CoCo~123

Glenside Color Computer Club, Inc. Mebane, North Carolina
Volume 38, Number 4 Winter 2018

CoCo ~ 123 Memory Map

Upcoming Events:
Regular meetings every 2nd Thursday @ Schaumburg Library.
The **28th** Annual "Last" Chicago CoCoFEST! **May 4-5, 2019**

G.C.C.C. OFFICERS

Here is the list of 2018 club officers and how to contact them. If you have questions about the association, call one of the officers for the answers.

POSITION	NAME	PHONE	PRIMARY FUNCTION
President	John W. Linville	919-744-8139	The buck stops here...
Vice-President	Tony Podraza	847-340-1801	Meeting planning, etc.
Treasurer	Brian Goers	708-805-1888	Dues and Purchasing
Secretary	Rich Bair	847-835-1309	Records and Reporting
Director	Tony Podraza	847-340-1801	CoCoFEST! Organizer
Librarian	Brian Goers	708-805-1888	Club Software Keeper
Editor	John Mark Mobley	847-409-8604	Newsletter Production


John Linville


Tony Podraza


Rich Bair


Brian Goers


John Mark Mobley

CoCo~123 INFORMATION

CoCo~123 is the newsletter of the Glenside Color Computer Club. Your annual contribution of $15.00 helps to keep our club going. Send your check to:

Brian Goers, Glenside Treasurer
3312 Miller Avenue
South Chicago Heights, IL 60411
briang0671@sbcglobal.net

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

Should you attend the Annual CoCoFEST! your annual contribution will be covered for that year.

CoCo~123 CONTRIBUTIONS

If you have any suggestions for the newsletter or would like to submit an article, please contact the CoCo~123 Newsletter editor:

John Mark Mobley, Editor
4104 Wren Lane
Rolling Meadows, IL 60008
johnmarkmelanie@gmail.com

CONTRIBUTORS TO THIS ISSUE

Rich Bair	John Linville
Salvador Garcia	John Mark Mobley
Brian Goers	Robert Swoger

G. C. C. C. MEETINGS

The Glenside Color Computer Club meets the second Thursday of each month at the Schaumburg Township District Library at 7:30 pm. If you need a map, see the following link:

http://ncmedals.com/glenside/splmap.html

A social get-together we lovingly call “The Meeting After” always follows the meeting at a nearby restaurant.

Visit our website at:
http://ncmedals.com/glenside/index.htm

FROM THE PRESIDENT’S PLATEN

CoCo New Year
by John W. Linville

Springtime is a favorite time of year for many folks -- it certainly is for me. More daylight (with or without Daylight Savings Time) and warmer temperatures come back into our lives, brightening our moods and warming our hearts. But that's not really what makes this time of year so special for me.

For those of us living in North America, spring means the months of March, April, and May. These same months, of course, are exactly the time of year when CoCoFEST! has happened every year for more than half of my life. As I have written before, I used to dismiss the idea of attending CoCoFEST! It was then I wised-up and started attending back in 2001. Since then CoCoFEST! has become a yearly touchstone, acting as a metronome to keep time throughout my adult life.

Knowing that CoCoFEST! is coming reminds me to take a break from time to time to enjoy my CoCo collection. Attending CoCoFEST! rejuvenates me each year, giving me a chance to relive a bit of my youth. Not only that, but CoCoFEST! introduced me to the best friendships that I have ever had as an adult. Going to CoCoFEST! really is as big an event in my life as any holiday or anniversary -- CoCoFEST! truly marks the CoCo New Year. You owe it to yourself to “Make The Trek!”

With that in mind, I assure you that CoCoFEST! preparations are well underway. I hope that you have already made travel plans. Did you reserve a table? Most of the exhibitor tables are already claimed, but we still have the smaller "A Place To Call Home" tables available. Did you make your hotel reservation? Mention "Glenside CoCoFEST!" to get the special rate. Did you reserve a place for dinner on Saturday night? The catered dinner will be at 6:00 pm Saturday evening, with the menu including Pulled Pork, Shredded Chicken, Beef Brisket, Pig Wings, Au Gratin Potatoes, Cole Slaw, Baked Beans, Garden Salad, Fresh Rolls, BBQ sauce, Gluten-Free Cheese and Veggie Lasagna, Lemonade, Tea, and Soft Drinks. The cost is only $20 per person (free for 12 years and younger). Reserve your dinner to ensure there is plenty for you to eat!

We already have as many pre-registrations for this year's CoCoFEST! as we had total attendees a few years ago. What does that mean for this year's attendance? NOBODY KNOWS! But how bad could it be? One thing is for sure -- if you aren't there, you'll miss it... In all seriousness, if you are coming to CoCoFEST! and you haven't already pre-registered then please do so. Various links are on the website to pre-register either as an exhibitor or as a regular attendee, but the easiest way to pre-register as an attendee is at the Tandy List link below:

https://www.tandylist.com/

NOTE: As a friendly reminder to exhibitors making sales at CoCoFEST!, please consider issuing receipts to purchasers. Those CoCoFEST! attendees that need to cross an international border may be subject to some hassle regarding their CoCoFEST! treasures. The word is that these hassles can be mitigated or even avoided with just a bit of paperwork. Be kind to your CoCo friends from abroad!

Well, that's about it for now. As I write this, there are about 49 more days until CoCoFEST! -- I can hardly wait! I hope you are making arrangements to join me in Lombard, IL on May 4-5, 2019. In any case, I hope you are having fun with Tandy's little underdog -- CoCo Forever!

