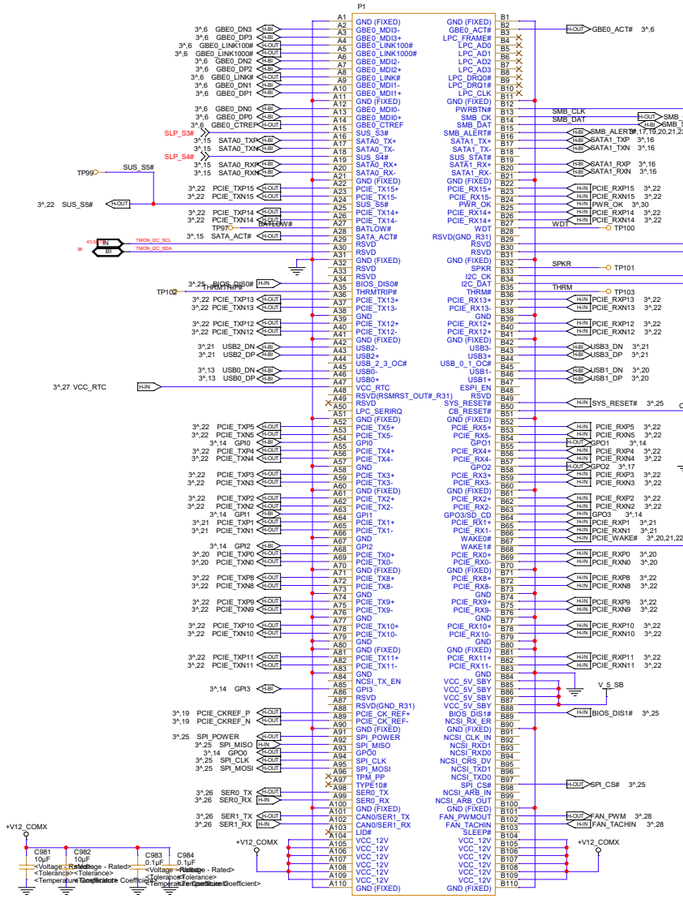
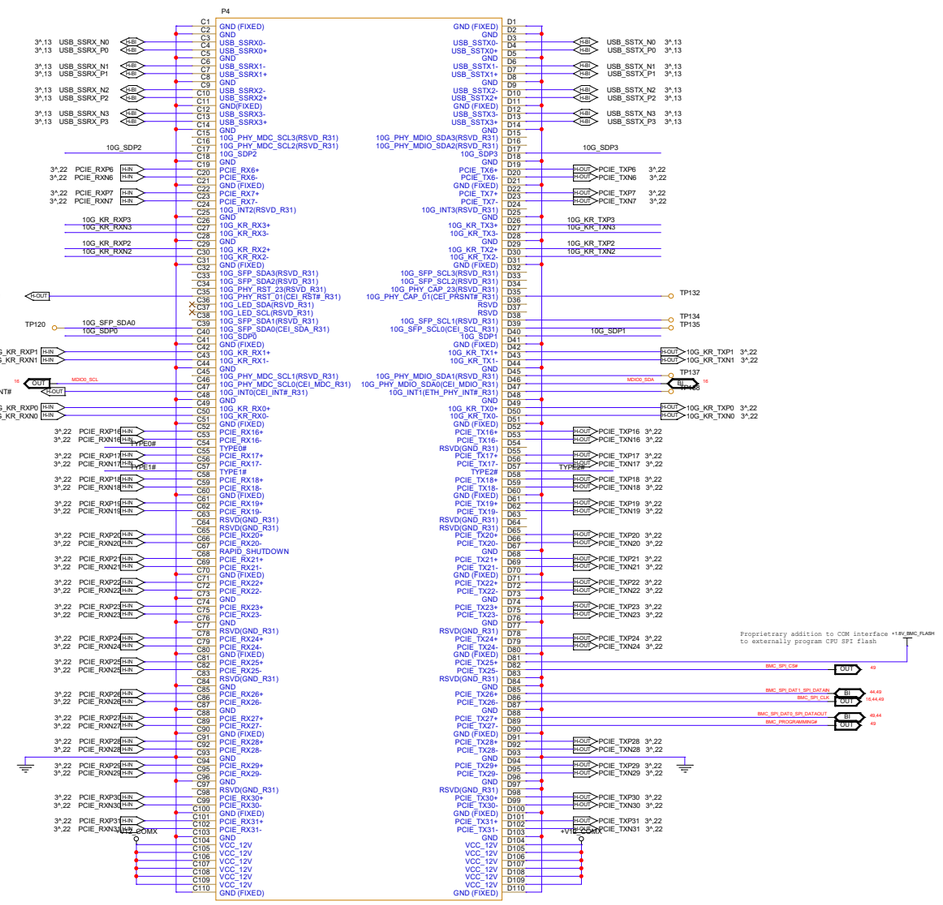
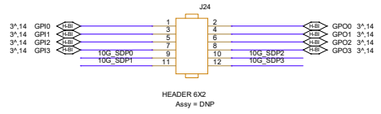
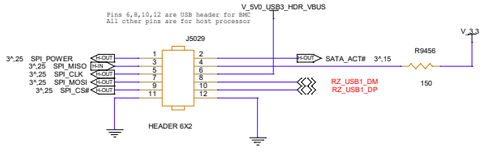
COM express type 7 AB connector

