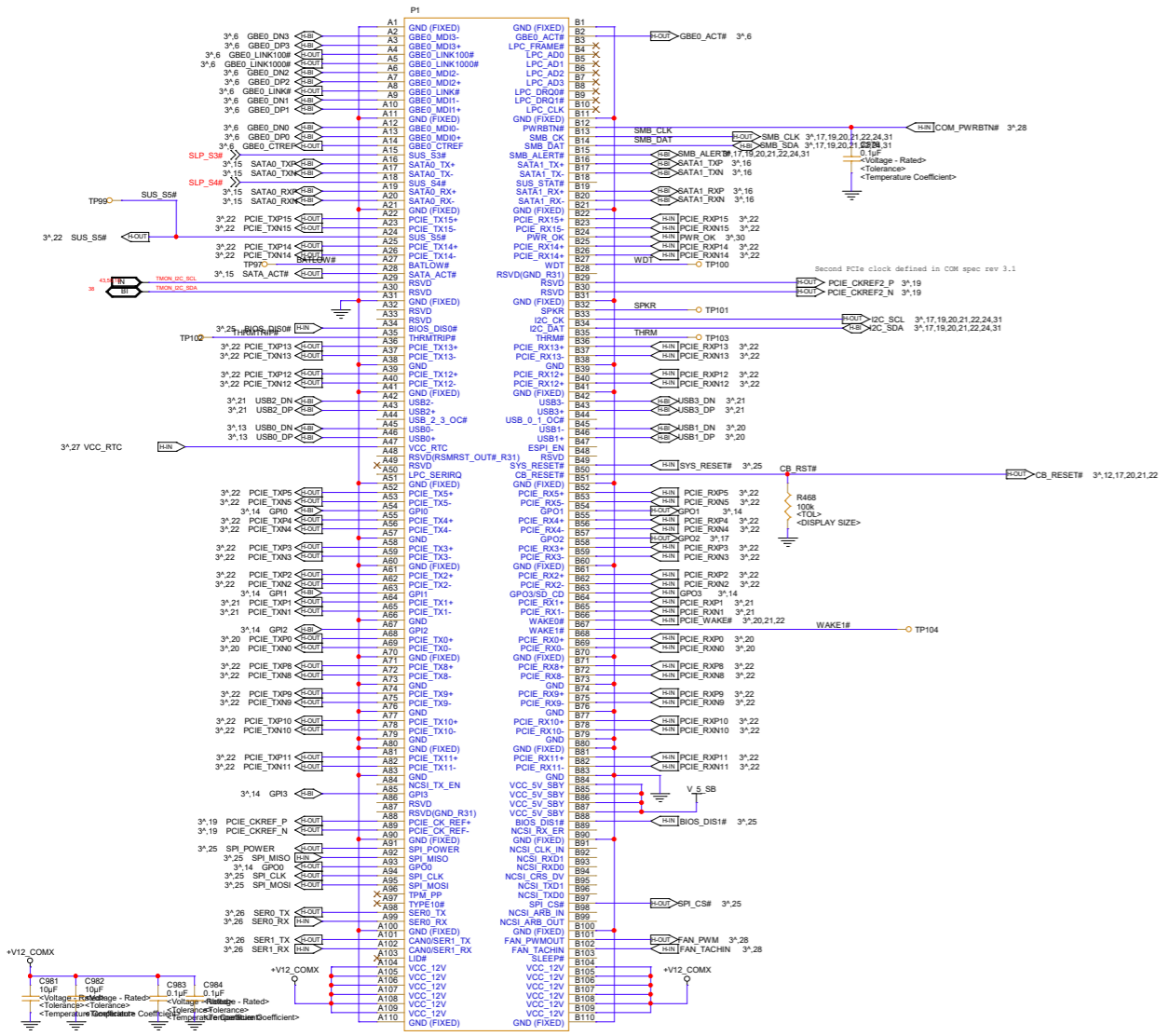
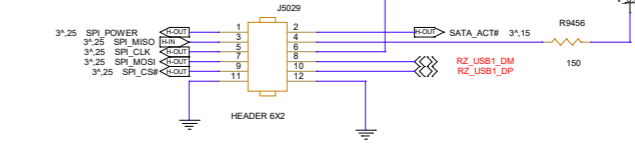
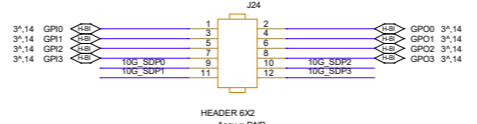
