CoCo ~ 123
A Publication of the Glenside Color Computer Club
Spring 2022 Volume 42, Number 1

CoCo~123 Memory Map

CoCo~123 Memory Map....1
Glenside Color Computer Club Officers....1
President's Platen....2
Trea$ury Notes....3
Editor's Notepad....3
Calendar of Events....4
Calendar Submissions....4
Featured Article: OS-9#4....5
CoCo News....7
CoCoFEST! Highlights....10
CoCo Community Corner....20
CoCo Gallery....20

The CoCo~123 newsletter is published by the Glenside Color Computer Club. Your annual contribution of $15.00 helps to keep our club going and permits you to vote each year.

Send your check to:
Eric Canales, Treasurer 5847 N Cicero Avenue Chicago, IL 60646

Our treasury provides newsletters and good times with fellow CoCo users at our Annual "Last" Chicago CoCoFEST! and our Annual Glenside Picnic.

If you attend our Annual CoCoFEST! as a vendor, your annual contribution is covered for that year.

Submissions for content to share in upcoming issues of CoCo~123 can be uploaded via Google Drive
bit.ly/3OxSPwe0
or emailed to
newsletter@glensideccc.com

Glenside Color Computer Club Officers

Jim Brain ..... The Buck Stops Here
President ..... president@glensideccc.com

John Mark Mobley ..... Planning, Etc.
Vice-President ..... vice-president@glensideccc.com

Brian Goers ..... Records & Reporting
Secretary ..... secretary@glensideccc.com

Eric Canales ..... Dues & Purchasing
Treasurer ..... treasurer@glensideccc.com

Grant Leighty ..... CoCoFEST! Organizer
Director Special Events ..... cocofest@glensideccc.com

Jim Brain

John Mark Mobley

Eric Canales

Brian Goers

Grant Leighty

President's Platen

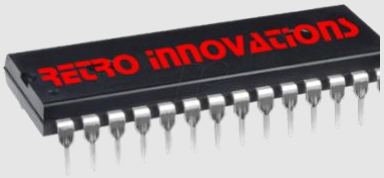
As we close out the Spring and our 2022 Glenside "Last" Chicago CoCoFEST! event, I would like to once again thank all of the attendees (physical and virtual), exhibitors, vendors, presenters, and staff who helped make the event a success. I heard some folks exclaim it was the most fun fest they've attended in a long time, which is heartening. I'd also like to give a shot out to Jason Timmons, our auctioneer (and VCF-Midwest organizer) as well as Michael Lee (VCF-Midwest organizer), who both graciously allowed the use of VCF-Midwest items like power strips and audio video equipment to help put on our show. I'd also like to graciously acknowledge our 2022 CoCoFEST! coordinator Grant Leighty, stepping into shoes previously filled by the venerable Tony Podraza. Grant organized a very nice show, and he's created a survey to improve planning for the 2023 show. If you attended virtually or physically and have not done so as yet. Please consider filling it out at https://forms.gle/E4hy2vBQRTz1Jtm37

In a related note, I'd like to welcome Grant Bloedow to the club and to our newsletter creation staff. Grant attended CoCoFEST! and inquired about opportunities to help the club. The newsletter editor position was described to him, and he's been hard at work putting together this very newsletter you are reading now. I very much appreciate Grant's willingness to step into this effort. As well, thanks to Bob Swoger for taking point on producing our Winter 2021 newsletter. As always, we depend on volunteers to help with these efforts, and I hope we never take it for granted. Glenside and the CoCoFEST! thrive because of its volunteers and the time they donate to the club.

I know Summer implies potentially less time to enjoy your classic computing hobby. Still, while you grab some sun and/or travel this season, I hope you stay plugged in and up to date on the hobby as well as find a few minutes to play a new CoCo game, grab the "watched" CoCo eBay item, and/or read up on some of the new hardware and software projects incubating for future production.

Jim Brain, President
Glenside Color Computer Club

COCOMAN.BIZ
maker of the switch-a-roo
http://cocoman.biz



Trea$ury Notes

The results of our finances are in good order. This year's auction and attendee and vendor income has bolstered our treasury. There are plans on how to best utilize these going forward. Expect some news in the coming year.

December 2021	
Income:	$15.87
- Membership Dues:	$15.00
- Interest/Rewards:	$0.87
Expenses:	$22.48
-Transaction Fees:	$0.92
-Newsletter:	$9.07
-Website	$12.49
Total:	($6.61)

January 2022	
Income:	$16.04
-Membership Dues:	$15.00
-Interest/Rewards:	$1.04
Expenses:	$186.07
Total:	($170.03)

February 2022	
Income:	$67.67
-Membership Dues:	$30.00
-Donations:	$16.40
-Interest/Rewards:	$1.27
-CoCoFEST!:	$20.00
Expenses:	$152.19
-Transaction Fees:	$50.49
-Website:	$12.00
-CoCoFEST! Misc:	$80.63
Total:	($84.52)

March 2022	
Income:	$31.46
-Membership Dues:	$30.00
-Interest/Rewards:	$1.46
Expenses:	$150.32
-Transaction Fees:	$16.76
-Newsletter:	$9.07
-Website:	$24.50
-Misc:	$99.99
(Boosting Discord Membership)	
Total:	($118.86)

April 2022	
Income:	$225.70
-Membership Dues:	$135.00
-Donations:	$87.53
-Interest/Rewards:	$3.17
Expenses:	$442.20
-Transaction Fees:	$26.83
-Newsletter:	$9.07
-Website:	$12.00
-CoCoFEST! Misc:	$257.89
Total:	($216.50)

May 2022	
Income:	$5,289.74
-Membership Dues:	$465.00
-Donations:	$10.00
-Interest/Rewards:	$5.74
-CoCoFEST!:	$4,809.00
Expenses:	$4,380.27
-Transaction Fees:	$13.49
-Government Fees:	$10.00
-Newsletter:	$9.07
-Office Supplies:	$24.23
-Website:	$12.00
-CoCoFEST! Awards:	$175.00
-CoCoFEST! Supplies Transport:	$235.70
-CoCoFEST! Meals:	$2,330.46
-CoCoFEST! Rental:	$1,176.98
-CoCoFEST! Misc:	$98.34
Total:	$909.47

There were up-front costs for the CoCoFEST! that show a net lower of the general account, yet post-show with the proceeds of the auction, table and membership income was a net positive! Look for the follow-up in our next issue.