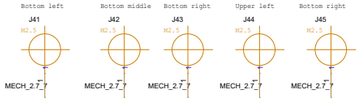


COM express type 7 CD connector









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Size	Title	Rev
D	COM express type 7 interface with headers	1.3
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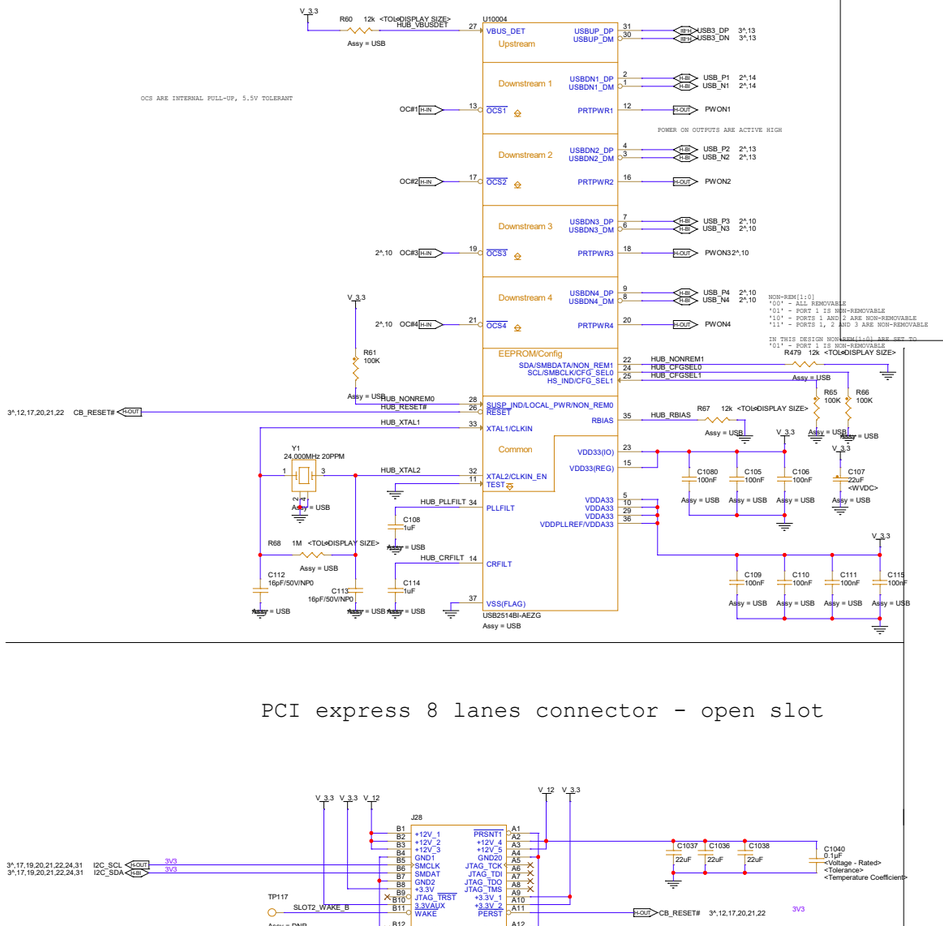
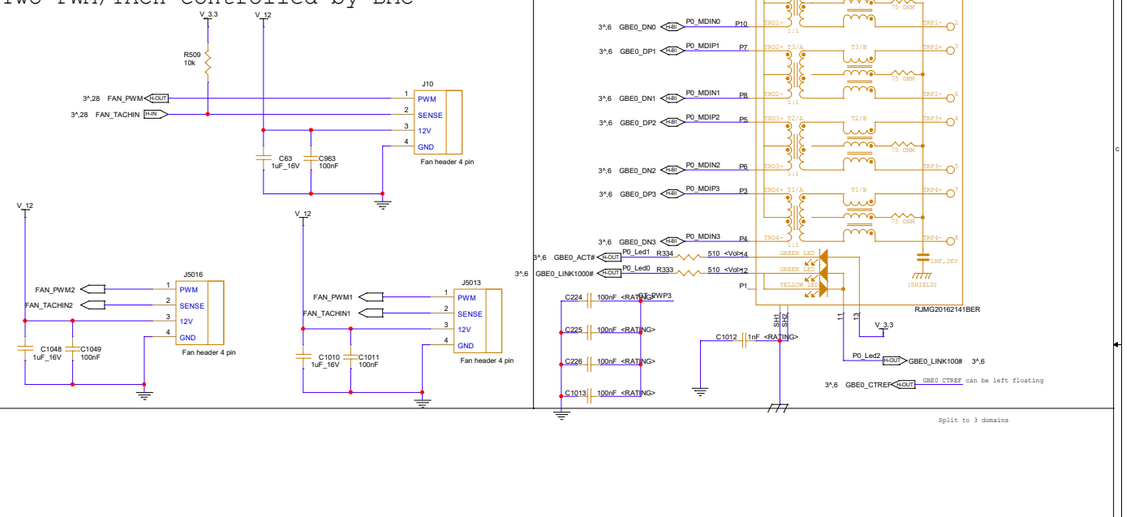
4 ports USB 2.0 hub

