-2	&(8μ	8 7.5							Fch,Nsc	20-smd-2	&(8μ	8 7.5		

**74573**

Output: TS

8-bit D-latch / bus driver

**74573**

Type

Production

Blid  
Sec. 3

Is  
&Iq

tpD  
E · Q  
ns typ

tpD  
E · Q  
ns max

Note  
fr fE  
&fE

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

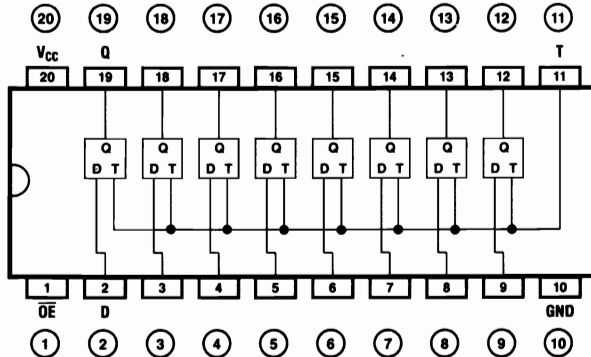
Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz



OE	T	D	Q
H	X	X	Z
L	L	X	Q <sub>n</sub>
L	H	L	L
L	H	H	H

AC

CD74AC573E  
CD54AC573E  
CD54AC573H  
CD54AC573M  
CD74AC573M  
74AC573D  
74AC573P  
74AC573S

Rca  
Rca  
Rca  
Rca  
Rca  
Fch, Nsc  
Fch, Nsc  
Fch, Nsc

20-dil-1  
20-dil-1  
chip  
20-smd-2  
20-smd-2  
20-dil-4  
20-dil-1  
20-smd-2

&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ

8.5 8.5  
7.7 7.7  
8.5 8.5  
8.5 8.5  
7.7 7.7  
6 6  
6 6  
6 6

8.5 8.5  
7.7 7.7  
8.5 8.5  
8.5 8.5  
7.7 7.7  
6 6  
6 6  
6 6

ACT

CD74ACT573E  
CD54ACT573H  
CD54ACT573M  
CD74ACT573M  
54ACT573D  
74ACT573D  
54ACT573F  
54ACT573L  
74ACT573P  
74ACT573S

Rca  
Rca  
Rca  
Rca  
Fch, Nsc  
Fch, Nsc  
Fch, Nsc  
Fch, Nsc  
Fch, Nsc  
Fch, Nsc

20-dil-1  
20-dil-1  
chip  
20-smd-2  
20-smd-2  
20-dil-4  
20-flat-2  
20-chip-2  
20-dil-1  
20-smd-2

&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ

10.4 10.4  
9.4 9.4  
10.4 10.4  
10.4 10.4  
9.4 9.4  
6 6  
6 6  
6 6  
6 6  
6 6

10.4 10.4  
9.4 9.4  
10.4 10.4  
10.4 10.4  
9.4 9.4  
6 6  
6 6  
6 6  
6 6  
6 6

HC

CD74HC573E  
CD54HC573F  
CD54HC573H  
CD74HC573M  
HD74HC573  
LR74HC573  
M74HC573  
MC74HC573DW  
MC54HC573J  
MC74HC573N  
MM74HC573J  
MM74HC573N  
MN74HC573  
MN74HC573S  
PC74HC573P  
PC74HC573T

Rca  
Rca  
Rca  
Rca  
Hit  
Sha  
Mit  
Mit  
Mot  
Mot  
Nsc  
Nsc  
Mat  
Mat  
Phi, Val  
Phi, Val  
Tix  
Tix

20-dil-1  
20-dil-4  
chip  
20-smd-2  
20-dil  
20-dil  
20-smd-2  
20-smd-2  
20-dil-4  
20-dil-1  
20-dil-4  
20-dil-1  
20-dil-1  
20-smd-3  
20-smd-3  
20-dil-1  
20-smd-2  
20-smd-2  
20-chip-3

&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ  
&(8µ

14 14  
14 14  
14 14  
14 14  
28 28  
28 28  
28 28  
28 28  
53 53  
53 53  
53 53  
12 12  
12 12  
19 19  
19 19  
28 28  
28 28  
17 17  
17 17  
26 26  
26 26

14 14  
14 14  
14 14  
14 14  
28 28  
28 28  
28 28  
28 28  
53 53  
53 53  
53 53  
12 12  
12 12  
19 19  
19 19  
28 28  
28 28  
17 17  
17 17  
26 26  
26 26

SN74HC573DW

SN54HC573FH

74573	Type		Production	Bild Sec. 3	I <sub>S</sub> &IR	t <sub>PD</sub> E-Q n#typ	t <sub>PD</sub> E-Q n#max	Note f <sub>T</sub> §fz &fE	74574 Output: TS	8-bit D-type flip-flop / bus driver
	0...70°C §0...75°C	- 40...85°C § - 25...85°C								
				Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↑ ↑	MHz		
SN74HC573FH	SN74HC573FH	SN54HC573FK	Tix	20-chip-3	&(8μ	26 26	44 44			
SN74HC573FN	SN74HC573FN		Tix	20-chip-2	&(8μ	26 26	53 53			
		SN54HC573J	Tix	20-chip-1	&(8μ	26 26	44 44			
SN74HC573J	SN74HC573J		Tix	20-dil-4	&(8μ	26 26	53 53			
SN74HC573N	SN74HC573N		Tix	20-dil-4	&(8μ	26 26	44 44			
μPB74HC573			Tix	20-dil-1	&(8μ	26 26	44 44			
			Nec	20-dil	&(8μ		28 28			
HCT										
	CD74HCT573E		Rca	20-dil-1	&(8μ	17 17	44 44			
		CD54HCT573F CD54HCT573H	Rca	20-dil-4	&(8μ	17 17	53 53			
			Rca	chip	&(8μ	17 17	53 53			
HD74HCT573	CD74HCT573M		Rca	20-smd-2	&(8μ	17 17	44 44			
			Hit	20-dil						
	MM74HCT573J	MM54HCT573J	Nsc	20-dil-4	(8μ	14 14	23 23			
	MM74HCT573N		Nsc	20-dil-1	(8μ	14 14	23 23			
	PC74HCT573P		Phi,Val	20-dil-1	&(8μ	20 20	44 44			
	PC74HCT573T		Phi,Val	20-smd-2	&(8μ	20 20	44 44			
SN74HCT573DW			Tix	20-smd-2	&(8μ	25 25	44 44			
		SN54HCT573FH	Tix	20-chip-3	&(8μ	25 25	53 53			
SN74HCT573FH	SN74HCT573FH		Tix	20-chip-3	&(8μ	25 25	44 44			
		SN54HCT573FK	Tix	20-chip-2	&(8μ	25 25	53 53			
SN74HCT573FN	SN74HCT573FN		Tix	20-chip-1	&(8μ	25 25	44 44			
		SN54HCT573J	Tix	20-dil-4	&(8μ	25 25	53 53			
SN74HCT573J	SN74HCT573J		Tix	20-dil-4	&(8μ	25 25	44 44			
SN74HCT573N	SN74HCT573N		Tix	2Q-dil-1	&(8μ	25 25	44 44			

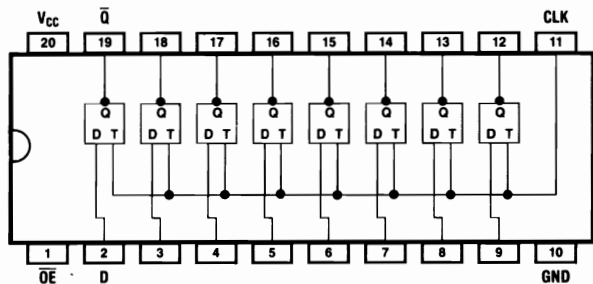
OE	CLK	D	Q
H	X	X	Z
L	L	X	Q <sub>n</sub>
L	J	L	L
L	J	H	H

74574	Type		Production	Bldg Sec. 3	IS &IR	tpD E -Q nstyp	tpD E -Q nsmax	Note T <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>	74574	Type		Production	Bldg Sec. 3	IS &IR	tpD E -Q nstyp	tpD E -Q nsmax	Note T <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>						
	0...70°C §0...75°C	- 40...85°C § - 25...85°C								- 55...125°C	0...70°C §0...75°C							- 40...85°C § - 25...85°C	- 55...125°C	Pins- Art-Nr.	Pins- Art-Nr.	mHz	mHz
AC	CD74AC574E	CD54AC574E	Rca	20-dil-1	&(8μ		10 8 10 8	125	SN74HC574N μPB74HC574	HCT	CD74HCT574E	Tix	20-chip-2	&(8μ	28 28	54 54	20						
		CD54AC574H CD54AC574M	Rca	20-dil-1	&(8μ		9 8 9 8	143				Tix	20-dil-4	&(8μ	28 28	54 54	20						
	CD74AC574M	54AC574D	Rca	chip	&(8μ		10 8 10 8	125	HCT	CD74HCT574M	Rca	20-dil-1	&(8μ	28 28	45 45	24	Nec	20-dil	&(8μ	28 28	45 45	24	
			Rca	20-smd-2	&(8μ		10 8 10 8	125			Rca	20-dil-4	&(8μ	15 15	41 41	25		Rca	20-dil-4	&(8μ	15 15	50 50	20
	74AC574D	54AC574F	Fch,Nsc	20-dil-4	&(8μ	6 5 7	7			CD74HCT574M	MM74HCT574J	MM54HCT574J	Nsc	chip	&(8μ	15 15	50 50	20					
			Fch,Nsc	20-flat-2	&(8μ	6 5 7	7				Nsc	20-smd-2	&(8μ	15 15	41 41	25	Nsc	20-dil-4	(8μ	13 13	23 23	30	
	74AC574P	74AC574S	Fch,Nsc	20-dil-1	&(8μ	6 5 7	7			PC74HCT574P	PC74HCT574T	Phi,Val	20-dil-1	(8μ	13 13	23 23	30	Phi,Val	20-dil-1	(8μ	13 13	23 23	30
			Fch,Nsc	20-smd-2	&(8μ	6 5 7	7					Phi,Val	20-smd-2	(8μ	18 18	41 41	24	Phi,Val	20-smd-2	(8μ	18 18	41 41	24
	ACT	CD74ACT574E	CD54ACT574E	Rca	20-dil-1	&(8μ		11 2 11 2	110	SN74HCT574DW	SN74HCT574N	CD74HCT574M	Tix	20-smd-2	(8μ	30 30	45 45	24					
			CD54ACT574H CD54ACT574M	Rca	20-dil-1	&(8μ		10 2 10 2	125				Tix	20-chip-2	(8μ	30 30	54 54	20	Tix	20-chip-2	(8μ	30 30	54 54
CD74ACT574M		54ACT574D	Rca	chip	(8μ		11 2 11 2	110	SN74HCT574N	SN74HCT574N	CD74HCT574M	Tix	20-dil-1	(8μ	30 30	54 54	20	Tix	20-dil-4	(8μ	30 30	54 54	20
			Rca	20-smd-2	(8μ		11 2 11 2	110				Tix	20-dil-1	(8μ	30 30	45 45	24	Tix	20-dil-1	(8μ	30 30	45 45	24
74ACT574D		54ACT574F 54ACT574L	Fch,Nsc	20-dil-4	(8μ	6 5 7	12 5 7	70			CD74HCT574M	MM74HCT574N	Fch,Nsc	20-dil-4	(8μ	6 5 7	11 12	85					
			Fch,Nsc	20-flat-2	(8μ	6 5 7	12 5 13	70					Fch,Nsc	20-flat-2	(8μ	6 5 7	12 5 13	70					
74ACT574P		74ACT574S	Fch,Nsc	20-chip-2	(8μ	6 5 7	12 5 13	70			CD74HCT574M	MM74HCT574N	Fch,Nsc	20-dil-1	(8μ	6 5 7	11 12	85					
			Fch,Nsc	20-dil-1	(8μ	6 5 7	11 12	85					Fch,Nsc	20-smd-2	(8μ	6 5 7	11 12	85					
HC		CD74HC574E	CD54HC574F CD54HC574H	Rca	20-dil-1	(8μ	15 15	41 41	25	SN74HC574DW	SN74HC574N	CD74HCT574M	Rca	20-dil-4	(8μ	15 15	50 50	20					
			Rca	chip	(8μ	15 15	50 50	20	Rca				20-smd-2	(8μ	15 15	41 41	25						
	CD74HC574M	MC74HC574DW MC54HC574J MC74HC574N MM54HC574J	Rca	20-smd-2	(8μ	15 15	41 41	25	SN74HC574N	SN74HC574N	CD74HCT574M	Hit	20-dil	(8μ	29 29	24							
			Hit	20-dil	(8μ	29 29	24	Mot				20-smd-2	(8μ	53 53	20								
	MM74HC574J MM74HC574N MN74HC574 MN74HC574S PC74HC574P PC74HC574T	MC74HC574DW MC54HC574J MC74HC574N MM54HC574J	Mot	20-dil-4	(8μ	12 12	20 20	35			CD74HCT574M	MM74HCT574N	Mot	20-dil-4	(8μ	12 12	20 20	35					
			Mot	20-dil-1	(8μ	53 53	20			Mat			20-dil-1	(8μ	29 29	24							
	SN74HC574DW	MC74HC574DW MC54HC574J MC74HC574N MM54HC574J	Nsc	20-dil-4	(8μ	12 12	20 20	35			CD74HCT574M	MM74HCT574N	Mat	20-smd-3	(8μ	29 29	24						
			Nsc	20-dil-1	(8μ	12 12	20 20	35					Phi,Val	20-dil-1	(8μ	17 17	35 35	24					
			Phi,Val	20-dil-1	(8μ	17 17	35 35	24			CD74HCT574M	MM74HCT574N	Phi,Val	20-smd-2	(8μ	17 17	35 35	24					
			Tix	20-smd-2	(8μ	28 28	45 45	24					Tix	20-smd-2	(8μ	28 28	45 45	24					

### 74576

Output: TS

8-bit inverting D-type flip-flop

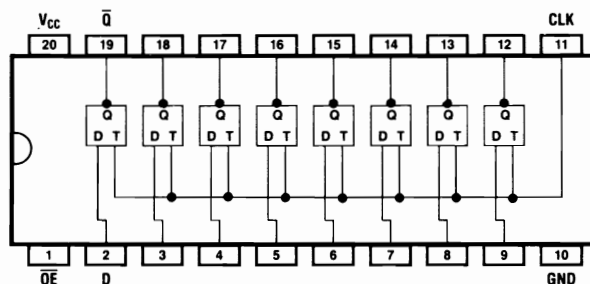


$\overline{OE}$	CLK	D	$\overline{Q}$
H	X	X	Z
L	L	X	$\overline{Q}_n$
L	J	L	H
L	J	H	L

### 74580

Output: TS

8-bit inverting D-latch



$\overline{OE}$	T	D	$\overline{Q}$
H	X	X	Z
L	L	X	$\overline{Q}_n$
L	H	L	H
L	H	H	L

### 74576

Type

Production

Bild  
Sec. 3

$I_S$

$I_R$

$t_{PD}$   
E · Q

$n_{styp}$

$t_{PD}$   
E · Q

$n_{smax}$

Note

$f_T$  §fz

&fE

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Pins-  
Art-Nr.

mA

↓ ↑ †

↓ ↑ †

↓ ↑ †

MHz

HC  
T74HC576  
  
HCT  
T74HCT576

Sgs  
  
Sgs

20-dil  
  
20-dil

### 74580

Type

Production

Bild  
Sec. 3

$I_S$

$I_R$

$t_{PD}$   
E · Q

$n_{styp}$

$t_{PD}$   
E · Q

$n_{smax}$

Note

$f_T$  §fz

&fE

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Pins-  
Art-Nr.

mA

↓ ↑ †

↓ ↑ †

↓ ↑ †

MHz

HC  
T74HC580  
  
HCT  
T74HCT580

Sgs  
  
Sgs

20-dil  
  
20-dil



**74583**

Output: TP

**4-bit BCD adder**

**74583**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>pD</sub>  
E-Q  
n<sub>s</sub>typ

t<sub>pD</sub>  
E-Q  
n<sub>s</sub>max

Note  
f<sub>T</sub> f<sub>SZ</sub>  
&f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

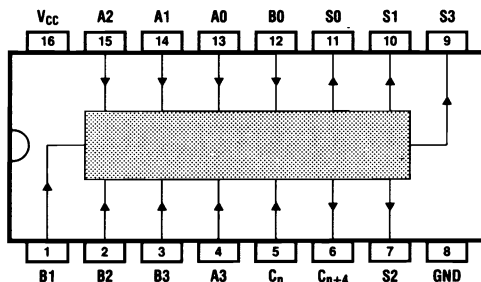
Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↓ ↑

MHz



HC

CD74HC583E

CD54HC583F  
CD54HC583H

Rca  
Rca  
Rca  
Rca  
Phi,Val  
Phi,Val

16-dil-1  
16-dil-4  
chip  
16-smd-1  
16-dil-2  
16-smd-1

&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ

23 23  
23 23  
23 23  
18 18  
18 18

70 70  
84 84  
84 84  
70 70  
39 39  
39 39

HCT

CD74HCT583E

CD54HCT583F  
CD54HCT583H

Rca  
Rca  
Rca  
Rca  
Phi,Val  
Phi,Val

16-dil-1  
16-dil-4  
chip  
16-smd-1  
16-dil-2  
16-smd-1

&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ

29 29  
29 29  
29 29  
29 29  
22 22  
22 22

85 85  
102 102  
102 102  
85 85  
46 46  
46 46

**74589**

Output: TS

8-bit shift register with latched inputs

**74589**

Type

Production

Bild  
Sec. 3I<sub>S</sub>  
&I<sub>R</sub>t<sub>PD</sub>  
E-Q  
n<sub>styp</sub>t<sub>PD</sub>  
E-Q  
n<sub>smax</sub>Note  
f<sub>T</sub> f<sub>Z</sub>  
&f<sub>E</sub>0...70°C  
§0...75°C- 40...85°C  
§ - 25...85°C

- 55...125°C

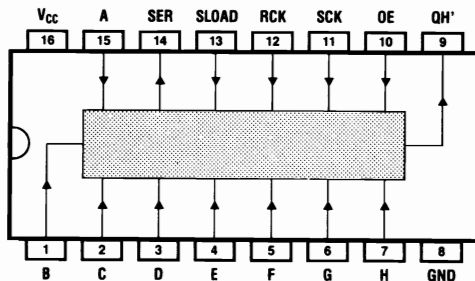
Pins-  
Art-Nr.

mA

↓ ↑ †

↓ ↑ †

MHz



HC

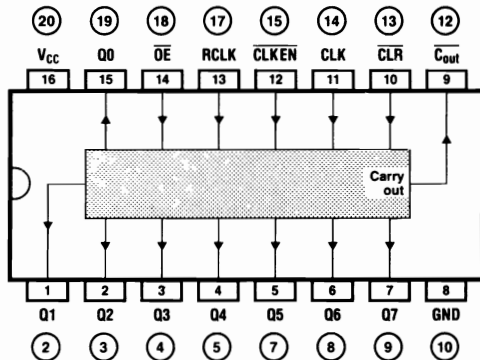
MM74HC589J  
MM74HC589NMC74HC589DW  
MC54HC589J  
MC74HC589N  
MM54HC589JMot  
Mot  
Mot  
Nsc  
Nsc16-smd-1  
16-dil-3  
16-dil-1  
16-dil-3  
16-dil-1(8μ  
(8μ  
(8μ  
(8μ  
(8μ18 18  
18 18  
18 18  
28 28  
28 2836 36  
36 36  
36 36  
38 38  
38 3830  
30  
30  
32  
32

Input				Funktion
RCK	SCK	SLOAD	OE	
┘	X	X	X	A...H → Input Latch
L	X	L	H	Input Latch → Register
H	X	L	H	Input Latch → Register
┘	X	L	H	A...H → Register
X	X	X	L	SER = Z
X	┘	H	H	Shift

# 74590

Output: TS

## 8-bit binary counter



OE	CLKEN	CLR	CLK	RCLK	Internal Counter	Q0...Q7
H	X	X	X	X	?	Z
L	H	H	X	X	No count	Q <sub>n</sub>
L	X	L	X	X	Clear	Q <sub>n</sub>
L	L	H	J	L	Count	Q <sub>n</sub>
L	L	H	X	J	?	= counter

### 74590

### Type

0...70°C	-40...85°C	-55...125°C
0...75°C	§-25...85°C	

### Production

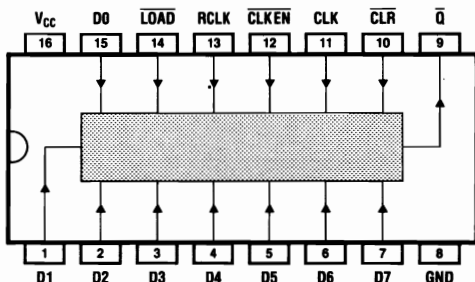
Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &R	t <sub>PD</sub> E-Q		t <sub>PD</sub> E-Q		Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>
		n#typ	n#max	n#typ	n#max	
	mA	↓ ↑ ↑	↓ ↑ ↑	↓ ↑ ↑		MHz

HC	MM74HC590J MM74HC590N	MM54HC590J	Nsc Nsc	16-dil-3 16-dil-1					
SN74HC590ADW		SN54HC590AFK SN54HC590AJ	Tix Tix	16-smd-2 20-chip-2	&(8μ	18 18	35 35	16	
SN74HC590AN			Tix	16-dil-3 16-dil-2	&(8μ	18 18	42 42	13	
HCT	MM74HCT590J MM74HCT590N	MM54HCT590J	Nsc Nsc	16-dil-3 16-dil-1					

### 74592

Output: TP

### 8-bit binary counter with preset

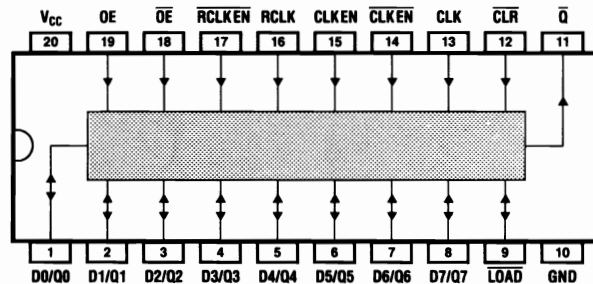


CLR	RCLK	CLKEN	LOAD	CLK	Function
L	X	X	X	X	Clear counter
X	┐	X	X	X	D0...D7 → Input register
H	L	X	L	X	Input register → counter
H	X	H	X	X	—
H	X	L	X	┐	Count
H	X	L	X	255x┐	Q = L

### 74593

Output: TP

### 8-bit binary counter with preset and parallel outputs



CLR	OE	OE-bar	RCLKEN	RCLK	LOAD	CLKEN	CLKEN	CLK	Function
L	X	X	X	X	H	X	X	X	Clear counter
X	L	X	X	X	X	X	X	X	Q <sub>n</sub> = Z
X	X	H	X	X	X	X	X	X	Q <sub>n</sub> = Z
X	X	X	L	┐	X	X	X	X	D0...D7 → Input register
H	X	X	X	X	L	X	X	X	Input register → counter
H	H	L	X	X	H	L	X	X	No count
H	H	L	X	X	H	X	H	X	No count
H	H	L	X	X	H	H	L	┐	Count, Q = Count output

74592	Type		Production	Blid Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E → Q n <sub>styp</sub>	t <sub>pd</sub> E → Q n <sub>max</sub>	Note f <sub>T</sub> §f <sub>Z</sub> &I <sub>E</sub>
	0...70°C	§ -25...85°C						
	-40...85°C	-55...125°C		Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↑ ↑	MHz
HC	MM74HC592J	MM54HC592J	Nsc	16-dil-3				
	MM74HC592N		Nsc	16-dil-1				
HCT	MM74HCT592J	MM54HCT592J	Nsc	16-dil-3				
	MM74HCT592N		Nsc	16-dil-1				

74593	Type		Production	Blld Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>styp</sub>	t <sub>PD</sub> E-Q n <sub>max</sub>	Note t <sub>r</sub> f <sub>SZ</sub> &f <sub>E</sub>	74594 Output: TP	8-bit shift register with latched outputs
	0...70°C §0...75°C	-40...85°C §-25...85°C								
HC	MM74HC593J MM74HC593N	MM54HC593J	Nsc Nsc	20-dil-4 20-dil-1						
HCT	MM74HCT593J MM74HCT593N	MM54HCT593J	Nsc Nsc	20-dil-4 20-dil-1						

74594	Type		Production	Blld Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>styp</sub>	t <sub>PD</sub> E-Q n <sub>max</sub>	Note t <sub>r</sub> f <sub>SZ</sub> &f <sub>E</sub>
	0...70°C §0...75°C	-40...85°C §-25...85°C						
HC	SN74HC594DW	SN54HC594FK SN54HC594J	Tix Tix Tix Tix	16-smd-2 20-chip-2 16-dil-3 16-dil-2	&(6μ	20 20 20 20 20 20 20 20	37 37 45 45 45 45 37 37	20 17 17 20

**74595**

Output: TS

8-bit shift register with latched outputs

**74595**

Type

Production

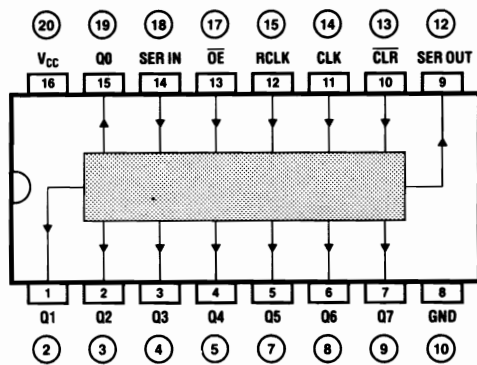
Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q ns <sub>typ</sub>		t <sub>PD</sub> E-Q ns <sub>max</sub>		Note f <sub>T</sub> f <sub>sz</sub> &f <sub>E</sub> MHz
		↓	↑	↓	↑	