John Linville, President
Glenside Color Computer Club

Trea$ury Note$

Treasure report for March 2019

The beginning balance on Feb 2019 was $9,727.96. Interest of $1.12, PayPal Transfer of $166.04 was collected.

The end of February month balance is $9,895.12.

Money received since March 1, 2019 from PayPal (03/14/19). $570.08. Available Balance of $10,465.20.

Brian Goers, Trea$urer
Glenside Color Computer Club

Secretary's Scroll

Rich Bair here with a summary of the last three monthly membership meetings:

In January we passed an amendment to the Glenside Color Computer Club's constitution clarifying who are the officers of the club. The four elected officers (president, vice-president, treasurer, and secretary) are supplemented by directors appointed by the president to accomplish specific tasks. An example is your hard-working newsletter editor. The elected officers plus the appointed directors constitute our Board of Directors.

The February meeting focused on the fantastic TandyList web site developed by Randy Weaver. He has added the ability to preregister and prepay (through PayPal) for attending the CoCoFEST!, which will help greatly to ameliorate the crush of registration on Saturday morning of the fest. We urge you to take advantage of this option for the above reason, but also because it gives us a better idea of how much food to order for the catered dinner Saturday night. Speaking of the dinner, did you know that it includes vegetarian options in addition to the traditional fare? It's an excellent time to get to know others in your CoCo community, and it's right on-site so you have more time for conversation.

The March meeting was focused on making sure we have all the necessary preparations made for the fest. We think we're on target. See you on May 4th and 5th!

Happy CoCoing!

Rich Bair, Secretary
Glenside Color Computer Club

THE EDITOR'S CLIPBOARD

We rely on people just like you to help write articles for the newsletter.

John Mark Mobley, Editor
Glenside Color Computer Club

New Paths for CoCoFEST! Check-in

by John Mark Mobley and Bob Swoger

For some years now we have had a turnout of 50 to 70 attendees at our fests. Expecting a greater number last year we tried to modify our check-in procedure. We had a total of 120 attendees at last year's fest. In order to get enough folks into the showroom to start the show we had to hold back the starting of the show until about 9:40 am, 40 minutes late.

On Saturday at 8 am in the morning you will want to get in line for fest check-in. We will have you verify your address, phone number and email address. We will add up your bill, take your money or credit card and give you a receipt. We will give you a nametag/badge and enter your name in a door prize drawing. If there is a problem with your information you can correct it on the ticket stub or enter it into a computer. We have improved things form last year to make check-in faster. We have a faster receipt printer and we plan to pre-print receipts for people that preregister.

CoCoFEST!

by John Mark Mobley

CoCoFEST! is a vintage computer festival for Tandy/Radio Shack computers and compatibles. This year CoCoFEST! will be held on May 4 & 5, 2019 in Lombard, IL.

If you would like to preregister for the CoCoFEST! then fill out one of the forms on the following link.

Link:
https://bit.ly/2CV7jSZ

Link:
http://www.glensideccc.com/index.shtml
Click Documents
Click CoCoFEST! Contract for Exhibitors and Vendors
Click Exhibitor/Vendor contract

If you would like a vendor table then fill out the Exhibitor/Vendor contract.

If you would like a table but not be a vendor then fill out the Exhibitor/Vendor contract and look for the words "a place to call home".

Send money via PayPal. Send money to a friend by sending money to brian7eg@gmail.com . By sending money to a friend you pay a little more to cover the service fee.

If you would like to not be a vendor and not have a table then visit https://www.tandylist.com/ and fill out the online form. Click "HERE" where it says Click HERE to register. Make the selection before you log in.

Also visit https://www.tandylist.com/ and verify your name, address, phone, and email.

That is how preregistration is done.

This is the sign for the Inn


This is the Inn


The Inn is on the left and the Heron Point Building is on the right


This statue is in the lobby of the Heron Point Building. It is customary to touch the heron.

What you came to see.

Also come and see the people.

There is a brief scene inside the store. I was not able to clearly make out any specific products, but then, the scene went by fast. If anyone sees this movie, it might be possible to make something out.

The movie overall was typical MARVEL fare, complete with a cameo from Stan Lee. Aside from the Radio Shack, there were other 90s references, including one where she destroys a True Lies poster. Not exactly Ready Player One, but still nice to see these references.

CoCo Bits: A Radio Shack Cameo

By Salvador Garcia

Hello out there! Are there any MARVEL movie/comics fans out there? I recently went to see Captain Marvel and was pleasantly surprised when a Radio Shack reared its beautiful head!

In this scene, the titular character ends up in a 1995 strip mall. She is anxious to call home, but there is something wrong with her comm device. She walks over to a security guard that's in a car. The guard looks at her with an almost gaping mouth as she is wearing her iconic suit.

She asks him where she can get communications equipment. In a robotic, almost zombie fashion, the guard points his finger. The next scene presents the façade of none other than a Radio Shack!

Computers with a Front Panel Interface

By John Mark Mobley

I first became interested in front panel interfaces when I saw Roy Justice's Mark-8 Computer at a CoCoFEST!.

The MITS Altair 8800 is an example of a computer with a front panel interface. It has toggle switches and blinky lights. We learned from movies and Television (TV) that computers should have blinky lights.

Modern MITS Altair 8800 Emulator

Altair: https://en.wikipedia.org/wiki/Altair_8800

Emulator: https://s2js.com/altair/

The MITS Altair emulator runs in a web browser. You use your mouse to click the switches. No video terminal interface is offered with the emulator. You can get a feel for what it is like to work this kind of computer. I find it is fun for a few days, but then I want to move on to a video terminal interface. You program in machine code. Single stepping is accomplished by just sending a few clock pulses to the microprocessor. Note not all microprocessors can work with a 1 milli-Hertz (perhaps DC) clock.