Eric Canales, Treasurer
Glenside Color Computer Club

Webmaster's Edits

The CoCoFEST! 2022 survey from Grant Leighty is online. Please visit the website and take the time to provide your feedback to help us make each "Last" CoCoFEST! more of what you want to see for a CoCoFEST!

Eric Canales, Webmaster
Glenside Color Computer Club

Editor's Notepad

Hi. I'm Grant Bloedow (pronounced blay-dough), Editor for the CoCo~123 newsletter. I'll be reaching out for content to include in future newsletters.

My first experience with CoCo was a 16k CoCo 2 with the melty keyboard. I upgraded it to 64k, and then got a CoCo 3 in early '87. Day and night I programmed in BASIC and played games. I used some machine language routines from one of the magazines of the time to write a BASIC word processor. It featured a 54 column display with in-line editing, word count, joystick cursor movement as an option, tabbing, save and print options.

Once OS9-Level 2 was released I knew I needed the 512k upgrade and tried my hand with BASIC09. Sadly, I sold my whole lot to "Rick's Trader" back in the mid-90s and hadn't been back until now.

My background ended up including computers and creative work as a graphic designer. Throughout, I've leaned on my technical aptitude learned from working with CoCos. I fix, configure, install, troubleshoot and extend many different platforms. Much of it I can attribute to the basics I learned on those first machines.

Today I do technical graphics, troubleshooting in prepress, and use python to automate solutions in my daily work. Combining automation, graphics and programming touch on all the things I have an affinity to do.

After this last CoCoFEST! I acquired a 512k CoCo 3 128k and immediately had the 6309 upgrade installed and set up a CoCoSDC. The archive of software is astounding! It is truly amazing exploring 35+ years of growth additions to the world of CoCo.

The future is in our hands. I'm here for the journey!

Grant Bloedow, Newsletter Editor
Glenside Color Computer Club

Calendar of Events

by John Mark Mobley and Salvador Garcia

See our website's Calendar of Events
https://www.glensideccc.com/calendar/

Glenside Color Computer Club, Inc. Business Meetings
July 21, August 18, September 15, October 20, November 18, December 16, 2022

Thursdays, 6:30 PM to 9:30 PM Central Daylight Time. Zoom teleconferencing access is available via the link available at https://www.glensideccc.com/meetings/ You can phone in.

The Glenside Color Computer Club meets the third Thursday of each month at an Internet chat room at 7:30 pm. Visit the following Link to join in:
A social get-together we lovingly call "The Meeting Before" always precedes the meeting at 6:30 pm to socialize and show demos.

Visit our website at:
www.glensideccc.com

Calendar Submissions

For anyone wishing to add an event for the calendar or a newsletter addition, please send them to newsletter@glensideccc.com

If you are supplying software, hardware, goods or support and want a link to your site and it isn't already here, please reach out.

The vintage computing scene is growing and there are many new resources that we could all benefit from seeing. As found, they will be added to future editions of the newsletter.

Southern-Fried Gaming Expo
July 15-17, 2022 (just passed before our latest issue)
Renaissance Atlanta Waverly Hotel & Convention Center
2450 Galleria Pkwy
Atlanta, GA 30339 USA
404.325.0000
https://gameatl.com/

Old Computer Geeks Club Meeting with Scott Adams
July 24, 2022 @ 11AM Central time
Online: https://zoom.us/j/96522436683

CoCo 1's birthday!
July 31, 1980

Vintage Computer Festival (VCF) West
August 6-7, 2022
The Computer History Museum
1401 N. Shoreline Blvd.
Mountain View, CA 94043 USA
(650) 810-1010
https://vcfed.org/events/vintage-computer-festival-west/

CoCo 2's Birthday!
September 9, 1983

Vintage Computing Festival Midwest 17
September 10 – 11, 2022
Waterford Banquets and Conference Center
933 S. Riverside Dr.
Elmhurst, IL 60126 USA
http://vcfmw.org/

Tandy Assembly
September 30 – October 2, 2022
Tandy Computer Festival
Courtyard by Marriott Springfield Downtown
100 S Fountain Ave
Springfield, OH 45502 USA
http://www.tandyassembly.com/

Featured Article: OS-9#4

Operating System Nine: 'BASIC (not basic)' by Rick Ulland

OS-9 always included one language by default, BASIC09. It has a different syntax than Microsoft BASIC, but it's similar. Let's skip the command list and explore a few reasons to bother learning BASIC09, and a few interesting things that might be buried in the manual.

Procedures

A BASIC09 procedure can load and execute other procedures. When they close, control falls back towards the original. And yes, a procedure can call itself, they'll stack until you run out of variable space. Multiple procedures can be stored in a single disk file, making this invisible to the user.

A procedure can be written in anything – C, assembly, more B09... a common approach is write the first pass in BASIC09. As code sections are completed, they are split from main, along logical divisions so the parameter passing, etc is built and debugged while the base code is fresh in mind. Some of these procedures may end up having to be rewritten in another language, but the framework is in place right from the prototype.

