



How to boot an APU2

bootit Aug 14th 2022



bootit

[Beginner]

Posts:

Aug 14th 2022

Hi

I have an APU board, trying to describe it:

PCEngines apu2
coreboot build 20160307
4080 MB ECC DRAM

- 3 SeaBIOS (version ?-20160307_153453-michael-desktop64)
Found mainboard PC Engines PCEngines apu2
multiboot: eax=0, ebx=0
boot order:

...

it has 3 1G ethernet ports, and 4 GBytes RAM.

This has always been extremely hard to get booted. It can't boot from SD card, it is absolutely required to boot from USB (and it is very hard to find a USB device that works). Then, in Linux, it is completely impossible to mount root from USB, even as devices are claimed to be found. The root partition HAS to be on SD Card. And it takes many many repeat attempts to boot, to find the SD card. (An "sdhci" controller is always found, but almost never the partitions on the SD card) Since Linux kernel 5.18, there is no way to mount any root.

What is it?

Is there any Bios that is more reliable?

thanks



bootit

[Beginner]

Posts:

Aug 19th 2022

rootwait and rootdelay= parameters don't help. The SD card root is either detected early enough or not at all.

But a netconsole= parameter makes SD card detection "reliable", even if the network driver is not built-in and netconsole stops immediately. And any delay introduced seems to be less than a second. I know and agree, this does not make sense, but it is the case. Linux 5.17 and 5.19 working.

Would a different bios even help?

- 3 Is there any "known best" bios version (as opposed to just the latest)?