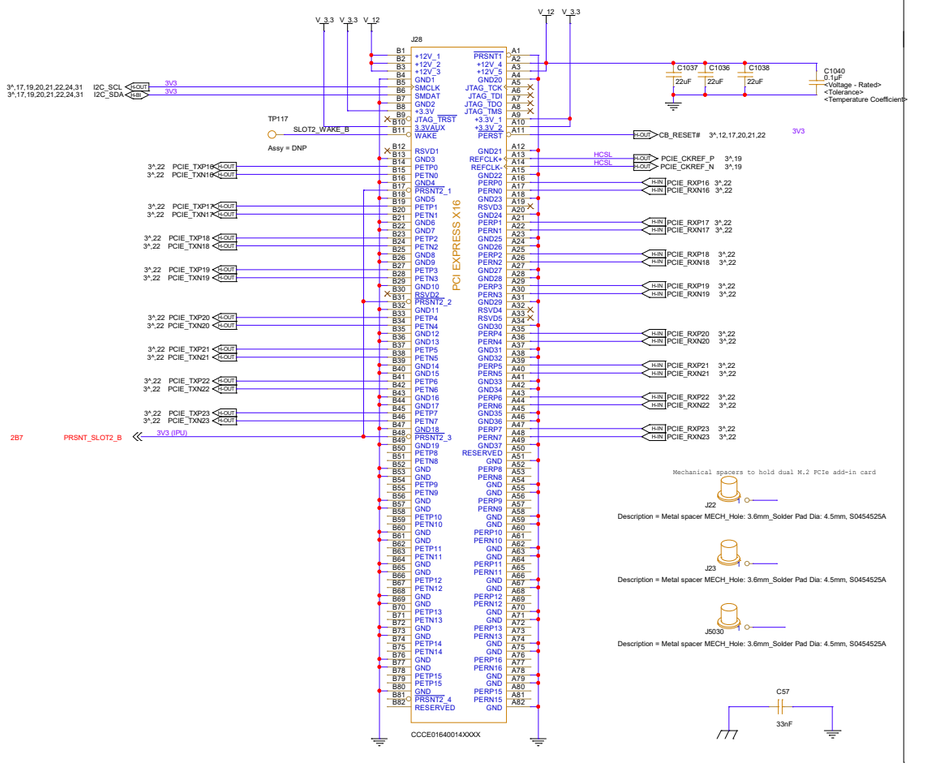


3 x SATA gen 3.0 connectors

3 x Standard 4 pin FAN headers
One PWM/TACH from host processor.
Two PWM/TACH controlled by BMC