HC

Type	Production
MCS4HC595J	Mot
MC74HC595N	Mot
MC74HC595AD	Mot
MCS4HC595AJ	Mot
MC74HC595AN	Mot
MM54HC595J	Nsc
MM74HC595N	Nsc
SN54HC595FK	Tix
SN54HC595J	Tix

SN74HC595DW

SN74HC595N



OE	CLR	CLK	RCLK	Function
H	X	X	X	Q0...Q7 = Z
X	L	X	X	Clear shift register
X	H	J	X	Shift right
X	H	X	J	Shift register → Output register

74597 Output: TP	8-bit shift register with latched inputs	74597	Type		Production	Bild Sec. 3	I <sub>S</sub>	I <sub>PD</sub>	I <sub>PD</sub>	Note	
		0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C		Pins- Art-Nr.	&I <sub>R</sub>	E-Q n <sub>styp</sub>	E-Q n <sub>max</sub>	t <sub>r</sub> Stz &I <sub>E</sub>	
						mA	↓ ↑ ↑	↓ ↓ ↑	MHz		
		HC	CD74HC597E	CD54HC597F CD54HC597H	Rca Rca Rca	16-dil-1 16-dil-4 chip					
		CD74HC597M	MC74HC597D MC54HC597J MC54HC597J MC74HC597N MC74HC597N MM54HC597J	Mot Mot Mot Mot Mot Nsc	16-smd-1 16-dil-3 16-dil-3 16-dil-2 16-dil-1 16-dil-3	(8μ (8μ (8μ (8μ (8μ	18 18 18 18 18 18 18 18 18 18 18 18	36 36 36 36 36 36 36 36 36 36 30 30	30 30 30 30 30 32		
		MM74HC597J MM74HC597N PC74HC597P PC74HC597T	MM54HC597J	Nsc Nsc Phi,Val Phi,Val	16-dil-1 16-dil-2 16-smd-1 16-dil	(8μ (8μ	18 18 18 18 17 17 17 17	30 30 30 30 17 17 17 17	30 30 30 30 17 17 17 17	32 32	
		TD74HC597		Tos	16-smd-1 16-dil		17 17	17 17	17 17	50	
		HCT	CD74HCT597E	CD54HCT597F CD54HCT597H	Rca Rca Rca	16-dil-1 16-dil-4 chip					
			CD74HCT597M PC74HCT597P PC74HCT597T		Rca Phi,Val Phi,Val	16-smd-1 16-dil-2 16-smd-1	&(8μ &(8μ	29 29 29 29	63 63 63 63	24 24	

CLR	RCLK	LOAD	CLK	Function
L	X	X	X	Clear shift register
X	J	X	X	D0...D7 → Input register
H	L	L	X	Input register → Shift register
H	X	H	J	Shift right

**74604**

Output: TS

8 2-line-to-1-line multiplex latches for bus applicat. (= TIM 99604)

**74604**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>Q</sub>

t<sub>PD</sub>  
E-Q  
n<sub>S</sub>typ

t<sub>PD</sub>  
E-Q  
n<sub>S</sub>max

Note  
f<sub>T</sub> f<sub>Z</sub>  
& f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

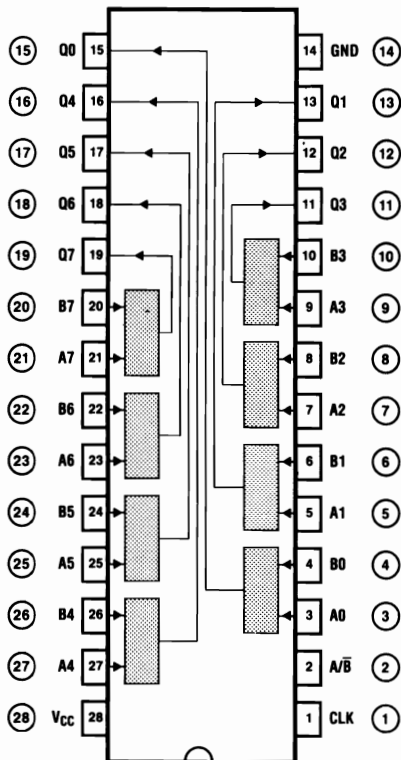
Pin-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz



HC  
SN74HC604N

SN54HC604FK

Tix  
Tix

28-chip-2  
28-dil-1

&(8μ  
&(8μ

23 23  
23 23

51 51  
43 43

17  
20

A/ $\bar{B}$	CLK	Function
X	L	Q = Z
L	H	Q = Internal B-Register
H	H	Q = Internal A-Register
L	J	Q = Input B
H	J	Q = Input A



74620 Output: TS	8-bit inverting bus driver	74620	Type		Production	, Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> & I <sub>R</sub> mA	t <sub>PD</sub> E-Q ns typ	t <sub>PD</sub> E-Q ns max	Note t <sub>r</sub> f <sub>z</sub> & f <sub>E</sub> MHz
		0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C						
		<b>HC</b> HD74HC620 M74HC620 SN74HC620DW  SN74HC620FH  SN74HC620FN  SN74HC620J SN74HC620N TD74HC620	SN74HC620FH  SN74HC620FN  SN74HC620J SN74HC620N	SN54HC620FH  SN54HC620FK  SN54HC620J	Hit Mit Tix Tix Tix Tix Tix Tix Tix Tix Tos	20-dil 20-dil 20-smd-2 20-chip-3 20-chip-3 20-chip-2 20-chip-1 20-dil-4 20-dil-1 20-dil	& (8µ & (8µ & (8µ & (8µ & (8µ & (8µ & (8µ & (8µ	10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10	26 26 32 32 26 26 32 32 26 26 32 32 26 26 26 26	
		<b>HCT</b> HD74HCT620 M74HCT620 SN74HCT620DW  SN74HCT620N	SN54HCT620FK SN54HCT620J	Hit Mit Tix Tix Tix	20-dil 20-dil 20-smd-2 20-chip-2 20-dil-4 20-dil-1	& (8µ & (8µ & (8µ & (8µ	15 15 15 15 15 15 15 15	28 28 33 33 33 33 28 28		

AB	BA	Function
L	L	$\bar{B} \rightarrow A$
L	H	$A = B = Z$
H	L	$\bar{B} \rightarrow A, \bar{A} \rightarrow B$
H	H	$\bar{A} \rightarrow B$

**74623**

Output: TS

8-bit bus driver

**74623**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E-Q  
n<sub>styp</sub>

t<sub>PD</sub>  
E-Q  
n<sub>max</sub>

Note  
f<sub>T</sub> f<sub>TZ</sub>  
& E

0...70°C  
§0...75°C

- 40...85°C  
§ - 25...85°C

- 55...125°C

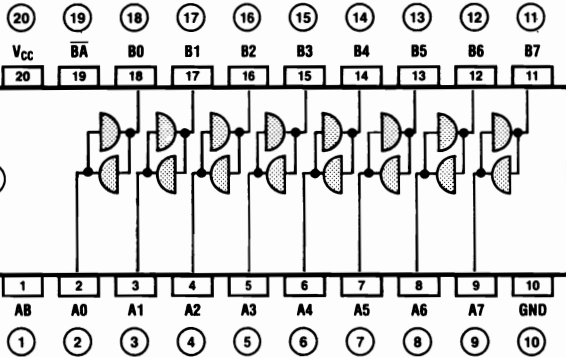
Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz



AB	$\overline{BA}$	Function
L	L	B → A
L	H	A = B = Z
H	L	B → A, A → B
H	H	A → B

AC

CD74AC623E  
CD74AC623H  
CD74AC623M

CD54AC623E  
CD54AC623H  
CD54AC623M

Rca  
Rca  
Rca  
Rca  
Rca

20-dil-1  
20-dil-1  
20-smd-2  
20-smd-2

&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ

9.6 9.6  
8.7 8.7  
9.6 9.6  
9.6 9.6  
8.7 8.7

ACT

CD74ACT623E  
CD74ACT623H  
CD74ACT623M

CD54ACT623E  
CD54ACT623H  
CD54ACT623M

Rca  
Rca  
Rca  
Rca  
Rca

20-dil-1  
20-dil-1  
20-smd-2  
20-smd-2

&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ

10.6 10.6  
9.6 9.6  
10.6 10.6  
10.6 10.6  
9.6 9.6

HC

HD74HC623  
SN74HC623DW  
SN74HC623FH  
SN74HC623FN  
SN74HC623J  
SN74HC623N  
TD74HC623

SN74HC623FH  
SN74HC623FN  
SN74HC623J  
SN74HC623N

SN54HC623FH  
SN54HC623FK  
SN54HC623J

Hit  
Tix  
Tix  
Tix  
Tix  
Tix  
Tix  
Tos

20-dil  
20-smd-2  
20-chip-3  
20-chip-3  
20-chip-2  
20-chip-1  
20-dil-4  
20-dil-4  
20-dil-1

&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ

30 30  
10 10  
10 10  
10 10  
10 10  
10 10  
10 10  
10 10  
30 30

HCT

HD74HCT623  
SN74HCT623DW  
SN74HCT623N

SN54HCT623FK  
SN54HCT623J

Hit  
Tix  
Tix  
Tix  
Tix

20-dil  
20-smd-2  
20-chip-2  
20-dil-4  
20-dil-1

&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ

15 15  
15 15  
15 15  
15 15  
15 15  
28 28  
28 28  
28 28

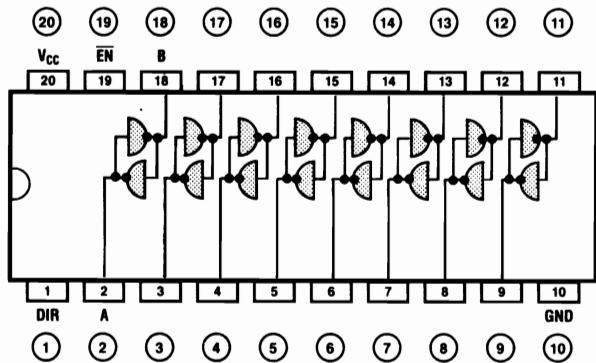
74640 Output: TS		8-bit bi-directional inverting bus driver		74640		Type		Production	Bld Sec. 3	Is &Iq	tPD E→Q ns <sub>typ</sub>	tPD E→Q ns <sub>max</sub>	Note †, ‡, †† &E	
				0...70°C	−40...85°C	−55...125°C								
				§0...75°C	§ −25...85°C									
				AC		M74AC640 74AC640D 74AC640P 74AC640S	Mit Fch, Nsc Fch, Nsc Fch, Nsc	20-dil 20-dil-4 20-dil-1 20-smD-2	&(8μ &(8μ &(8μ &(8μ	4 4 4 4	4 4 4 4			
				ACT		74ACT640D 74ACT640P 74ACT640S	Fch, Nsc Fch, Nsc Fch, Nsc	20-dil-4 20-dil-1 20-smD-2	&(8μ &(8μ &(8μ	5 5 5	5 5 5			
				HC		CD74HC640E	Rca	20-dil-1	&(8μ	7	7	23	23	
				HD74HC640 JRC74HC640 M74HC640 MB74HC640		CD54HC640F CD54HC640H CD74HC640M	Rca Rca Rca Rca Hit Njr Mit Fui	20-dil-4 20-dil-4 chip 20-smD-2 20-dil 20-dil 20-dil 20-dil-4	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ &(8μ	7 7 7 7	7 7 7 7	23 27 27 23	23 27 27 23	
				MSM74HC640		MM74HC640J MM74HC640N MN74HC640 MN74HC640S	Nsc Nsc Mat Mat	20-dil-4 20-dil-1 20-dil-1 20-dil-1	(8μ (8μ (8μ (8μ	14 14	14 14	18 18	18 18	
				SN74HC640DW		PC74HC640P PC74HC640T	Phi, Val Phi, Val	20-dil-1 20-smD-2	(8μ (8μ			18 18	18 18	
				SN74HC640FH		SN74HC640FH	Tix	20-smD-2	&(8μ	10	10	26	26	
				SN74HC640FN		SN74HC640FN	Tix	20-chip-3	&(8μ	10	10	32	32	
				SN74HC640J		SN74HC640J	Tix	20-chip-2	&(8μ	10	10	32	32	
				SN74HC640N		SN74HC640N	Tix	20-chip-3	&(8μ	10	10	26	26	
				T74HC640			Tix	20-dil-4	&(8μ	10	10	26	26	
				TD74HC640			Sgs Tos	20-dil 20-dil	&(8μ &(8μ	10 10	10 10	26 26	26 22	

EN	DIR	Function
L	L	$\bar{B} \rightarrow A$
L	H	$\bar{A} \rightarrow B$
H	X	$A = Z, B = Z$

74640	Type		Production	Blid Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E→Q		t <sub>PD</sub> E←Q		Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>
	0...70°C §0...75°C	- 40...85°C § - 25...85°C				-55...125°C	n <sub>typ</sub>	n <sub>max</sub>	MHz	
μPB74HC640			Nec	20-dil	&(8μ			22	22	
HCT	CD74HCT640E	CD54HCT640F CD54HCT640H	Rca Rca Rca	20-dil-1 20-dil-4 chip	&(8μ	9 9	28 28	33 33	33 33	
HD74HCT640 M74HCT640	CD74HCT640M		Rca Hit Mit	20-smd-2 20-dil 20-dil	&(8μ	9 9	28 28	29 29	29 29	
		MC74HCT640DW MC54HCT640J MC54HCT640J MC74HCT640N MC74HCT640N	Mot Mot Mot Mot Mot	20-smd-2 20-dil-4 20-dil-4 20-dil-1 20-dil-1	&(8μ		39 39	39 39	39 39	Vcc = 5V
	MM74HCT640J MM74HCT640N PC74HCT640P PC74HCT640T	MM54HCT640J	Nsc Nsc Phi,Val Phi,Val	20-dil-4 20-dil-1 20-dil-1 20-smd-2	(8μ	17 17 17 17	23 23	23 23	23 23	Vcc = 5V
SN74HCT640DW		SN54HCT640FK SN54HCT640J	Tix Tix Tix	20-smd-2 20-chip-2 20-dil-4	&(8μ	14 14 14 14	25 25	32 32	32 32	
SN74HCT640N T74HCT640 TD74HCT640 μPB74HCT640			Tos Nec	20-dil-1 20-dil 20-dil	&(8μ	14 14	25 25	29 29	29 29	

**74643**  
Output: TS

8-bit bi-directional inverting bus driver



EN	DIR	Function
L	L	B→A
L	H	$\bar{A}$ →B
H	X	A=Z, B=Z

74643	Type		Production	Blid Sec. 3	Is &Iq	tpD E-Q n <sub>styp</sub>	tpD E-Q n <sub>max</sub>	Note fr stz &E MHz	74643	Type			Production	Blid Sec. 3	Is &Iq	tpD E-Q n <sub>styp</sub>	tpD E-Q n <sub>max</sub>	Note fr stz &E MHz	
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C	-40...85°C §-25...85°C							-55...125°C
	Pins- Art-Nr.	mA								↓ ↑ ↑	↓ ↑ ↑	↓ ↑ ↑							Pins- Art-Nr.
AC	74AC843D		Fch,Nsc	20-dil-4	&(8μ	4 4			MM74HCT643J MM74HCT643N PC74HCT643P PC74HCT643T	MC54HCT643J	Mot	20-dil-4							
	74AC843P		Fch,Nsc	20-dil-1	&(8μ	4 4				MC74HCT643N	Mot	20-dil-1							
	74AC843S		Fch,Nsc	20-smd-2	&(8μ	4 4				MM54HCT643J	Nsc	20-dil-4	(8μ	17 17	23 23				
ACT	74ACT843D		Fch,Nsc	20-dil-4	&(8μ	5 5		SN74HCT643DW SN74HCT643N	MM74HCT643N	Nsc	20-dil-1	(8μ	17 17	23 23					
	74ACT843P		Fch,Nsc	20-dil-1	&(8μ	5 5				PC74HCT643P	Nsc	20-dil-1	(8μ	8 8					
	74ACT843S		Fch,Nsc	20-smd-2	&(8μ	5 5				PC74HCT643T	Phi,Val Phi,Val	20-dil-1		8 8					
HC	CD74HC643E		Rca	20-dil-1	&(8μ	7 7	23 23					20-smd-2	&(8μ	14 14	25 25				
		CD54HC643F CD54HC643H	Rca	20-dil-4	&(8μ	7 7	27 27					20-smd-2	&(8μ	14 14	32 32				
	CD74HC643M		Rca	chip	&(8μ	7 7	27 27					20-smd-2	&(8μ	14 14	32 32				
HD74HC643 M74HC643			Rca	20-smd-2	&(8μ	7 7	23 23					20-smd-2	&(8μ	14 14	25 25				
			Hit	20-dil	&(8μ		22 22					20-chip-2	&(8μ	14 14	32 32				
			Mit	20-dil	&(8μ		22 22					20-dil-4	&(8μ	14 14	32 32				
MSM74HC643		MC54HC643J MC74HC643N	Mot	20-dil-4								20-dil-1	&(8μ	14 14	25 25				
		MM54HC643J	Mot	20-dil-1								Tix							
			Nsc	20-dil-4	(8μ	14 14	18 18					Tix							
SN74HC643DW			Nsc	20-dil-1	(8μ	14 14	18 18					Tix							
			Mat	20-dil-1	&(8μ		22 22					Tix							
			Mat	20-smd-3	&(8μ		22 22					Tix							
SN74HC643FH			Ok	20-dil	&(8μ		22 22					Tix							
			Phi,Val	20-dil-1	(8μ		19 19					Tix							
			Phi,Val	20-smd-2	(8μ		19 19					Tix							
SN74HC643FN		SN54HC643FH	Tix	20-smd-2	&(8μ	10 10	28 28					Tix							
		SN54HC643FK	Tix	20-chip-3	&(8μ	10 10	33 33					Tix							
			Tix	20-chip-3	&(8μ	10 10	28 28					Tix							
SN74HC643J			Tix	20-chip-2	&(8μ	10 10	33 33					Tix							
			Tix	20-chip-1	&(8μ	10 10	28 28					Tix							
			Tix	20-dil-4	&(8μ	10 10	33 33					Tix							
HCT			Tix	20-dil-4	&(8μ	10 10	28 28					Tix							
			Tix	20-dil-1	&(8μ	10 10	28 28					Tix							
			Tix	20-dil-1	&(8μ	10 10	28 28					Tix							
HD74HCT643 M74HCT643			Rca	20-dil-1	&(8μ	9 9	28 28					Tix							
		CD54HCT643F CD54HCT643H	Rca	20-dil-4	&(8μ	9 9	33 33					Tix							
		CD74HCT643M	Rca	chip	&(8μ	9 9	33 33					Tix							
			Rca	20-smd-2	&(8μ	9 9	28 28					Tix							
			Hit	20-dil	&(8μ		29 29					Tix							
			Mit	20-dil	&(8μ		29 29					Tix							

**74645**  
Output: TS

8-bit bi-directional bus driver

**74645**

Type

Production

Blid  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>  
E-Q

t<sub>PD</sub>  
E-Q

Note  
f<sub>T</sub> f<sub>Z</sub>  
&f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

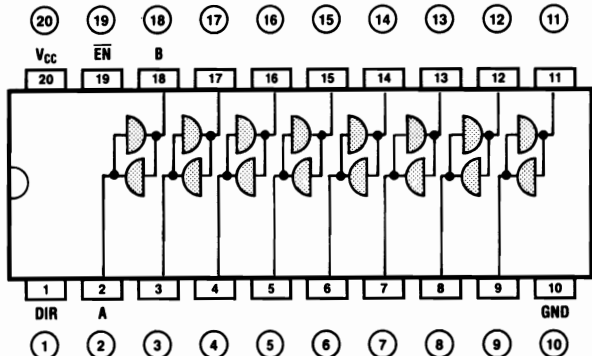
Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz



EN	DIR	Function
L	L	B→A
L	H	A→B
H	X	A=Z, B=Z

HC  
JRC74HC645  
M74HC645  
SN74HC645DW  
  
SN74HC645N  
  
HCT  
M74HCT645  
SN74HCT645DW  
  
SN74HCT645N

SN54HC645FK  
SN54HC645J

SN54HCT645FK  
SN54HCT645J

Njr  
Mit  
Tix  
Tix  
Tix  
Tix  
  
Mit  
Tix  
Tix  
Tix  
Tix

20-dil  
20-dil  
20-smd-2  
20-chip-2  
20-dil-4  
20-dil-1  
  
20-dil  
20-smd-2  
20-chip-2  
20-dil-4  
20-dil-1

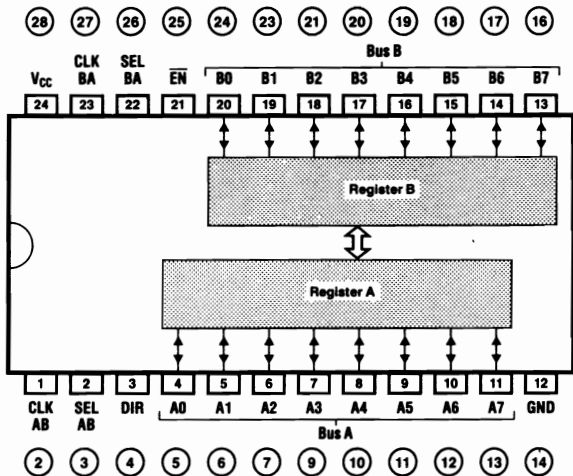
&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ  
  
&(8μ  
&(8μ  
&(8μ  
&(8μ

15 15  
15 15  
15 15  
15 15  
15 15  
  
16 16  
16 16  
16 16  
16 16

26 26  
32 32  
32 32  
26 26  
  
28 28  
33 33  
33 33  
28 28

**74646**

Output: TS

**8-bit bi-directional bus driver**

EN $\bar{B}A$	ENAB	CLK AB	CLK BA	SEL AB	SEL BA	Function
H	X	H or L	H or L	X	X	A = B = Z
H	X	J	H or L	X	X	A $\rightarrow$ Register B
H	X	X	J	X	X	B $\rightarrow$ Register A
L	L	X	X	X	L	B $\rightarrow$ A
L	H	X	X	L	X	A $\rightarrow$ B
L	L	X	X	X	H	Register A $\rightarrow$ A
L	H	H or L	X	H	X	Register B $\rightarrow$ B

**74646**

Type

Production

Blld  
Sec. 3IS  
&IRtPD  
E-Q  
n#typtPD  
E-Q  
n#maxNote  
fr  
&fz  
&fE0...70°C  
§0...75°C-40...85°C  
§-25...85°C

-55...125°C

Pins-  
Art-Nr.

mA

↓ ↓ ↑ ↑

↓ ↓ ↑ ↑

MHz

**AC**

CD74AC846EN

CD54AC846EN

Rca

24-dil-2

&(8 $\mu$ )

13.5 13.5

125

CD74AC846H  
CD54AC846H

Rca

24-dil-2

&(8 $\mu$ )

12.3 12.3

143

CD74AC846M  
M74AC846CD54AC846M  
CD54AC846M

Rca

chip

&(8 $\mu$ )

13.5 13.5

125

74AC846D

Rca

24-smd-2

&(8 $\mu$ )

13.5 13.5

125

74AC846P

Rca

24-smd-2

&(8 $\mu$ )

12.3 12.3

143

**ACT**

CD74ACT846EN

CD54ACT846EN

Rca

24-dil-2

&(8 $\mu$ )

15.5 15.5

110

CD74ACT846H  
CD54ACT846H

Rca

chip

&(8 $\mu$ )

14.1 14.1

125

CD74ACT846M  
74ACT846DCD54ACT846M  
CD54ACT846M

Rca

24-smd-2

&(8 $\mu$ )

15.5 15.5

110

74ACT846P

Rca

24-dil-6

&(8 $\mu$ )

14.1 14.1

125

74ACT846S

Fch,Nsc

24-dil-2

&(8 $\mu$ )

6.5 7.5

**HC**

CD74HC846E

CD54HC846E

Rca

24-dil-1

&(8 $\mu$ )

18 18

25

CD74HC846H  
CD54HC846H

Rca

24-dil-6

&(8 $\mu$ )

18 18

20

CD74HC846M

CD54HC846M

Rca

chip

&(8 $\mu$ )

18 18

66 66

LR74HC846  
M74HC846

Rca

24-smd-2

&(8 $\mu$ )

55 55

25

MCS4HC846J  
MC74HC846N

Sha

24-dil

&(8 $\mu$ )

18 18

66 66

MM74HC846J  
MM74HC846N

Mit

24-dil

&(8 $\mu$ )

18 18

66 66

PC74HC846P  
PC74HC846T

Mot

24-dil-4

&(8 $\mu$ )

14 14

29 29

SN74HC846DW

MM74HC846J  
MM74HC846N

Mot

24-dil-1

&(8 $\mu$ )

14 14

29 29

SN74HC846NT  
TD74HC846MM54HC846J  
MM54HC846N

Mot

24-dil-1

&(8 $\mu$ )

18 18

26 26

**HCT**

PC74HC846T

Nsc

24-dil-1

&(8 $\mu$ )

18 18

26 26

SN54HC846FK  
SN54HC846JT

Phi,Val

24-dil-1

24 24

66 66

66 66

SN74HC846DW

Phi,Val

24-smd-2

24 24

66 66

66 66

SN54HC846FK  
SN54HC846JT

Tix

24-smd-2

&(8 $\mu$ )

