



APU4D4 and mPCIe LTE modem in slot 3

a_px Feb 16th 2022



a_px

[Beginner]

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Feb 16th 2022

I am attempting to enable 3 x mPCIe LTE modems using a APU4D4 board running Ubuntu 20.04.

I am aware the SIM slots relate to mPCI slots 2 and 3. I have fitted a SIM carrier to one of the LTE modems in slot 1 and this appears to work. The modem in slot 2 also works and I can query the devices via the USB serial ports that appear in /dev

However, although the activity LED lights up for the modem in slot 3, I do not see any USB serial ports appearing in /dev for this device and so cannot connect to it. Swapping the modems results in the same issue with no connectivity to the device in slot 3. If I remove the device in slot 3 and place it in an external USB carrier plugged into one of the external USB ports, I can then get all 3 devices to work.

Is there something I need to do with this slot position (3) in order to enable mPCI functionality as opposed to mSATA? The modem is powered and operating but I don't get any USB connectivity with it when it's in this slot.

- 1) The operating system is installed on the SD card, so I don't need SATA/mSATA
- 2) The modems are Simcom SIM7600G-H (1e0e:9001)
- 3) The Qualcomm Option driver is installed for these modems

Thanks Alan



mkopec

[Administrator]

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Feb 18th 2022

Hello @a_px and welcome to the forum!

Please try enabling the EHCI0 controller in BIOS settings, it will enable the USB functionality in the mSATA slot.

See the documentation for more information: https://github.com/pcengines/apter/docs/mpcie_modules.md

(https://github.com/pcengines/apu2-documentation/blob/master/docs/mpcie_modules.md).



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Feb 21st 2022

Hi @mkopec
That's great, thanks. All working now.
Alan