PCI express 8 lanes connector - open slot



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Size	Title	Rev
D	PCIe, SATA, NVME, FANs, RJ45	1.3
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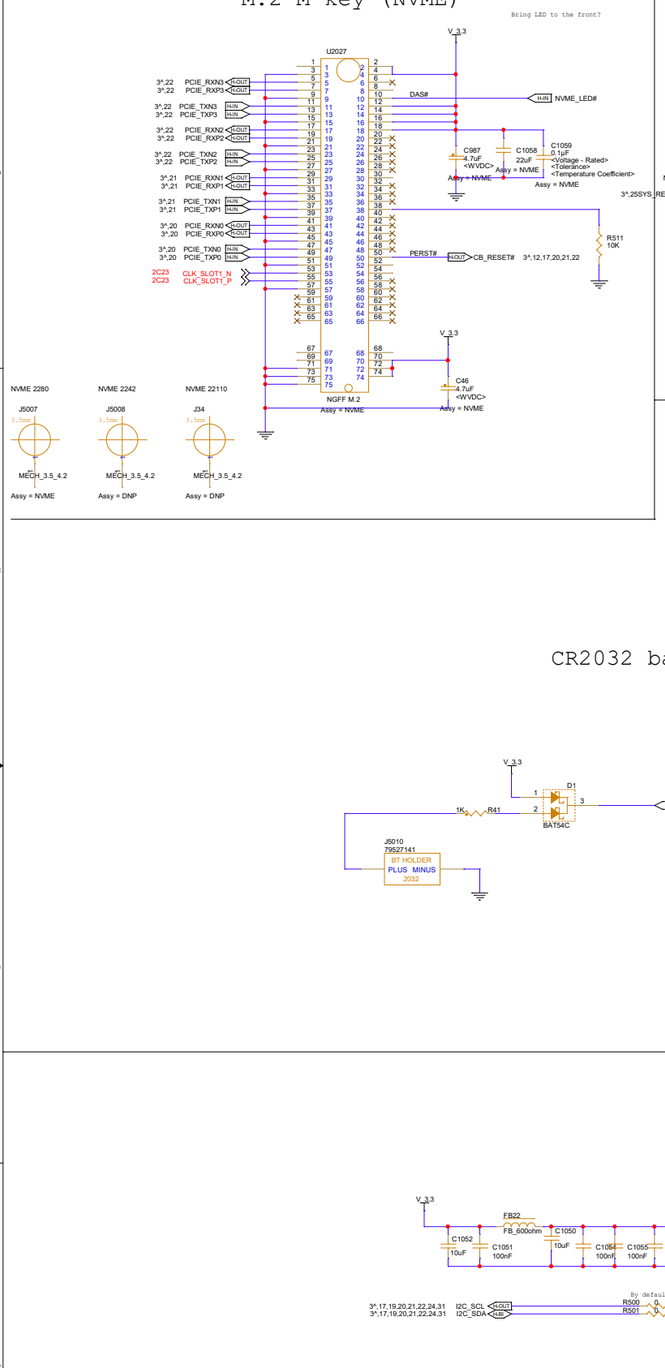
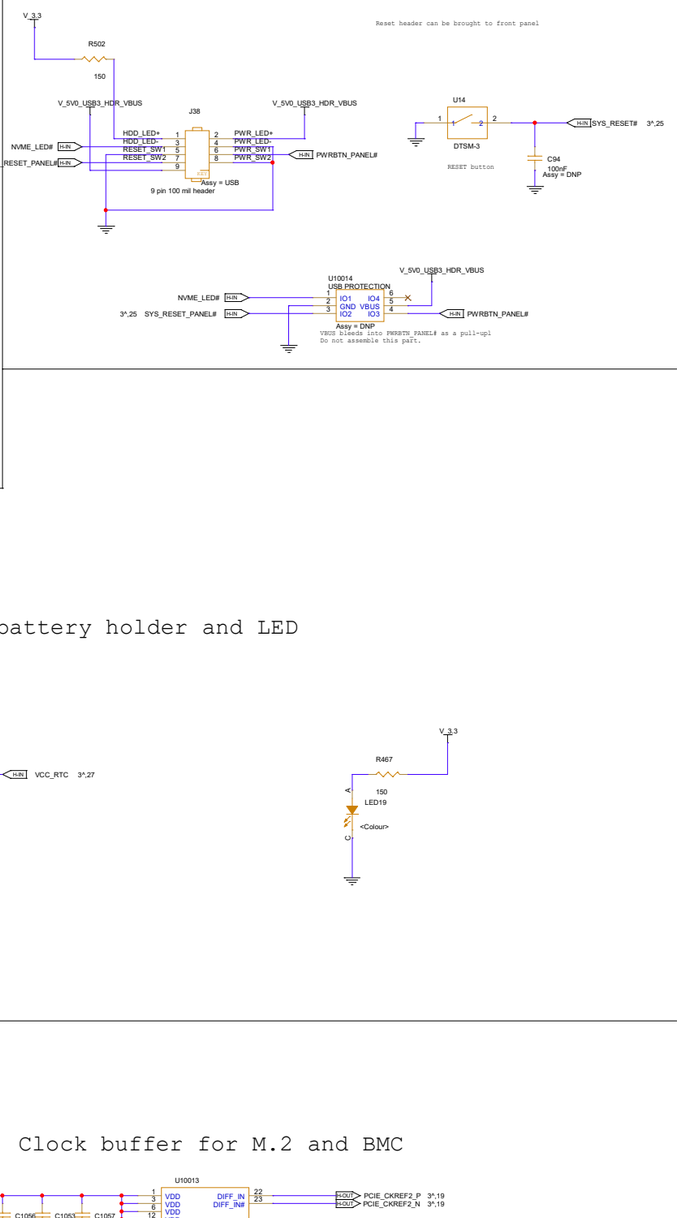
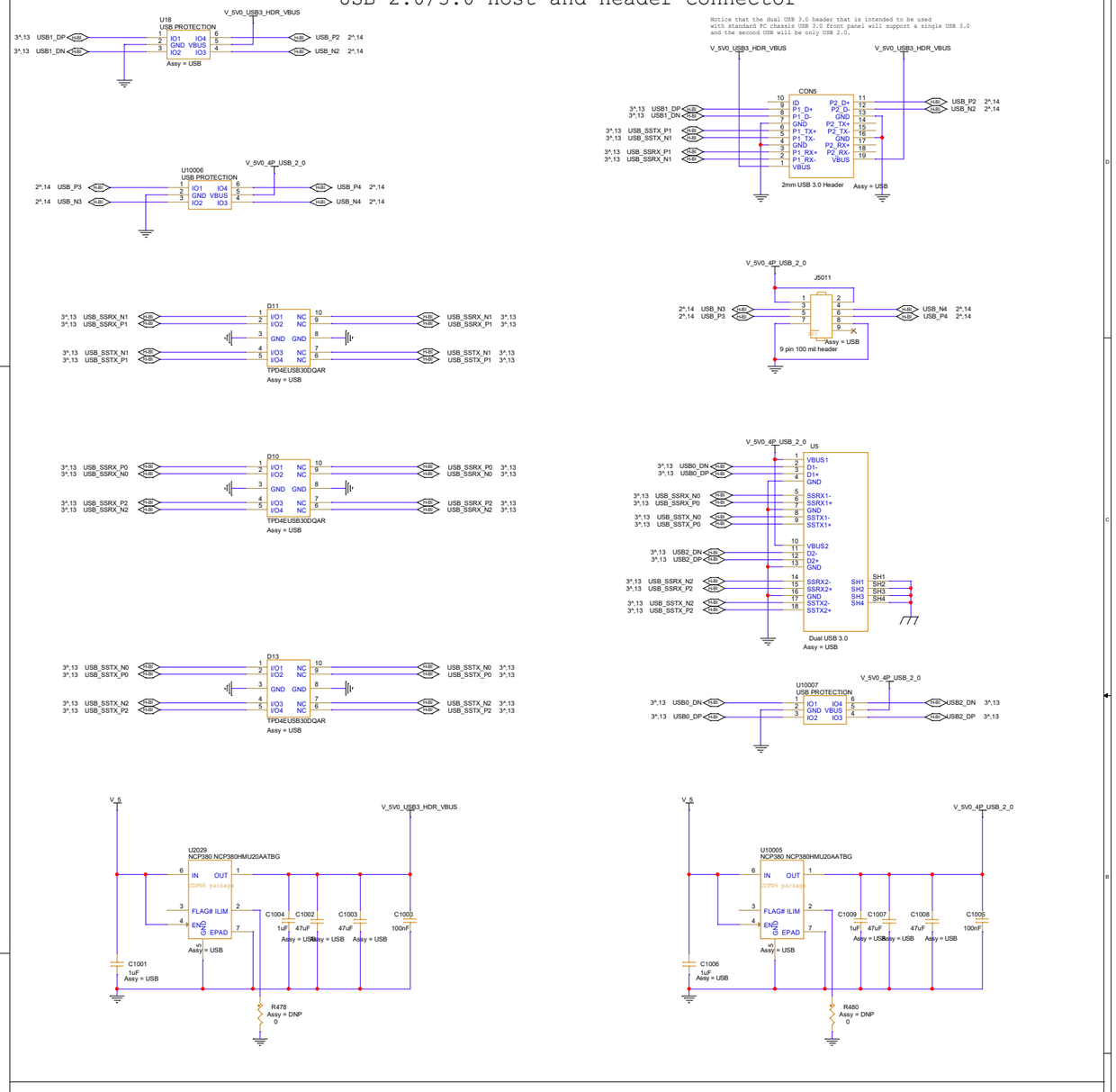
M.2 M key (NVME)