18 18

45 45

SN74HC846NT  
TD74HC846

Tix

28-chip-2

&(8 $\mu$ )

18 18

54 54

SN74HC846NT  
TD74HC846

Tix

24-dil-6

&(8 $\mu$ )

18 18

54 54

SN74HC846NT  
TD74HC846

Tos

24-dil

&(8 $\mu$ )

18 18

55 55

74646		Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>S</sub> typ	t <sub>PD</sub> E-Q n <sub>S</sub> max	Note f <sub>T</sub> §f <sub>Z</sub> &f <sub>E</sub>	74646			Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>S</sub> typ	t <sub>PD</sub> E-Q n <sub>S</sub> max	Note f <sub>T</sub> §f <sub>Z</sub> &f <sub>E</sub>	
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.		mA	↓ ↑ ↑	↓ ↑ ↑	MHz	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.	mA	↓ ↑ ↑		↓ ↑ ↑	MHz				
SN74HCT646DW	CD74HCT646E CD54HCT646F CD54HCT646H CD74HCT646M MC54HCT646J MC74HCT646N PC74HCT646P PC74HCT646T	Rca	24-dil-1	&(8μ	18 18	55 55	20														
		Rca	24-dil-6	&(8μ	18 18	66 66	17														
		Rca	chip	&(8μ	18 18	66 66	17														
		Rca	24-smd-2	&(8μ	18 18	55 55	20														
		Mot	24-dil-6	&(8μ		66 66	20														
		Mot	24-dil-2	&(8μ		66 66	20														
		Phi,Val	24-dil-1		23 23	66 66															
		Phi,Val	24-smd-2		23 23	66 66															
		Tix	24-smd-2	&(8μ	18 18	45 45	27														
		Tix	28-chip-2	&(8μ	18 18	54 54	22														
		Tix	24-dil-6	&(8μ	18 18	54 54	22														
		SN74HCT646NT TD74HCT646		Tix	24-dil-2	&(8μ	18 18	45 45	27												
Tos	24-dil					55 55	25														



**74647**

Output: OD

8-bit bi-directional bus driver

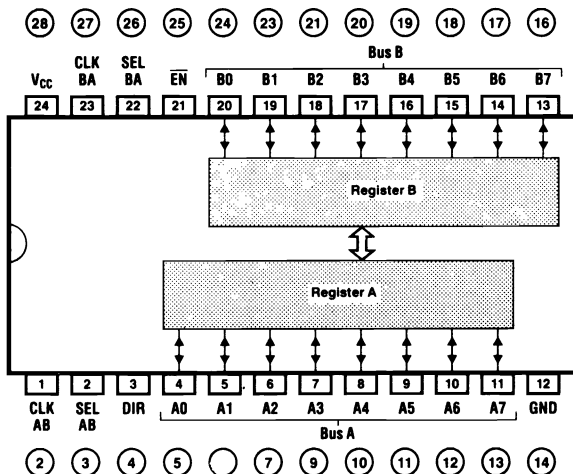
**74647**

Type

Production

Bld Sec. 3	I <sub>S</sub> & I <sub>R</sub>	I <sub>PD</sub> E-Q n <sub>typ</sub>	I <sub>PD</sub> E-Q m <sub>max</sub>	Note f <sub>T</sub> f <sub>SZ</sub> & f <sub>E</sub>
Pine-Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz

0...70°C	-40...85°C	-55...125°C
§0...75°C	§-25...85°C	



ENB	ENAB	CLKAB	CLKBA	SELAB	SELBA	Function
H	X	H or L	H or L	X	X	A = B = open
H	X	┘	H or L	X	X	A → Register B
H	X	X	┘	X	X	B → Register A
L	L	X	X	X	L	B → A
L	H	X	X	L	X	A → B
L	L	X	X	X	H	Register A → A
L	H	H or L	X	H	X	Register B → B

AC

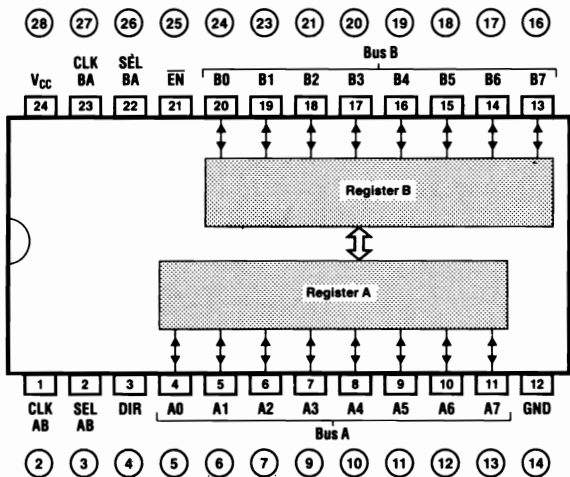
ACT

CD74AC647EN	CD54AC647EN	Rca	24-dil-2	&(8μ	125
		Rca	24-dil-2	&(8μ	143
		Rca	chip	&(8μ	125
CD74AC647M	CD54AC647M	Rca	24-smd-2	&(8μ	125
		Rca	24-smd-2	&(8μ	143
		Rca			
		Rca			
CD74ACT647EN	CD54ACT647EN	Rca	24-dil-2	&(8μ	110
		Rca	24-dil-2	&(8μ	125
		Rca	chip	&(8μ	110
		Rca	24-smd-2	&(8μ	110
CD74ACT647M	CD54ACT647M	Rca	24-smd-2	&(8μ	125

**74648**

Output: TS

8-bit bi-directional inverting bus driver



EN	DIR	CLK AB	CLK BA	SEL AB	SEL BA	Function
H	X	H or L	H or L	X	X	A = B = Z
H	X	J	H or L	X	X	$\bar{A}$ → Register B
H	X	X	J	X	X	$\bar{B}$ → Register A
L	L	X	X	X	L	$\bar{B}$ → A
L	H	X	X	L	X	$\bar{A}$ → B
L	L	X	X	X	H	Register A → A
L	H	H or L	X	H	X	Register B → B

74648	Type		Production	Blld Sec. 3	I <sub>S</sub> & R	t <sub>PD</sub> E-Q n#typ	t <sub>PD</sub> E-Q n#max	Note t <sub>r</sub> & f <sub>Z</sub> & f <sub>E</sub>
	0...70°C §0...75°C	-40...85°C §-25...85°C						
AC	CD74AC648EN	CD54AC648EN	Rca	24-dil-2	&(8μ)		13.5 13.5	125
		CD54AC648H	Rca	24-dil-2	&(8μ)		12.3 12.3	143
	CD74AC648M	CD54AC648M	Rca	24-smd-2	&(8μ)		13.5 13.5	125
		CD54AC648M	Rca	24-smd-2	&(8μ)		12.3 12.3	143
ACT	CD74ACT648EN	CD54ACT648EN	Rca	24-dil-2	&(8μ)	6 7	13 13	
		CD54ACT648H	Rca	24-dil-2	&(8μ)	6 7	13 13	
	CD74ACT648M	CD54ACT648M	Rca	24-smd-2	&(8μ)	6 7	13 13	
		CD54ACT648M	Rca	24-smd-2	&(8μ)	6 7	13 13	
HC	CD74HC648E	CD54HC648E	Rca	24-dil-1	&(8μ)	20 20	60 60	25
		CD54HC648F	Rca	24-dil-6	&(8μ)	20 20	72 72	20
	CD74HC648M	CD54HC648H	Rca	24-smd-2	&(8μ)	20 20	72 72	20
		CD54HC648H	Rca	24-smd-2	&(8μ)	20 20	60 60	25
SN74HC648DW	MM74HC648J	MM54HC648J	Mot	24-dil-4	(8μ)	14 14	29 29	30
		MM74HC648N	Mot	24-dil-1	(8μ)	14 14	29 29	30
	PC74HC648P	MM54HC648J	Nsc	24-dil-6	(8μ)	18 18	26 26	31
		PC74HC648T	Nsc	24-dil-1	(8μ)	18 18	26 26	31
SN74HC648NT	SN54HC648FK	SN54HC648JT	Phi,Val	24-dil-1		27 27	69 69	
		SN54HC648FK	Phi,Val	24-smd-2		27 27	69 69	
HCT	CD74HCT648E	CD54HCT648E	Tix	24-smd-2	&(8μ)	18 18	45 45	27
		CD54HCT648H	Tix	28-chip-2	&(8μ)	18 18	54 54	22
	CD74HCT648M	CD54HCT648M	Tix	24-dil-6	&(8μ)	18 18	54 54	22
		CD54HCT648H	Tix	24-dil-2	&(8μ)	18 18	45 45	27
PC74HCT648P	MCS54HCT648J	MCT74HCT648N	Phi,Val	24-dil-1	&(8μ)	23 23	68 68	20
		MCT74HCT648N	Phi,Val	24-dil-6	&(8μ)	23 23	81 81	17
	PC74HCT648T	MCS54HCT648J	Phi,Val	24-smd-2	&(8μ)	23 23	68 68	20
		MCT74HCT648N	Phi,Val	24-dil-6	&(8μ)	23 23	66 66	20
PC74HCT648T	MCT74HCT648N	Phi,Val	24-dil-1		25 25	69 69		
		Phi,Val	24-smd-2		25 25	69 69		

74648		Type		Production	Blid Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>pD</sub> E→Q n <sub>s</sub> typ	t <sub>pD</sub> E→Q n <sub>s</sub> max	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>	74648		Type		Production	Blid Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>pD</sub> E→Q n <sub>s</sub> typ	t <sub>pD</sub> E→Q n <sub>s</sub> max	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub>
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	0...70°C §0...75°C							-40...85°C §-25...85°C	-55...125°C								
			Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↑ ↑	MHz				Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↑ ↑	MHz				
SN74HCT648DW			Tix	24-smd-2	&(8μ	18 18	45 45	27											
			Tix	28-chip-2	&(8μ	18 18	54 54	22											
			Tix	24-dil-6	&(8μ	18 18	54 54	22											
SN74HCT648NT			Tix	24-dil-2	&(8μ	18 18	45 45	27											

**74649**

Output: OD

8-bit bi-directional inverting bus driver

**74649**

Type

Production

Bld  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>  
E→Q  
n<sub>S</sub>typ

t<sub>PD</sub>  
E→Q  
n<sub>S</sub>max

Note  
f<sub>T</sub> f<sub>SZ</sub>  
&E

0...70°C  
§0...75°C

- 40...85°C  
§ - 25...85°C

- 55...125°C

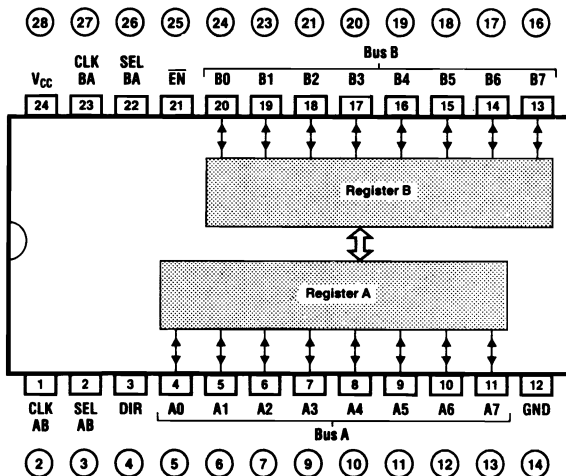
PIna-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz



AC

CD74AC649EN

CD54AC649EN

Rca

24-dil-2

&(8μ

125

Rca

24-dil-2

&(8μ

143

Rca

chip

&(8μ

125

Rca

24-smd-2

&(8μ

125

Rca

24-smd-2

&(8μ

143

ACT

CD74ACT649EN

CD54ACT649EN

Rca

24-dil-2

&(8μ

110

Rca

24-dil-2

&(8μ

125

Rca

chip

&(8μ

110

Rca

24-smd-2

&(8μ

110

Rca

24-smd-2

&(8μ

125

CD74ACT649M

CD54ACT649M

Rca

24-smd-2

&(8μ

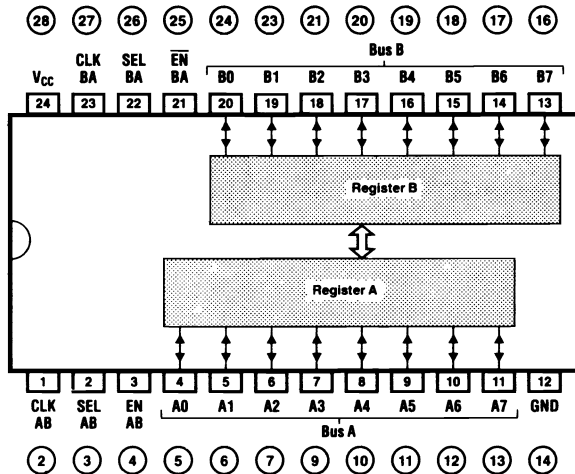
125

EN	DIR	CLK AB	CLK BA	SEL AB	SEL BA	Function
H	X	H or L	H or L	X	X	A = B = open
H	X	J	H or L	X	X	A → Register B
H	X	X	J	X	X	B → Register A
L	L	J	X	X	L	B → A
L	H	X	X	L	X	A → B
L	L	X	X	X	H	Register A → A
L	H	H or L	X	H	X	Register B → B

**74651**

Output: TS

**8-bit bi-directional inverting bus driver with storage register**



EN AB	EN BA	CLK AB	CLK BA	SEL AB	SEL BA	Function
L	H	H or L	H or L	X	X	A = B = Z
L	H	J	H or L	X	X	$\bar{A}$ → Register B
L	H	H or L	J	X	X	$\bar{B}$ → Register A
L	L	X	X	X	L	$\bar{B}$ → A
H	H	X	X	L	X	$\bar{A}$ → B
L	L	X	H or L	X	H	Register A → A
H	H	H or L	X	H	X	Register B → B
H	L	H or L	H or L	H	H	Register A → A + Register B → B

**74651**

Type

Production

Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>typ</sub>	t <sub>PD</sub> E-Q n <sub>max</sub>	Note
Pins-Art-Nr.	mA	↓ ↓ ↑	↓ ↓ ↑	t <sub>r</sub> s <sub>fz</sub> & t <sub>E</sub> MHz

AC

CD74AC651EN

CD54AC651EN

Rca

24-dil-2

& / 8μ

13.5 13.5

125

CD74AC651M

CD54AC651H

Rca

24-dil-2

& / 8μ

12.3 12.3

143

CD74AC651M

CD54AC651M

Rca

24-smd-2

& / 8μ

13.5 13.5

125

CD74AC651M

CD54AC651M

Rca

24-smd-2

& / 8μ

12.3 12.3

143

ACT

CD74ACT651EN

CD54ACT651EN

Rca

24-dil-2

& / 8μ

15.5 15.5

110

CD74ACT651M

CD54ACT651H

Rca

24-dil-2

& / 8μ

14.1 14.1

125

CD74ACT651M

CD54ACT651M

Rca

24-smd-2

& / 8μ

15.5 15.5

110

CD74ACT651M

CD54ACT651M

Rca

24-smd-2

& / 8μ

14.1 14.1

125

HC

SN74HC651DW

SN54HC651FK

Tix

24-smd-2

& / 8μ

18 18

45 45

27

SN74HC651NT

SN54HC651JK

Tix

28-chip-2

& / 8μ

18 18

54 54

22

SN74HC651NT

SN54HC651JT

Tix

24-dil-6

& / 8μ

18 18

54 54

22

SN74HC651NT

SN54HC651JT

Tix

24-dil-2

& / 8μ

18 18

45 45

27

SN74HCT651DW

SN54HCT651FK

Tix

24-smd-2

& / 8μ

18 18

45 45

20

SN74HCT651NT

SN54HCT651JK

Tix

28-chip-2

& / 8μ

18 18

54 54

17

SN74HCT651NT

SN54HCT651JT

Tix

24-dil-6

& / 8μ

18 18

54 54

17

SN74HCT651NT

SN54HCT651JT

Tix

24-dil-2

& / 8μ

18 18

45 45

20

**74652**

Output: TS

**8-bit bi-directional inverting bus driver with storage register**

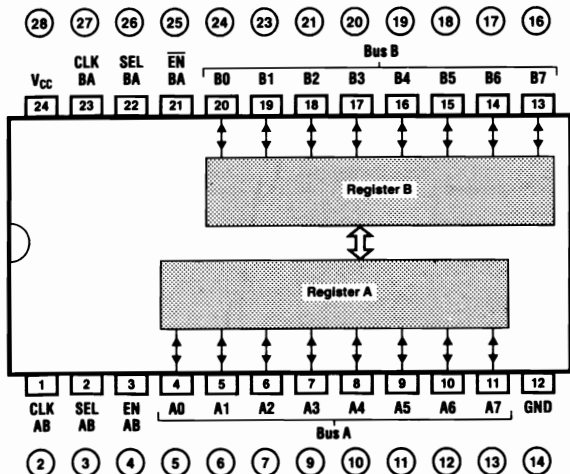
**74652**

Type

Production

Bld Sec. 3	IS & IR	tPD E-Q nstyp	tPD E-Q nmax	Note 1
Pins- Art-Nr.	mA	µs	µs	fT fZ & IE MHz

0...70°C	-40...85°C	-55...125°C
90...75°C	§-25...85°C	



EN AB	EN BA	CLK AB	CLK BA	SEL AB	SEL BA	Function
L	H	H or L	H or L	X	X	A = B = Z
L	H	J	H or L	X	X	A → Register B
L	H	H or L	J	X	X	B → Register A
L	L	X	X	X	L	B → A
H	H	X	X	L	X	A → B
L	L	X	H or L	X	H	Register A → A
H	H	H or L	X	H	X	Register B → B
H	L	H or L	H or L	H	H	Register A → A + Register B → B

AC	CD74AC652EN	CD54AC652EN	Rca	24-dil-2	&(8µ	13.5 13.5	125
		CD54AC652H	Rca	24-dil-2 chip	&(8µ	12.3 12.3	143
		CD54AC652M	Rca	24-smd-2	&(8µ	13.5 13.5	125
	CD74AC652M		Rca	24-smd-2	&(8µ	13.5 13.5	125
			Rca			12.3 12.3	143
ACT	CD74ACT652EN	CD54ACT652EN	Rca	24-dil-2	&(8µ	15.5 15.5	110
		CD54ACT652H	Rca	24-dil-2 chip	&(8µ	14.1 14.1	125
		CD54ACT652M	Rca	24-smd-2	&(8µ	15.5 15.5	110
	CD74ACT652M		Rca	24-smd-2	&(8µ	15.5 15.5	110
			Rca			14.1 14.1	125
HC	SN74HC652DW	SN54HC652FK	Tix	24-smd-2	&(8µ	18 18	45 45
		SN54HC652JT	Tix	28-chip-2	&(8µ	18 18	54 54
	SN74HC652NT		Tix	24-dil-6	&(8µ	18 18	54 54
			Tix	24-dil-2	&(8µ	18 18	45 45
HCT	SN74HCT652DW	SN54HCT652FK	Tix	24-smd-2	&(8µ	18 18	45 45
		SN54HCT652JT	Tix	28-chip-2	&(8µ	18 18	54 54
	SN74HCT652NT		Tix	24-dil-6	&(8µ	18 18	54 54
			Tix	24-dil-2	&(8µ	18 18	45 45

**74653**

Output: SS

8-bit inverting bidirectional bus driver

**74653**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E→Q  
n<sub>S</sub>typ

t<sub>PD</sub>  
E→Q  
n<sub>S</sub>max

Note  
t<sub>r</sub> t<sub>f</sub>  
& t<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§ -25...85°C

-55...125°C

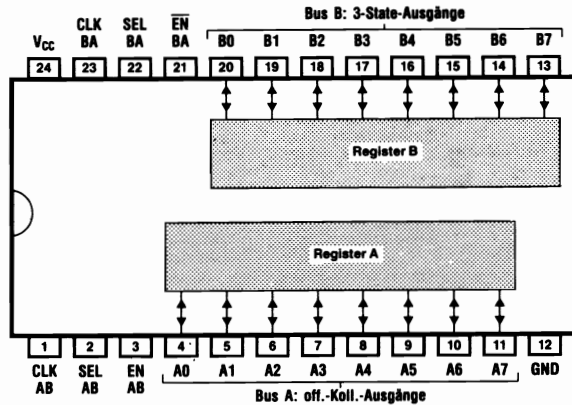
Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz



EN AB	EN $\bar{B}$ A	CLK AB	CLK $\bar{B}$ A	SEL AB	SEL $\bar{B}$ A	Function
L	H	H or L	H or L	X	X	A = B = open
L	H	J	H or L	X	X	$\bar{A}$ → Register B
L	H	H or L	J	X	X	$\bar{B}$ → Register A
L	L	X	X	X	L	$\bar{B}$ → A
H	H	X	X	L	X	$\bar{A}$ → B
L	L	X	H or L	X	H	Register A → A
H	H	H or L	X	H	X	Register B → B
H	L	H or L	H or L	H	H	Register A → A + Register B → B

AC

CD74AC653EN

CD54AC653EN

Rca

24-dil-2

&(8μ

13.5 13.5

125

CD74AC653H

CD54AC653H

Rca

24-dil-2

&(8μ

12.3 12.3

143

CD74AC653M

CD54AC653M

Rca

chip

&(8μ

13.5 13.5

125

CD74AC653M

CD54AC653M

Rca

24-smd-2

&(8μ

13.5 13.5

125

CD74AC653M

CD54AC653M

Rca

24-smd-2

&(8μ

12.3 12.3

143

ACT

CD74ACT653EN

CD54ACT653EN

Rca

24-dil-2

&(8μ

15.5 15.5

110

CD74ACT653H

CD54ACT653H

Rca

24-dil-2

&(8μ

14.1 14.1

125

CD74ACT653M

CD54ACT653M

Rca

chip

&(8μ

15.5 15.5

110

CD74ACT653M

CD54ACT653M

Rca

24-smd-2

&(8μ

15.5 15.5

110

CD74ACT653M

CD54ACT653M

Rca

24-smd-2

&(8μ

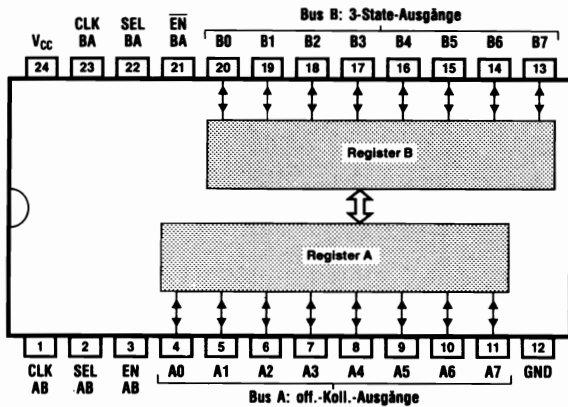
14.1 14.1

125

**74654**

Output: SS

8-bit bi-directional bus driver



ENAB	ENBA	CLKAB	CLKBA	SELAB	SELBA	Function
L	H	H or L	H or L	X	X	A = B = open
L	H	┌	H or L	X	X	A → Register B
L	H	H or L	└	X	X	B → Register A
L	L	X	X	X	L	B → A
H	H	X	X	L	X	A → B
L	L	X	H or L	X	H	Register A → A
H	H	H or L	X	H	X	Register B → B
H	L	H or L	H or L	H	H	Register A → A + Register B → B

**74654**

Type

Production

Bld Sec. 3

I<sub>S</sub> & I<sub>R</sub>

t<sub>PD</sub> E→Q n<sub>styp</sub>

t<sub>PD</sub> E→Q n<sub>max</sub>

Note f<sub>T</sub> f<sub>Z</sub> & I<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Pins-Art-Nr.

mA

↓ ↑ †

↓ ↑ †

MHz

AC

CD74AC654EN

CD54AC654EN

Rca

24-dil-2

&(8μ

13.5 13.5

125

CD74AC654H

CD54AC654H

Rca

24-dil-2

&(8μ

12.3 12.3

143

CD74AC654M

CD54AC654M

Rca

chip

&(8μ

13.5 13.5

125

CD74AC654M

CD54AC654M

Rca

24-sm-d-2

&(8μ

13.5 13.5

125

CD74AC654M

CD54AC654M

Rca

24-sm-d-2

&(8μ

12.3 12.3

143

ACT

CD74ACT654EN

CD54ACT654EN

Rca

24-dil-2

&(8μ

15.5 15.5

110

CD74ACT654H

CD54ACT654H

Rca

24-dil-2

&(8μ

14.1 14.1

125

CD74ACT654M

CD54ACT654M

Rca

chip

&(8μ

15.5 15.5

110

CD74ACT654M

CD54ACT654M

Rca

24-sm-d-2

&(8μ

15.5 15.5

110

CD74ACT654M

CD54ACT654M

Rca

24-sm-d-2

&(8μ

14.1 14.1

125



**74658**

Output: TS

**8-bit inverting bidirectional bus driver with parity control**

**74658**

Type

Production

Bild Sec. 3

I<sub>S</sub> & I<sub>R</sub>

t<sub>PD</sub> E-Q n<sub>styp</sub>

t<sub>PD</sub> E-Q n<sub>max</sub>

Note f<sub>T</sub> f<sub>Z</sub> & f<sub>E</sub>

0...70°C  
§0...75°C

- 40...85°C  
§ - 25...85°C

- 55...125°C

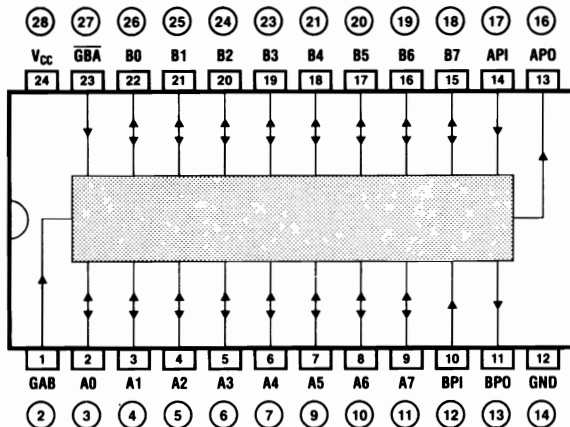
Pins- Art-Nr.