Variables

There are 5 'simple' types – *byte*, *integer*, *real*, *string*, and *boolean*. To save space and time, use the smallest type that will do. We do have auto cast, no need to be perfect. And of course, all of these types can be defined as *arrays*, this 8x10 array of 40 character strings looks about like you'd expect:

```
DIM tblcell(8,10):STRING[40]
```

And then, there are complex variables. Which might seem slightly pointless, until you start passing data to other procedures, or creating a database on disk, or sending things out a pipe... Anyway, here we create a variable 'bookmark' using our new complex type 'bookmarks'. Then use 'dot notation' to set the three strings it contains, and pass the whole mess top another process.

```
TYPE bookmarks=server,page,title:STRING[144]
DIM bookmark:bookmarks
bookmark.server="stuffserver.com"
bookmark.page="main.html"
bookmark.title="Welcome to StuffServer"
RUN gotoHost(bookmark)
```

A Color Computer 3 setup ideal for BASIC09

Parameter passing

When calling code written in another language, you might be expected to pass a variable 'by reference', meaning it can be changed by the new guy. Or you might need to pass 'by value', new guy only gets a copy and can't mess up the original.

The BASIC09 syntax is clunky, but makes sense in a minute- the first example offers the variable itself, the others only supply the result of an equation.

```
RUN program(var)      - by reference
RUN program(var+0)    - by value (numeric)
RUN program(var+"")   - by value (string)
```

Jumping around

Any advert for BASIC09 has to touch on program structure. Like most basics, BASIC09 has line numbers, GOTO/GOSUB, ONxGOTO/GOSUB, etc. Unlike most basics, these are optional. Here are our options.

```
IF/THEN/ELSE/ENDIF                traditional flyover branch
LOOP/EXITIF/ENDEXIT/ENDLOOP       loop, test in the middle
REPEAT/UNTIL                      loop, test at the end
WHILE/DO/ENDWHILE                 loop, test at the start
```

The LOOP exit test can run a block of code just before jumping out of the loop, so you really can put the test anyplace in there.

Editing

Recently I've been working on CoCo addons, meaning I have to run and debug my BASIC09 program on an actual coco. I do the main writing in VScode, lots of text to source and back again. This might be slightly odd, and I have run across some random things worth mentioning.

For text from an outside editor, B09 accepts a lot. You can indent the text any way you want, write equations any way you want, caps or no, it's usually injested error free. But not unchanged.

B09 does not tokenize incoming ASCII text, but it does change it. One example, in the 'save file', there are no intents. Those are created while producing the screen listing. To export an indented ASCII source file, use 'list processname > filename.b09'

This, unfortunately, hard breaks lines @ screen width for you to fix. 80 cols is not that bad, but smaller widths? VSCode will throw you a bone by adding weird alignment rulers to broken lines.

There is no B09 character to ignore a line break, even if you knew where to put it.

There is, however, a character to add a non-returning character return. '\' collapses multiple lines into one. *Sometimes* this is a good way to keep listings short.

```
a:=0
b:=0
c:=0
...

a:=0 \b:=0 \c:=0 \d:=0 \e:=0 \f:=0 \g:=0
```

If you like fancy equals, be warned B09 is different.

BASIC09	:= assignment	= test
world	= assignment	== test

Mathematical formulas are another thing you don't completely control. For example this line:

```
int1:=(int2*10)+int3+1
```

will be stored and reproduced as

```
int1:=int2*10+int3+1
```

since the parens are identical to the default precedence.

And don't bother inventing new InTerCaps for procedure names, they will just be smashed flat when imported. I still put 'em in the disk file names, because I am old and stubborn.

Finally, remember that whole indent on display thing? If you are bug-chasing on a CoCo, listing a file in the editor isn't full indented unless you make it. Position the edit pointer just past the area of interest, like the end of an ENDIF chain. List as many previous lines as are needed to begin before the first indentation. l-* if unsure. Your screen will be perfect.

Random notes

I said no lists, but these few commands and options deserve special merit. In the kill your computer range, we have:

ADDR/SIZE	return absolute address and size of a variable, array, data struct…
$dir	call the system shell with a command, like '$dir'. But not $chd or $chx
CHD, CHX	change directories without crashing basic!
DIR, EXEC	read current data/exec directory as files
SHELL	run an OS9 program or command shell. Return to B09 when that ends.
SYSCALL	Execute any OS9 system call

And then there is math. IANAM. Or even a good adder. But I found these notable.

AND vs LAND	semantics is hard. AND is logic IF a=1 AND b=1 THEN... LAND is math LAND(int1,int2) also LOR,LNOT,LXOR, etc
BASE	the eternal question 0 or 1?
DEG/RAD	(debug) the other eternal question

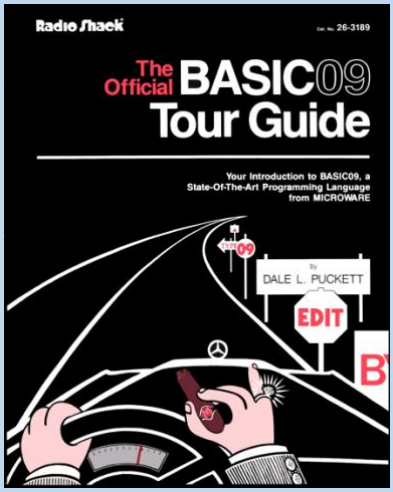
And that's it for my BASIC09 flyby. Hope it strikes someone's fancy. But wait, there's more! So far, all we've done is type. Next issue, we click.