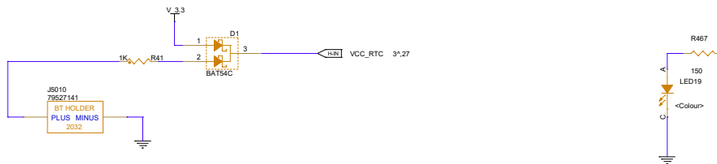
Reset button and header



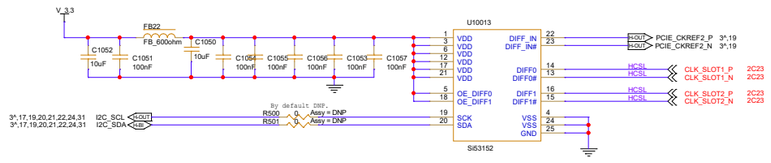
USB 2.0/3.0 host and header connector



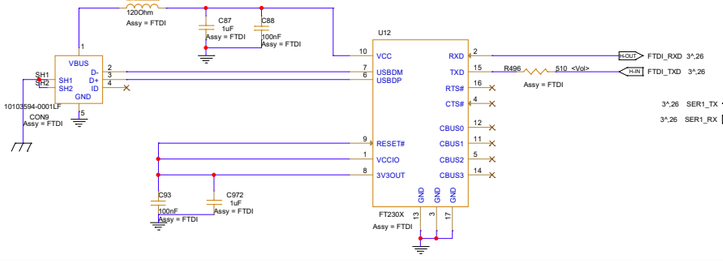
CR2032 battery holder and LED



Clock buffer for M.2 and BMC



Onboard micro USB to serial console



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Size	Title	Rev
D	NVME, USB serial, USB connectors	1.3
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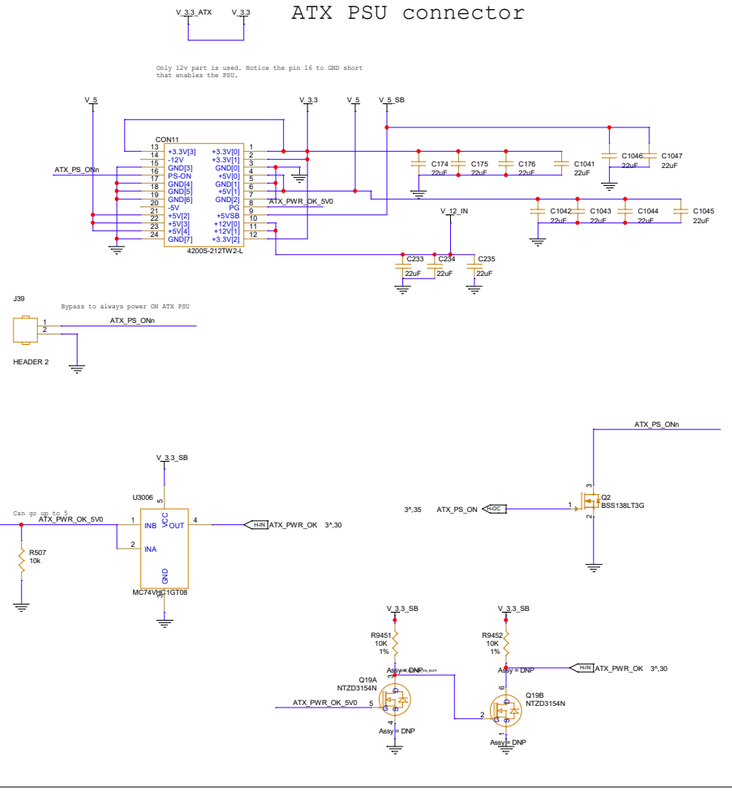
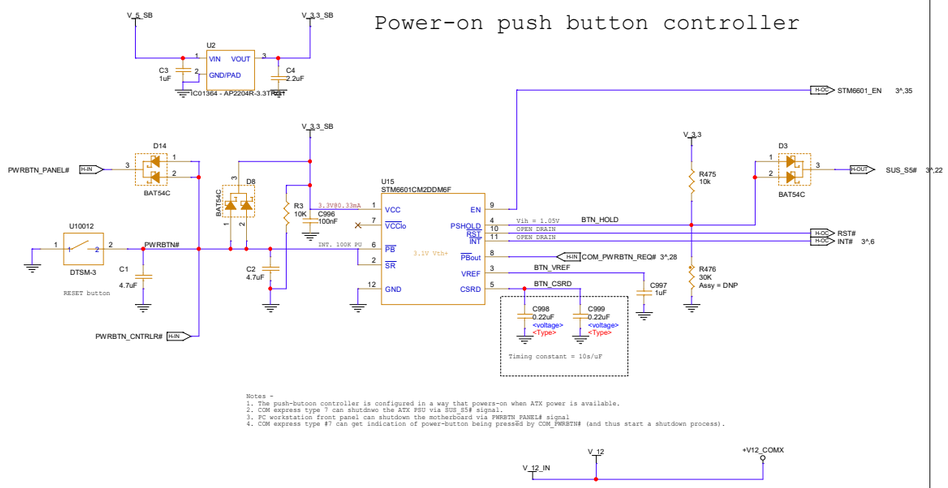
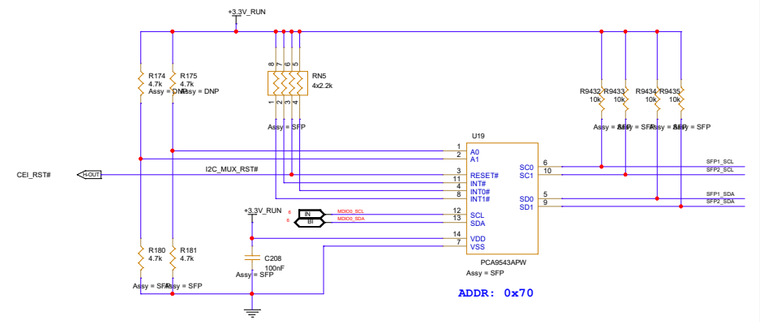
ATX PSU connector

