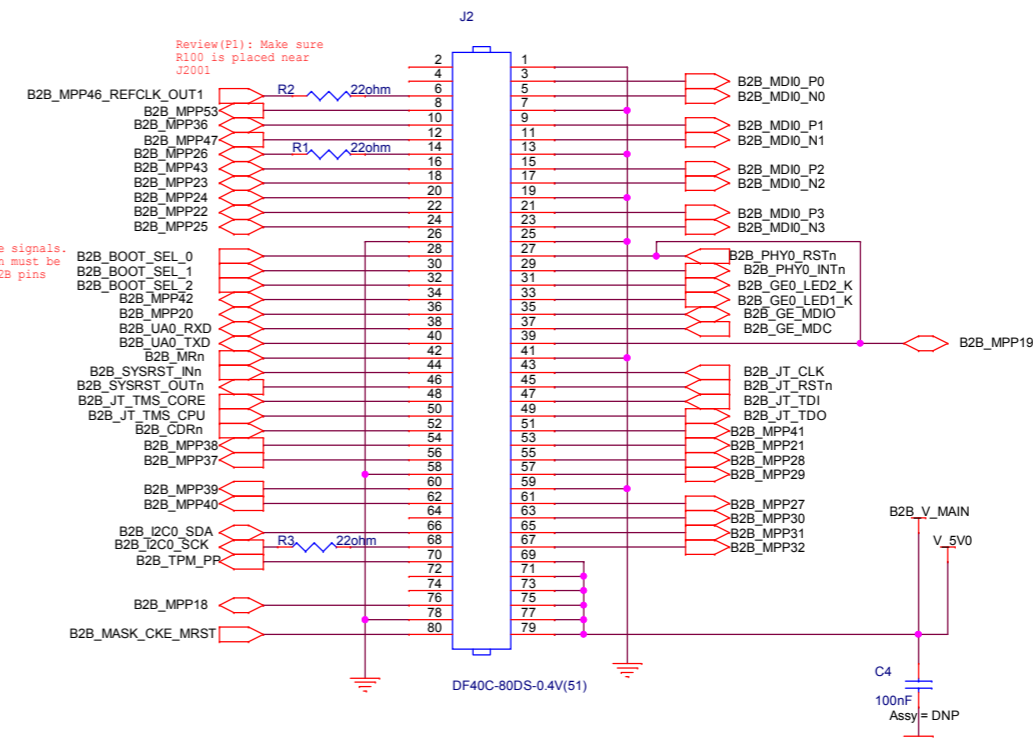
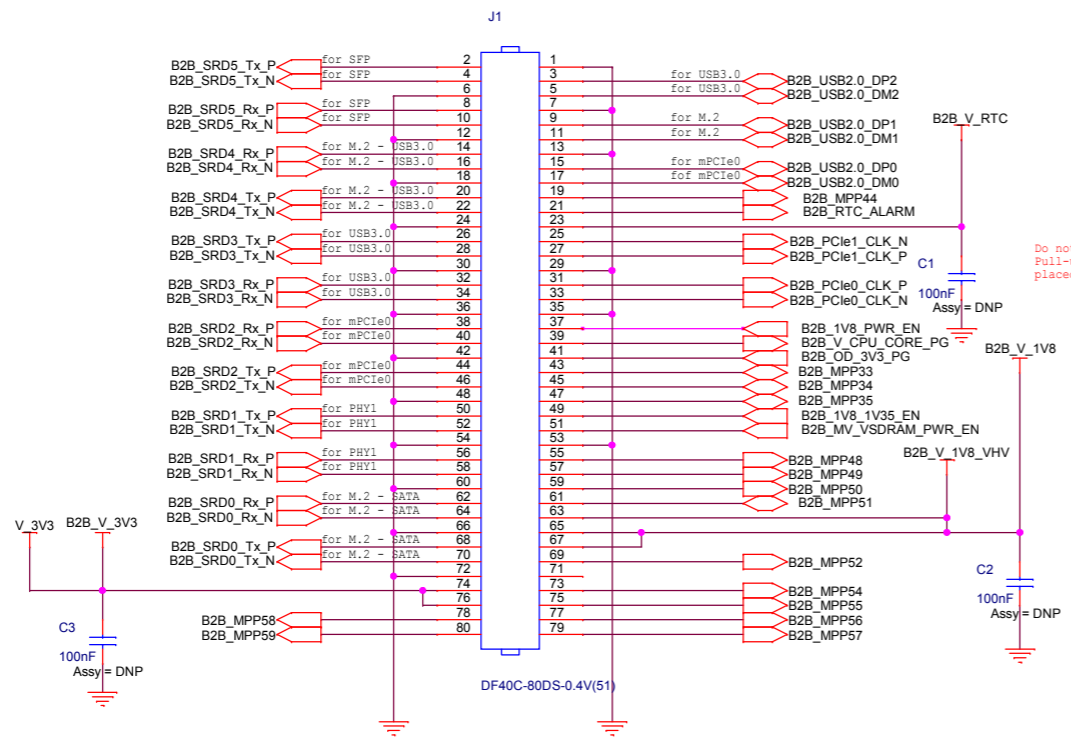