The RCA CDP1802 microprocessor has a Direct Memory Access (DMA) mode that makes it easy to support a front panel interface. The COSMAC ELF 1802 "Membership Card" is a good example of a simple front panel interface. The address can only be cleared or incremented by the front panel interface. On some models of COSMAC ELF the address is not displayed so you have to keep track of how many times you increment the address.

1802 "Membership Card"
http://www.sunrise-ev.com/membershipcard.htm

1802 "Membership Card"
http://www.retrotechnology.com/memship/memship.html

EMMA02 Emulator:
https://www.emma02.hobby-site.com/

The KIM-1 (while not a front panel interface) has 7-segment displays and a keypad. It is software driven with what I call a machine code monitor. The KIM-1 allows you to single step code that is in RAM. ROM cannot be single stepped because that is where the machine code monitor is located. Also the KIM-1 will allow you examine registers. The user application can make use of the display and keypad while in run mode.

https://en.wikipedia.org/wiki/Machine_code_monitor

KIM-1: https://en.wikipedia.org/wiki/KIM-1

Emulator: https://www.asm80.com/kim.html

The Cactus is a resent design for the 6502 microprocessor. It is believed to be the first front panel interface for the 6502. This is controlled by hardware. I am very impressed by the dedication it took to develop this product. Read about it using the link below.

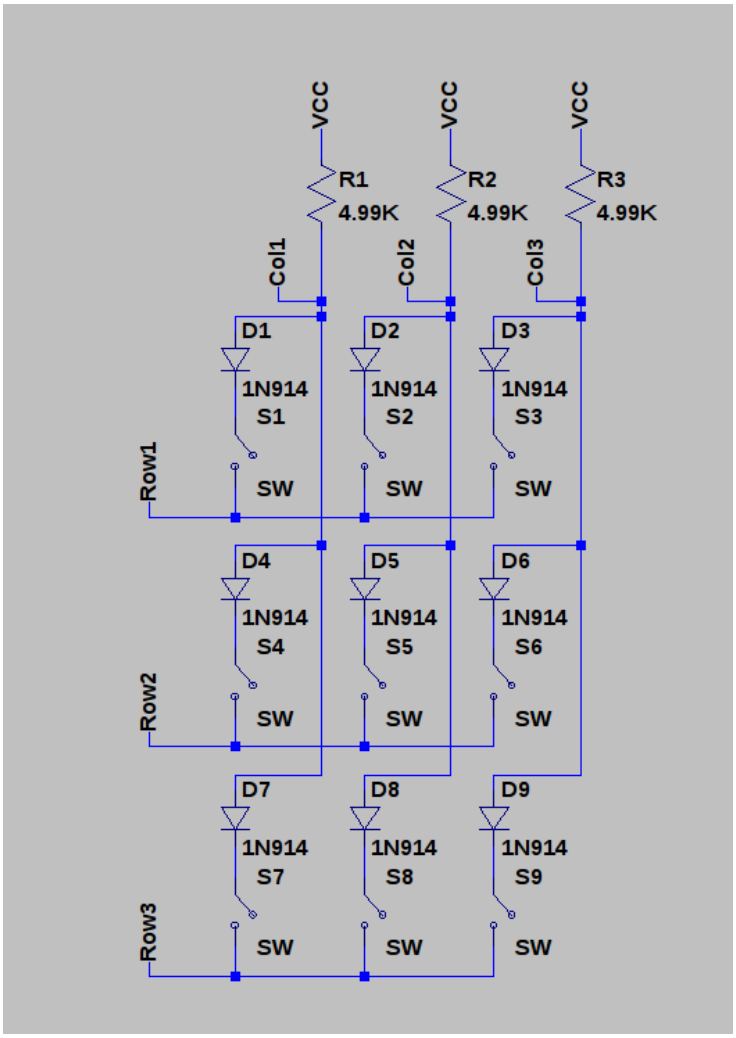
Cactus: http://commodorez.com/cactus.html

Something similar to the Cactus could be done for the 6809. The front panel interface could be hardware driven or software driven.

If hardware driven then you can use a Complex Programmable Logic Device (CPLD) or Field Programmable Gate Array (FPGA) to drive the interface.

If software driven then the lights and switches could be connected to a Peripheral Interface Adapter (PIA) and driven by a machine code monitor. This is similar to the KIM-1. If the switches are laid out like a keyboard matrix then each switch should have a diode so that more than one switch can be on at a time. 400K Hz is the slowest clock frequency you can run a MC6809 at, so single stepping the clock input is a bad idea. Single stepping on a 6809 is made easier by using the SWI (Software Interrupt) instruction. Insert a SWI at a RAM location where you want processing to stop. When running at full speed (non single step mode) the address and data lights can be driven by a 60 Hz interrupt. The lights are just a blur anyway.

Diode and switch matrix example:
https://www.gammon.com.au/forum/?id=14175



Diode Switch Matrix

The diode switch matrix works by driving one row low at a time and reading the columns. The rows can be driven by a 3-to-8 one-low (1-of-8) decoder. Without the diodes, a 3 switches on situation can look like 4 switches are on. If S2, S4 and S5 are on then S1 will appear to on also. The diodes cost about 7 cents each in 10 lot quantities.