mA

↓ ↑ ↑

↓ ↑ ↑

MHz



**HC**  
SN74HC658DW  
  
SN74HC658NT  
  
**HCT**  
SN74HCT658DW  
  
SN74HCT658NT

SN54HC658FK  
SN54HC658JT  
  
  
SN54HCT658FK  
SN54HCT658JT

Tix  
Tix  
Tix  
Tix  
  
Tix  
Tix  
Tix  
Tix

24-smd-2  
28-chip-2  
24-dil-6  
24-dil-2  
  
24-smd-2  
28-chip-2  
24-dil-6  
24-dil-2

&(8μ  
&(8μ  
&(8μ  
&(8μ  
  
&(8μ  
&(8μ  
&(8μ  
&(8μ

15 15  
15 15  
15 15  
15 15  
  
15 15  
15 15  
15 15  
15 15

38 38  
45 45  
45 45  
38 38  
  
38 38  
45 45  
45 45  
38 38

Inputs		No. of H-inputs		Outputs		Function
GBA	GAB	Bus A + API	Bus B + BPI	APO	BPO	
H	L	X	X	Z	Z	—
L	L	X	even	Z	H	$\bar{B} \rightarrow A$
L	L	X	odd	Z	L	
H	H	even	X	H	Z	$\bar{A} \rightarrow B$
H	H	odd	X	L	Z	
L	H	X	even	H	L	$\bar{A} \rightarrow B$
L	H	X	odd	H	L	
L	H	even	X	H	L	$\bar{B} \rightarrow A$
L	H	odd	X	L	L	

**74659**

Output: TS

**8-bit bidirectional bus driver with parity control**

**74659**

Type

Production

Bld  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E · Q

t<sub>PD</sub>  
E · Q

Note  
t<sub>T</sub> f<sub>Tz</sub>  
& f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

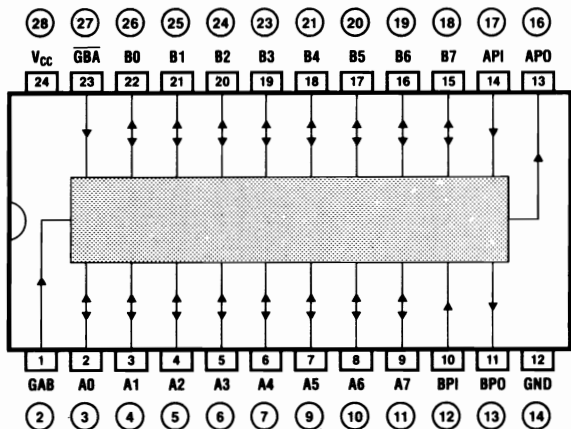
Pins-  
Art-Nr.

mA

↓ ↑ †

↓ ↑ †

MHz



Inputs	No. of H-inputs		Outputs		Function
	GB̄A GAB	Bus A + API Bus B + BPI	APO	BPO	
H L	X	X	Z	Z	—
L L	X	even	Z	H	B → A
L L	X	odd	Z	L	
H H	even	X	H	Z	A → B
H H	odd	X	L	Z	
L H	X	even	H	L	A → B
L H	X	odd			
L H	even	X	H	L	B → A
L H	odd	X			

**HC**  
SN74HC659DW  
SN74HC659NT  
**HCT**  
SN74HCT659DW  
SN74HCT659NT  
SN74HCT659JT

SN54HC659FK  
SN54HC659JT  
SN54HCT659FK  
SN54HCT659JT

Tix  
Tix  
Tix  
Tix  
Tix  
Tix  
Tix  
Tix

24-smd-2  
28-chip-2  
24-dil-6  
24-dil-2  
24-smd-2  
28-chip-2  
24-dil-6  
24-dil-2

&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ

14 14  
14 14  
14 14  
14 14  
14 14  
14 14  
14 14  
14 14

35 35  
42 42  
42 42  
35 35  
50 50  
61 61  
61 61  
50 50

74664 Output: TS	8-bit inverting bidirectional bus driver with parity control		74664		Type	Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E→Q n#typ	t <sub>PD</sub> E→Q n#max	Note f <sub>T</sub> §f <sub>Z</sub> &f <sub>E</sub>								
			0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C							
			Pins- Art-Nr.									mA	↓ ↑ ↑	↓ ↑ ↑	MHz				
			HC	SN54HC664FK SN54HC664JT	Tix Tix Tix Tix	24-smd-2 28-chip-2 24-dil-6 24-dil-2	&(8μ	15 15	38 38	45 45	45 45								
			SN74HC664NT									SN74HC664NT	38 38						
			HCT									SN54HCT664FK SN54HCT664JT	Tix Tix Tix Tix	24-smd-2 28-chip-2 24-dil-6 24-dil-2	&(8μ	15 15	38 38	45 45	45 45
			SN74HCT664DW SN74HCT664NT																

Inputs		No. of H-inputs		Outputs		Function
G-bar	DIR	Bus A + API	Bus B + BPI	APO	BPO	
H	X	X	X	Z	Z	—
L	L	X	even	Z	H	B-bar→A
L	L	X	odd	Z	L	
L	H	even	X	H	Z	A-bar→B
L	H	odd	X	L	Z	

**74665**

Output: TS

**8-bit bidirectional bus driver with parity control**

**74665**

Type

Production

Bld Sec. 3

I<sub>S</sub> & I<sub>R</sub>

t<sub>PD</sub> E→Q n<sub>styp</sub>

t<sub>PD</sub> E→Q n<sub>smax</sub>

Note t<sub>T</sub> f<sub>Z</sub> & f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

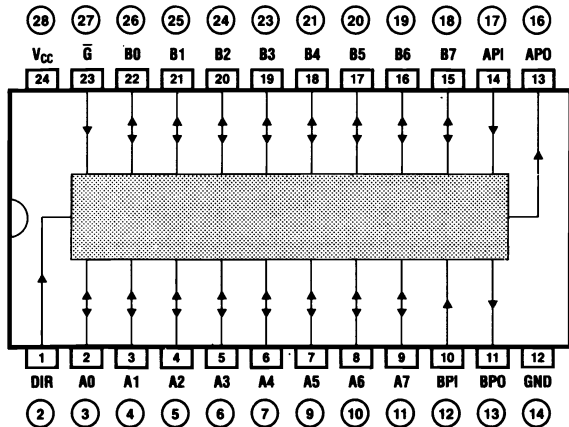
Pins-Art-Nr.

mA

↓ ↑ ↑

↓ ↓ ↑

MHz



**HC**  
SN74HC665DW  
  
SN74HC665NT  
  
**HCT**  
SN74HCT665DW  
  
SN74HCT665NT

SN54HC665FK  
SN54HC665JT  
  
  
SN54HCT665FK  
SN54HCT665JT

Tix  
Tix  
Tix  
Tix  
  
Tix  
Tix  
Tix  
Tix

24-smd-2  
28-chip-2  
24-dil-6  
24-dil-2  
  
24-smd-2  
28-chip-2  
24-dil-6  
24-dil-2

8(8μ)  
8(8μ)  
8(8μ)  
8(8μ)  
  
8(8μ)  
8(8μ)  
8(8μ)  
8(8μ)

14 14  
14 14  
14 14  
14 14  
  
14 14  
14 14  
14 14  
14 14

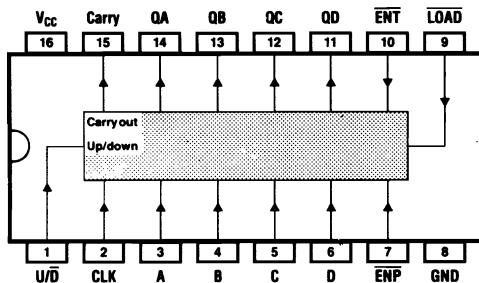
35 35  
42 42  
42 42  
35 35  
  
50 50  
61 61  
61 61  
50 50

Inputs	No. of H-Inputs		Outputs		Function
	DIR	Bus A + API	Bus B + BPI	APO BPO	
H	X	X	X	Z Z	—
L	L	X	even	Z H	B→A
L	L	X	odd	Z L	
L	H	even	X	H Z	A→B
L	H	odd	X	L Z	

**74668**

Output: TP

4-bit synchronous decade counter with preset

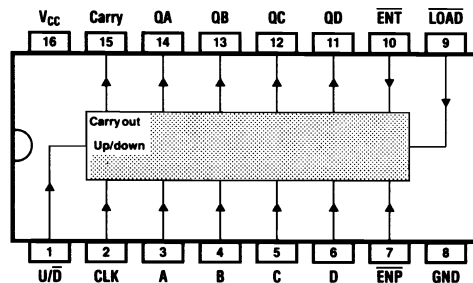


ENP	ENT	LOAD	U/D	CLK	Function
H	X	X	X	X	Latch counter + QA...QD
X	H	X	X	X	Latch counter + QA...QD
L	L	L	X	X	A...D → Counter + QA...QD
L	L	H	L	↓	Count down
L	L	H	H	↓	Count up

**74669**

Output: TP

4-bit synchronous binary counter with preset



ENP	ENT	LOAD	U/D	CLK	Function
H	X	X	X	X	Latch counter + QA...QD
X	H	X	X	X	Latch counter + QA...QD
L	L	L	X	X	A...D → Counter + QA...QD
L	L	H	L	↓	Count down
L	L	H	H	↓	Count up

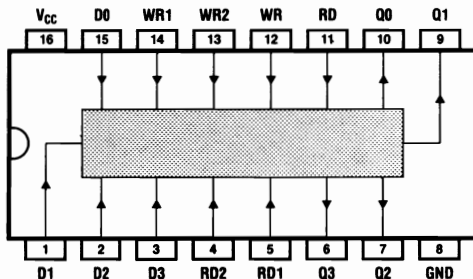
74668	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E → Q n <sup>st</sup> typ	t <sub>PD</sub> E → Q n <sup>st</sup> max	Note f <sub>T</sub> f <sub>Z</sub> &E	74669	Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E → Q n <sup>st</sup> typ	t <sub>PD</sub> E → Q n <sup>st</sup> max	Note f <sub>T</sub> f <sub>Z</sub> &E
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C						
HC HD74HC668			Hit	16-dil					HC HD74HC669			Hit	16-dil				

# 74670

Output: TS

## 4x4-bit RAM (random access memory)

Pin	FI
RD	3,3
WR	2,2



Input	Funktion*		
WR	WR1	WR2	
H	X	X	—
L	L	L	D0...D3 → M0
L	H	L	D0...D3 → M1
L	L	H	D0...D3 → M2
L	H	H	D0...D3 → M3

Input	Funktion*		
RD	RD1	RD2	
H	X	X	Q = Z
L	L	L	M0 → Q0...Q3
L	H	L	M1 → Q0...Q3
L	L	H	M2 → Q0...Q3
L	H	H	M3 → Q0...Q3

\* funktion · fonction · funzione  
funcion

### 74670

Type

0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C
-----------------------	---------------------------	-------------

Production

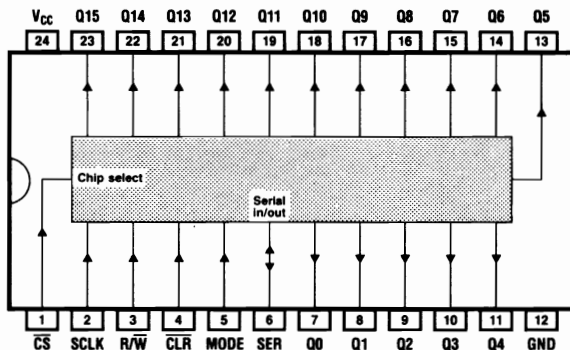
Blid Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n*typ		t <sub>PD</sub> E-Q n*max		Note f <sub>T</sub> §f <sub>Z</sub> &f <sub>E</sub> MHz
		↓	↑	↓	↑	

HC	CD74HC670E	CD54HC670F CD54HC670H	Rca Rca Rca Rca Hit Phi,Val Phi,Val Sgs Tos Nec	16-dil-1 16-dil-3 chip 16-smd-1 16-dil 16-dil-2 16-smd-1 16-dil 16-dil	&(8μ &(8μ &(8μ &(8μ 23 23 23 23	21 21 21 21 23 23 23 23	63 75 75 63 63 63 63	63 75 75 63 63 63 63
HD74HC670	CD74HC670M							
T74HC670 TD74HC670 μPB74HC670	PC74HC670P PC74HC670T							
HCT	CD74HCT670E	CD54HCT670F CD54HCT670H	Rca Rca Rca Rca Phi,Val Phi,Val Tos	16-dil-1 16-dil-3 chip 16-smd-1 16-dil-2 16-smd-1 16-dil	&(8μ &(8μ &(8μ &(8μ &(8μ &(8μ	21 21 21 21 27 27 27	21 21 21 21 27 27 27	63 75 75 63 63 63 63
TD74HCT670	CD74HCT670M PC74HCT670P PC74HCT670T							

# 74673

Output: TP

16-bit shift register with parallel outputs

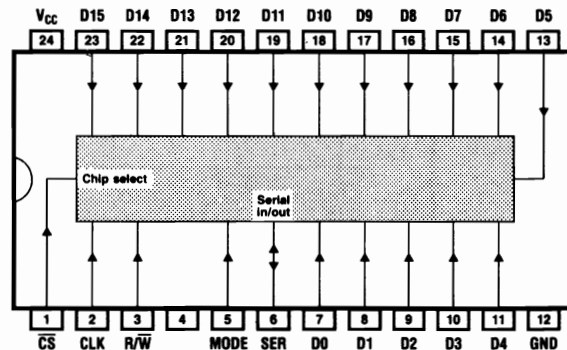


Inputs			In/Out	Function			
CS	R/W	SCLK	CLR	MODE	SER	Shift Register	Storage register
H	X	X	X	X	Z	—	—
X	X	X	L	X	Z	—	Clear
L	L	L	X	X	Z	Shift, serial in	—
L	H	X	X	X	out	Serial out read	—
L	H	L	X	L	out	Shift, serial out	—
L	H	L	L	H	L	Parallel in, serial out	Clear
L	H	L	H	H	Q15 <sub>n</sub>	Parallel in, serial out	—
L	L	X	H	L	Z	→ Storage register	→ Shift register

# 74674

Output: TP

16-bit shift register with parallel inputs



Inputs			In/Out	Function	
CS	R/W	MODE	CLK	SER	
H	X	X	X	Z	—
L	L	X	L	Z	Shift
L	H	L	L	out	Shift, serial out
L	H	H	L	out	Parallel in, serial out

74673	Type			Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	I <sub>PD</sub> E→Q n <sub>typ</sub>	I <sub>PD</sub> E→Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Z</sub> & f <sub>E</sub>	74674	Type			Production	Bild Sec. 3	I <sub>S</sub> & I <sub>R</sub>	I <sub>PD</sub> E→Q n <sub>typ</sub>	I <sub>PD</sub> E→Q n <sub>max</sub>	Note f <sub>T</sub> f <sub>Z</sub> & f <sub>E</sub>
	0...70°C	-40...85°C	§ -55...125°C								0...70°C	-40...85°C	§ -55...125°C						
§0...75°C	§ -25...85°C	-55...125°C								§0...75°C	§ -25...85°C	-55...125°C							
HC HD74HC673			Hit	24-dil						HC HD74HC674			Hit	24-dil					

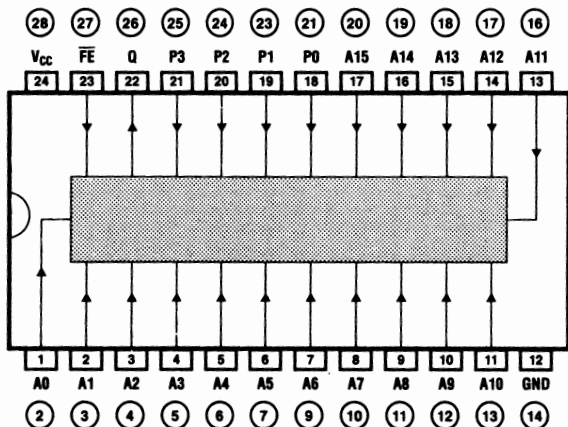
**74677**

Output: TP

16-bit address comparator

**74677**

Output: TP



Input														Output							
FE	P3	P2	P1	P0	A15	A14	A13	A12	A11	A10	A9	A8	A7	A6	A5	A4	A3	A2	A1	A0	Q
L	L	L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
L	L	L	H	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L	L
L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L	L
L	L	H	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	L	L	L	L
L	L	H	L	H	H	H	H	H	H	H	H	H	H	H	H	H	L	L	L	L	L
L	L	H	H	L	H	H	H	H	H	H	H	H	H	H	H	L	L	L	L	L	L
L	L	H	H	H	L	H	H	H	H	H	H	H	H	H	L	L	L	L	L	L	L
L	L	H	H	H	H	H	H	H	H	H	H	H	H	L	L	L	L	L	L	L	L
L	L	H	L	L	H	H	H	H	H	H	H	H	H	L	L	L	L	L	L	L	L
L	L	H	L	L	H	H	H	H	H	H	H	H	L	L	L	L	L	L	L	L	L
L	L	H	L	L	H	H	H	H	H	H	H	H	L	L	L	L	L	L	L	L	L
L	L	H	H	L	H	H	H	H	H	L	L	L	L	L	L	L	L	L	L	L	L
L	L	H	H	H	L	H	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L
L	L	H	H	H	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
L	L	H	H	H	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	H
L																				Alle anderen Kombinationen — all other combinations	H

74677	Type		Production	Bild Sec. 3	I <sub>S</sub> A <sub>IR</sub>	I <sub>PD</sub> E→Q n <sub>typ</sub>	I <sub>PD</sub> E→Q n <sub>max</sub>	Note ft, f <sub>z</sub> & I <sub>E</sub>
	0...70°C §0...75°C	-40...85°C §-25...85°C						
HC SN74HC677DW			Tix	24-smd-2	&(8μ	18 18	37 37	
			Tix	28-chip-2	&(8μ	18 18	45 45	
			Tix	24-dll-6	&(8μ	18 18	45 45	
SN74HC677NT			Tix	24-dll-2	&(8μ	18 18	37 37	



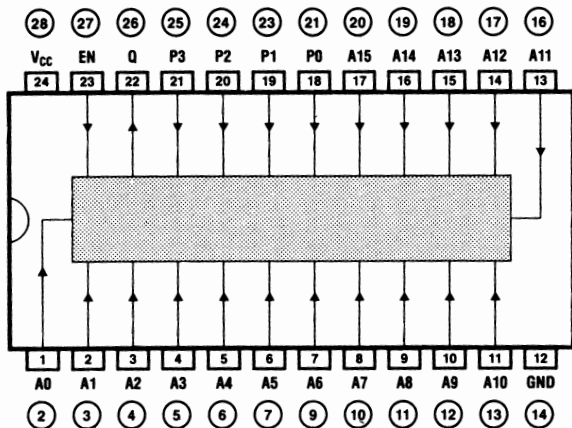
**74678**

Output: TP

16-bit address comparator with latch

**74678**

Output: TP



Input																Output					
EN	P3	P2	P1	P0	A15	A14	A13	A12	A11	A10	A9	A8	A7	A6	A5	A4	A3	A2	A1	A0	Q
H	L	L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
H	L	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L
H	L	L	H	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L	L
H	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L	L
H	L	H	L	L	H	H	H	H	H	H	H	H	H	H	H	H	H	L	L	L	L
H	L	H	L	H	H	H	H	H	H	H	H	H	H	H	H	H	L	L	L	L	L
H	L	H	H	L	H	H	H	H	H	H	H	H	H	H	H	L	L	L	L	L	L
H	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L	L	L	L	L	L
H	L	H	H	H	H	H	H	H	H	H	H	H	H	H	H	L	L	L	L	L	L
H	H	L	L	L	H	H	H	H	H	H	H	L	L	L	L	L	L	L	L	L	L
H	H	L	L	L	H	H	H	H	H	H	H	L	L	L	L	L	L	L	L	L	L
H	H	L	L	H	H	H	H	H	H	L	L	L	L	L	L	L	L	L	L	L	L
H	H	H	L	H	H	H	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	H	H	H	L	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
H	H	H	H	H	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L
L	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Latched
All other combinations																				H	

74678	Type		Production	B11d Sec. 3	I <sub>S</sub> & I <sub>Q</sub>	I <sub>PD</sub> E → Q n <sub>styp</sub>	I <sub>PD</sub> E → Q n <sub>max</sub>	Note f <sub>T</sub> §f <sub>Z</sub> & f <sub>E</sub>
	0...70°C §0...75°C	-40...85°C §-25...85°C						
HC								
SN74HC678DW			Tix	24-smd-2	&(8μ	23 23	44 44	
			Tix	28-chip-2	&(8μ	23 23	52 52	
			Tix	24-dil-6	&(8μ	23 23	52 52	
SN74HC678NT			Tix	24-dil-2	&(8μ	23 23	44 44	

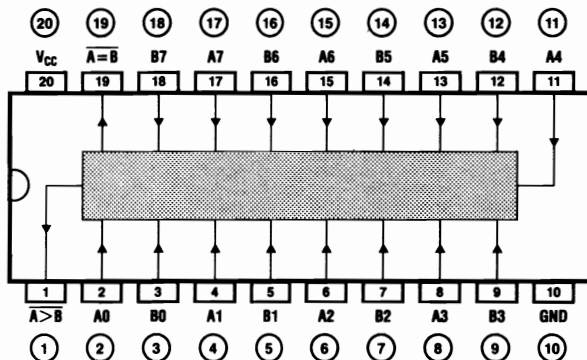




### 74682

Output: TP

8-bit magnitude comparator with pull-up resistors

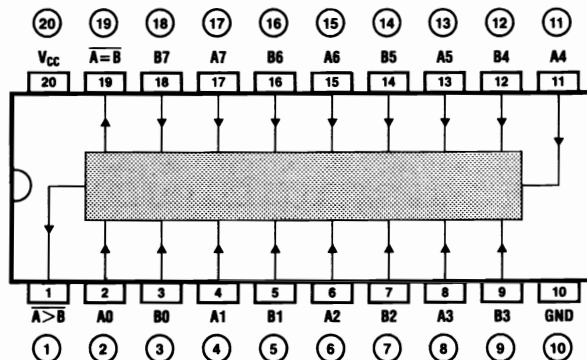


A, B	A = B	A > B
A = B	L	H
A > B	H	L
A < B	H	H

### 74684

Output: TP

8-bit magnitude comparator



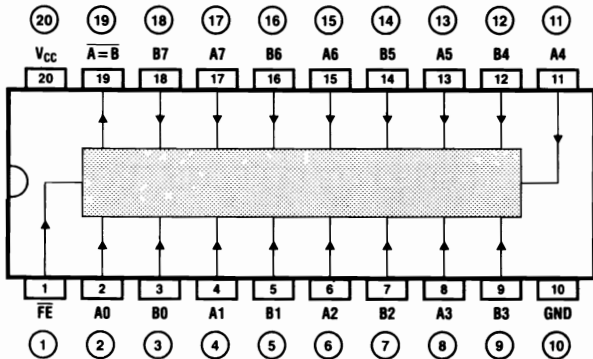
A, B	A = B	A > B
A = B	L	H
A > B	H	L
A < B	H	H

74682	Type		Production	Bld Sec. 3 Pins-Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q ns <sub>typ</sub> ↓ ↑ † ‡	t <sub>PD</sub> E-Q ns <sub>max</sub> ↓ ↓ † ‡	Note f <sub>T</sub> &f <sub>Z</sub> &f <sub>E</sub> MHz	74684	Type		Production	Bld Sec. 3 Pins-Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q ns <sub>typ</sub> ↓ ↑ † ‡	t <sub>PD</sub> E-Q ns <sub>max</sub> ↓ ↓ † ‡	Note f <sub>T</sub> &f <sub>Z</sub> &f <sub>E</sub> MHz
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C						
HC SN74HC682DW  SN74HC682N				Tix Tix Tix Tix	20-smd-2 &(8μ 20-chip-2 &(8μ 20-dil-4 &(8μ 20-dil-1 &(8μ	26 26 26 26 26 26 26 26	69 69 88 88 88 88 69 69		HC SN74HC684DW  SN74HC684N			Tix Tix Tix Tix	20-smd-2 &(8μ 20-chip-2 &(8μ 20-dil-4 &(8μ 20-dil-1 &(8μ	26 26 26 26 26 26 26 26	69 69 88 88 88 88 69 69		

**74688**

Output: TP

8-bit magnitude comparator



A, B	FE	A = B
X	H	H
A = B	L	L
A > B	X	H
A < B	X	H

**74688**

Type

Production

Blld  
Sec. 3

IS  
&I<sub>R</sub>

t<sub>PD</sub>  
E-Q  
n#typ

t<sub>PD</sub>  
E-Q  
n#max

Note  
f<sub>T</sub> S<sub>FZ</sub>  
&I<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Pins-  
Art-Nr.