To Extract BOM:

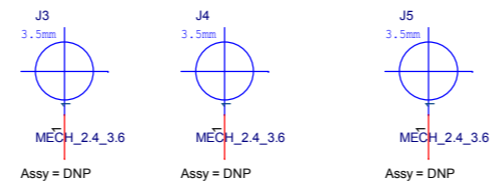
-----  
Item\tQuantity\tAssemblyOption\tPart\tPCB Footprint\tDescription\tDataSheet\tManufacturer\tManufacturer P/N\tSolidRun P/N\tReference  
{Item}\t{Quantity}\t{ASSY}\t{Value}\t{PCB Footprint}\t{DESCRIPTION}\t{Datasheet}\t{Manufacturer}\t{Manufacturer P/N}\t{SolidRun P/N}\t{Reference}

To Extract BOM:

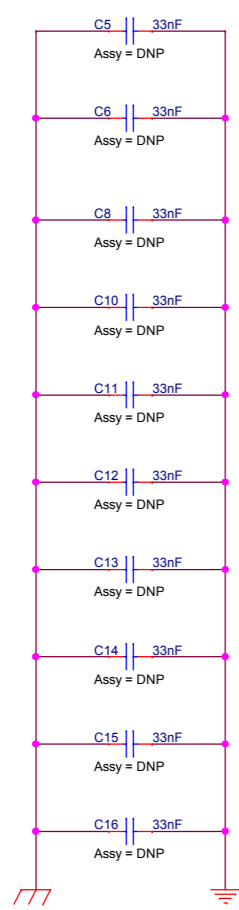
-----  
Item\tQuantity\tAssemblyOption\tValue\tDescription\tManufacturer Name\tManufacturer P/N\tSolidRun P/N\tPCB Footprint\tReference  
{Item}\t{Quantity}\t{Assy}\t{Value}\t{DESCRIPTION}\t{Manufacturer Name}\t{Manufacturer P/N}\t{SolidRun P/N}\t{PCB Footprint}\t{Reference}



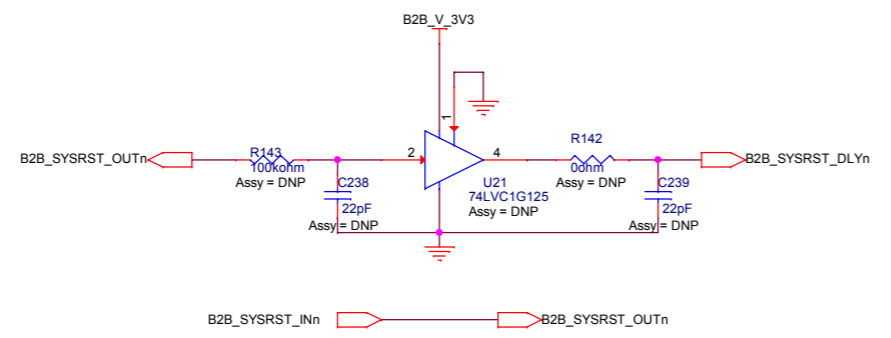
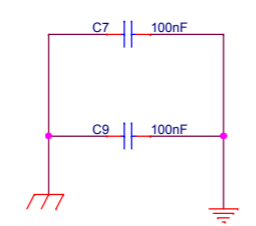
Four mechanical holes for the MicroSoM