If using a Tandy Color Computer you can have a similar experience by using (Disk) EDTASM+ with ZBUG. ZBUG will give you debugging, single step, and the ability to examine registers.

Also, many emulators such as Multiple Arcade Machine Emulator (MAME) have a debugger built into them. This is a very nice way to debug a program.

Also you can emulate a front panel interface on a Tandy Color Computer. Pressing a key on the keyboard can toggle a switch on the screen. 0-9 and A-F can toggle 16 switches. The F1 key can select the address switches. And the F2 key can select the data switches. Now we are toggling 16 address switches and 8 data switches for a total of 24 switches. So, without building any new hardware, you can emulate a front panel interface on a Tandy Color Computer. You just have to write the emulator software.

Alternatively, you can use a screen and mouse to toggle the switches on the screen.

So if you are interested in a front panel interface for a 6809 microcontroller then you have many options.

Jim Gerrie Software

By John Mark Mobley

Jim Gerrie continues to write new software for Tandy/TRS-80 computers.

Below are some links that will show you what is available.

Home:
http://faculty.cbu.ca/jgerrie/Home/

Software:
http://faculty.cbu.ca/jgerrie/Home/jsoft.html

Software Icons:
http://faculty.cbu.ca/jgerrie/Home/jgames.html

Blog spot:
http://jimgerrie.blogspot.com/

Online MC-10 Emulator:
http://faculty.cbu.ca/jgerrie/MC10/

Game Jolt:
https://gamejolt.com/games/jgmc-10games/339292

CoCo Happenings

By Salvador Garcia

2018-12-26 Allen Huffman posted a message with a link to his article where he discusses how strings work in BASIC:

http://tinyurl.com/y2o6exle

2019-01-05 Neil Blanchard announced the availability of Evan Wright's Hunt the Wumpus for the CoCo. The game is available on a cartridge and requires a Color Computer with at least 32K RAM. Contact Neil for ordering information. Evan posted a video with more information:

https://youtu.be/UsuywWSyL6E

2019-01-05 Carlos Camacho announced that he had finished scanning all of the content that he had of the Dynamic Color News, kindly provided by Steve Ostrom. While Carlos has posted a few issues on the Color Computer Archive, he still has lots of work to do to complete this task for the entire collection.

2019-01-09 Walter Zambotti announces the availability of OVCC, the Open Source Virtual Color Computer. Download at:

http://tinyurl.com/y2bkof27

2019-01-09 Jason Reighard announced the availability of his WallabY-Cable which is a dual RGB cable for the Coco 3 and allows the connection of two RGB devices. More info here:

http://tinyurl.com/y2bkof27

2019-01-11 Neil announced the "Call for Papers" for 2019. Do you have an interesting idea or project that is completed? This is your chance to share your research and innovation with the community. More information at the following link:

https://tinyurl.com/y5s8er8n

2019-01-13 George Ramsower shared the link to a video that he found about the rise and fall of Radio Shack:

https://youtu.be/JFivtOmXPPM

2019-03-02 Rietveld shared the link to a video from Joe's Computer Museum discussing the CoCo SDC:

https://youtu.be/mL-IJUoSDQs

2019-03-08 Rietveld shared another video link to a documentary further discussing Radio Shack:

https://youtu.be/GJTKtkqSEVs

2019-03-09 M. David Johnson, responsible for the CF83 Forth, shared a link to his Website where people can download the full CF83 Forth package:

http://www.bds-soft.com/

2019-03-16 Joe Schutts posted a question regarding the TL866A USB Minipro Programmer. It seems that those in the CoCo community who have purchased this item have had success with it. This programmer connects to the USB port of a PC.

2019-03-17 Rietveld published a short video demonstrating the transfer of files between DriveWire and the CoCoSDC. Contact Rietveld for more information.

https://youtu.be/yt5tNnI1vFY

2019-03-19 Pere Serrat announced that he posted version 2 of BigPack, a ZIP file containing all of the game packs that he previously published. V2.0 corrects some "details" that were found in some games in V1.0 of the BigPack.

https://tinyurl.com/y2syrcdu
https://tinyurl.com/y4b3pk5d

MAME Installation
By Salvador Garcia

Introduction

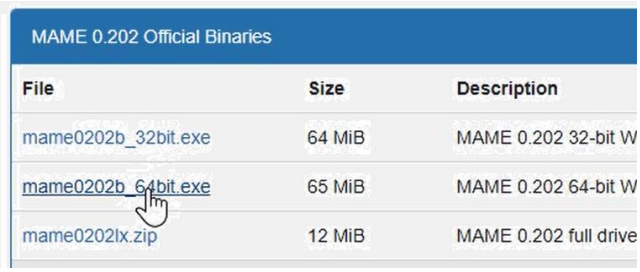
MAME is the Multiple Arcade Machine Emulator and is a virtual environment where different types of computing machinery can be emulated. This document describes the process to install and configure MAME so that it will emulate a Color Computer 1, 2 and 3.

Procedure

The following describes the process to get a Color Computer emulation running on MAME.

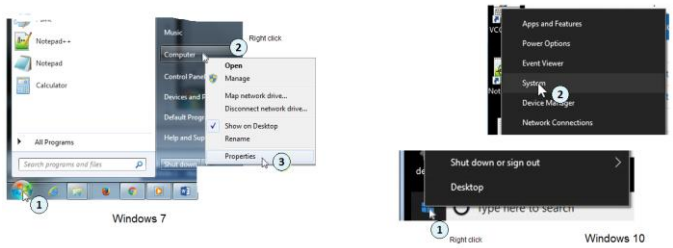
#1. Open the mamedev.org Website.

