

## Best storage solution for C128 using all modes

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Posted: Tue Mar 03, 2020 3:28 pm Post subject: Best storage solution for C128 using all modes



Hi,  
While I am waiting for my "new" C128 I am kind of panicking about the storage solution...I thought that it would be a walk in the park, but I can see now, that this might not be the case...

Do anyone know what storage solution (modern if possible) could be used on the C128 (all modes)? I want to play around with CP/M and of cause 128-mode with 80 column display?

Best Anders



Posted: Tue Mar 03, 2020 4:32 pm Post subject:



1571, SD2IEC, 1541 Ultimate, or Pi Drive. And absolutely get JiffyDOS.

The 1571 is most compatible with CP/M, and there is no third party device that's fully compatible with the 1571 today.

The SD2IEC works with all of the 128's modes, but 64 games with fast loaders may not work.

The 1541 Ultimate and Pi 1541 are the most compatible with games, so you should get one of those two devices.

Personally, I use an SD2IEC and the 1541 Ultimate with my 128. The SD2IEC is faster and supports larger file sets (for example, Sam's Journey does not need disk swapping.) The Ultimate gets used for software that won't load from SD2IEC or where I really want the menu available (games where I have to swap disks a lot.)

As for CP/M... the 128 is about the slowest way to use CP/M. My Altairduino or RunCPM running on a Teensy is a much better experience.

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Posted: Tue Mar 03, 2020 9:31 pm Post subject:



So when talking about the C128 and CP/M, one needs to look a but beyond the various floppy emulators and consider an actual mass storage solution. (for CP/M you do NOT want to limit yourself to low capacity floppies)

This rules out the Ultimate 1541 II+ as the drive solution because it at best only does 1541 emulations and that is terribly slow with CP/M. (not to mention you cannot access the Ultimate 1541 control menu in 80 col mode or from within CP/M mode, you would have to use the telnet interface to control it)

The BEST solution, is the most expensive one, but it works fully..that being the Rear Admiral "Thunderdrive", CMD HD Clone. 100% compatible, works with JiffyDOS and has the most flexibility of all the options. (like partitions, subdirs, etc). This drive even has native CP/M support.

Next best is a RPi1541 configured as a 1581 drive. and is very cost effective, just limited to the 800k capacity.

Note these recommendations are specific to CP/M use as mentioned..The Ultimate 1541 II+ excels in all other areas, its just its biggest weak point is lack of support of native C128 features.

My recommendation is to get the Ultimate 1541 II+ AND a RPi1541 (for the full 1581 support under CP/M).



Posted: Tue Mar 03, 2020 10:31 pm Post subject:



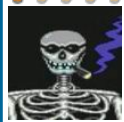
if you want to use cp/m, you will need a 1571

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Posted: Tue Mar 03, 2020 11:17 pm Post subject:

[quote](#)

SD2IEC is an actual mass storage solution. Besides it's cheap and simple (uIEC even applicable inside the computer case itself), and gets very fast indeed, once you have a JiffyDOS built in (for all three modes). You can even use a custom boot sector for autobooting your C128 machine on powerup in native mode like an Amiga by making a BOOTSECT.128 file and placing in the root directory of the SD card (if you have the programming skills for that).

But firstly, in any or all cases, having a JiffyDOS Kernal in the machine is a must (preferably a switchable one, for the best compatibility).

You may need an additional real drive (or floppy emulator) in these cases:

1.) 1571 or 1581 if you want to exchange data towards other machines' file systems (CP/M or even MS-DOS)

2.) 1541 or 1571 for C64 demos and games with fast loaders (or using the second CPU).

It will also get some rather fast with JiffyDOS (but you need to buy a chip into the drive, too).

But maybe the best (though not the cheapest) is to rather buy a 1541 Ultimate-II(+) then, since you also get the benefit of REU and other things.

If you also plan to use some Basic 8, ZED or GEOS etc., then consider a 64K VDC upgrade, too.

<http://istennyila.hu/>

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Posted: Wed Mar 04, 2020 12:03 am Post subject:

[quote](#)

Thank you for all your answers - The amount of knowlegde found in the forum still impresses me.

I already own an Ultimate II+ and a SD2IEC however the latter is the wireless kind so I am not sure that it would fit the C128 (different port layout maybe).

I will buy:

-JiffyDos for the system

- Pi1541 (Since I am loaded with "obsolete" pis anyway)

If possible I will find a cheap 1571 (Thunderdrive is way over my budget)

Just one more question.

If I only use Pi1541 and/or Ultimate - can I still boot into CP/M or do I need a 1571 for the boot itself?

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Posted: Wed Mar 04, 2020 12:21 am Post subject:

[quote](#)

You can boot into CP/M with the Pi 1541.

The CP/M disks are single-sided. I'd suggest tracking down a 1581 CP/M disk image, however. You can use the 1581 images with the Pi 1541 or with an SD2IEC.

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Posted: Wed Mar 04, 2020 1:35 am Post subject:

[quote](#)

Thank you, Tom

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Posted: Wed Mar 04, 2020 3:47 am Post subject:

[quote](#)

You might consider a real Commodore REU with a 1571. The REU speeds things up quite a bit after you have booted from the 1571.

This requires an extra save at the end of a session, so you have to consider that too. I consider the added speed well worth the "trouble".

A2000 3.1, '030, 21Mb, FF/sd

A1000 2.5Mb 2 floppies, Microbotics Starboard II

C-128, 1571, 1750

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Posted: Wed Mar 04, 2020 4:22 am Post subject:

[quote](#)

does the SD2IEC support 128 JiffyDOS, as it uses BURST mode, and the SD2IEC doesn't support Burst protocol, does it have special detection to detect 128 jiffydos burst protocol?

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Posted: Wed Mar 04, 2020 7:30 am Post subject:

[quote](#)

No, it won't use burst mode communication, but JiffyDOS is still faster on the SD2IEC than the 1571 is without it.

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Posted: Wed Mar 04, 2020 7:34 am Post subject:

[quote](#)

oh they also had room to fit in the 1541 Jiffy routines as well as the Burst jiffy routines? Yeah you will save the seek times in that case.

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Posted: Wed Mar 04, 2020 8:32 am Post subject:

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**oziphantom wrote:**

oh they also had room to fit in the 1541 Jiffy routines as well as the Burst jiffy routines? Yeah you will save the seek times in that case.

Right. There's basically no seek time, so the SD2IEC can transfer a 40K file in like 3 seconds.

CP/M on the 128 is still really slow to boot up, and I'm not actually sure it uses JiffyDOS. I've heard two different answers on that... if the system switches back to the 8502 to load from disk, then JD will probably work. (It almost has to, since the Z80 is so much slower than the 8502.)

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Posted: Wed Mar 04, 2020 8:38 am Post subject:

[quote](#)

CP/M uses a different track layout and format. So it probably does load Track/Sector commands, rather than using the "load file" command. Which JiffyDos can't really do much about. the SD2IEC should be faster as it can instantly get the sector, but going back and forth on the 128 side is going to slow it down a lot. CP/M mode probably also does bunch of "hey drive do you have this" commands, to which the SD2IEC probably doesn't respond, so CP/M probably goes "OI I SAID DO YOU HAVE THIS" until it gives up..

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Posted: Wed Mar 04, 2020 8:42 am Post subject:

[quote](#)

Like I said... the C128 is not the best choice for a CP/M computer... that's just one of the reasons.

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