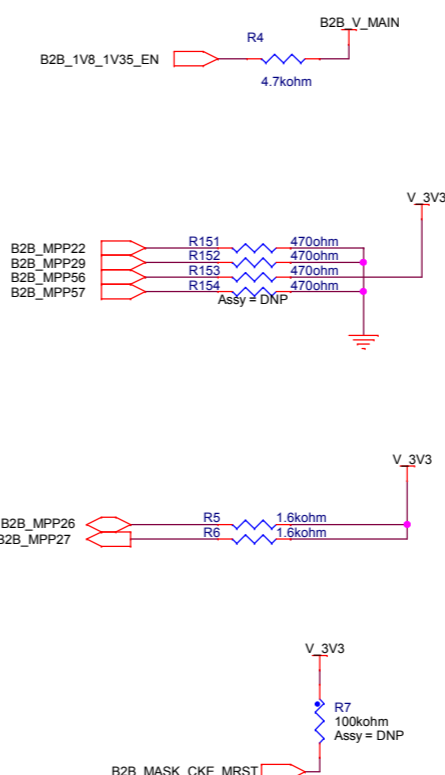
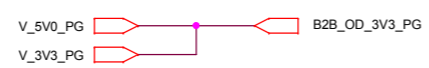
Bypass capacitors between GNDC and GND



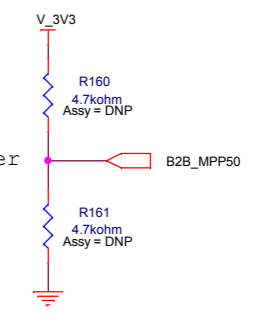
Bypass capacitors for MDIO passing underneath GNDC



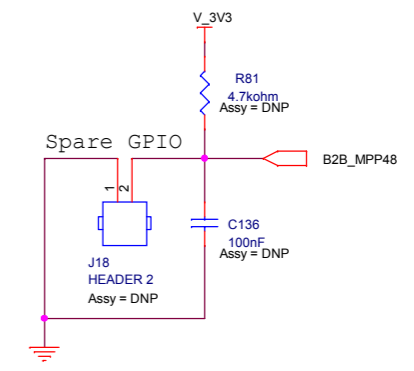
Carrier DC-DC PGOOD Signals will enable CPU DC-DC on uSoM. Signal is pulled up on uSoM.