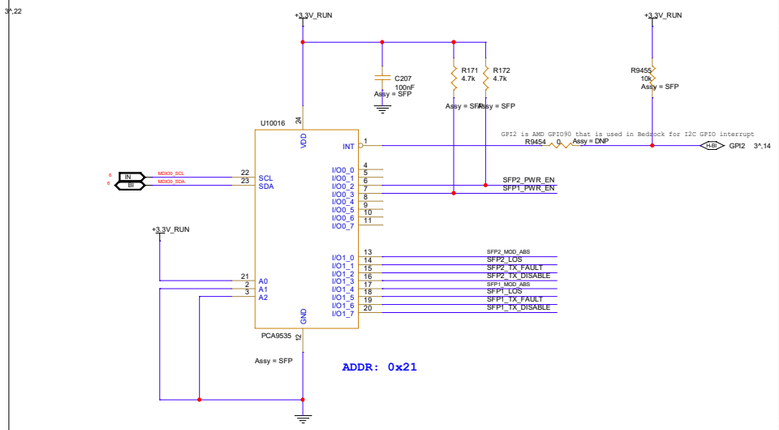


Power-on push button controller

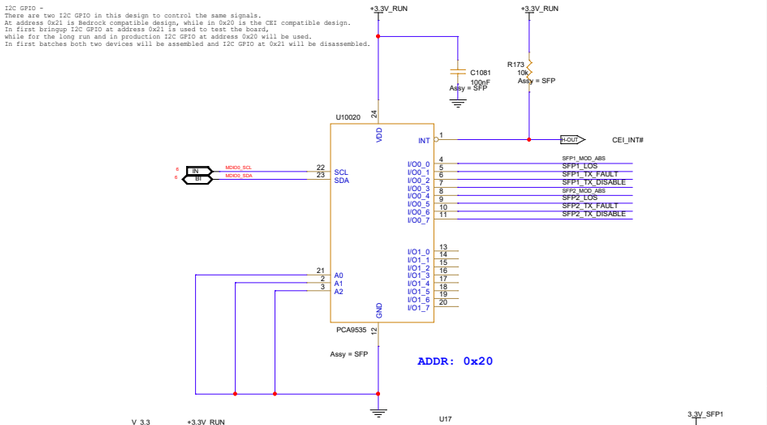


Notes -
1. The push-butoon controller is configured in a way that powers-on when ATX power is available.
2. COM express type 7 can shutdown the ATX PSU via SUS_S5# signal.
3. PC workstation front panel can shutdown the motherboard via PWRBTN_PANEL# signal
4. COM express type #7 can get indication of power-button being pressed by COM_PWRBTN# (and thus start a shutdown process).

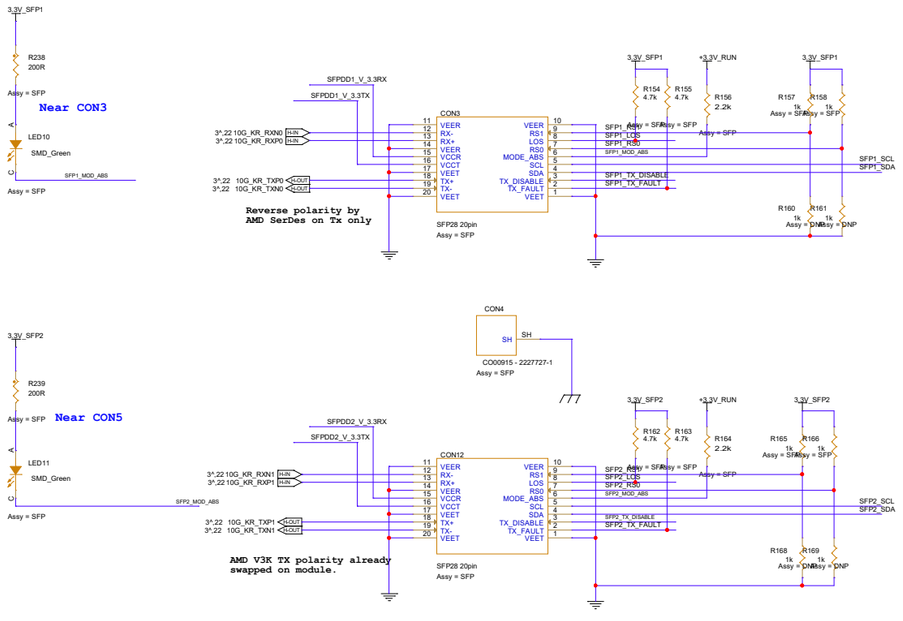




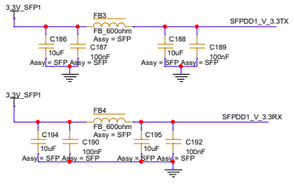
I2C GPIO -
There are two I2C GPIO in this design to control the same signals.
At address 0x21 is Bedrock compatible design, while in 0x20 is the CEI compatible design.
In first bringup I2C GPIO at address 0x21 is used to test the board,
while for the long run and in production I2C GPIO at address 0x20 will be used.
In first batches both two devices will be assembled and I2C GPIO at 0x21 will be disassembled.