Helpful links for BASIC09 reference:

BASIC09 Wikipedia

BASIC09 Manual from 1984
(PDF via Color Computer Archive)

Some of What is Possible
(From Canadian Retro Things
on YouTube)

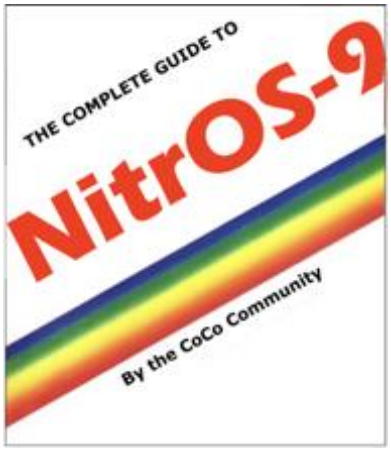


CoCo News

By Salvador Garcia

Has someone been working on something? Is there a new accessory for sale? Read on and find out what's been happening in our community!

Did you enjoy CoCoFEST!, either in person or virtually? Did not like something about it? Grant Leighty set up a survey so that we can express our thoughts on this last CoCoFEST! Help the organizers make it better! Take a few minutes and answer a few questions:
https://tinyurl.com/yfw4pvy2
See below for news, photos and highlights of the latest gathering.



Hear ye! Hear ye! At the end of March Steve Ostrom had a great idea! How about rewriting the Rainbow Guide to OS/9 so that it targets specifically NitrOS-9? The idea is to have the same chapter structure, but totally different contents. Others chimed in, including Robert Gault, Allen Huffman, L. Curtis Boyle and Bill Nobel. Allen suggested that this be a community effort where different collaborators would provide contributions. If you are interested in helping, contact any of the mentioned above, or drop a note on either the CoCo List or the EOU NitrOS-9 Facebook group. Let's make this a reality!

Pierre Sarrazin announced that he has a new version of CMOC, the CoCo 6809 cross compiler. Pierre mentions the following:
The latest additions are the following, aside from several bug fixes:
- Functions sinf, cosf, tanf, atanf, logf, expf, sqrtf, fabsf, floorf, truncf and roundf have been added to coco.h>. These functions only work on the CoCo and only if Extended Color Basic is present.
- Local static variables are supported.
- K&R C function definitions are accepted, experimentally.
More info here: https://tinyurl.com/47dj6xzw

Allen Huffman installed LWTools on his Windows 11 machine and shared this process with the community. Check it out here:
https://tinyurl.com/4z8dsbs6

Can the CoCo surf the World Wide Web? David Chesek posted a link on the Facebook group to a video where he demonstrates how he uses the Color Computer to this under NitrOS-9. Have a look at the video:
https://youtu.be/_kjrMEM-mrk

During a conversation on the Facebook group, Enrico Patricio Monteiro recommend a GLBASIC, a multi-platform BASIC development system where the developer can create one source for Windows, Linux and MacOS. More here:
https://www.glbasic.com/

Aaron Wolfe shared information about a podcast that he found which discusses different topics about the beginnings of computing. The podcast is called Advent of Computing. Aaron mentioned that a recent episode discussed OS-9.
https://adventofcomputing.com/

Daniielle OConnor, a kindred spirit CoCoNut from Australia, shared a video that she made showcasing music created with a Color Computer. The YouTube video link follows:
https://youtu.be/57KXMa0dxf8

Also, here is her original post that she shared on the Facebook group:

Here's a new upload of a fresh edit of the first song I've recorded for my upcoming solo album, CoCo-Musik. This song is called, "Ear Has Not Heard," and is a Berlin School style electronic instrumental.
I'm using two Second Sound devices here to control my modular synthesizer, analog step sequencers and Roland System 8 synthesizer. These devices, the ACO160 EVK and the UniSyn convert audio from my TRS-80 Colour Computer into analog control voltages, gates, envelopes and MIDI in real-time.
I wrote the controller program for my CoCo 1 specifically for this track.
All songs on the CoCo-Musik album will feature my TRS-80 CoCo 1, 2 and 3 computers. The first part of the album name is derived from the CoCo and the second part, Musik, is a reference to Tangerine Dream who were foundational in creating the Berlin School electronic genre.

She also added:

To expand a bit..., basically the CoCo is playing the things I'm not playing. I'm playing the other parts over the backing sequences and arpeggios the CoCo is generating. You're not hearing audio from the CoCo itself though. Its audio output from the six bit DAC is being converted in real-time to signals the synthesizers understand via the Second Sound devices.

What would you think of a 3.5 inch floppy with a 256GB capacity? Crazy? Undoable? Not if you cheat. Rory Conaway shared this video on the Facebook group on how to embed an SD reader into the floppy drive and an SD card into the floppy disk. Enjoy!

https://youtu.be/gNQYbSWBhAs

Michael Furman purchased a CoCoIO Ethernet cart at the CoCoFEST! This card allows the Color Computer to be connected to an Ethernet network. Michael went into overdrive to create software that would work with the CoCoIO. Currently, he is sharing two utilities for NitrOS-9: ccio and ping. The configuration utility for the CoCoIO is ccio, while ping allows the user to ping an external host, whether on the local network or on the Internet. Michael mentions that ping only recognizes IP addresses. He is sharing the utilities and their source at the following site:
https://tinyurl.com/5hxzatba

Additionally, Michael has been working to enhance the CoCoIO's functionality. He posted the following:

YouTube Video 1: NTP on the CoCo
https://youtu.be/eu2x6OmREF0

YouTube Video 2: Demonstration of the CoCoIO Ethernet Card on a CoCo 2
https://youtu.be/utCqwvolmEY

Since the last newsletter came out, John Linville has announced the availability of episodes of the CoCo Crew Podcast: 82 through 85. Check out this comprehensive and complete podcast at:
http://cococrew.org/

Follow them on Facebook:
https://tinyurl.com/2p8navau

Another piece of great news! John Linville just announced that the CoCo Podcast now has 292,000 downloads!