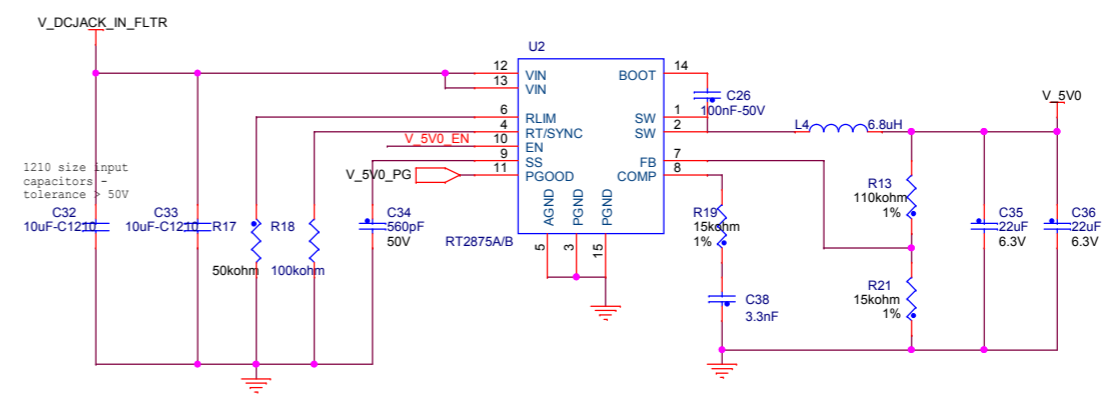
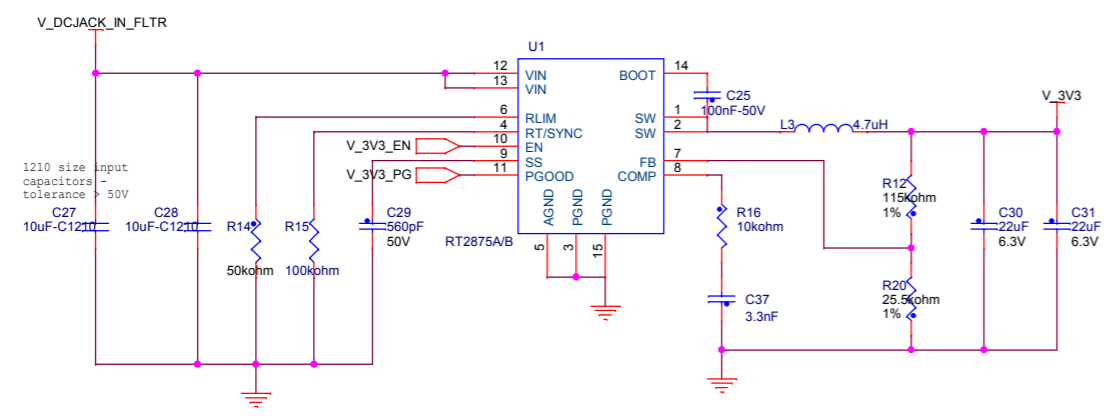
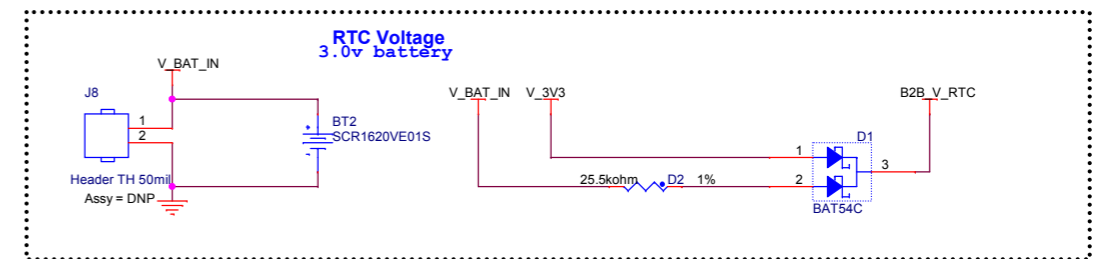
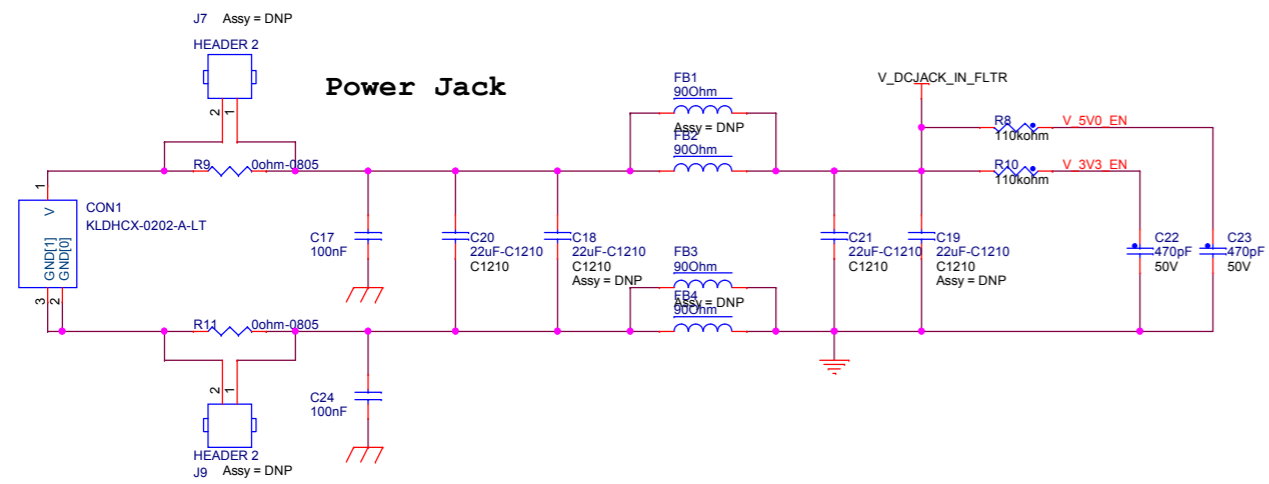