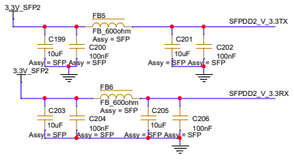
2x SFP+

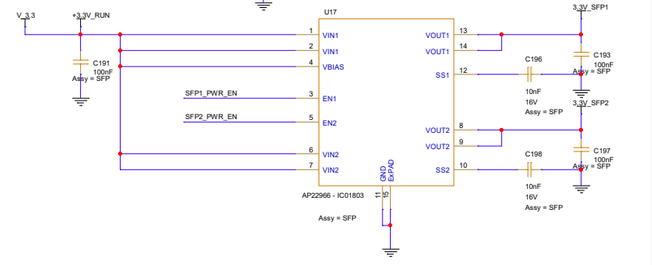


SFP TRANSCEIVER Power



SFP TRANSCEIVER Power





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Size	Title	Rev
D	ATX, SFP+ connectors, power button controller	1.3
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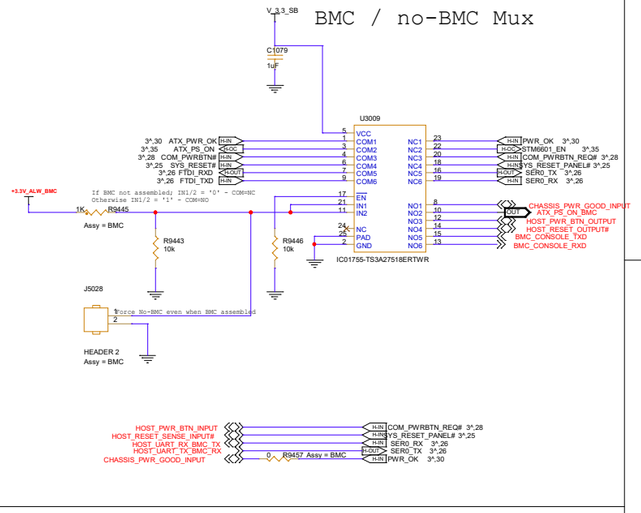
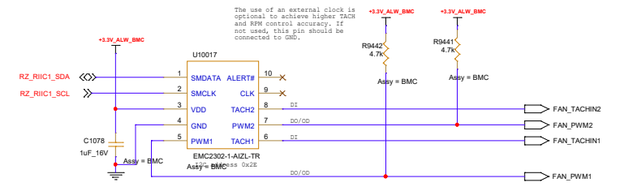
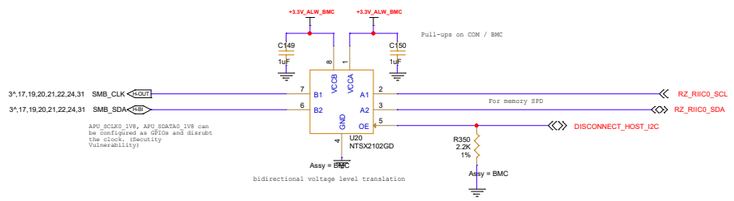
BMC / no-BMC Mux