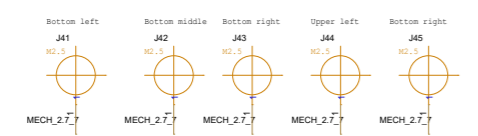
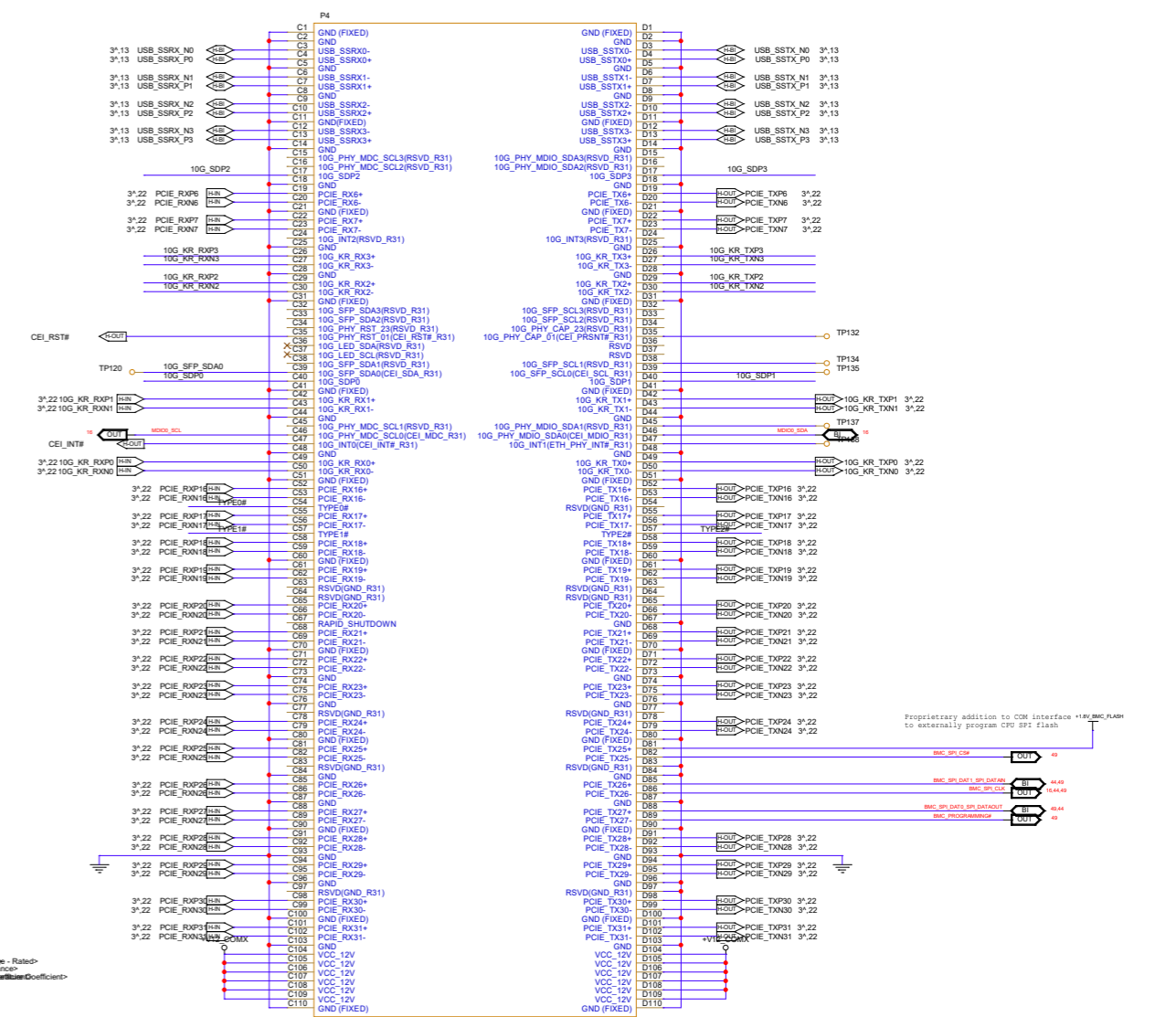