#2. Scroll down and click on the download button corresponding to the operating system. Linux is also available, but not shown in the above image. This document describes the process for a Windows based computer.

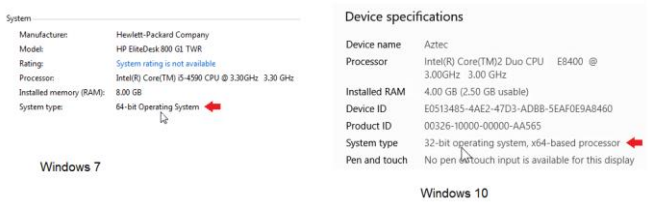


#3. MAME is available for Windows x86 (32-bit) and x64 (64-bit). Click on the download that corresponds to the Windows edition on the target machine.

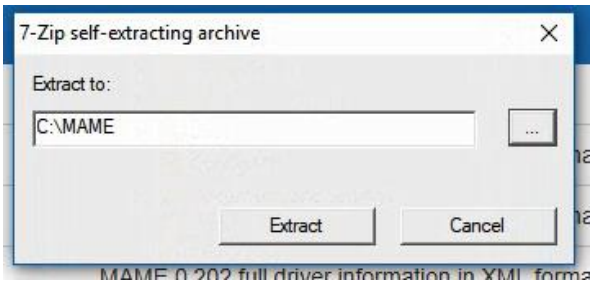
Download the file that corresponds to the Windows edition. If you don't know which edition you have, follow the steps below. If you do know, then skip to step #6.



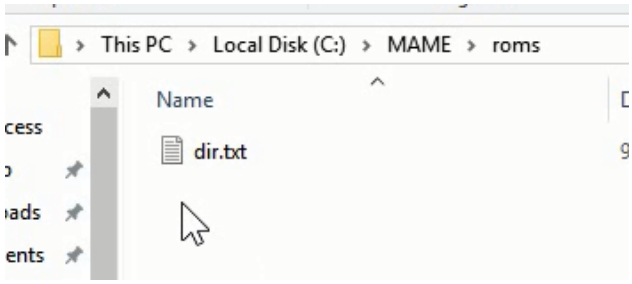
#4. To check which edition of Windows is installed, right click the Windows start button, then select System. This procedure varies depending on which Windows version you have. The above image shows the process for Windows 7 and Windows 10.



#5. Once the System/Properties window opens, locate the item captioned "**System type**". There, it will say whether it is a 32 or 64-bit operating system.



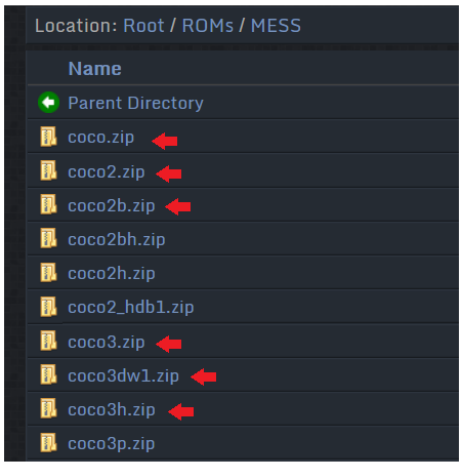
#6. Once the executable MAME file is downloaded, run it. This EXE file contains the compressed files. A small window will pop up asking where the extracted files should be saved. Either accept the default or select a folder. A new folder can be created here, if necessary. In the image above I created and selected the folder c:\MAME. Finish up by clicking the **Extract** button. Once the extraction process is done, click the **Cancel** button to exit.



#7. Navigate to the ROMs subfolder that's in the folder where the files were extracted. Given the folder in the previous image, this would be c:\MAME\ROMs.

This folder should be empty, save for the text file. The ROMs corresponding to the Color Computers must reside in this folder. We need to go to the Internet resource where these ROMs are available and download them to this folder. A place to download these ROM files is the following:

http://www.colorcomputerarchive.com/coco/ROMs/MESS/



#8. Open the ROMs/MESS page of the link above and download the ZIP files corresponding to the Color Computer that you'll want to emulate. Make sure they are saved to the MAME\ROMs folder on the local machine.

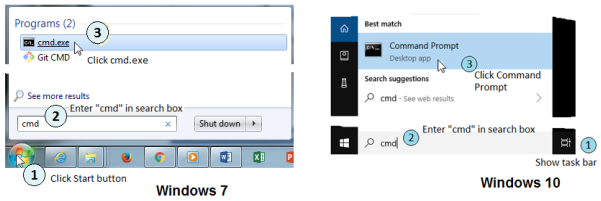
The ROM files that were downloaded for this presentation were the following:

Coco.zip	Color Computer 1 ROM
Coco2.zip	Color Computer 2 ROM
Coco2b.zip	Color Computer 2 with enhanced video
Coco3.zip	Color Computer 3 ROM
Coco3dw1.zip	Color Computer 3 with Drivewire support
Coco3h.zip	Color Computer 3 with Hitachi 6309

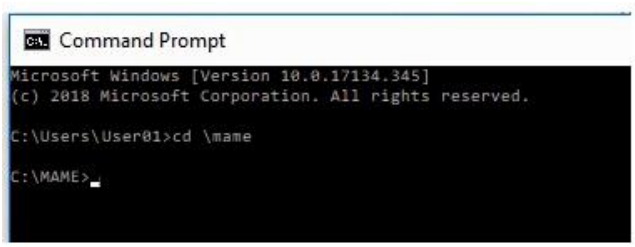
The full list of available ROM files as of December 2018:

File name	Date	Size
coco.zip	29-Nov-2012 08:19	7.4K
coco2.zip	29-Nov-2012 08:19	21K
coco2b.zip	29-Nov-2012 08:19	21K
coco2bh.zip	27-Apr-2018 15:07	21K
coco2h.zip	27-Apr-2018 15:07	21K
coco2_hdb1.zip	29-Sep-2017 15:05	6.8K
coco3.zip	29-Nov-2012 08:19	28K
coco3dw1.zip	16-Aug-2014 04:50	28K
coco3h.zip	29-Nov-2012 08:19	28K
coco3p.zip	29-Nov-2012 08:19	30K
coco3_hdb1.zip	29-Sep-2017 15:05	6.8K
cocoe.zip	29-Nov-2012 08:19	22K
cocoeh.zip	27-Apr-2018 15:06	21K
cocoh.zip	27-Apr-2018 15:05	7.2K
coco_dcmodem.zip	06-Jun-2017 04:13	3.9K
coco_orch90.zip	01-Jun-2017 20:15	6.8K
coco_rs232.zip	27-Apr-2018 15:11	3.6K
coco_ssc.zip	01-Jun-2017 19:48	5.5K
cp400.zip	29-Nov-2012 08:19	21K
cp400e.zip	29-Nov-2012 08:19	21K
cp400_fdc.zip	06-Jun-2017 04:17	7.0K
dragon32.zip	29-Nov-2012 08:19	20K
dragon64.zip	29-Nov-2012 08:19	34K
dragon64h.zip	27-Apr-2018 15:08	34K
tanodr64h.zip	27-Apr-2018 15:08	34K

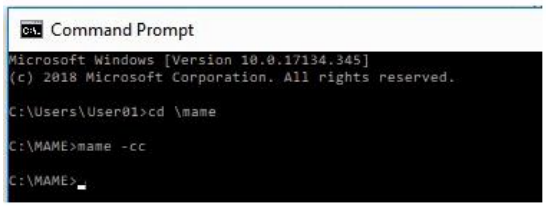
The next step is to create and configure the setup file.



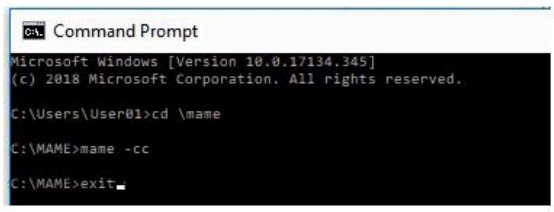
#9. Open a console window (command prompt). Windows 7: Click the **Start** button, enter **cmd** in the search box and then select the cmd.exe option. Windows 10: Enter **cmd** in the search box



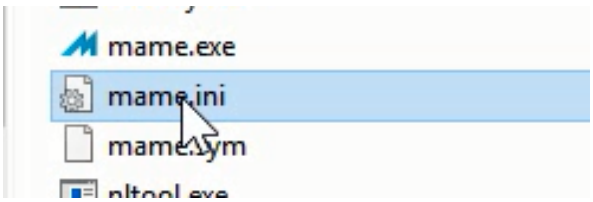
#10. Navigate to the MAME folder.



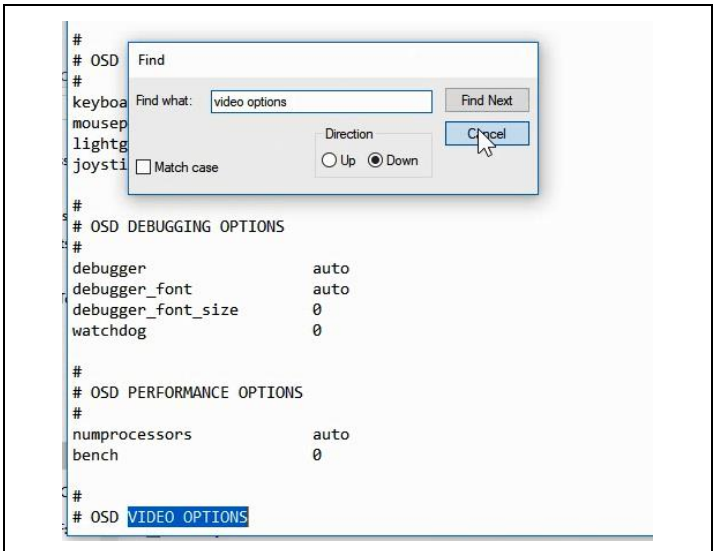
#11. Run MAME to create the configuration file: **mame -cc**



#12. Close the command prompt. Enter **exit** followed by pressing the **Enter** key.

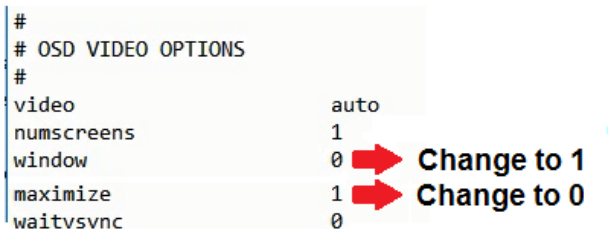


#13. Locate the file MAME.ini and open it by double clicking it.