Note: If you are new to the CoCo Community and are thirsty for knowledge, you have 81 other episodes to listen to!

(**Play** online! Use the "H" key as a joystick button)

Paul Shoemaker has been busy perfecting his game Ghost Rush. He is now on version 2.1 and believes it is ready to be released into the wild. Get ready for some madness soon!
FYI: Simon Jonassen is working on an MC-10 port! **Last minute news:** BOTH versions, are now available!

For those who were at the auction, or saw the live streamed video, you'll remember that there was a unique custom-built Color Computer 3. This CoCo was repacked inside a mini AT case and loaded with floppies and a hard drive. This CoCo was won by Kirk Rietveld. Henry Rietveld posted some updates to the repacked CoCo on YouTube and can be viewed at the following URLs:
https://youtu.be/2k7-oHBGxAE
https://youtu.be/SAuIZEyq5JY

Craig West shared a CoCo 1 repair video on the Facebook group. It turns out that more than one person has recommended this channel, called Adrian's Digital Basement. The channel covers different computers, and the presentation is lighthearted and easy to follow. Check it out!
https://youtu.be/5Kw7TrUWZZA

RetroWiki

Pere Serrat has been posting AGD converted games for the CoCo line of computers for a while now. His latest upload is pack #57. Check out all the packs that he's uploaded at the following link:
https://tinyurl.com/4wwj5ku7

CoCoTALK! Featured the Taylor & Amy show. Their show presents topics on various vintage computers, including the Color Computer. Give their channel a looksee:
https://tinyurl.com/y7eee2vv

Mike Rayburn now has these CoCo PS/2 adapters for sale. Attach a joystick via the 15 pin DB or a PS/2 mouse to our favorite Color Computer. More info here:
https://tinyurl.com/2p97hwn7

Mike is selling the CoCo PS/2 through eBay. The link is below. At last count on June 21, he only had six more left.
https://tinyurl.com/ycysfejk

Bryan Meyer shared this Radio Shack sales flyer. Those were the days!

CoCoFEST! Highlights

By Salvador Garcia

This CoCoFEST! Was a blast! Interesting stuff everywhere. First time attendees and vendors were welcomed with open 6809s and copious amounts of free coffee!

Here are some of what I saw:

Steve Strowbridge, who has painstakingly provided streaming support for the CoCoFEST! set a new bar: **Purple hair!** Now that this is trending within the CoCo community, I am sure that next year we'll see many more CoCoFEST! attendees showcasing their purple locks.
I only wonder, why didn't he choose CoCo green?

Joel Rees shared an article from Oh!FM, 1988 that "exposes" the 6309's extension features. He mentioned that this info was available elsewhere, but this article had historical relrelevance.
https://tinyurl.com/jcufupnx

Somewhere in the middle of all the excitement there was humble and discreet display with an enlarged picture of the innards of an integrated circuit. It was made from a tri-fold white display board. However, this unassuming display presented one of the amazing projects currently underway.

The image depicted the innards of the GIME chip, a vital component of the CoCo 3. While 6809 microprocessors can easily be obtained, the GIME is a proprietary chip designed and manufactured by Radio Shack. Given this, there are only a certain number of GIME chips in existence.
The goal of this intrepid project is to reverse engineer the GIME so that it can be produced using modern technology. Roger Taylor started this project in 2021.

If one thinks about the image in the display, one should wonder how such an image could have been taken. It turns out that two (or more) GIME chips were sacrificed and had their plastic casing removed to expose the silicon die.

Once the functionality of the chips components is understood and reproduced, it will be recreated using field programmable technology. Interested? Here is an article that discusses this project:
https://tinyurl.com/f6eynpe6

Taylor & Amy (photo attributed to Steve Strowbridge)

First time vendors, The Taylor and Amy Show, were with us and even did a nostalgic rendition of “Sugar Sugar”, CoCo style. They have a YouTube channel that discusses different types of vintage technology. Check out the CoCo Community Updates for more information about them. Here is the video of their Sugar Sugar rendition:
https://youtu.be/bzr2dg8NEKw?t=237
Watch the entire video for heartfelt renditions of the United States and Canadian anthems.
New Products in the Works
Two new products were introduced, these being carts for the CoCo that allows this venerable computer to be connected to an Ethernet network. The first was the CoCoNIC, a product still in the prototype stage, displayed by Brett Gordon. The second was a fully functional product, based on the WizNet 5100s Ethernet chip, called the CoCoIO, by Rick Ulland. CoCoIOs were on sale for $55 USD.

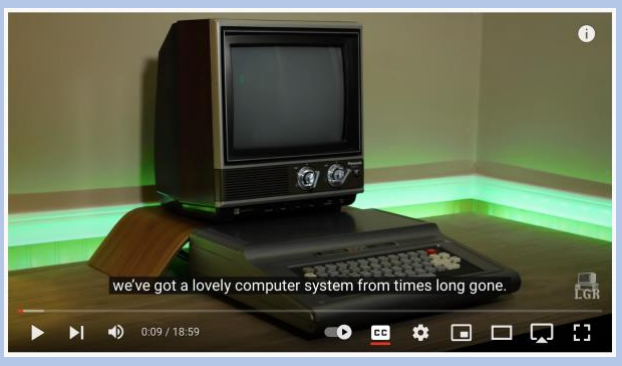
Rick Ulland’s CoCoIO PCB

The CoCoIO in action.