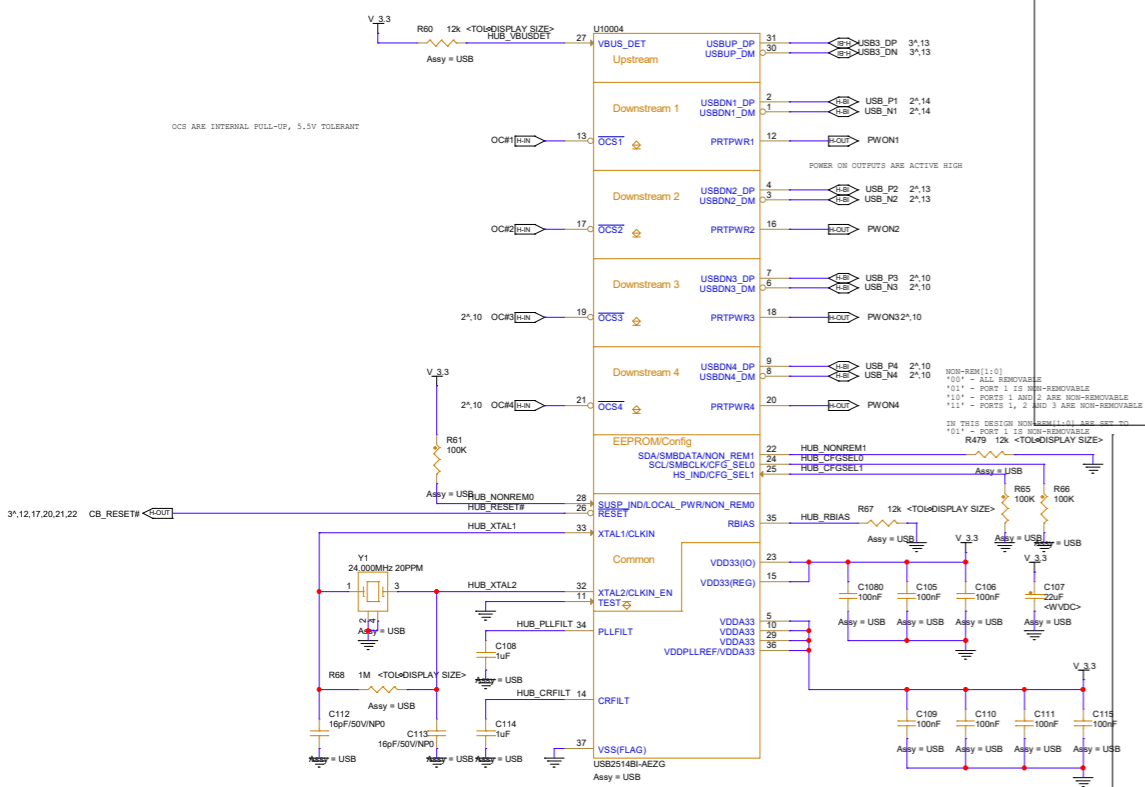
COM express type 7 AB connector



COM express type 7 CD connector



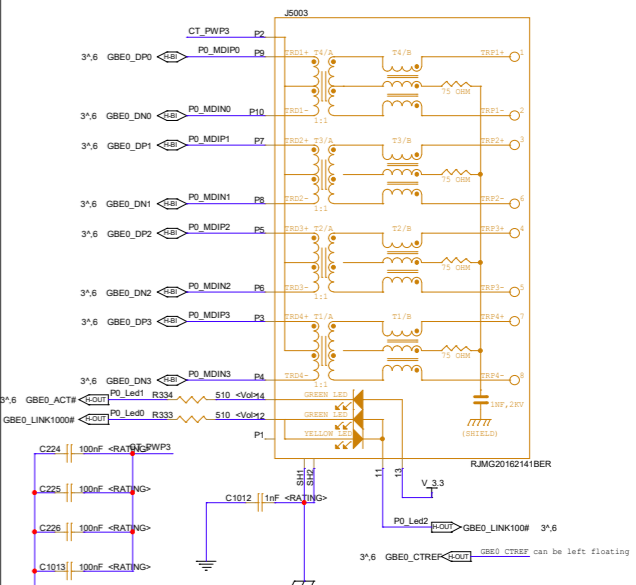
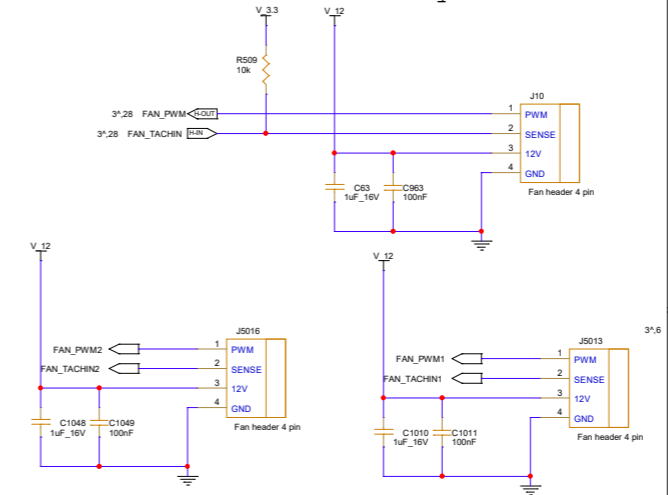
4 ports USB 2.0 hub