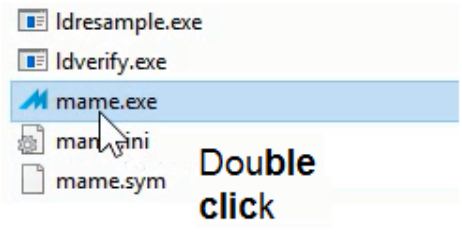
#14. Open the **Find** dialog box and search for **video options**. Once the text is entered, the editor will search for it automatically and highlight it as shown in the image. If not, click the **Find Next** button. Once the text is located, close the **Find** dialog by clicking the **Cancel** button.

Edit the entries **window** and **maximize**.

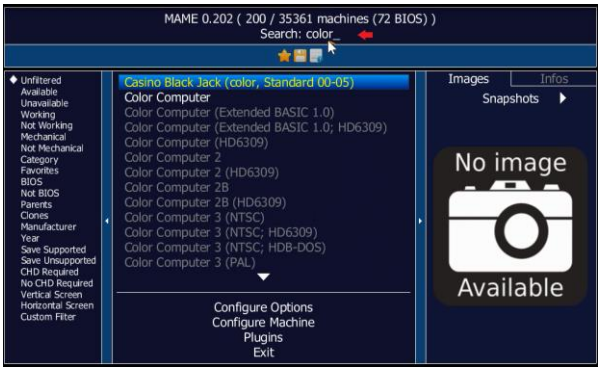


#15. Partial contents of the mame.ini file. The **window** option needs to be 1 and the **maximize** option needs to be 0.

After the edit save the MAME.ini file and close the editor. The next step is to set up MAME to emulate Color Computers.

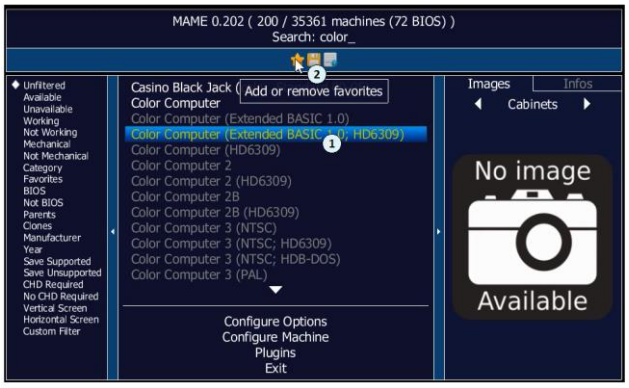


#16. Navigate to the folder where the MAME files are stored and run mame.exe by double clicking the filename.



#17. Once the main MAME screen opens, start by locating the Color Computer items within the list of environments. Enter the search phrase ***color computer*** in the **Search** box. In the above image, the desired items displayed automatically after entering just "**color**".

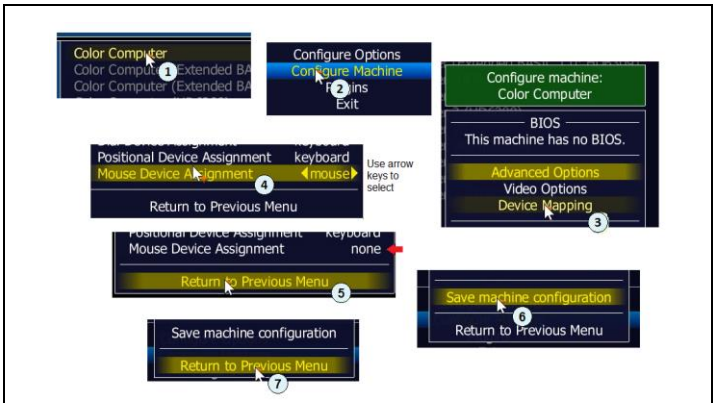
Once the list of Color Computer items displays, the next task is to isolate this list so that we don't have to search for it every time we run MAME. To do this, we need to copy these items to the Favorites "folder". This item is present in the left-hand pane along with other elements.



#18. Copy the Color Computer items from this list to the Favorites list. To do this, click on an item and then click on the Favorites star. Repeat this process for each of the Color Computer items.

You can check on the results by clicking on the **Favorites** option in the left pane. All the Color Computer items that were copied should be there.

The next step is to disable the mouse mapping. We'll be using MAME's device mapping dialog box.



#19. Disable the mouse device mapping. To do this, select the item to work on (from the main list of machines), double click on **Configure Machine**, double click on the **Device Mapping** option and then double click on **Mouse Device Assignment** option. Once that item is clicked, two arrows delimit the current option which most likely is "**mouse**". Use the left arrow key to locate and select the "**none**" option. Now double click on the **Return to Previous Menu** option. Now double click on the **Save Machine Configuration** option. To close the dialog box, double click on **Return to Previous Menu**. You may need to repeat this process for each machine in the list.

There is one more change that's needed. By default, MAME may display a game information screen when the emulator is launched. To not display this screen, we need to set up the machine so that this screen is skipped (that is, not displayed).

#20. Disable the information display screen. To do this, select the desired Color Computer item from the main list of machines, double click on **Configure Options**, double click on the **Miscellaneous Options** and then locate and double click **Skip Information Screen at Startup** so that the setting flips to "**On**". Note that Off will make MAME not skip the startup screen while On will cause MAME to skip it. Now double click **Return to Previous Menu**, then double click **Save Configuration** and finally double click on **Return to Previous Menu**.