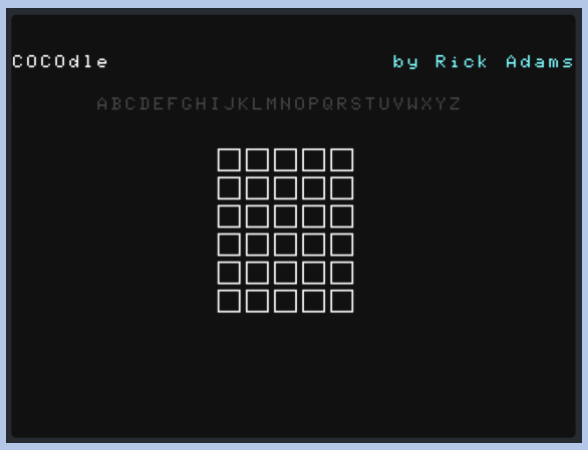
These carts open up new frontiers for the CoCo because of it not being able to directly connect to an Ethernet network. Michael Furman, of pyDrivewire fame, purchased a CoCoIO and has been working on software that will allow communication with the outside world.

Rick Ulland demonstrating his www browser in the works under NitrOS-9.

TRS-80 Color Computer: Radio Shack Retropsective



LGR video back from SepTandy 2020
https://youtu.be/I3lhtcGzhkc

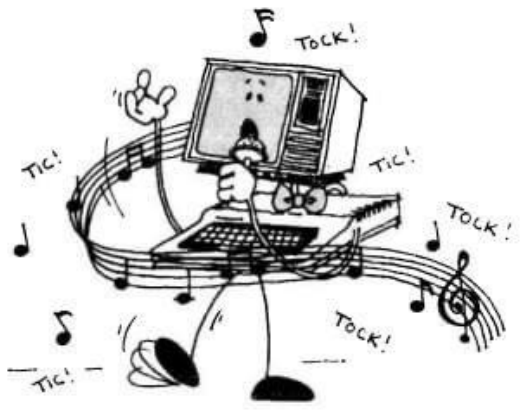


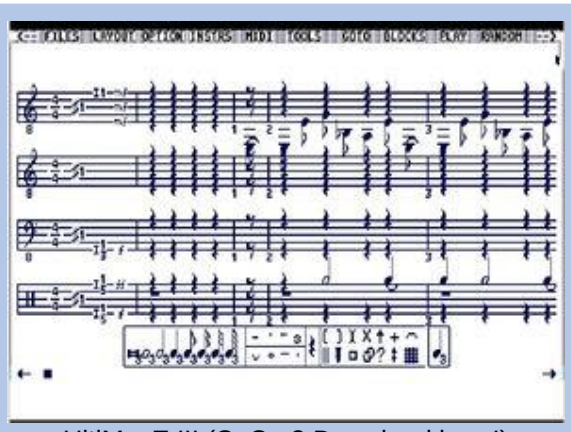
COCOdle by Rick Adams (Play online!)

As usual, Music Man kept the show lively. Never a quiet moment (musically speaking). He showcased his CoCo and audio equipment as he has for CoCoFESTs! immemorial.

Here is UltiMuse III with a MIDI cart.

Someone else we were happy to see was Mark Marlette's Cloud-9. He once again had table after table of everything CoCo, including hardware, RAM expansion, carts, documentation, software and an endless selection of CoCo trinkets that we would love to find in our attic.



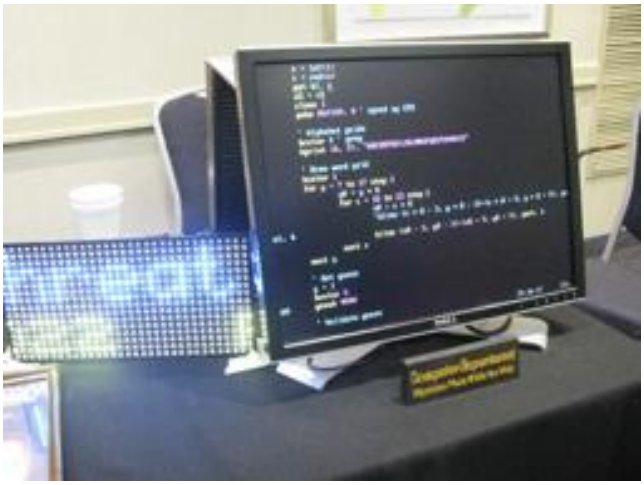


UltiMusE III (CoCo 3 Download here!)

We had a visitor at CoCoFEST! from the Apple family. COCOBYTE, from Canada and Colombia, displayed a fully functional Apple Mac Plus. COCOBYTE also had on display other CoCo merch. Their Colombian website: https://cocobyte.co/

The COCOBYTE table. Photo credit:unknown

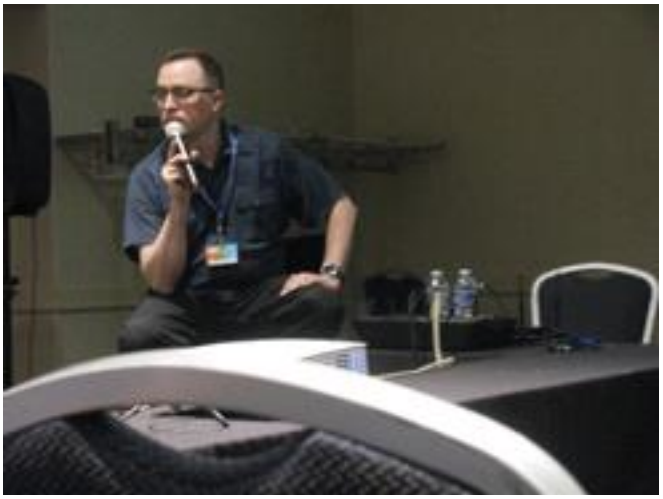
John Linville's RetroTinker proudly displayed his cart games and some hardware, including his Game Master Cartridge and the Joystick Auto-Fire.



Rick Adams was also present, demonstrating his CoCo development system. He demoed a BASIC that does not use any line numbers.
He also had a CoCo running the Cocodle program, a port of the now (in)famous Wordle daily challenge.