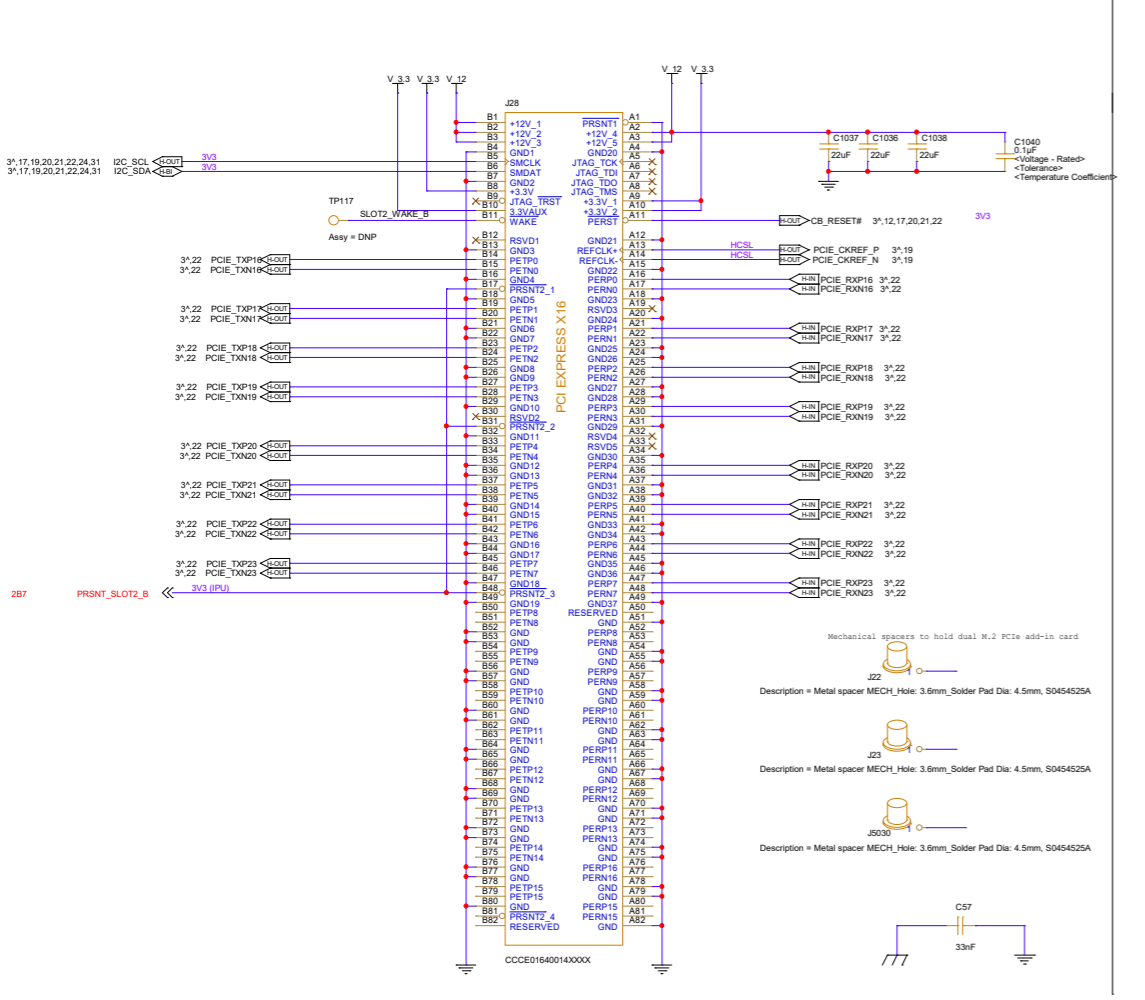
3 x SATA gen 3.0 connectors



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

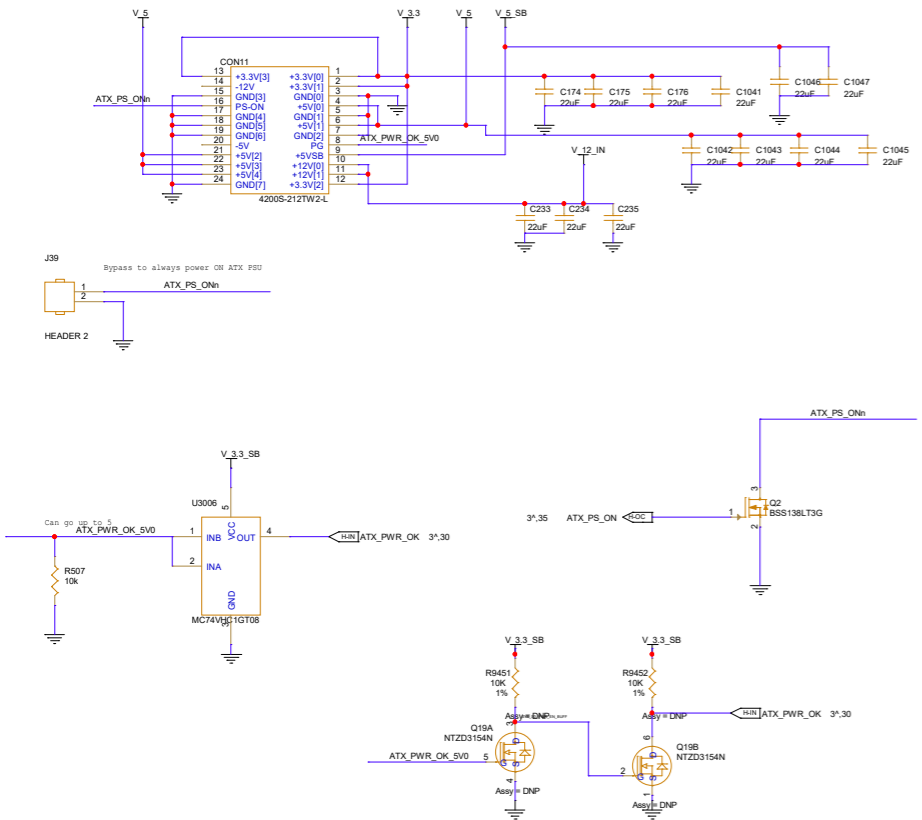


PCI express 8 lanes connector - open slot

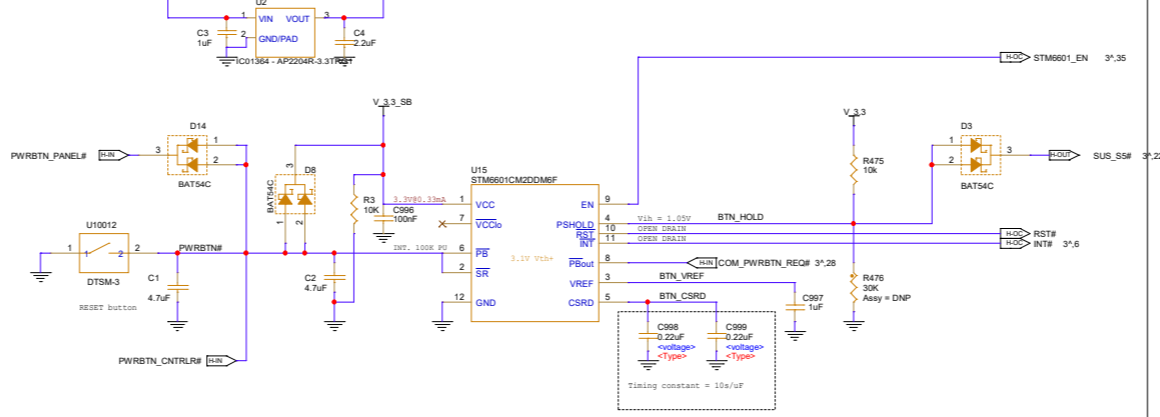


ATX PSU connector

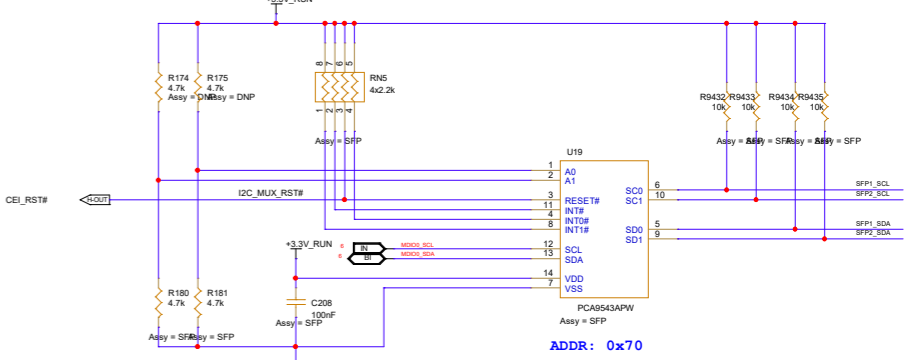
Only 12v part is used. Notice the pin 16 to GND short that enables the PSU.



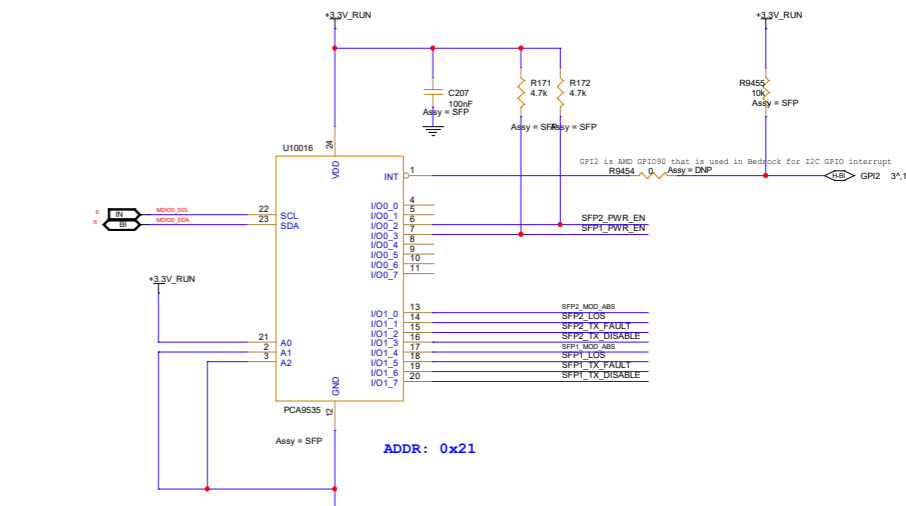
Power-on push button controller



- Notes -
- 1. The push-button controller is configured in a way that power-on when ATX power is available.
 - 2. COM express type 1 can shutdown the ATX PSU via SFF_3.3 signal.
 - 3. PC workstation front panel can shutdown the motherboard via PWRBTN_PANEL signal.
 - 4. COM express type 41 can get indication of power-button being pressed by COM_PWRBTN signal (and thus start a shutdown process).