mA

↓ ↑

↓ ↑

MHz

HC

CD74HC688E

CD54HC688F  
CD54HC688H

Rca  
Rca  
Rca

20-dil-1  
20-dil-4  
chip

&(8μ  
&(8μ  
&(8μ

14 14  
14 14  
14 14

42 42  
51 51  
51 51

CD74HC688M

Rca  
Hit  
Mit

20-smd-2  
20-dil  
20-dil

&(8μ  
&(8μ  
&(8μ

14 14  
14 14  
14 14

42 42  
53 53  
53 53

HD74HC688  
M74HC688

MC74HC688DW  
MC54HC688J  
MC54HC688J  
MC74HC688N  
MC74HC688N

Mot  
Mot  
Mot  
Mot  
Mot

20-smd-2  
20-dil-4  
20-dil-1  
20-dil-1

(8μ  
(8μ  
(8μ  
(8μ  
(8μ

24 24  
24 24  
24 24  
24 24

36 36  
36 36  
36 36  
36 36

MM74HC688J

MM54HC688J

Nsc

20-dil-4

(8μ

MM74HC688N

MM74HC688N

Nsc

20-dil-1

(8μ

MN74HC688

MN74HC688S

Mat

20-dil-1

&(8μ

53 53

MN74HC688S

PC74HC688P

Mat

20-smd-3

&(8μ

53 53

PC74HC688P

PC74HC688T

Phi,Val

20-dil-1

23 23

SN74HC688DW

SN74HC688N

TD74HC688

Phi,Val  
Tix

20-smd-2  
20-smd-2

&(8μ  
&(8μ

23 23  
30 30

53 53

SN74HC688N  
TD74HC688

SN54HC688FK

SN54HC688J

Tix  
Tix

20-chip-2  
20-dil-4

&(8μ  
&(8μ

30 30  
30 30

63 63  
63 63

HCT

CD74HCT688E

CD54HCT688F  
CD54HCT688H

Rca  
Rca  
Rca

20-dil-1  
20-dil-4  
chip

&(8μ  
&(8μ  
&(8μ

14 14  
14 14  
14 14

42 42  
51 51  
51 51

CD74HCT688M

Rca  
Hit

20-smd-2  
20-dil

&(8μ  
&(8μ

14 14

42 42

HD74HCT688

MC54HCT688J

MC74HCT688N

MM54HCT688J

Mot  
Mot

20-dil-4  
20-dil-1

&(8μ  
&(8μ

63 63  
63 63

MM74HCT688J

MM74HCT688N

Nsc

20-dil-4

(8μ

23 16

35 24

MM74HCT688N

PC74HCT688P

PC74HCT688T

Nsc

20-dil-1

(8μ

23 16

35 24

PC74HCT688P

PC74HCT688T

Phi,Val  
Phi,Val

20-dil-1  
20-smd-2

&(8μ  
&(8μ

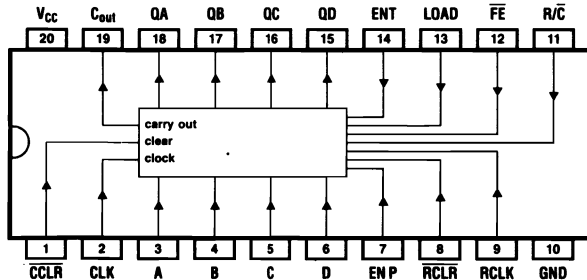
20 20  
20 20

43 43  
43 43

### 74690

Output: TP

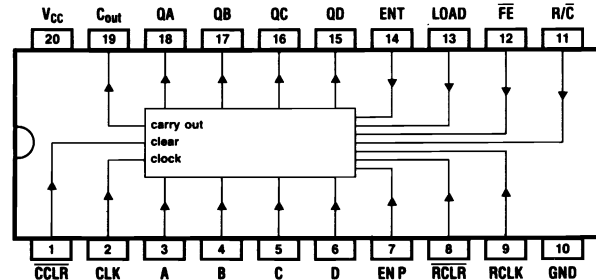
4-bit decade counter with register and multiplexer



### 74691

Output: TP

4-bit binary counter with register and multiplexer

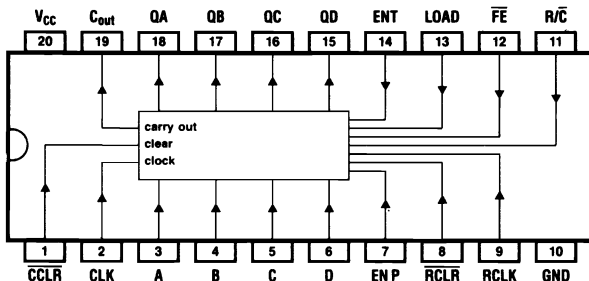


74690	Type			Production	Bld Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>styp</sub> ↓ ↓ ↑	t <sub>PD</sub> E-Q n <sub>max</sub> ↓ ↓ ↑	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub> MHz	74691	Type			Production	Bld Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>styp</sub> ↓ ↓ ↑	t <sub>PD</sub> E-Q n <sub>max</sub> ↓ ↓ ↑	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub> MHz
	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C								0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C						
HC TD74HC690				Tos	20-dil					HC TD74HC691				Tos	20-dil				

### 74692

Output: TP

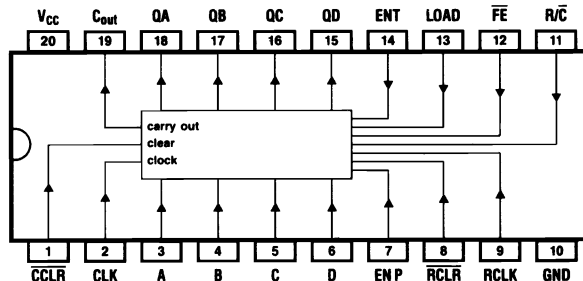
4-bit decade counter with register and multiplexer



### 74693

Output: TP

4-bit binary counter with register and multiplexer



### 74692

Type

Production

Bild Sec. 3

Pins-Art-Nr.

$I_S$

mA

$I_R$

mA

$t_{PD}$

E → Q

n<sub>styp</sub>

ns

↑ ↓ ↑

ns

$t_{PD}$

E → Q

n<sub>max</sub>

ns

↑ ↓ ↑

ns

Note

$t_r$

$S/z$

&f<sub>E</sub>

MHz

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Tos

20-dil

HC  
TD74HC692

### 74693

Type

Production

Bild Sec. 3

Pins-Art-Nr.

$I_S$

mA

$I_R$

mA

$t_{PD}$

E → Q

n<sub>styp</sub>

ns

↑ ↓ ↑

ns

$t_{PD}$

E → Q

n<sub>max</sub>

ns

↑ ↓ ↑

ns

Note

$t_r$

$S/z$

&f<sub>E</sub>

MHz

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Tos

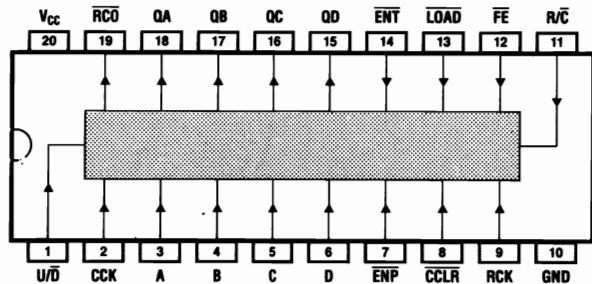
20-dil

HC  
TD74HC693

**74696**

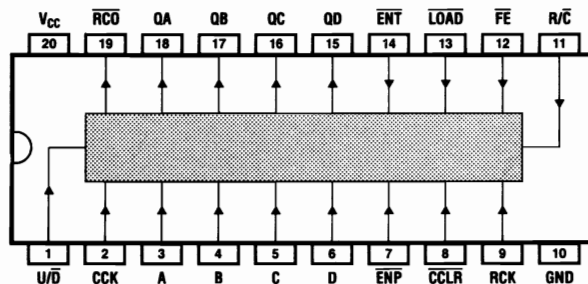
Output: TP

4-bit decade counter with register and multiplexer

**74697**

Output: TP

4-bit binary counter with register and multiplexer

**74696**

Type

0...70°C  
§0...75°C-40...85°C  
§-25...85°C

-55...125°C

Production

Bild  
Sec. 3Pins-  
Art-Nr. $I_S$   
&I<sub>R</sub>

mA

 $t_{PD}$   
E-Q  
n<sub>styp</sub>

↓ ↓ ↑

 $t_{PD}$   
E-Q  
n<sub>max</sub>

↓ ↓ ↑

Note  
f<sub>T</sub> §fz  
&fE

MHz

HC  
TD74HC696

Tos

20-dil

**74697**

Type

0...70°C  
§0...75°C-40...85°C  
§-25...85°C

-55...125°C

Production

Bild  
Sec. 3Pins-  
Art-Nr. $I_S$   
&I<sub>R</sub>

mA

 $t_{PD}$   
E-Q  
n<sub>styp</sub>

↓ ↓ ↑

 $t_{PD}$   
E-Q  
n<sub>max</sub>

↓ ↓ ↑

Note  
f<sub>T</sub> §fz  
&fE

MHz

HC  
TD74HC697

Tos

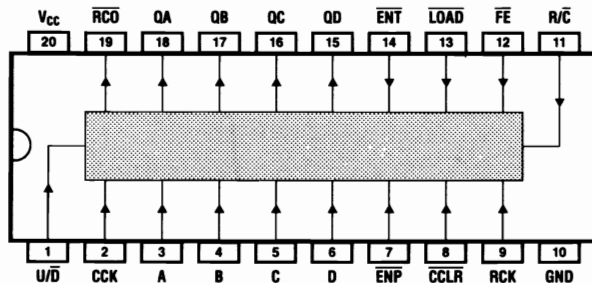
20-dil



**74698**

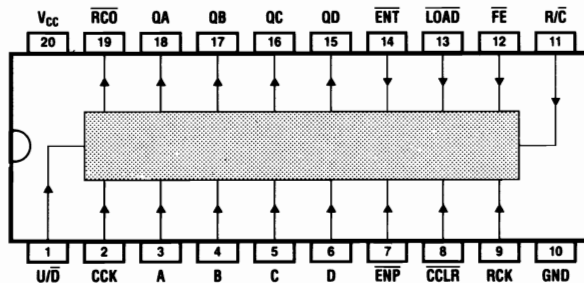
Output: TP

4-bit decade counter with register and multiplexer

**74699**

Output: TP

4-bit binary counter with register and multiplexer

**74698**

Type

0...70°C  
§0...75°C-40...85°C  
§-25...85°C

-55...125°C

Production

Bild  
Sec. 3Pins-  
Art-Nr.I<sub>S</sub>&I<sub>R</sub>

mA

t<sub>PD</sub>

E-Q

n<sub>styp</sub>t<sub>PD</sub>

E-Q

n<sub>max</sub>

MHz

Note

t<sub>T</sub>§I<sub>E</sub>&t<sub>E</sub>

MHz

**74699**

Type

0...70°C  
§0...75°C-40...85°C  
§-25...85°C

-55...125°C

Production

Bild  
Sec. 3Pins-  
Art-Nr.I<sub>S</sub>&I<sub>R</sub>

mA

t<sub>PD</sub>

E-Q

n<sub>styp</sub>t<sub>PD</sub>

E-Q

n<sub>max</sub>

MHz

Note

t<sub>T</sub>§I<sub>E</sub>&t<sub>E</sub>

MHz

HC  
TD74HC698

Tos

20-dil

HC  
TD74HC699

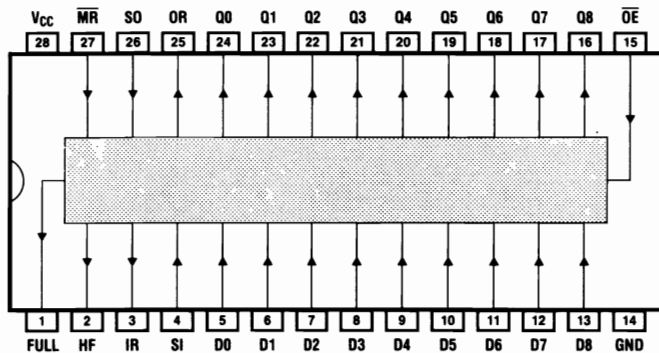
Tos

20-dil

### 74708

Output: TS

64x9-bit FIFO (first-in first-out memory)



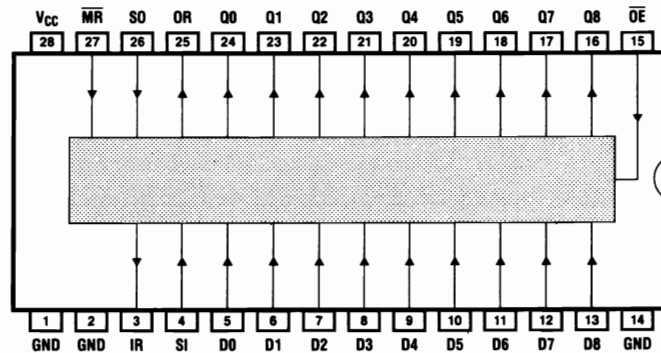
IR Input ready  
SI Shift in clock  
FULL Full flag

OR Output ready  
SO Shift out clock  
HF Half full flag

### 74723

Output: TS

64x9-bit FIFO (first-in first-out memory)



IR Input ready  
SI Shift in clock

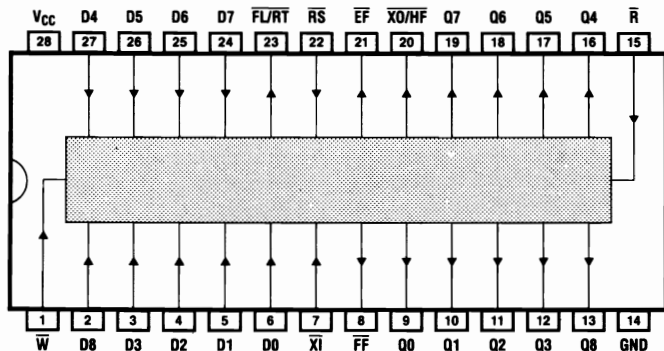
OR Output ready  
SO Shift out clock

74708	Type			Production	Blid Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>styp</sub> ↓ ↓ ↑	t <sub>PD</sub> E-Q n <sub>max</sub> ↓ ↓ ↑	Note f <sub>T</sub> f <sub>TZ</sub> &f <sub>E</sub> MHz	74723	Type			Production	Blid Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>styp</sub> ↓ ↓ ↑	t <sub>PD</sub> E-Q n <sub>max</sub> ↓ ↓ ↑	Note f <sub>T</sub> f <sub>TZ</sub> &f <sub>E</sub> MHz
	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C								0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C						
AC	74ACT708D 74ACT708P	Fch,Nsc Fch,Nsc	28-dil-7 28-dil-3	(10) (10)	5.5 5.5	5.5 5.5				AC	74ACT723D 74ACT723P	Fch,Nsc Fch,Nsc	28-dil-7 28-dil-3	(10) (10)	5.5 5.5	5.5 5.5			
ACT	74ACT708D 74ACT708P	Fch,Nsc Fch,Nsc	28-dil-7 28-dil-3	(10) (10)	6.5 6.5	6.5 6.5				ACT	74ACT723D 74ACT723P	Fch,Nsc Fch,Nsc	28-dil-7 28-dil-3	(10) (10)	6.5 6.5	6.5 6.5			

**74725**

Output: TP

512x9-bit FIFO (first-in first-out memory)

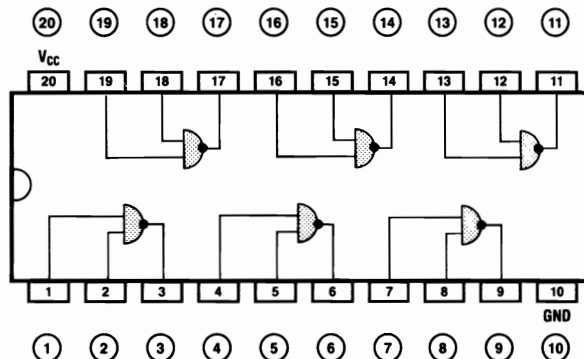


$\bar{R}$  Read enable  
 RS reset  
 EF Empty flag  
 $\bar{X}\bar{I}$  Expansion in  
 $\bar{W}$  Write enable  
 FL/RT First load / retransmit  
 FF Full flag  
 XO/HF Expansion out / Half full flag

**74804**

Output: TP

NAND driver



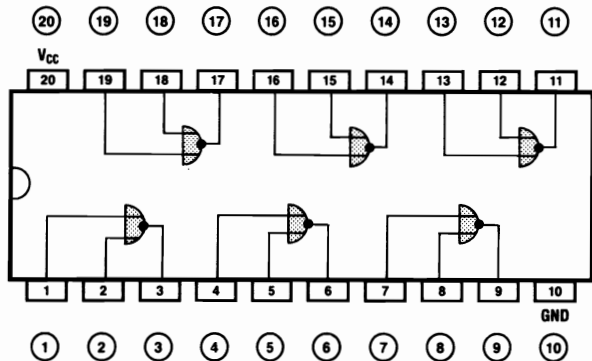
Logiktablelle siehe Section 1  
 Function table see section 1  
 Tableau logique voir section 1  
 Per tavola di logica vedi sezione 1  
 Tabla de verdad, ver sección 1

	74725			Type	Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E-Q n*typ	I <sub>PD</sub> E-Q n*max	Note I <sub>T</sub> I <sub>Z</sub> &I <sub>E</sub>	74804			Type	Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	I <sub>PD</sub> E-Q n*typ	I <sub>PD</sub> E-Q n*max	Note I <sub>T</sub> I <sub>Z</sub> &I <sub>E</sub>
	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C								0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C							
AC																				
				74AC725D 74AC725P	Fch,Nsc Fch,Nsc	28-dil-7 28-dil-3	(10) (10)					HC SN74HC804DW			Tix Tix Tix Tix	20-smd-2 20-chip-2 20-dil-4 20-dil-1	&(8μ &(8μ &(8μ &(8μ	12 12 12 12 12 12 12 12	25 25 30 30 30 30 25 25	
ACT				74ACT725D 74ACT725P	Fch,Nsc Fch,Nsc	28-dil-7 28-dil-3	(10) (10)					SN74HC804N								

### 74805

Output: TP

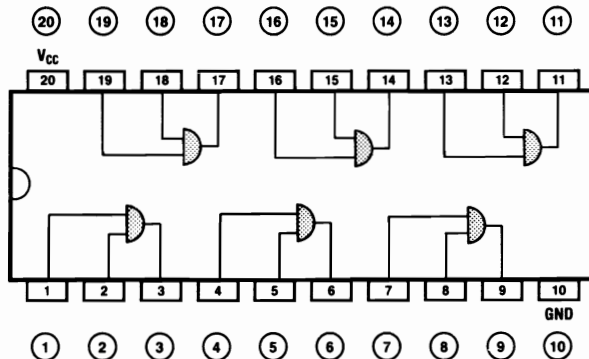
NOR driver



### 74808

Output: TP

AND driver



Logiktablelle siehe Section 1  
 Funktion table see section 1  
 Tableau logique voir section 1  
 Per tavola di logica vedi sezione 1  
 Tabla de verdad, ver sección 1

74805	Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>S</sub> typ ↓ ↓ ↑	t <sub>PD</sub> E-Q n <sub>S</sub> max ↓ ↓ ↑	Note f <sub>T</sub> f <sub>SZ</sub> &f <sub>E</sub> MHz	74808	Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>S</sub> typ ↓ ↓ ↑	t <sub>PD</sub> E-Q n <sub>S</sub> max ↓ ↓ ↑	Note f <sub>T</sub> f <sub>SZ</sub> &f <sub>E</sub> MHz
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C						
HC SN74HC805DW	SN54HC805FK SN54HC805J	Tix	20-smd-2	&(8μ	10 10	24 24	24 24	HC SN74HC808DW	SN54HC808FK SN54HC808J	Tix	20-smd-2	&(8μ	10 10	25 25	25 25	HC SN74HC808N	
Tix		20-chip-2	&(8μ	10 10	29 29	29 29	30 30										
Tix		20-dil-4	&(8μ	10 10	29 29	29 29	30 30										
SN74HC805N		Tix	20-dil-1	&(8μ	10 10	24 24	24 24			Tix	20-dil-1	&(8μ	10 10	25 25	25 25		

74818 Output: TP	8-bit diagnostic register		74818		Type	Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q ns <sub>typ</sub> ↓ ↓ ↑	t <sub>PD</sub> E-Q ns <sub>max</sub> ↓ ↓ ↑	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub> MHz																														
			0...70°C §0...75°C	- 40...85°C § - 25...85°C								- 55...125°C																													
			AC									ACT																													
												<p>SDI Serial data input  DCLK Diagnostics clock  SDO Serial data output  PCLK Pipeline register clock</p>																													
<table border="1"> <thead> <tr> <th colspan="3">AC</th> <th colspan="3">ACT</th> </tr> </thead> <tbody> <tr> <td>74AC818D</td> <td>Fch,Nsc</td> <td>24-dil-6</td> <td>(1</td> <td>4.5</td> <td>5</td> </tr> <tr> <td>74AC818P</td> <td>Fch,Nsc</td> <td>24-dil-1</td> <td>(1</td> <td>4.5</td> <td>5</td> </tr> <tr> <td>74ACT818D</td> <td>Fch,Nsc</td> <td>24-dil-6</td> <td>(1</td> <td>6.5</td> <td>6.5</td> </tr> <tr> <td>74ACT818P</td> <td>Fch,Nsc</td> <td>24-dil-2</td> <td>(1</td> <td>6.5</td> <td>6.5</td> </tr> </tbody> </table>												AC			ACT			74AC818D	Fch,Nsc	24-dil-6	(1	4.5	5	74AC818P	Fch,Nsc	24-dil-1	(1	4.5	5	74ACT818D	Fch,Nsc	24-dil-6	(1	6.5	6.5	74ACT818P	Fch,Nsc	24-dil-2	(1	6.5	6.5
AC			ACT																																						
74AC818D	Fch,Nsc	24-dil-6	(1	4.5	5																																				
74AC818P	Fch,Nsc	24-dil-1	(1	4.5	5																																				
74ACT818D	Fch,Nsc	24-dil-6	(1	6.5	6.5																																				
74ACT818P	Fch,Nsc	24-dil-2	(1	6.5	6.5																																				

**74821**

Output: TS

10-bit bus interface flip-flops

**74821**

Type

Production

Bild  
Sec. 3

$I_S$   
&  $I_R$

$t_{PD}$   
E-Q  
ns typ

$t_{PD}$   
E-Q  
ns max

Note  
 $t_T$   $t_{fz}$   
&  $t_E$

0...70°C  
§0...75°C

- 40...85°C  
§ - 25...85°C

- 55...125°C

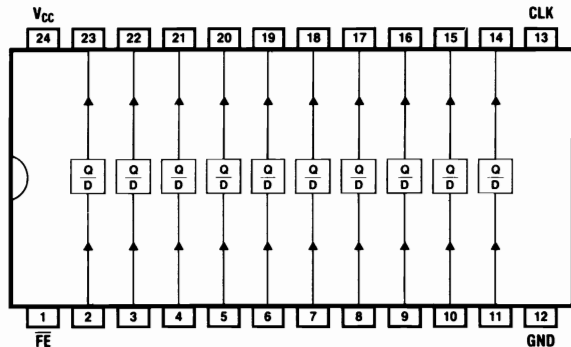
Pins-  
Art-Nr.

mA

↓ ↑ †

↓ ↑ †

MHz



AC

74AC821D  
74AC821P  
74AC821S

Fch.Nsc  
Fch.Nsc  
Fch.Nsc

24-dil-6  
24-dil-2  
24-smd-2

&(8μ  
&(8μ  
&(8μ

6.5 6.5  
6.5 6.5  
6.5 6.5

ACT

74ACT821D  
74ACT821P  
74ACT821S

54ACT821D

Fch.Nsc  
Fch.Nsc  
Fch.Nsc  
Fch.Nsc

24-dil-6  
24-dil-6  
24-dil-2  
24-smd-2

&(8μ  
&(8μ  
&(8μ  
&(8μ

8 8  
8 8  
8 8  
8 8

10.5 10.5  
10.5 10.5  
10.5 10.5

110  
110  
110

FE	CLK	D	Q
H	X	X	Z
L	L	X	Q <sub>0</sub>
L	┘	L	L
L	┘	H	H

74822 Output: TS	10-bit inverting bus interface flip-flops	74822	Type		Production	Blld Sec. 3 Pina- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E→Q ns <sub>typ</sub>	t <sub>PD</sub> E→Q ns <sub>max</sub>	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub> MHz
		0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C						
		AC	74AC822D 74AC822P 74AC822S	Fch,Nsc Fch,Nsc Fch,Nsc	24-dil-6 24-dil-1 24-smd-2	&(8μ &(8μ &(8μ	6.5 6.5 6.5 6.5 6.5 6.5			
		ACT	74ACT822D 74ACT822P 74ACT822S	Fch,Nsc Fch,Nsc Fch,Nsc	24-dil-6 24-dil-1 24-smd-2	&(8μ &(8μ &(8μ	8 8 8 8 8 8	10.5 10.5 10.5 10.5 10.5 10.5	110 110 110	