For the first time ever, a non-electronic device made its debut: A CoCoCrew beverage! This limited-edition drink featured the images of the CoCoCrew.
Unfortunately, I was not able to get one to try it out. Sorry about the blurry picture. That's the way it came out and I did not take any backup photos.

The auction was not only a success, but entertaining as well. A friend of the club donated some 6802 boards that sold well. Elsewhere, a one-of-a-kind CoCo 3 repack was also auctioned off. Bidders fought over the piece. As there can only be one, the victor was Kirk Rietveld. Check out the Updates section for links to YouTube videos of the Repack CoCo 3.



Thanks again to Jason Timmons, who made the auction entertaining and kept all the participants at the edge of their seat. Live long and prosper Jason!
Missed the auction? Want to relive each thrilling moment? No problem! Here is the video on YouTube:
https://youtu.be/ZmZSKwBb5tY

StrongWare was present, featuring cases John Strong created and 3D printed. Also featured were some of John's software titles. A newer product is the mini CoCo case, tailored specifically for the Raspberry Pi version of the CoCo.

Trending currently is a CoCo emulator built using the Pi 400 kit which is a complete computer with a Raspberry Pi at its heart. These nifty computers were for sale for $169 USD at the fest.

Plug and play CoCo emulators using the Raspberry Pi

Eric Kudzin (a.k.a. Jesus Eric) provided these fully assembled CoCoPi computers ready-to-go, right out of the box.

A rare sighting of David Ladd, highly focused on the task at hand. It looks like Dave's hobbies include water and diet Dr. Pepper.

CoCo-Pi project
Run a CoCo emulation on a RaspberryPi

CoCoMan showcased his wares with an MC-10 and a few CoCos, along with his Switch-A-Roo, Walla-V-Cable and Rookaburra Cable, among other items. The Switch-A-Roo is an easy way to connect the CoCo 3's RGB output to a modern-day VGA monitor.

More CoCo stuff from CoCoMan

But this fest wasn't only about CoCo tech, it also features two tables that showcased and sold other items. The first was MoxyPop, featuring handcrafted fashion jewelry.

The second table belonged to Karolton Sefcik's Bargeman Research Labs. He had an assortment of magazines, books and other items, some for sale.

Brendan Donahe's COCOVGA showcased his flagship product, the CoCoVGA. This product is the VGA solution for the Color Computer 1 and 2, and the MC-10.

The MC-10, and CoCo 1 and CoCo 2 benefit greatly with the CoCoVGA.

Below is a video of the MC-10 & CoCoVGA.

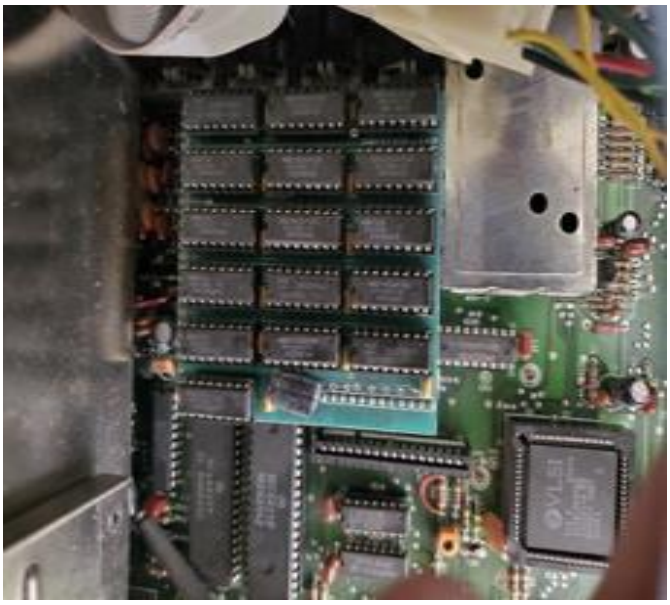
https://youtu.be/6dPfEhJ-f4w

Deek had an interesting display. Along with his CoCo and MPI, he had a small circuit based on the NodeMCU. Deek mentioned that the NodeMCU had the ZiModem firmware and was connected to the Mega Mini-MPI using its high-speed serial port, running under NitrOS9, with full hardware handshake and stable up to 38400 bps. He also shared a document where he presents a proposal for Dave Philipsen's single board computer CoCoDEV.

R & B Computer Graphics had the above CoCo on display. Note the use of a PS/2 keyboard adapter allowing the CoCo to use a standard PS/2 keyboard and the fan which helps keep the CoCo's innards cool. A standard PSU was connected and used to power up the external components.

An interesting and unique article that was auctioned was the Repack CoCo 3. A repack CoCo is one where the innards of the CoCo are assembled inside a case that is not an original CoCo case. In this case, the CoCo 3 was assembled inside a Mini AT tower. Tony Podraza provided the following pictures.

The Repack CoCo 3, showcasing its two floppy drives. Additionally, this rig also has a hard drive.



The CoCo 3 motherboard, showing the GIME in background and a 512KB RAM expansion card in the foreground.

A close up of the inside of the case, showing cartridges (bottom) and what seems to be the CoCo 3 motherboard

This shows a heat sink and possibly a capacitor in the background.

A close up of the mighty GIME

Of course, no CoCo celebration is complete without a display featuring the CoCo FPGA.