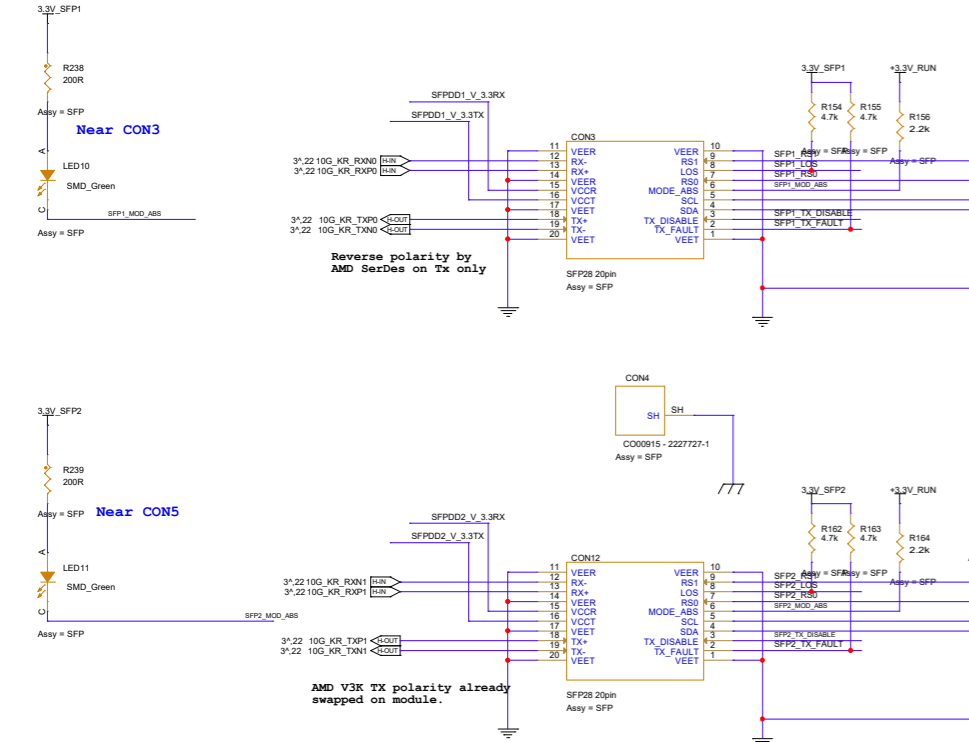
ADDR: 0x70



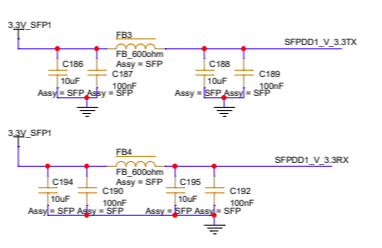
ADDR: 0x21

I2C GP10 - There are two I2C GP10 in this design to control the same signals. At address 0x21 is Bedrock compatible design, while in 0x20 is the COM compatible design. In first design I2C GP10 at address 0x21 is used to take the control, while for the long run and in production I2C GP10 at address 0x20 will be used. In first batches both two devices will be assembled and I2C GP10 at 0x21 will be disassembled.

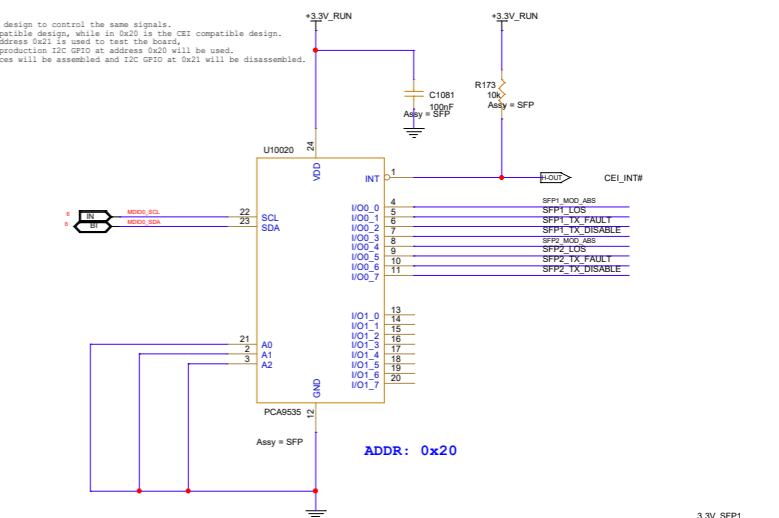
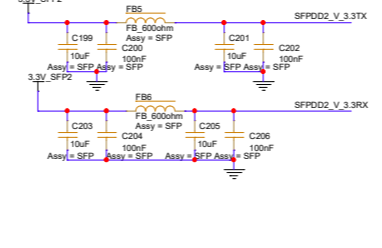
2x SFP+