$\overline{FE}$	CLK	D	Q
H	X	X	Z
L	L	X	Q <sub>0</sub>
L	J	L	H
L	J	H	L

# 74823

Output: TS

## 9-bit bus interface flip-flops

### 74823

Type

Production

Bild  
Sec. 3

$I_S$   
&  $I_R$

$t_{PD}$   
E-Q  
ns typ

$t_{PD}$   
E-Q  
ns max

Note  
 $t_T$   $f_{Iz}$   
&  $f_E$

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

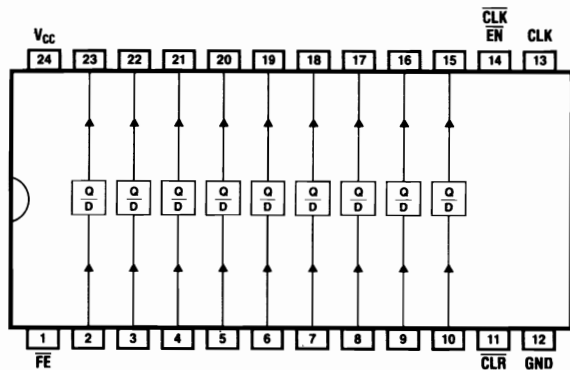
Pins-  
Art-Nr.

mA

↓ ↑ †

↓ ↑ †

MHz



AC

74AC823D  
74AC823P  
74AC823S

Fch, Nsc  
Fch, Nsc  
Fch, Nsc

24-dil-6  
24-dil-1  
24-smd-2

&(8μ  
&(8μ  
&(8μ

6.5 6.5  
6.5 6.5  
6.5 6.5

ACT

74ACT823D  
74ACT823P  
74ACT823S

54ACT823D

Fch, Nsc  
Fch, Nsc  
Fch, Nsc  
Fch, Nsc

24-dil-6  
24-dil-6  
24-dil-2  
24-smd-2

&(8μ  
&(8μ  
&(8μ  
&(8μ

8 8  
8 8  
8 8  
8 8

FE	CLR	CLKEN	CLK	D	Q
H	X	X	X	X	Z
L	H	H	X	X	$Q_0$
L	L	X	X	X	L
L	H	L	J	L	L
L	H	L	J	H	H



# 74824

Output: TS

## 9-bit inverting bus interface flip-flops

### 74824

Type

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

Production

Bild  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>  
E · Q  
n<sup>§</sup>typ

t<sub>PD</sub>  
E · Q  
n<sup>§</sup>max

Note  
f<sub>T</sub> §f<sub>Z</sub>  
&t<sub>E</sub>

mA

↓ ↑ †

↓ † †

MHz

AC

74AC824D  
74AC824P  
74AC824S

Fch,Nsc  
Fch,Nsc  
Fch,Nsc

24-dil-6  
24-dil-1  
24-smd-2

&(8μ  
&(8μ  
&(8μ

6.5 6.5  
6.5 6.5  
6.5 6.5

ACT

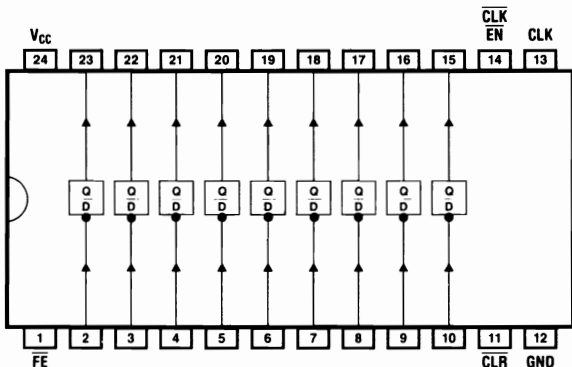
74ACT824D  
74ACT824P  
74ACT824S

Fch,Nsc  
Fch,Nsc  
Fch,Nsc

24-dil-6  
24-dil-1  
24-smd-2

&(8μ  
&(8μ  
&(8μ

8 8  
8 8  
8 8



FE	CLR	CLK	EN	CLK	D	Q
H	X	X	X	X	X	Z
L	H	H	X	X	X	Q <sub>0</sub>
L	L	X	X	X	X	L
L	H	L	∟	∟	L	H
L	H	L	∟	∟	H	L

**74825**

Output: TS

**8-bit bus interface flip-flops**

**74825**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>  
E · Q  
n<sub>S</sub>typ

t<sub>PD</sub>  
E · Q  
n<sub>S</sub>max

Note  
f<sub>T</sub> S<sub>FZ</sub>  
&f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

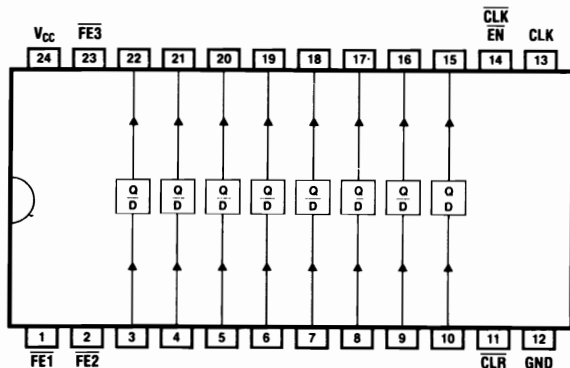
Pins-  
Art-Nr.

mA

↓ ↑ †

↓ ↑ †

MHz



AC

ACT

74AC825D  
74AC825P  
74AC825S

74ACT825D  
74ACT825P  
74ACT825S

54ACT825D

Fch,Nsc  
Fch,Nsc  
Fch,Nsc

Fch,Nsc  
Fch,Nsc  
Fch,Nsc  
Fch,Nsc

24-dil-6  
24-dil-1  
24-smd-2

24-dil-6  
24-dil-6  
24-dil-2  
24-smd-2

&(8μ  
&(8μ  
&(8μ

&(8μ  
&(8μ  
&(8μ  
&(8μ

6.5 6.5  
6.5 6.5  
6.5 6.5

8 8  
8 8  
8 8  
8 8

FE1	FE2	FE3	CLR	CLK	EN	CLK	D	Q
H	X	X	X	X	X	X	X	Z
X	H	X	X	X	X	X	X	Z
X	X	H	X	X	X	X	X	Z
L	L	L	L	X	X	X	X	L
L	L	L	H	H	X	X	X	Q <sub>0</sub>
L	L	L	H	L	J	L	L	L
L	L	L	H	L	J	H	H	L

**74826**

Output: TS

8-bit inverting bus interface flip-flops

**74826**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E → Q  
n<sub>styp</sub>

t<sub>PD</sub>  
E → Q  
n<sub>smax</sub>

Note  
f<sub>T</sub> f<sub>Z</sub>  
& f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

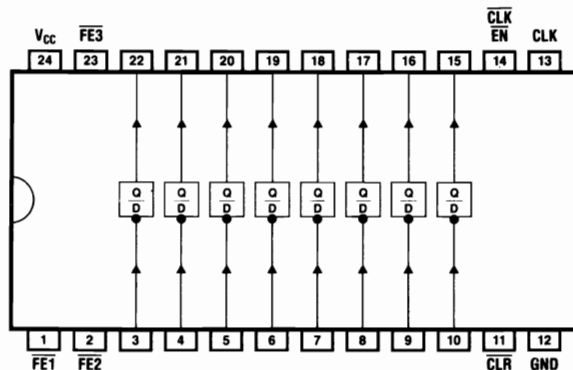
Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↓ ↑

MHz



FE1	FE2	FE3	CLR	CLK	EN	CLK	D	Q
H	X	X	X	X	X	X	X	Z
X	H	X	X	X	X	X	X	Z
X	X	H	X	X	X	X	X	Z
L	L	L	L	X	X	X	X	L
L	L	L	H	H	X	X	X	Q <sub>0</sub>
L	L	L	H	L	┘	L	H	H
L	L	L	H	L	┘	H	L	L

AC

74AC826D  
74AC826P  
74AC826S

Fch, Nsc  
Fch, Nsc  
Fch, Nsc

24-dil-6  
24-dil-1  
24-smd-2

&(8μ  
&(8μ  
&(8μ

6.5 6.5  
6.5 6.5  
6.5 6.5

ACT

74ACT826D  
74ACT826P  
74ACT826S

Fch, Nsc  
Fch, Nsc  
Fch, Nsc

24-dil-6  
24-dil-1  
24-smd-2

&(8μ  
&(8μ  
&(8μ

8 8  
8 8  
8 8

**74832**

Output: TP

OR driver

**74832**

Type

Production

Bld  
Sec. 3I<sub>S</sub>  
& I<sub>R</sub>t<sub>pD</sub>  
E-Q  
n<sub>typ</sub>t<sub>pD</sub>  
E-Q  
n<sub>max</sub>Note  
t<sub>r</sub> f<sub>z</sub>  
& f<sub>E</sub>0...70°C  
§0...75°C-40...85°C  
§-25...85°C

-55...125°C

Pins-  
Art-Nr.

mA

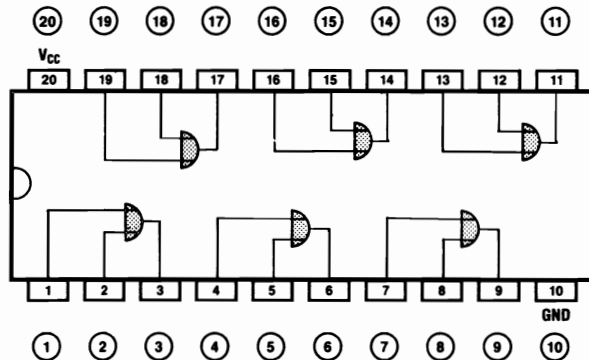
↓ ↑ ↑

↓ ↓ ↑

MHz

HC  
SN74HC832DWSN54HC832FK  
SN54HC832JTix  
Tix  
Tix  
Tix20-smd-2  
20-chip-2  
20-dil-4  
20-dil-18(8μ  
8(8μ  
8(8μ  
8(8μ10 10  
10 10  
10 10  
10 1025 25  
30 30  
30 30  
25 25

SN74HC832N



Logiktablelle siehe Section 1  
 Function table see section 1  
 Tableau logique voir section 1  
 Per tavola di logica vedi sezione 1  
 Tabla de verdad, ver sección 1

**74841**

Output: TS

10-bit bus interface latches

**74841**

Type

Production

Bild  
Sec. 3I<sub>S</sub>  
&I<sub>R</sub>t<sub>PD</sub>  
E→Q  
n<sup>#</sup><sub>typ</sub>t<sub>PD</sub>  
E→Q  
n<sup>#</sup><sub>max</sub>Note  
f<sub>T</sub> f<sub>z</sub>  
&f<sub>E</sub>0...70°C  
§0...75°C- 40...85°C  
§ - 25...85°C

- 55...125°C

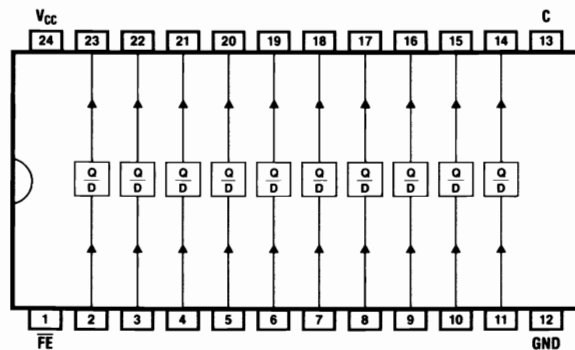
Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↓ ↑

MHz



FE	C	D	Q
H	X	X	Z
L	L	X	Q <sub>0</sub>
L	H	L	L
L	H	H	H

AC

74AC841D  
74AC841P  
74AC841SFch,Nsc  
Fch,Nsc  
Fch,Nsc24-dil-6  
24-dil-1  
24-smd-2&(8μ  
&(8μ  
&(8μ11 12  
11 12  
11 12

ACT

74ACT841D  
74ACT841P  
74ACT841SFch,Nsc  
Fch,Nsc  
Fch,Nsc24-dil-6  
24-dil-2  
24-smd-2&(8μ  
&(8μ  
&(8μ11 12  
11 12  
11 12

**74842**

Output: TS

10-bit inverting bus interface latches

**74842**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>  
E-Q  
n<sub>styp</sub>

t<sub>PD</sub>  
E-Q  
n<sub>max</sub>

Note  
f<sub>T</sub> f<sub>fz</sub>  
&f<sub>E</sub>  
MHz

0...70°C  
§0...75°C

-40...85°C  
§ -25...85°C

-55...125°C

Pins-  
Art-Nr.

mA

↓ ↓ ↑

↓ ↓ ↑

MHz

AC

74AC842D  
74AC842P  
74AC842S

Fch,Nsc  
Fch,Nsc  
Fch,Nsc

24-dil-6  
24-dil-1  
24-smd-2

&(8μ  
&(8μ  
&(8μ

11 12  
11 12  
11 12

ACT

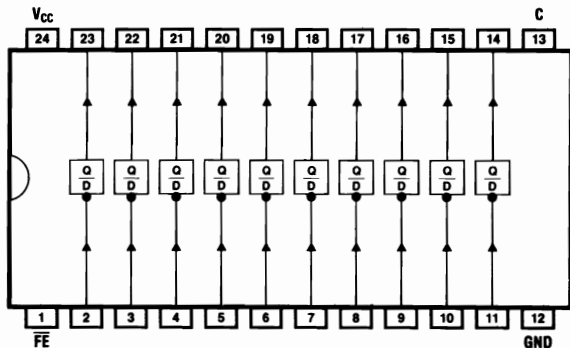
74ACT842D  
74ACT842P  
74ACT842S

Fch,Nsc  
Fch,Nsc  
Fch,Nsc

24-dil-6  
24-dil-1  
24-smd-2

&(8μ  
&(8μ  
&(8μ

11 12  
11 12  
11 12



FE	C	D	Q
H	X	X	Z
L	L	X	Q <sub>0</sub>
L	H	L	H
L	H	H	L

**74843**

Output: TS

9-bit bus interface latches

**74843**

Type

Production

Bld  
Sec. 3

$I_S$   
&  $I_R$

$t_{PD}$   
E→Q  
n<sup>styp</sup>

$t_{PD}$   
E→Q  
n<sup>max</sup>

Note  
f<sub>T</sub> f<sub>Iz</sub>  
& f<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

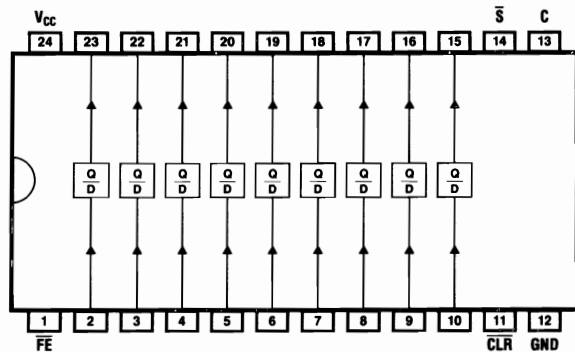
-55...125°C

mA

↓ ↑ ↑

↓ ↑ ↑

MHz



AC

74AC843D  
74AC843P  
74AC843S

Fch,Nec  
Fch,Nec  
Fch,Nec

24-dil-4  
24-dil-1  
24-smd-2

&(8μ  
&(8μ  
&(8μ

11 12  
11 12  
11 12

ACT

74ACT843D  
74ACT843P  
74ACT843S

Fch,Nec  
Fch,Nec  
Fch,Nec

24-dil-6  
24-dil-2  
24-smd-2

&(8μ  
&(8μ  
&(8μ

11 12  
11 12  
11 12

S	CLR	FE	C	D	Q
L	H	L	X	X	H
H	L	L	X	X	L
L	L	L	X	X	H
X	X	H	X	X	Z
H	H	L	L	X	Q <sub>0</sub>
H	H	L	H	L	L
H	H	L	H	H	H

**74844**

Output: TS

9-bit inverting bus interface latches

**74844**

Type

0...70°C  
 §0...75°C

- 40...85°C  
 § - 25...85°C

- 55...125°C

Production

Bild  
 Sec. 3

I<sub>S</sub>  
 &I<sub>R</sub>

t<sub>PD</sub>  
 E→Q  
 ns typ

t<sub>PD</sub>  
 E→Q  
 ns max

Note  
 I<sub>T</sub> I<sub>Z</sub>  
 &I<sub>E</sub>

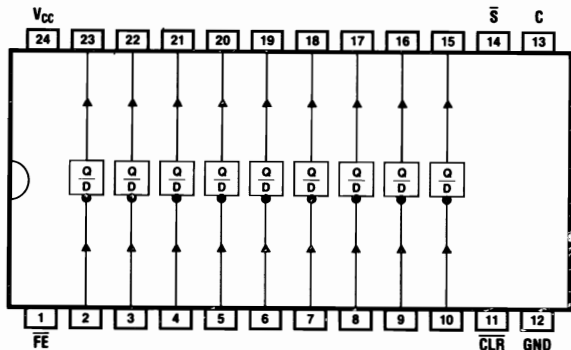
Pins-  
 Art-Nr.

mA

↓ ↑ †

↓ ↑ †

MHz



AC

74AC844D  
 74AC844P  
 74AC844S

Fch,Nsc  
 Fch,Nsc  
 Fch,Nsc

24-dil-6  
 24-dil-1  
 24-smd-2

&(8μ  
 &(8μ  
 &(8μ

11 12  
 11 12  
 11 12

ACT

74ACT844D  
 74ACT844P  
 74ACT844S

Fch,Nsc  
 Fch,Nsc  
 Fch,Nsc

24-dil-6  
 24-dil-1  
 24-smd-2

&(8μ  
 &(8μ  
 &(8μ

11 12  
 11 12  
 11 12

S	CLR	FE	C	D	Q
L	H	L	X	X	H
H	L	L	X	X	L
L	L	L	X	X	H
X	X	H	X	X	Z
H	H	L	L	X	Q <sub>0</sub>
H	H	L	H	L	H
H	H	L	H	H	L



**74845**

Output: TS

**8-bit bus interface latches**

**74845**

Type

Production

Bild  
Sec. 3  
Pins-  
Art-Nr.

I<sub>S</sub>  
&I<sub>Q</sub>  
mA

t<sub>PD</sub>  
E-Q  
n<sub>s</sub>typ  
ns

t<sub>PD</sub>  
E-Q  
n<sub>s</sub>max  
ns

Note  
f<sub>T</sub> f<sub>z</sub>  
&E  
MHz

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

AC

74AC845D  
74AC845P  
74AC845S

Fch,Nsc  
Fch,Nsc  
Fch,Nsc

24-dil-6  
24-dil-1  
24-smd-2

&(8μ  
&(8μ  
&(8μ

11 12  
11 12  
11 12

ACT

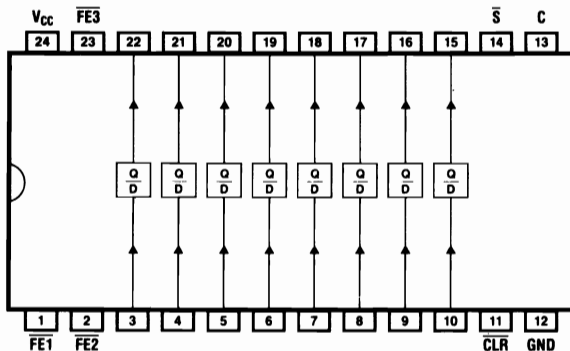
74ACT845D  
74ACT845P  
74ACT845S

Fch,Nsc  
Fch,Nsc  
Fch,Nsc

24-dil-6  
24-dil-2  
24-smd-2

&(8μ  
&(8μ  
&(8μ

11 12  
11 12  
11 12



FE1	FE2	FE3	S	CLR	C	D	Q
H	X	X	X	X	X	X	Z
X	H	X	X	X	X	X	Z
X	X	H	X	X	X	X	Z
L	L	L	L	H	X	X	H
L	L	L	L	H	L	X	L
L	L	L	L	L	X	X	H
L	L	L	H	H	L	X	Q <sub>0</sub>
L	L	L	H	H	H	L	L
L	L	L	H	H	H	H	H

**74846**

Output: TS

8-bit inverting bus interface latches

**74846**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>  
E · Q  
n\*typ

t<sub>PD</sub>  
E · Q  
n\*max

Note  
f<sub>T</sub> f<sub>Z</sub>  
&f<sub>E</sub>

0...70°C  
§0...75°C

- 40...85°C  
§ - 25...85°C

- 55...125°C

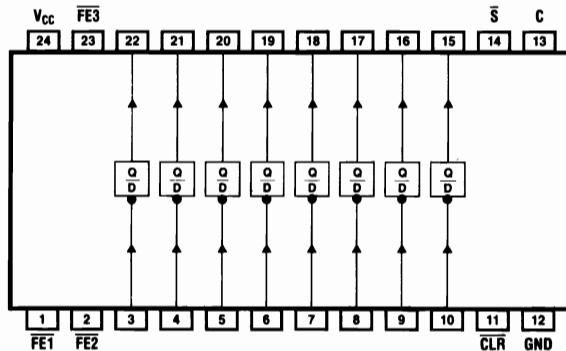
Pins-  
Art-Nr.

mA

↓ ↑ ↑

↓ ↓ ↑

MHz



AC

74AC846D  
74AC846P  
74AC846S

Fch,Nsc  
Fch,Nsc  
Fch,Nsc

24-dil-6  
24-dil-1  
24-smd-2

&(8μ  
&(8μ  
&(8μ

11 12  
11 12  
11 12

ACT

74ACT846D  
74ACT846P  
74ACT846S

Fch,Nsc  
Fch,Nsc  
Fch,Nsc

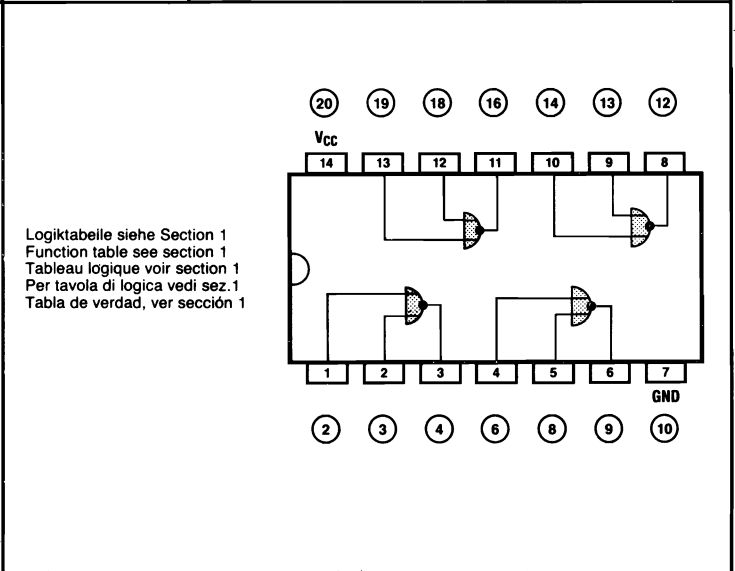
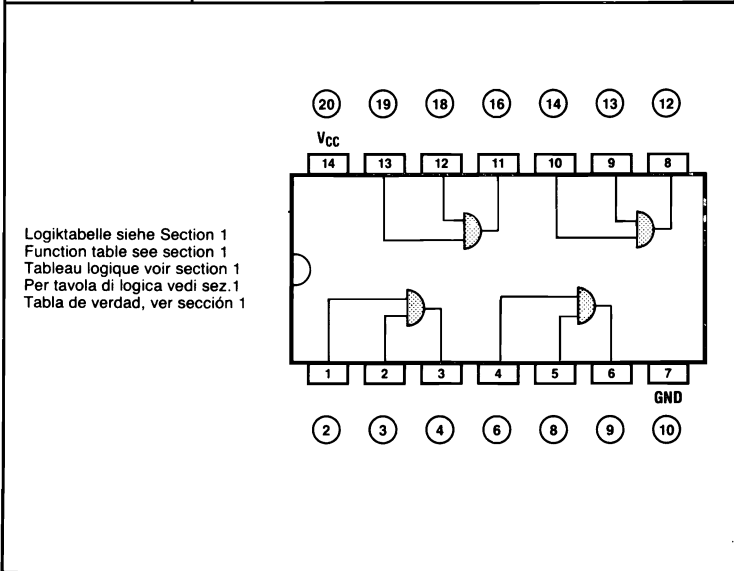
24-dil-6  
24-dil-1  
24-smd-2

&(8μ  
&(8μ  
&(8μ

11 12  
11 12  
11 12

FE1	FE2	FE3	S	CLR	C	D	Q
H	X	X	X	X	X	X	Z
X	H	X	X	X	X	X	Z
X	X	H	X	X	X	X	Z
L	L	L	L	H	X	X	H
L	L	L	H	L	X	X	L
L	L	L	L	L	X	X	H
L	L	L	H	H	L	X	Q <sub>0</sub>
L	L	L	H	H	H	L	H
L	L	L	H	H	H	H	L

<b>747001</b> Output: TP	<b>4 2-input AND Schmitt triggers</b>	<b>747002</b> Output: TP	<b>4 2-input NOR Schmitt triggers</b>
-----------------------------	---------------------------------------	-----------------------------	---------------------------------------