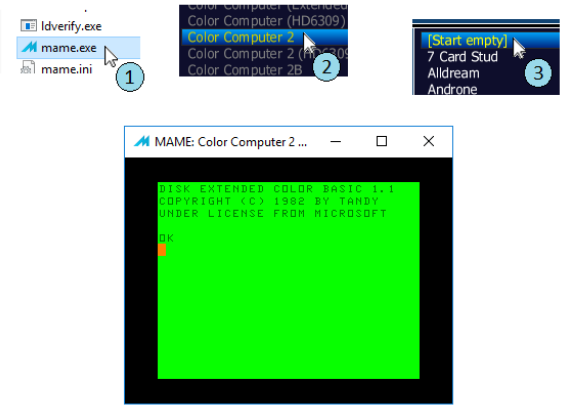
Note: I set this option for one machine and it turned out to affect all the Color Computer machines in the main list. After the above process is completed, check out various

Color Computer machines before repeating this process for each one. Also, for some reason, this setting did not persist from one MAME session to another.

Epilog

This completes the install process for MAME. Note that for brevity, we installed only a few of the ROMs. Having the time and inclination do to do, all the ROM files can be copied to the MAME\ROMs folders. This will guarantee maximum coverage of the diverse makes and models available.

The last activity is to test an emulator.



#21. Launch MAME by double clicking the mame.exe file. Select and double click the Color Computer of choice. Finally, double click the **[Start empty]** option. The Color Computer emulator will display. If it is too small you can make it bigger by dragging the window's border.

In the last step, when selecting **[Start empty]**, you'll notice a list of software, mostly games. Any of these can be launched from this menu if they are installed in MAME. This process is way beyond the scope of this article, but it is an available option.

To end the CoCo emulator (not the MAME app), press the **Esc** key. If this does not end the emulator, press the **Scroll Lock** key and then the **Esc** key again.

You now have MAME ready to do some CoCoing! Enjoy!

CoCoFEST! Awards Ceremony

By John Mark Mobley

Diego Barizo is sponsoring the Asimov Awards for the best BASIC and Machine Language programs of the last year.

Link:
https://www.facebook.com/groups/2359462640/permalink/10156952539787641/

Isaac Asimov was an American writer of science fiction and popular science. Isaac Asimov appeared in advertisements for Radio Shack.

Trophies have been ordered and prize money has been set aside for the Asimov awards.

4 Trophies have been ordered. Two are for the Asimov awards and two are for Excellence in Broadcasting.

Sample Trophy

Calendar of Events

by John Mark Mobley and Salvador Garcia

See our website's Calendar of Events:
http://www.glensideccc.com/calendar/index.shtml

Glenside Color Computer Club, Inc. Business Meetings
April 11, May 9, June 13, 2019
Thursdays, 7:30 PM to 9:30 PM Central Time
Schaumburg Public Library
130 South Roselle Road
Schaumburg, IL, USA
Blue Jeans teleconferencing access is available via John Mark Mobley or John Linville. You can call in.

Vintage Computer Festival Northwest
March 23-24, 2019
Living Computers: Museum+Labs
Seattle, WA, USA
Link: http://vcfed.org/wp/

Playthrough Gaming Convention
March 30-31, 2019
Raleigh Convention Center
Raleigh, NC, USA
Link: https://www.playthroughgc.com/

Midwest Gaming Classic
April 12-14, 2019
Home video game consoles, pinball, arcade, computers, tabletop gaming, crane games, collectible card games and air hockey, and that's just the start!
Wisconsin Center
Milwaukee, WI, USA
Link: https://www.midwestgamingclassic.com/

Vintage Computer Festival Southeast
April 27-28, 2019
Roswell Town Center
Roswell, GA, USA
Link: http://computermuseumofamerica.org/vcfse-7-0/

Vintage Computer Festival East
May 3-5, 2019
InfoAge Science Center
Wall, NJ, USA
Link: http://vcfed.org/wp/

The 28th Annual "Last" Chicago CoCoFEST!
May 4 & 5, 2019
Tandy Color Computer Festival
Heron Point Building
Lombard, IL, USA
Link: https://tinyurl.com/y8zrdyw4

The 28th Annual "Last" Chicago CoCoFEST!

Make The Trek!

Here are the 5 "W's"
WHO? 1) Glenside Color Computer Club, Inc.
PRESENTS
WHAT? 2) The 28th Annual "Last" Chicago CoCoFEST!
WHEN? 3) May 4 & 5, 2019
(Sat. 9 am to midnight - Sun. 9 am-3 pm)
WHERE? 4) Fairfield Inn & Suites Lombard
645 West North Avenue
Lombard, IL 60148
(Near the intersection of IL-355 and North Avenue)
(Same location as 2018!)
Overnight room rate:
$94.00 plus 11% tax ($104.34 Total)
Call 1-630-629-1500 for reservations.
You must ask for the Glenside "CoCoFEST!" rate.

>>> YOU MUST REGISTER UNDER "CoCoFEST!" <<<
>>> TO GET THIS RATE <<<

WHY? 5)
A. To provide vendor support to the CoCo Community
B. To provide Community support for our CoCo Vendors
C. To provide educational support to new users.
D. TO HAVE AN OUTRAGEOUSLY GOOD TIME!!!

And now, the "H" word.
HOW MUCH? All Attendees - General Admission
Both days: $15.00 1st – $10.00 2nd & more
Sunday Only: $10.00 1st – $5.00 2nd & more
********* Children 12 and under - FREE *********
***** Students 21 and under with valid Student ID - FREE *****

For further information, general or exhibitor, contact:
Tony Podraza, GCCCI Robert Swoger, GCCCI
847-428-3576, VOICE 630-589-4692, VOICE
tonypodraza@gmail.com rswoger@aol.com

Be sure to visit our Website to see up-to-date information on upcoming events. http://ncmedals.com/glenside/