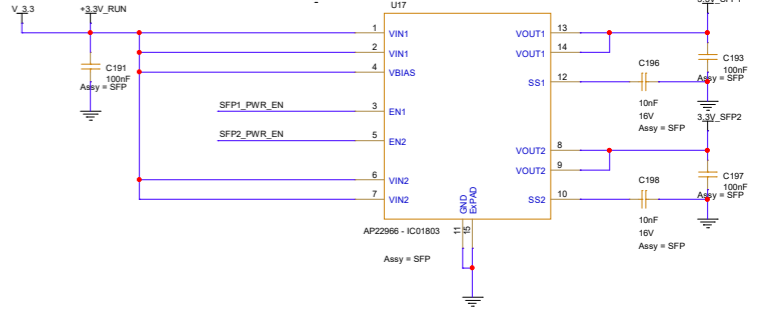
SFP TRANSCEIVER Power



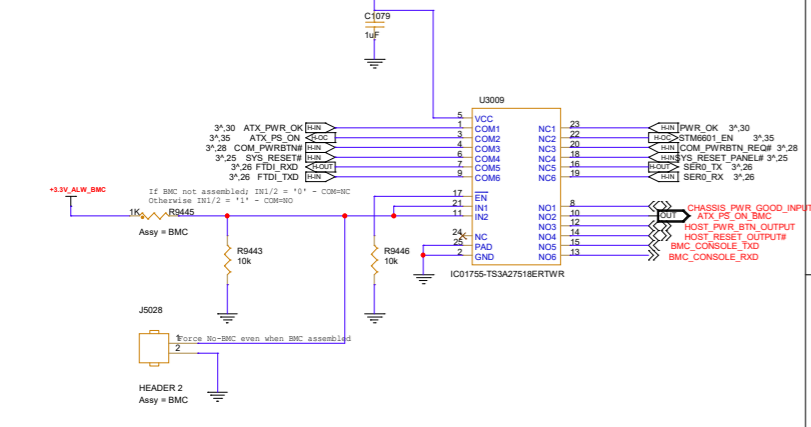
SFP TRANSCEIVER Power



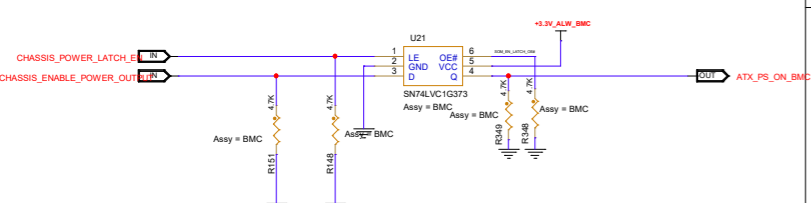
ADDR: 0x20



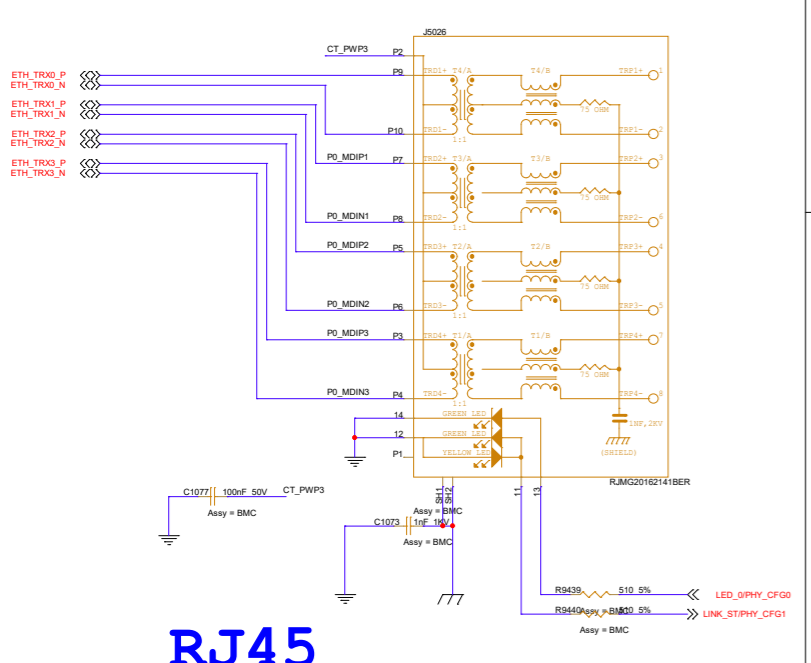
BMC / no-BMC Mux



ATX PSU control

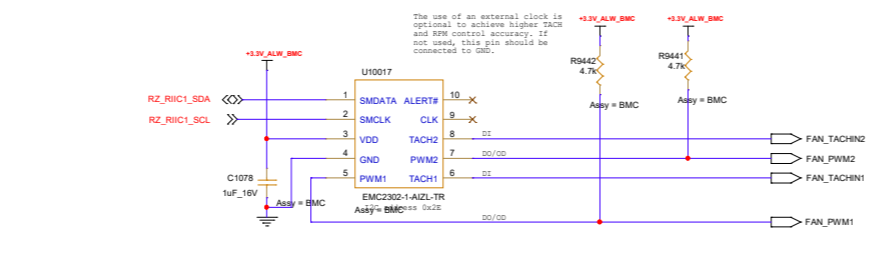


BMC 1Gbp Ethernet connector

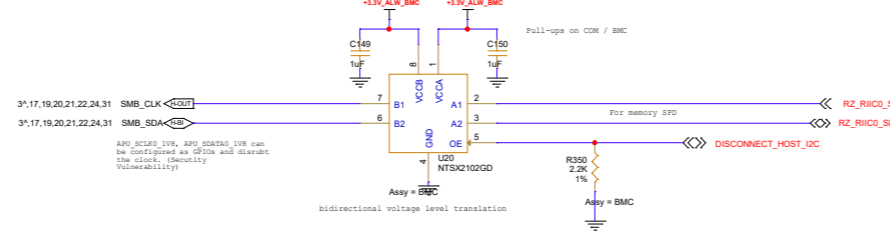


RJ45

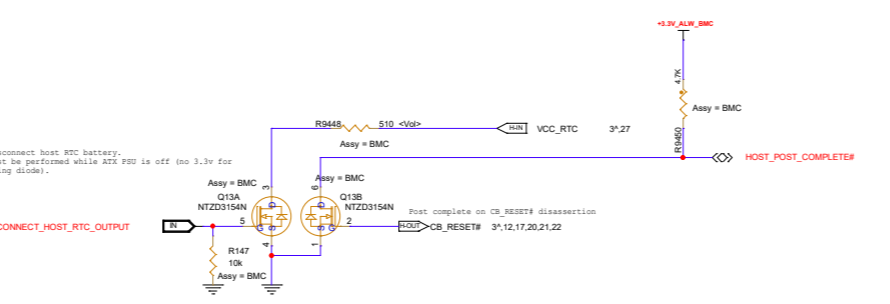