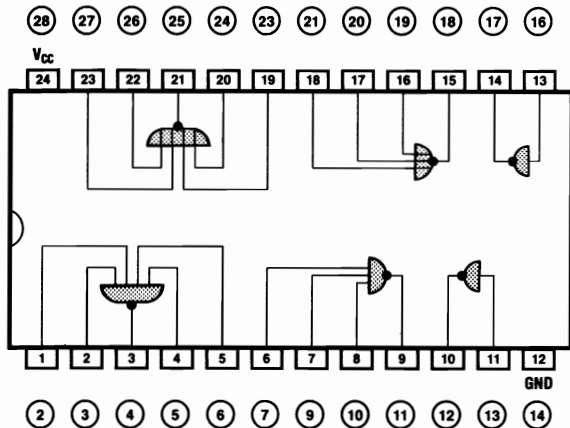


747001	Type			Production	Blld Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>styp</sub>	t <sub>PD</sub> E-Q n <sub>smax</sub>	Note f <sub>T</sub> f <sub>Z</sub> & f <sub>E</sub>	747002	Type			Production	Blld Sec. 3	I <sub>S</sub> & I <sub>R</sub>	t <sub>PD</sub> E-Q n <sub>styp</sub>	t <sub>PD</sub> E-Q n <sub>smax</sub>	Note f <sub>T</sub> f <sub>Z</sub> & f <sub>E</sub>
	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C		Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz		0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C		Pins- Art-Nr.	mA	↓ ↑ ↑	↓ ↓ ↑	MHz
HC SN74HC7001D	SN54HC7001FK SN54HC7001J			Tix	14-smd-1	&(2μ)	18 18	33 33		HC SN74HC7002D	SN54HC7002FK SN54HC7002J			Tix	14-smd-1	&(2μ)	18 18	33 33	
Tix				20-chip-2	&(2μ)	18 18	39 39		Tix	20-chip-2				&(2μ)	18 18	39 39			
Tix				14-dil-4	&(2μ)	18 18	39 39		Tix	14-dil-4				&(2μ)	18 18	39 39			
SN74HC7001N				14-dil-1	&(2μ)	18 18	33 33		Tix	14-dil-1				&(2μ)	18 18	33 33			

# 747006

Output: TP

NAND-, NOR-gates, inverters

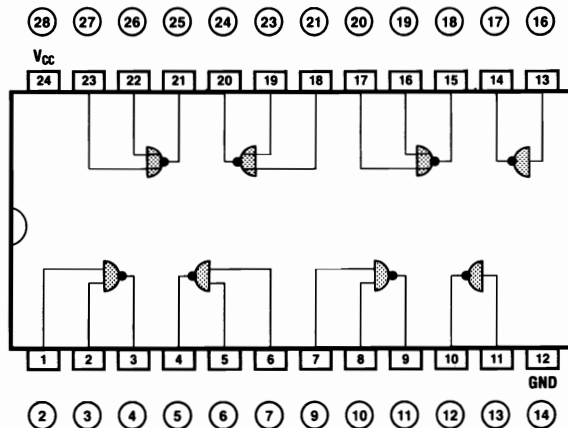


Logiktablelle siehe Sektion 1 · Function table see section 1 · Tableau logique voir section 1  
Per tavola di logica vedi sezione 1 · Tabla de verdad, ver sección 1

# 747008

Output: TP

NAND-, NOR-gates, inverters



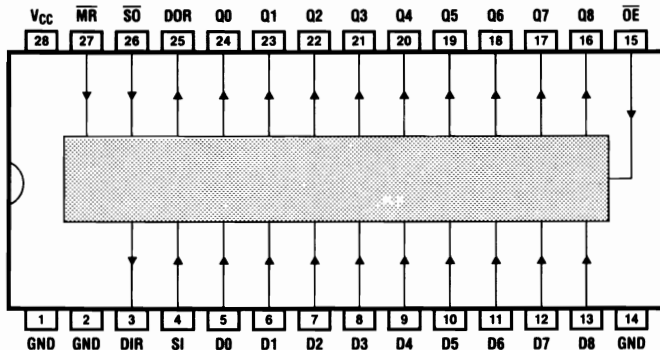
Logiktablelle siehe Sektion 1 · Function table see section 1 · Tableau logique voir section 1  
Per tavola di logica vedi sezione 1 · Tabla de verdad, ver sección 1

747006	Type		Production	Bld Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>pD</sub> E→Q ns <sub>typ</sub> ↓ ↑ ↑	t <sub>pD</sub> E→Q ns <sub>max</sub> ↓ ↓ ↓	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub> MHz	747008	Type		Production	Bld Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>pD</sub> E→Q ns <sub>typ</sub> ↓ ↑ ↑	t <sub>pD</sub> E→Q ns <sub>max</sub> ↓ ↓ ↓	Note f <sub>T</sub> f <sub>Z</sub> &f <sub>E</sub> MHz
	0...70°C §0...75°C	-40...85°C §-25...85°C								-55...125°C	0...70°C §0...75°C						
HC SN74HC7006DW SN74HC7006NT		SN54HC7006FK SN54HC7006JT	Tix Tix Tix Tix	24-smd-2 28-chip-2 24-dil-6 24-dil-2	&(2μ &(2μ &(2μ &(2μ	9 9 9 9 9 9 9 9	24 24 29 29 29 29 24 24		HC SN74HC7008DW SN74HC7008NT		SN54HC7008FK SN54HC7008JT	Tix Tix Tix Tix	24-smd-2 28-chip-2 24-dil-6 24-dil-2	&(2μ &(2μ &(2μ &(2μ	9 9 9 9 9 9 9 9	24 24 29 29 29 29 24 24	

### 747030

Output: TS

64x9-bit FIFO (first-in first-out memory)

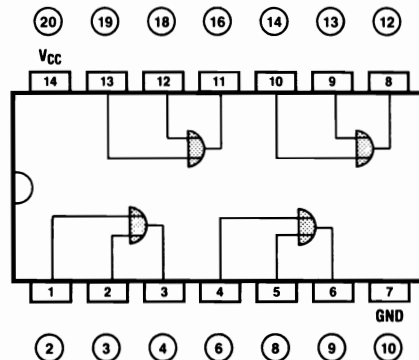


SI Shift in  
DIR Data-in ready  
SO Shift out  
DOR Data-out ready

### 747032

Output: TP

4 2-input OR Schmitt triggers



Logiktablelle siehe Section 1  
Function table see section 1  
Tableau logique voir section 1  
Per tavola di logica vedi sez.1  
Tabla de verdad, ver sección 1

747030	Type		Production	Bldg Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>styp</sub> ↓ ↑ ↑	t <sub>PD</sub> E-Q n <sub>max</sub> ↓ ↑ ↑	Note ft \$fz &fE MHz	747032	Type			Production	Bldg Sec. 3 Pins- Art-Nr.	I <sub>S</sub> &I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>styp</sub> ↓ ↑ ↑	t <sub>PD</sub> E-Q n <sub>max</sub> ↓ ↑ ↑	Note ft \$fz &fE MHz
	0...70°C \$0...75°C	-40...85°C \$-25...85°C								-55...125°C	0...70°C \$0...75°C	-40...85°C \$-25...85°C						
HC	PC74HC7030P PC74HC7030T		Phi,Val Phi,Val	28-dil-1 28-smd-2		28 28 28 28	71 71 71 71		HC SN74HC7032D			Tix Tix Tix Tix	14-smd-1 20-chip-2 14-dil-4 14-dil-1	&(2μ &(2μ &(2μ &(2μ	18 18 18 18 18 18 18 18	33 33 39 39 39 39 33 33		
HCT	PC74HCT7030P PC74HCT7030T		Phi,Val Phi,Val	28-dil-1 28-smd-2	&(50μ &(50μ	28 28 28 28	59 59 59 59	14 14	HC SN74HC7032N									

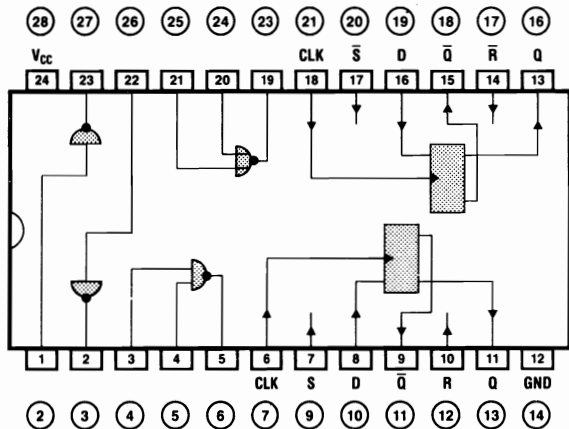
747060 Output: TP	14-stage binary counter			747060		Type		Production	Bild Sec. 3	I <sub>S</sub> ΔI <sub>R</sub>	I <sub>PD</sub> E · Q n <sub>styp</sub>	I <sub>PD</sub> E · Q n <sub>smax</sub>	Note f <sub>T</sub> f <sub>Z</sub> & I <sub>E</sub>						
				0...70°C §0...75°C		-40...85°C §-25...85°C								-55...125°C					
				Pins- Art-Nr.		mA								↓ ↓ ↑ ↓ ↓ ↑		MHz			
														<table border="1"> <thead> <tr> <th>MR CLK1</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>H X</td> <td>reset</td> </tr> <tr> <td>L L</td> <td>count</td> </tr> </tbody> </table>					
MR CLK1	Function																		
H X	reset																		
L L	count																		
747060	Type			Production	Bild Sec. 3	I <sub>S</sub> ΔI <sub>R</sub>	I <sub>PD</sub> E · Q n <sub>styp</sub>	I <sub>PD</sub> E · Q n <sub>smax</sub>	Note f <sub>T</sub> f <sub>Z</sub> & I <sub>E</sub>										
0...70°C §0...75°C		-40...85°C §-25...85°C								-55...125°C									
Pins- Art-Nr.		mA								↓ ↓ ↑ ↓ ↓ ↑		MHz							
AC	CD74AC7060E CD74AC7060M	CD54AC7060E	Rca	20-dil-1	&(8μ	20.3 20.3	100												
		CD54AC7060H	Rca	20-dil-1	&(8μ	18.5 18.5	114												
		CD54AC7060M	Rca	chip	&(8μ	20.3 20.3	100												
		CD54AC7060M	Rca	20-smd-2	&(8μ	20.3 20.3	100												
ACT	CD74AC7060M	CD54AC7060E	Rca	20-smd-2	&(8μ	18.5 18.5	114												
		CD54ACT7060E	Rca	20-dil-1	&(8μ	20.3 20.3	100												

747061 Output: TP	14-stage binary counter			747061		Type		Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sup>styp</sup>	t <sub>PD</sub> E-Q n <sup>max</sup>	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>									
	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.							mA	↓ ↑ ↑	↓ ↑ ↑	MHz					
<table border="1"> <thead> <tr> <th>MR</th> <th>CLK1</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>H</td> <td>X</td> <td>reset</td> </tr> <tr> <td>L</td> <td>⌋</td> <td>count</td> </tr> </tbody> </table>														MR	CLK1	Function	H	X	reset	L	⌋	count
MR	CLK1	Function																				
H	X	reset																				
L	⌋	count																				
747061	Type			Production	Bild Sec. 3	I <sub>S</sub> &I <sub>R</sub>	t <sub>PD</sub> E-Q n <sup>styp</sup>	t <sub>PD</sub> E-Q n <sup>max</sup>	Note f <sub>T</sub> f <sub>z</sub> &f <sub>E</sub>													
0...70°C §0...75°C	-40...85°C §-25...85°C	-55...125°C	Pins- Art-Nr.							mA	↓ ↑ ↑	↓ ↑ ↑	MHz									
AC	CD74ACT7061E	CD54ACT7061E	Rca	20-dil-1	&(8μ	20.3 20.3	100															
		CD54ACT7061H	Rca	20-dil-1	&(8μ	18.5 18.5	114															
		CD54ACT7061M	Rca	chip	&(8μ	20.3 20.3	100															
		CD54ACT7061M	Rca	20-smd-2	&(8μ	20.3 20.3	100															
ACT	CD74ACT7061M	CD54ACT7061E	Rca	20-smd-2	&(8μ	18.5 18.5	114															
		CD54ACT7061E	Rca	20-dil-1	&(8μ	20.3 20.3	100															

# 747074

Output: TP

Gates, flip-flops

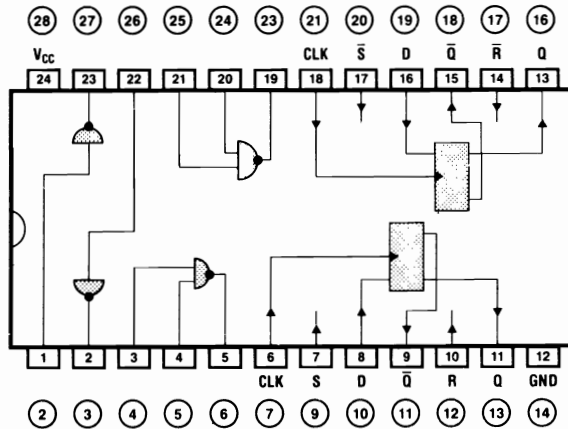


Logiktablelle siehe Sektion 1 · Function table see section 1 · Tableau logique voir section 1  
Per tavola di logica vedi sezione 1 · Tabla de verdad, ver sección 1

# 747075

Output: TP

Gates, flip-flops



Logiktablelle siehe Sektion 1 · Function table see section 1 · Tableau logique voir section 1  
Per tavola di logica vedi sezione 1 · Tabla de verdad, ver sección 1

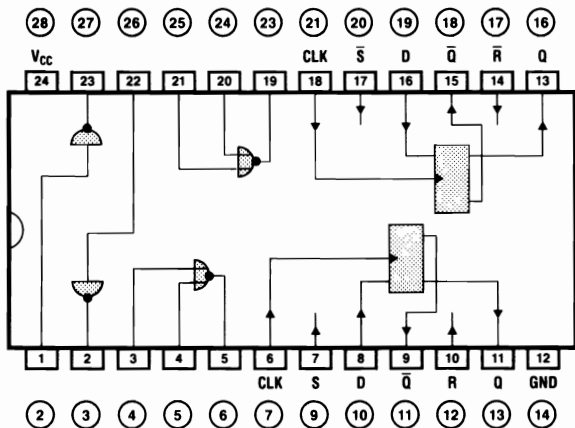
747074	Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> & I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>styp</sub> ↓ ↑ ↑	t <sub>PD</sub> E-Q n <sub>smax</sub> ↓ ↑ ↑	Note f <sub>T</sub> f <sub>FZ</sub> & f <sub>E</sub> MHz	747075	Type		Production	Bild Sec. 3 Pins- Art-Nr.	I <sub>S</sub> & I <sub>R</sub> mA	t <sub>PD</sub> E-Q n <sub>styp</sub> ↓ ↑ ↑	t <sub>PD</sub> E-Q n <sub>smax</sub> ↓ ↑ ↑	Note f <sub>T</sub> f <sub>FZ</sub> & f <sub>E</sub> MHz
	0...70°C \$0...75°C	-40...85°C \$-25...85°C								-55...125°C	0...70°C \$0...75°C						
HC SN74HC7074DW			Tix	24-smd-2	&(4μ	9 9	23 23		HC SN74HC7075DW			Tix	24-smd-2	&(4μ	9 9	23 23	
			Tix	28-chip-2	&(4μ	9 9	27 27					Tix	28-chip-2	&(4μ	9 9	27 27	
			Tix	24-dil-6	&(4μ	9 9	27 27					Tix	24-dil-6	&(4μ	9 9	27 27	
			Tix	24-dil-2	&(4μ	9 9	23 23					Tix	24-dil-2	&(4μ	9 9	23 23	



# 747076

Output: TP

## Gates, flip-flops

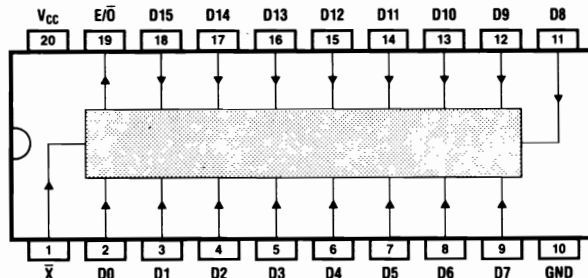


Logiktablelle siehe Sektion 1 · Function table see section 1 · Tableau logique voir section 1  
Per tavola di logica vedi sezione 1 · Tabla de verdad, ver sección 1

# 747080

Output: TP

## 16-bit parity checker



$\bar{X}$  = Cascade/odd-even input,  $E/\bar{O}$  = even/odd output

### 747076

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E · Q  
n<sub>styp</sub>

t<sub>PD</sub>  
E · Q  
n<sub>smax</sub>

Note  
f<sub>T</sub> f<sub>z</sub>  
& f<sub>E</sub>

MHz

### 747080

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
& I<sub>R</sub>

t<sub>PD</sub>  
E · Q  
n<sub>styp</sub>

t<sub>PD</sub>  
E · Q  
n<sub>smax</sub>

Note  
f<sub>T</sub> f<sub>z</sub>  
& f<sub>E</sub>

MHz

HC  
SN74HC7076DW  
SN74HC7076NT

SN54HC7076FK  
SN54HC7076JT

Tix  
Tix  
Tix  
Tix

24-smd-2  
28-chip-2  
24-dil-6  
24-dil-2

& (4μ  
& (4μ  
& (4μ  
& (4μ

9 9  
9 9  
9 9  
9 9

23 23  
27 27  
27 27  
23 23

9 9  
9 9  
9 9  
9 9

23 23  
27 27  
27 27  
23 23

HC  
PC74HC7080P  
PC74HC7080T  
HCT  
PC74HCT7080P  
PC74HCT7080T

Phi, Val  
Phi, Val  
Phi, Val  
Phi, Val

20-dil-1  
20-smd-2  
20-dil-1  
20-smd-2

& (8μ  
& (8μ  
& (8μ  
& (8μ

33 33  
33 33  
37 37  
37 37

70 70  
70 70  
79 79  
79 79

9 9  
9 9  
9 9  
9 9

23 23  
27 27  
27 27  
23 23

**747266**

Output: TP

4 2-input EX-NOR gates

**747266**

Type

Production

Bild  
Sec. 3

$I_S$   
&  $I_R$

$t_{PD}$   
E-Q  
n#typ

$t_{PD}$   
E-Q  
n#max

Note  
 $f_T$   $f_{z}$   
&  $f_E$

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

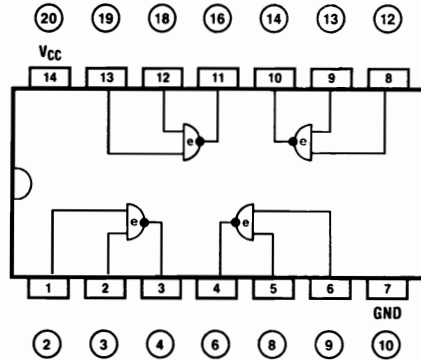
Pins-  
Art-Nr.

mA

↓ ↑ †

↓ ↑ †

MHz



HC

PC74HC7266P  
PC74HC7266T

SN74HC7266D

SN54HC7266FK  
SN54HC7266J

SN74HC7266N

HCT

PC74HCT7266P  
PC74HCT7266T

Phi, Val  
Phi, Val  
Tix  
Tix  
Tix  
Tix

14-dil-1  
14-smd-1  
14-smd-1  
20-chip-2  
14-dil-4  
14-dil-1

&(2μ  
&(2μ  
&(2μ  
&(2μ  
&(2μ  
&(2μ

14 14  
14 14  
12 12  
12 12  
12 12  
12 12

29 29  
29 29  
25 25  
30 30  
30 30  
25 25

Logiktablelle siehe Section 1  
Function table see section 1  
Tableau logique voir section 1  
Per tavola di logica vedi sezione 1  
Tabla de verdad, ver sección 1

747623 Output: SS	8-bit bidirectional bus driver with OC and TS outputs	747623		Production	Blid Sec. 3	I <sub>S</sub> &I <sub>Q</sub>	t <sub>PD</sub> E-Q n <sub>S</sub> typ	t <sub>PD</sub> E-Q n <sub>S</sub> max	Note f <sub>T</sub> f <sub>TZ</sub> &E
		Type							
		0...70°C §0...75°C	-40...85°C §-25...85°C						
		AC	CD74AC7623E CD54AC7623H CD54AC7623M	Rca Rca Rca Rca Rca	20-dil-1 20-dil-1 chip 20-smd-2 20-smd-2	&(8μ &(8μ &(8μ &(8μ &(8μ	10.9 10.9 9.9 9.9 10.9 10.9 10.9 10.9 9.9 9.9		
		ACT	CD74ACT7623E CD54ACT7623H CD54ACT7623M	Rca Rca Rca Rca Rca	20-dil-1 20-dil-1 chip 20-smd-2 20-smd-2	&(8μ &(8μ &(8μ &(8μ &(8μ	10.9 10.9 9.9 9.9 10.9 10.9 10.9 10.9 9.9 9.9		

AB	BA	Function
H	L	A = open, B = Z
L	L	B → A
H	H	A → B
L	H	A → B, B → A

Bus B = TS outputs, Bus A = OC outputs

**747651**

Output: TS

8-bit transceiver/register, inverting

**747651**

Type

Production

Bild  
Sec. 3

I<sub>S</sub>  
&I<sub>R</sub>

t<sub>PD</sub>  
E → Q  
n<sub>styp</sub>

t<sub>PD</sub>  
E → Q  
n<sub>max</sub>

Note  
t<sub>r</sub> S<sub>fz</sub>  
&t<sub>E</sub>

0...70°C  
§0...75°C

-40...85°C  
§-25...85°C

-55...125°C

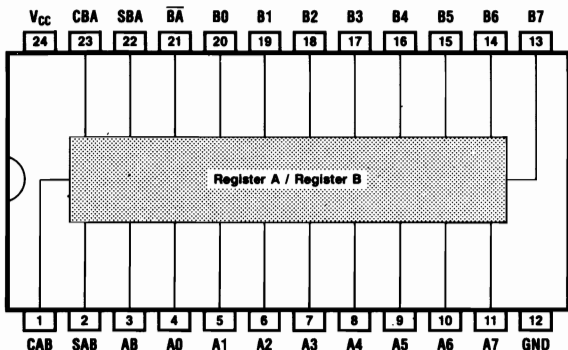
Pins-  
Art-Nr.

mA

↓ ↑ †

↓ ↑ †

MHz



Inputs						Function
AB	$\overline{BA}$	CAB	CBA	SAB	SBA	
L	H	H/L	H/L	X	X	A = B = Z
L	H	J	J	X	X	A → Reg A, B → Reg B
X	H	J	H/L	X	X	A → Reg A, hold B
H	H	J	J	X	X	A → Reg A, A → Reg B
L	X	H/L	J	X	X	Hold A, B → Reg B
L	L	J	J	X	X	B → Reg A, B → Reg B
L	L	X	X	X	L	$\overline{B} \rightarrow A$
L	L	X	H/L	X	H	Reg $\overline{B} \rightarrow A$
H	H	X	X	L	X	$\overline{A} \rightarrow B$
H	H	H/L	X	H	X	Reg $\overline{A} \rightarrow B$
H	L	H/L	H/L	H	H	Reg $\overline{A} \rightarrow B$ , Reg $\overline{B} \rightarrow A$

AC

CD74AC7651EN  
CD54AC7651EN  
CD54AC7651H  
CD54AC7651M

Rca  
Rca  
Rca  
Rca  
Rca

24-dil-2  
24-dil-2  
chip  
24-smd-2

ACT

CD74ACT7651EN  
CD74ACT7651H  
CD54ACT7651H  
CD54ACT7651M


Rca  
Rca  
Rca  
Rca  
Rca

24-dil-2  
24-dil-2  
chip  
24-smd-2  
24-smd-2

&(8μ  
&(8μ  
&(8μ  
&(8μ  
&(8μ

16.1 16.1  
16.1 16.1

125  
125



**tdv1**  
**Bestell-Nr. 101**  
**ISBN 3-88109-028-2**



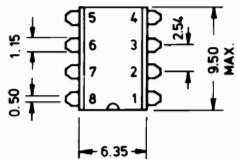
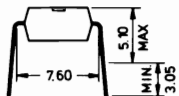
Dimensions and dimensional tolerances as stated by different manufacturers for one and the same case are not always precisely identical. These values are thus to be understood as mean values, unless stated otherwise.