Brian Goers at his table for BG Enterprise

Mark Marlette of Cloud-9

John Linville during the CoCo Crew Podcast

Mark Overholser describing the Boomerang memory upgrade

Boisy Pitre participating in a CoCoCrew Podcast

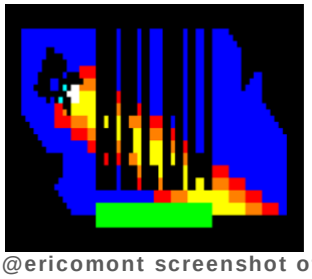
William Astle, the Wizard of 09

Chris Luckey (aka Sloopy Malibu) working on an upgrade

CoCo Community Corner

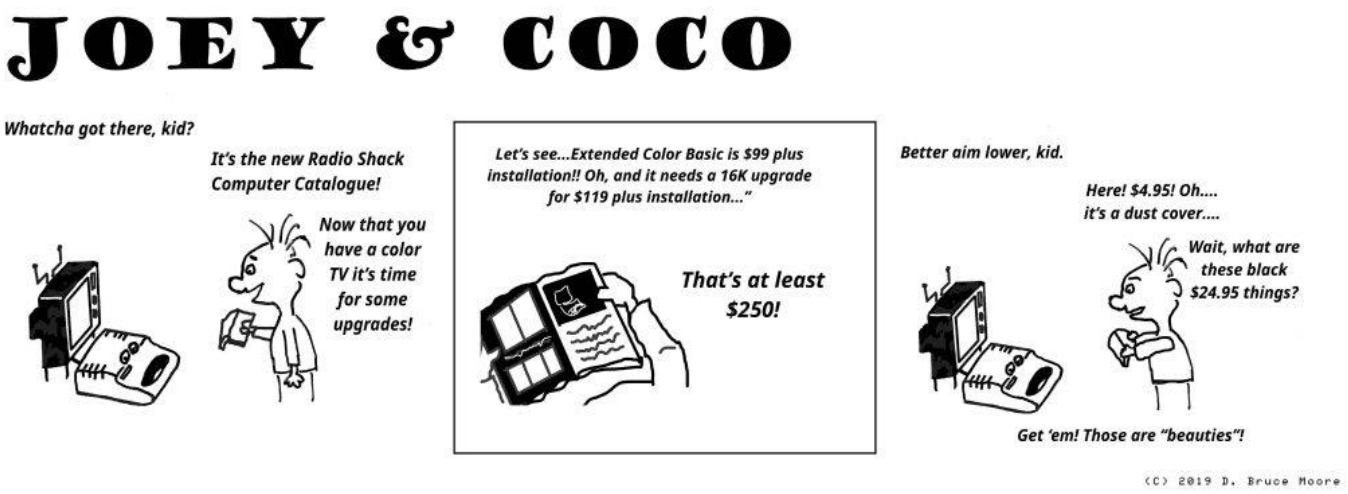
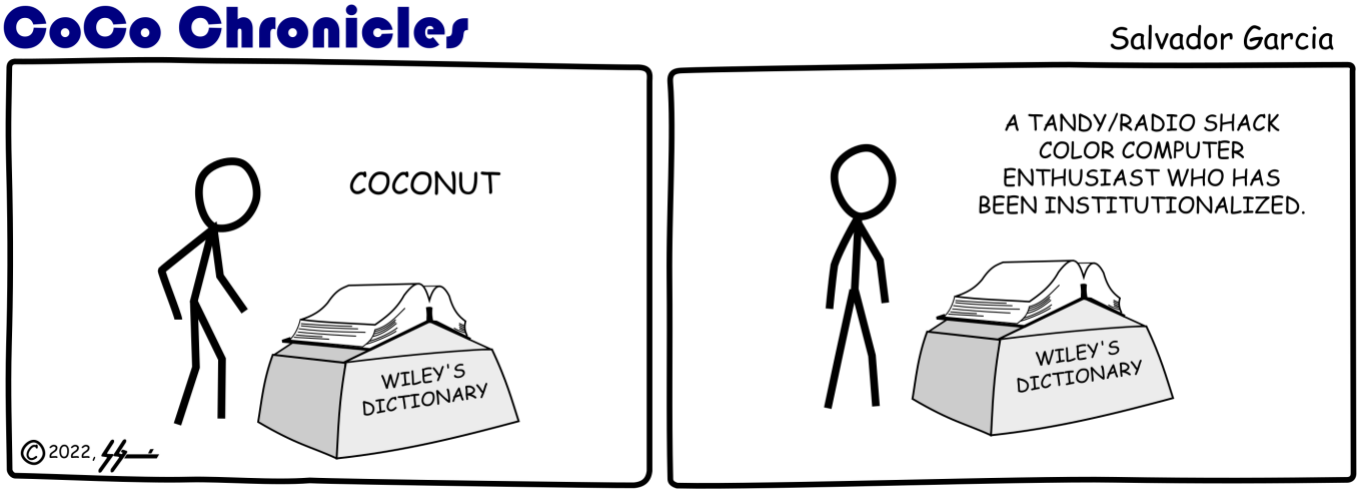
Source	Link(s)
Glenside Color Computer Club	Website | Facebook
The TRS-80 Color Computer Facebook Group	Facebook
The Color Computer Mailing List	Website
The TRS-80 MC-10 Facebook Group	Facebook
The CoCo Crew Podcast	Website | Facebook
The Dragon 32/64 Communities	Website | Facebook
CoCoTALK! Weekly live Color Computer talk show	Website | Facebook
The CoCo Community Discord server	Server | Get Discord
The CoCo Show Podcast	Website | YouTube
Looking for more CoCo Links? Visit I'm a CoCo Nut!	Website
TRS-80 Color Computer Archive	Website
Tandy (TRS-80) Color Computer Games List from L. Curtis Boyle	Website

CoCo Gallery



@ericomont screenshot of his upcoming BASIC multi-genre lundar lander game

Ron Delvaux's high color photo for CoCo

@Tazman posted a digitized photo shown without artifacting

@MrDave6309 screenshot of the upcoming adventure, space shooter "Space Pirate Kimiko"