BMC Fan controller



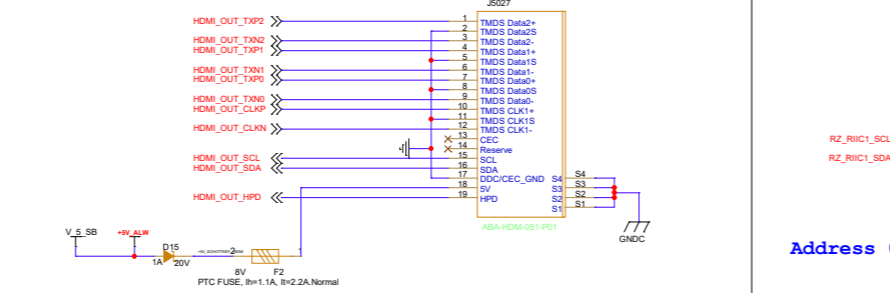
Host I2C Communication



Misc features

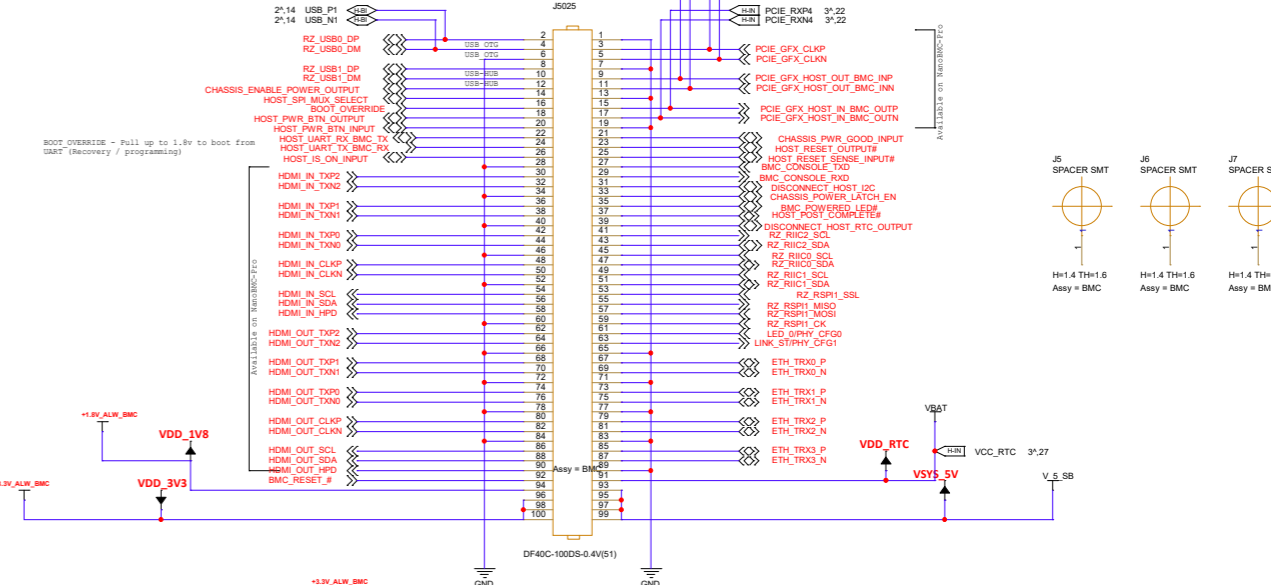


BMC HDMI Out



Address 0x50

BMC Header



BOOT OVERRIDE = MD2
High => MD2: 1, MD1: 0, MD0: 1 -- UART Boot
Low => MD2: 0, MD1: 0, MD0: 1 -- Default = Boot from eMMC
boot_override: 0 boot normally (eMMC)
boot_normally: 1 boot override

Level shifter to 1.8v to program COM SPI flash