All dimensions in millimeters (mm)

8-Pin dual-in-line

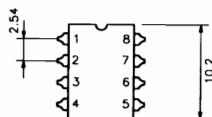
8-dil

plastic



8-dil-1

ceramic



8-dil-3

dil

smd

flat

chip



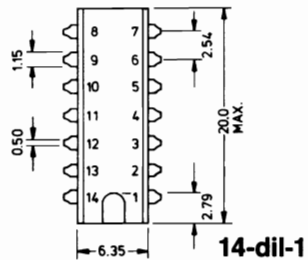
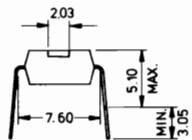
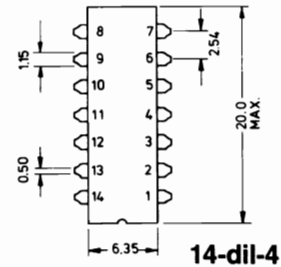
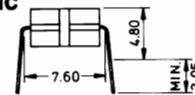
**14-dil****14-Pin dual-in-line**

dil

smd

flat

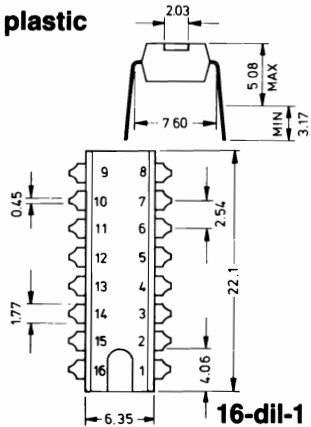
chip

**plastic****ceramic**

16-Pin dual-in-line

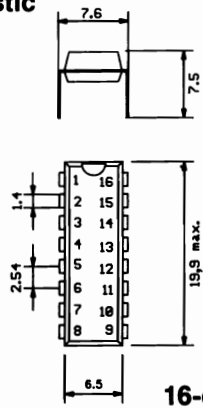
16-dil

plastic



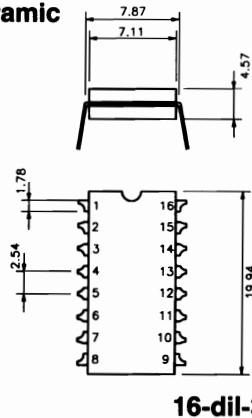
16-dil-1

plastic



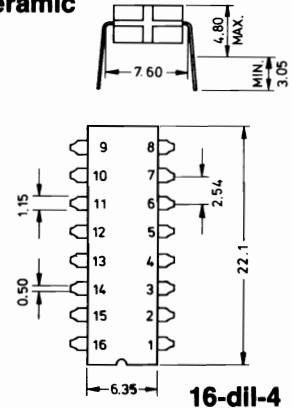
16-dil-2

ceramic



16-dil-3

ceramic



16-dil-4

dil

smd

flat

chip

# 18-dil

# 18-Pin dual-in-line

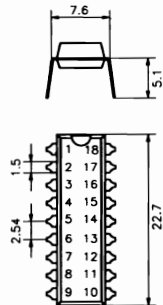
dil

smd

flat

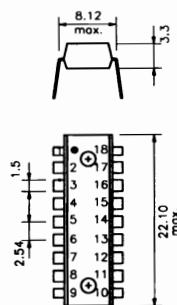
chip

plastic



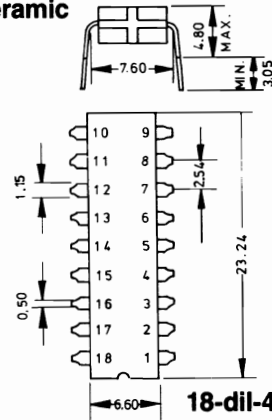
18-dil-1

plastic



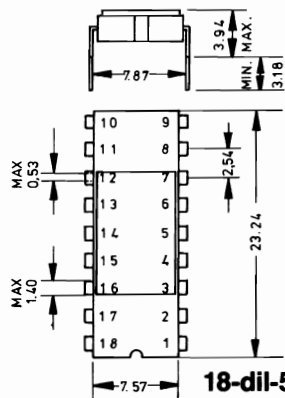
18-dil-2

ceramic



18-dil-4

metal/ceramic

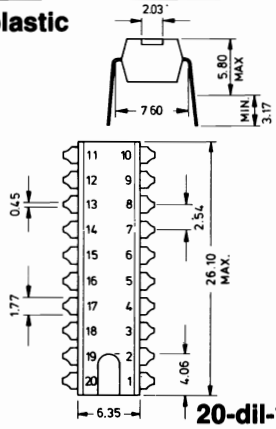


18-dil-5

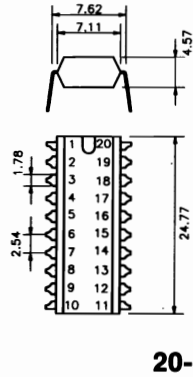
# 20-Pin dual-in-line

**20-dii**

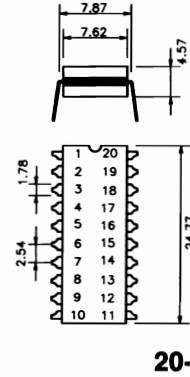
**plastic**



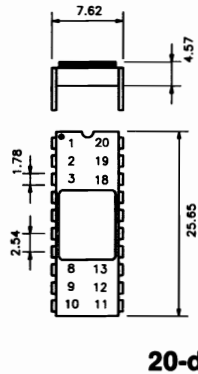
**plastic**



**ceramic**



**metal/ceramic**



**dil**

**smd**

**flat**

**chip**

# 24-dii

## 24-Pin dual-in-line

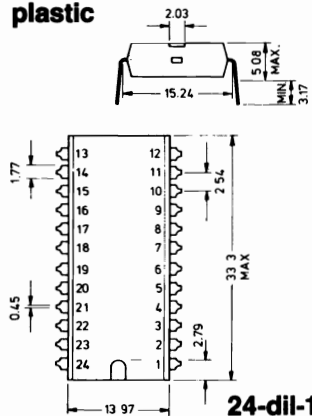
dii

smd

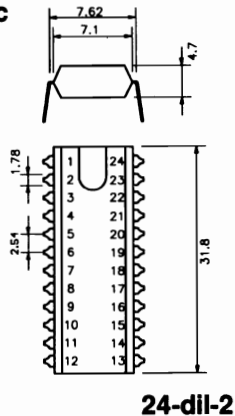
flat

chip

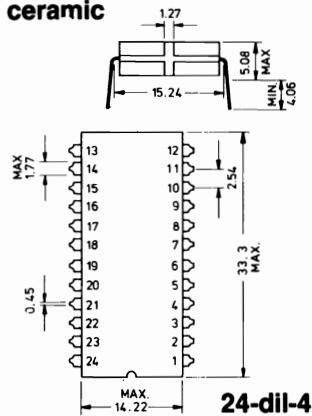
plastic



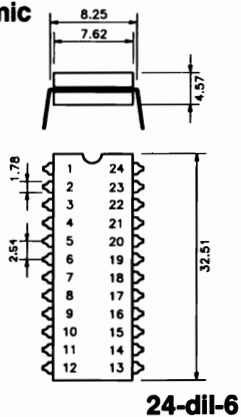
plastic



ceramic



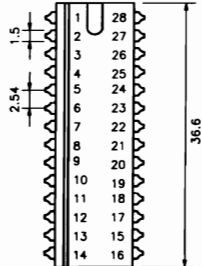
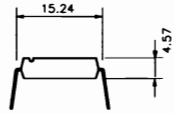
ceramic



## 28-Pin dual-in-line

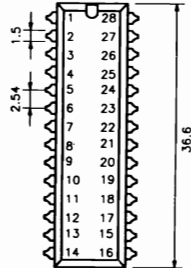
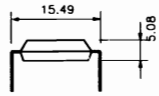
28-dil

plastic



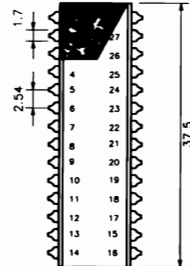
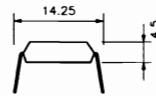
28-dil-1

ceramic



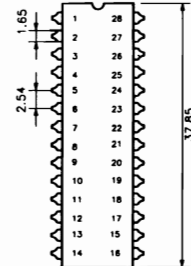
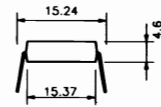
28-dil-2

plastic



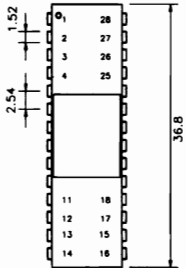
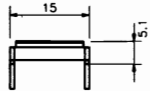
28-dil-3

ceramic



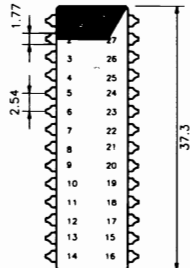
28-dil-4

metal/ceramic



28-dil-5

ceramic



28-dil-7

dil

smd

flat

chip

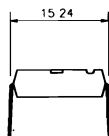
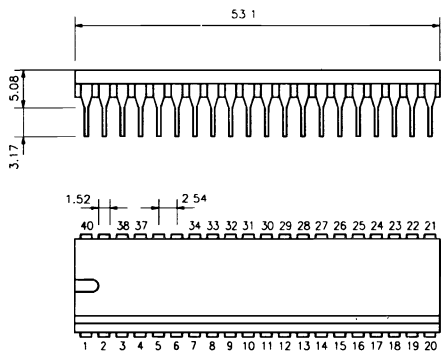
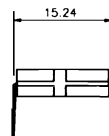
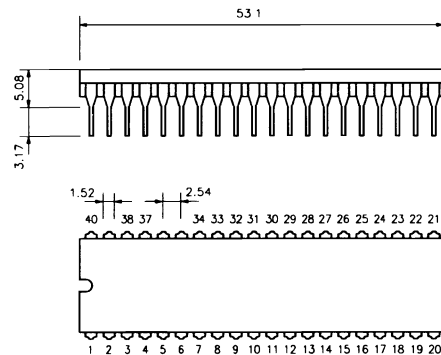
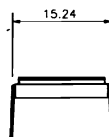
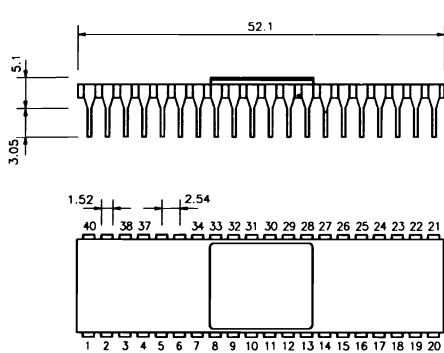
**40-dii****40-Pin dual-in-line**

dil

smd

flat

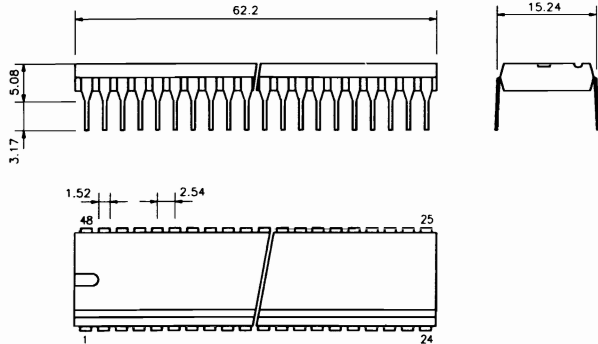
chip

**plastic****40-dil-1****ceramic****40-dil-4****metal/ceramic****40-dil-5**

48-Pin dual-in-line

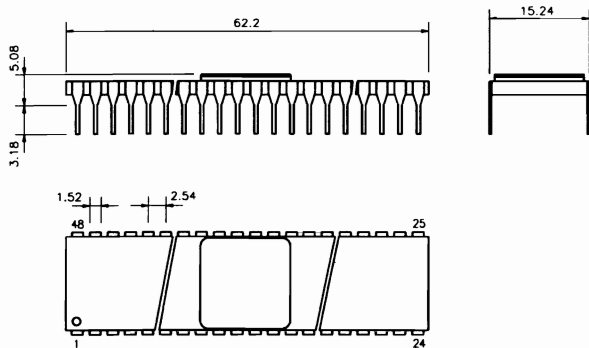
48-dil

plastic



48-dil-1

metal/ceramic



48-dil-5

dil

smd

flat

chip



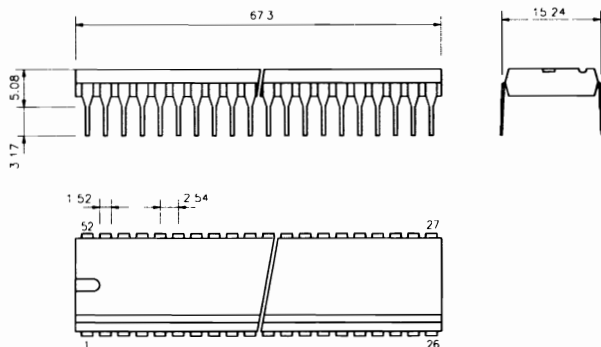
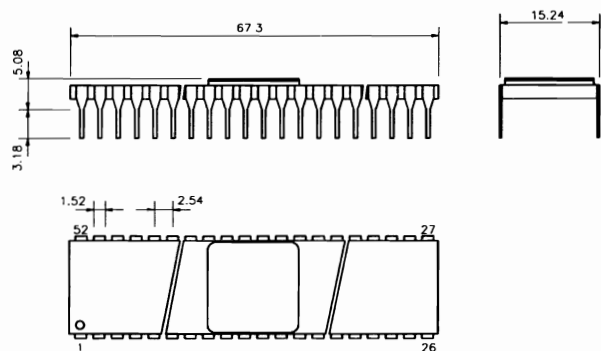
**52-dil****52-Pin dual-in-line**

dil

smd

flat

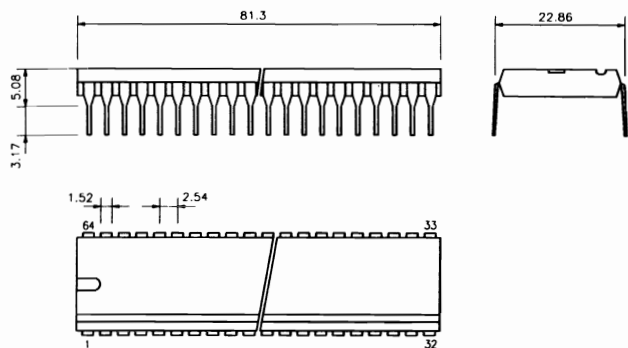
chip

**plastic****52-dil-1****metal/ceramic****52-dil-5**

# 64-Pin dual-in-line

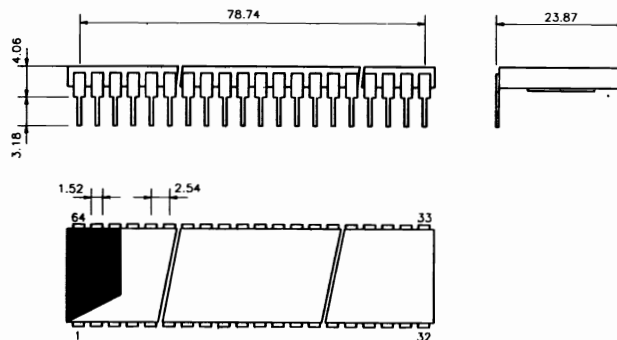
64-dil

plastic



64-dil-1

ceramic



64-dil-4

dil

smd

flat

chip

**8-smd**

**8-Pin surface-mounted device (SO)**

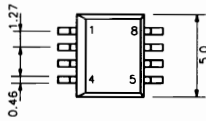
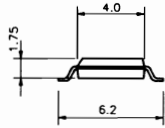
**dil**

**smd**

**flat**

**chip**

**plastic**

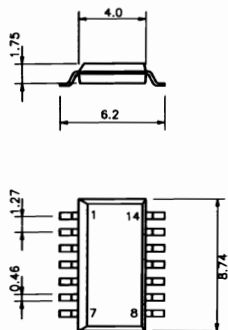


**8-smd-1**

14-Pin surface-mounted device (SO)

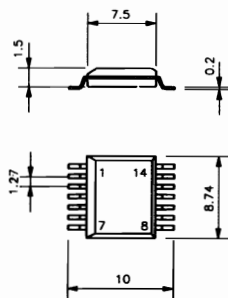
14-smd

plastic



14-smd-1

plastic



14-smd-2

dll

smd

flat

chip

**16-smd****16-Pin surface-mounted device (SO)**

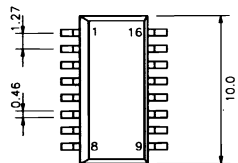
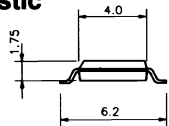
dii

smd

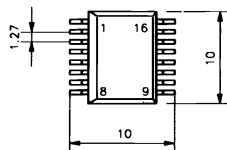
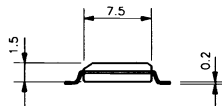
flat

chip

plastic

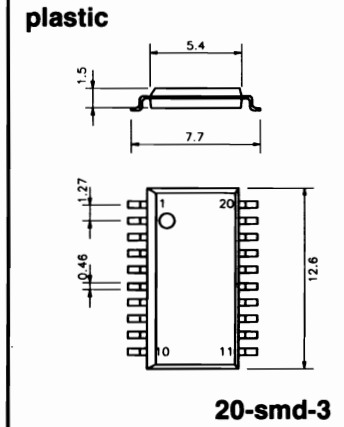
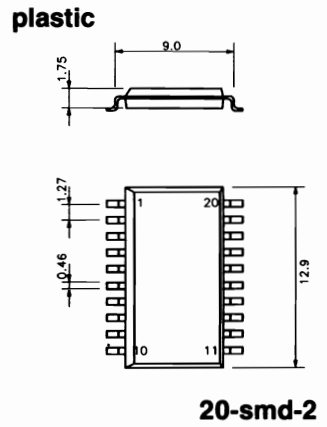
**16-smd-1**

plastic

**16-smd-2**

**20-Pin surface-mounted device (SO)**

**20-smd**



dil

smd

flat

chip

**24-smd**

**24-Pin surface-mounted device (SO)**

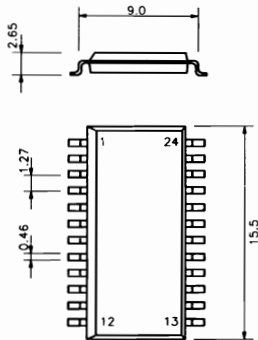
dil

smd

flat

chip

plastic

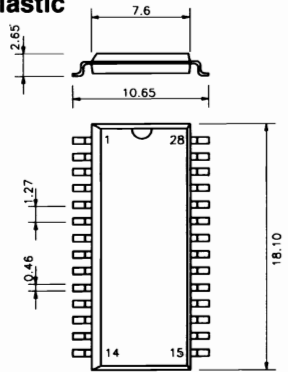


**24-smd-2**

28-Pin surface-mounted device (SO)

28-smd

plastic



28-smd-2

dil

smd

flat

chip



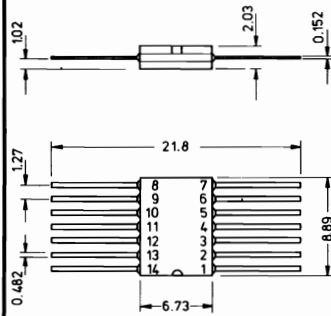
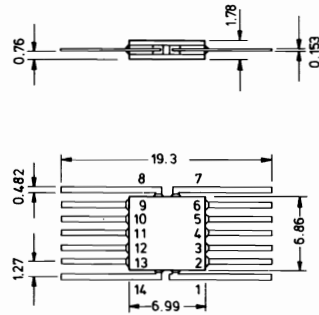
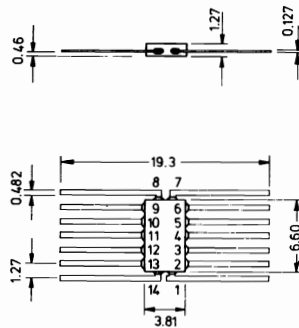
**14-flat****14-Pin flat-pack**

dip

smd

flat

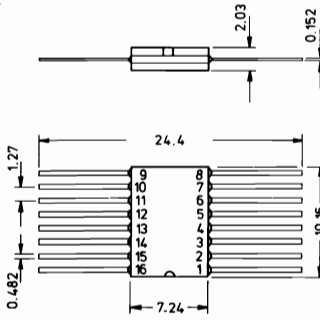
chip

**ceramic****14-flat-1****ceramic****14-flat-2****ceramic****14-flat-5**

# 16-Pin flat-pack

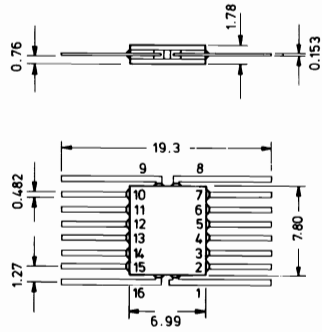
**16-flat**

ceramic



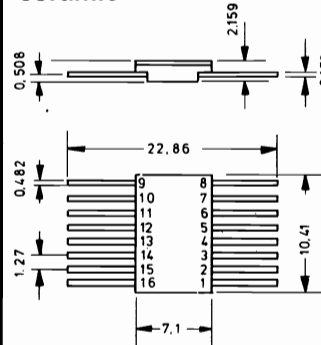
**16-flat-1**

ceramic



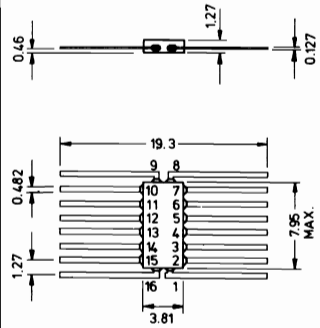
**16-flat-2**

ceramic



**16-flat-3**

ceramic



**16-flat-5**

dil

smd

flat

chip

**20-flat****20-Pin flat-pack**

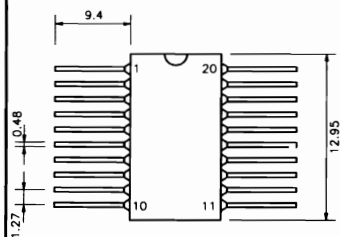
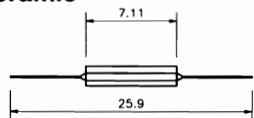
dil

smd

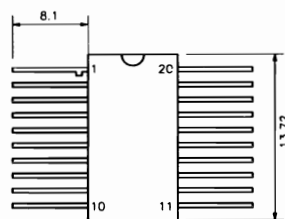
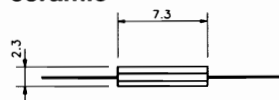
flat

chip

ceramic

**20-flat-1**

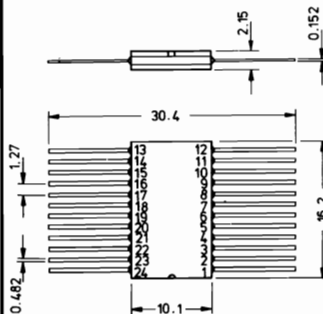
ceramic

**20-flat-2**

# 24-Pin flat-pack

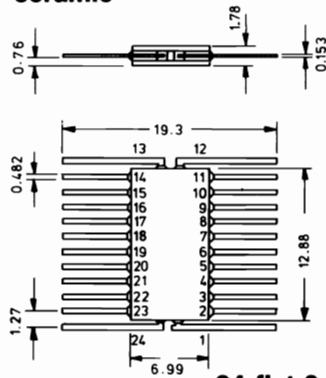
**24-flat**

ceramic



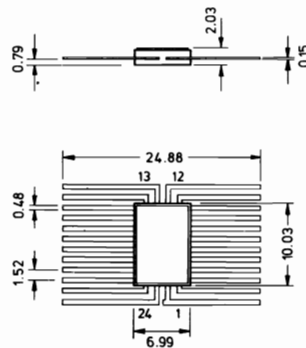
**24-flat-1**

ceramic



**24-flat-2**

ceramic



**24-flat-3**

dll

smd

flat

chip

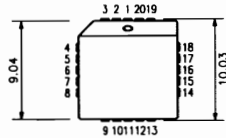
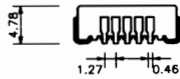
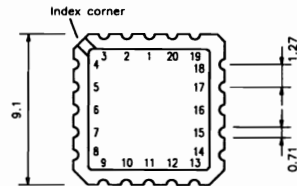
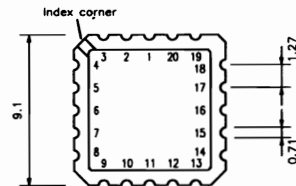
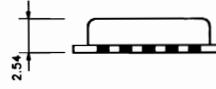
**20-chip****20-Pin chip**

dip

smd

flat

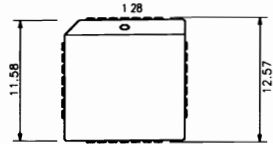
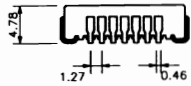
chip

**plastic****20-chip-1****ceramic****20-chip-2****ceramic****20-chip-3**

28-Pin chip

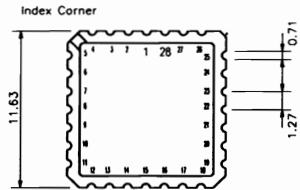
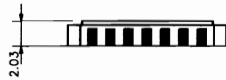
28-chip

plastic



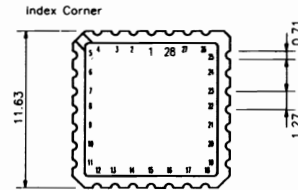
28-chip-1

ceramic



28-chip-2

ceramic



28-chip-3

dil

smd

flat

chip

**44-chip****44-Pin chip**

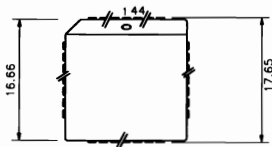
dip

smd

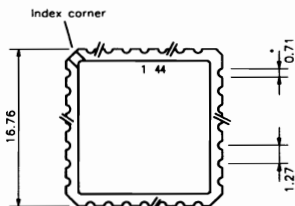
flat

chip

plastic

**44-chip-1**

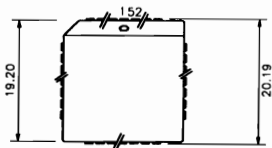
ceramic

**44-chip-2**

52-Pin chip

52-chip

plastic



52-chip-1

dil

smd

flat

chip



**68-chip**

**68-Pin chip**

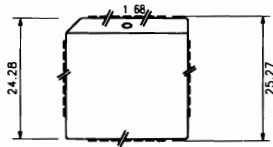
dil

smd

flat

chip

**plastic**



**68-chip-1**

## OTHER TITLES OF INTEREST

300 Circuits

301 Circuits

302 Circuits

303 Circuits

Microprocessor Data Handbook

Semicon's International Diode and SCR Index

The Japanese Transistor Substitution Manual

The Japanese Transistor Data Manual

The Japanese Diode Data Manual

Up-To-Date World's Transistors-Diodes-Thyristors  
& IC's Comparison Tables A.....Z (Vol. 1)

Up-To-Date World's Transistors-Diodes-Thyristors  
& IC's Comparison Tables 1N.....60,000..... $\mu$  (Vol. 2)

Up-To-Date World's Transistor Comparison Tables A – Z (Vol. 1)

Up-To-Date World's Transistor Comparison Tables 0 –  $\mu$  (Vol. 2)

Up-To-Date CMOS 4000 IC's Data & Comparison Tables

Up-To-Date CMOS 7400 IC's Data & Comparison Tables

BM 4566  
\$ 19.95



*Published by*

**TECH PUBLICATIONS PTE LTD**

10, Jalan Besar, #B1-39 Sim Lim Tower, Singapore 0820.

Tel: 2914595, Fax: 2991550.

**ISBN: 981-214-540-0**