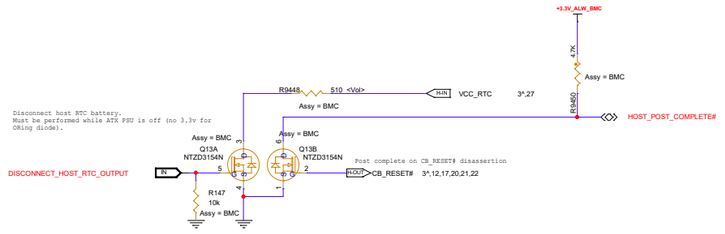
BMC Fan controller



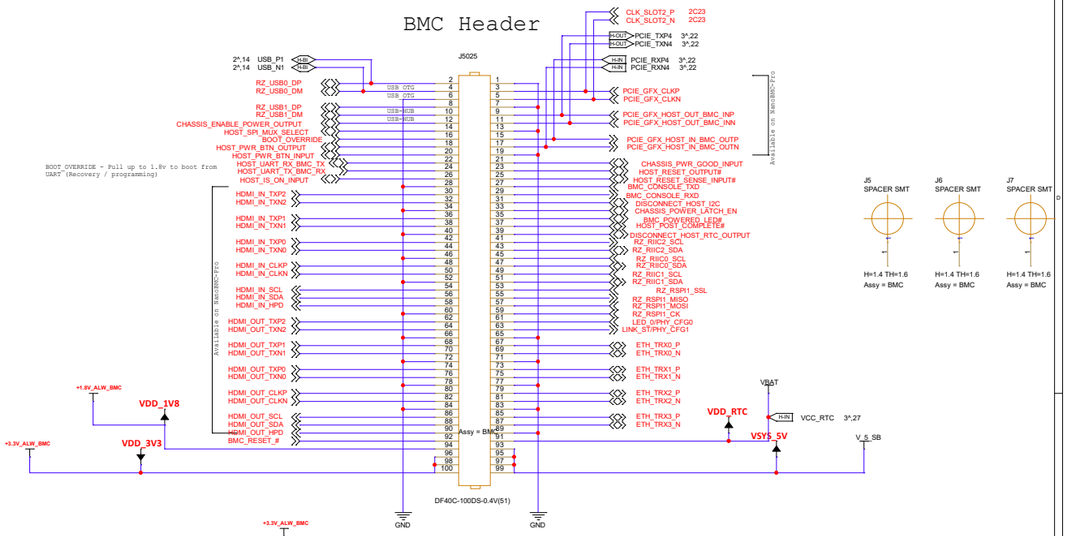
Host I2C Communication



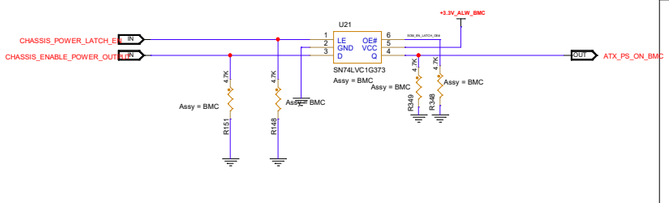
Misc features



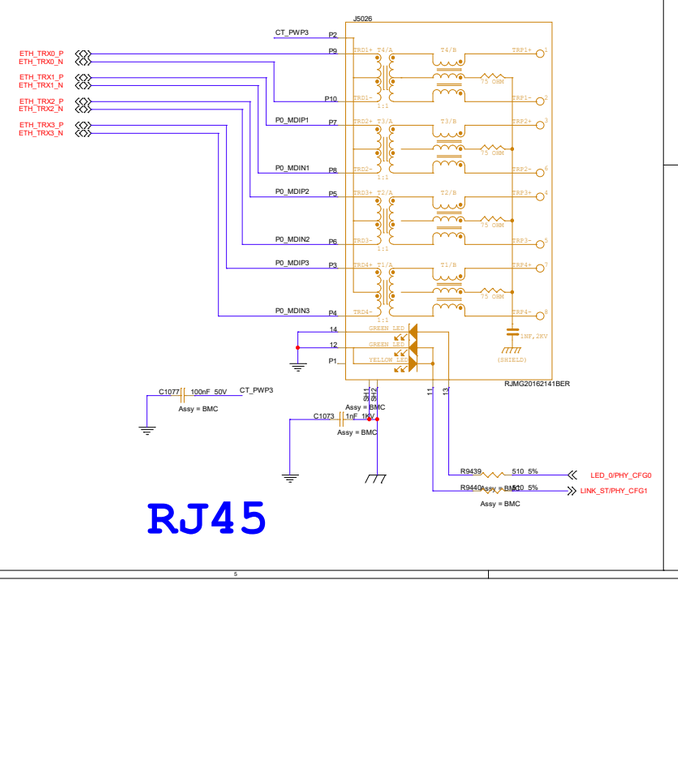
BMC Header



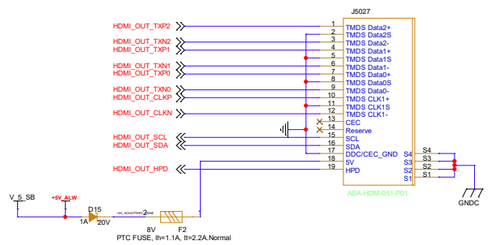
ATX PSU control



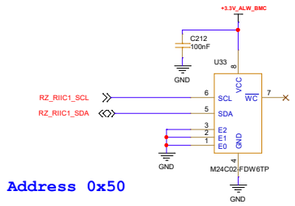
BMC 1Gbp Ethernet connector



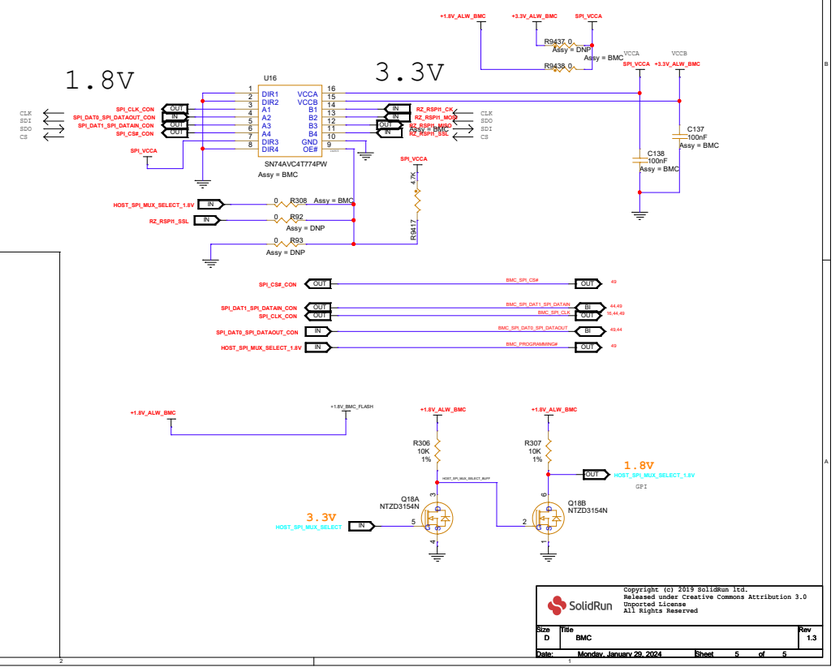
BMC HDMI Out



FRU I2C



Level shifter to 1.8v to program COM SPI flash



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Size	Title	Rev
D	BMC	1.3

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