Board identifier

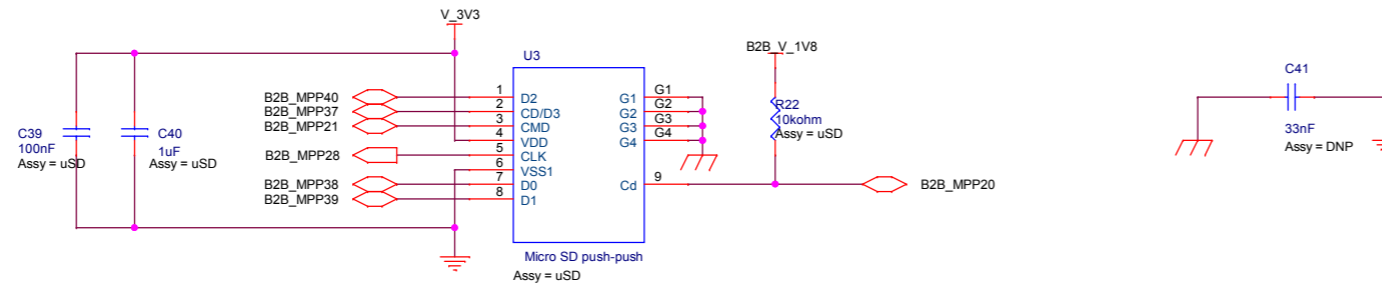


Spare GPIO



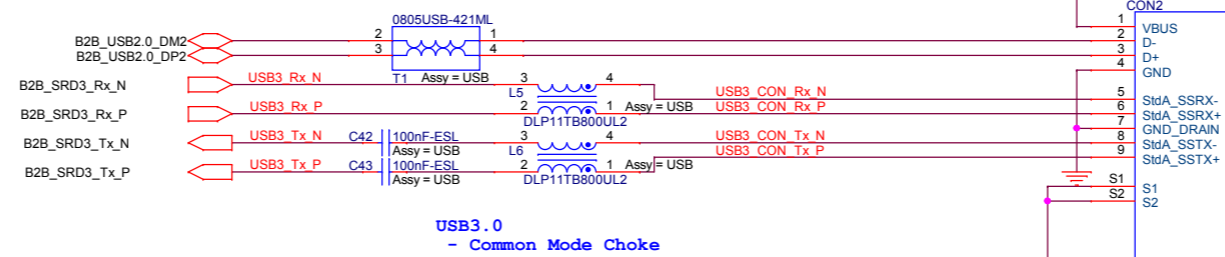


# uSD



USB2.0  
- Common Mode Choke

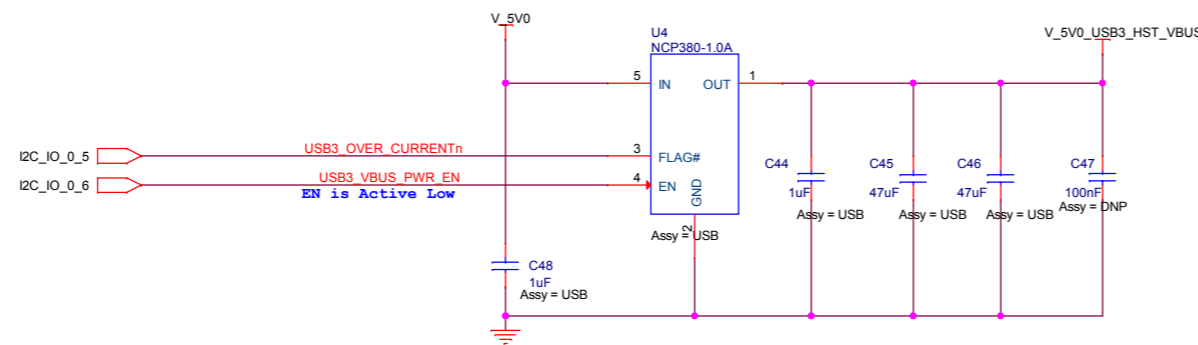
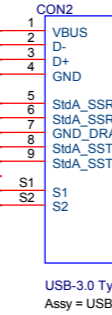
Connector side

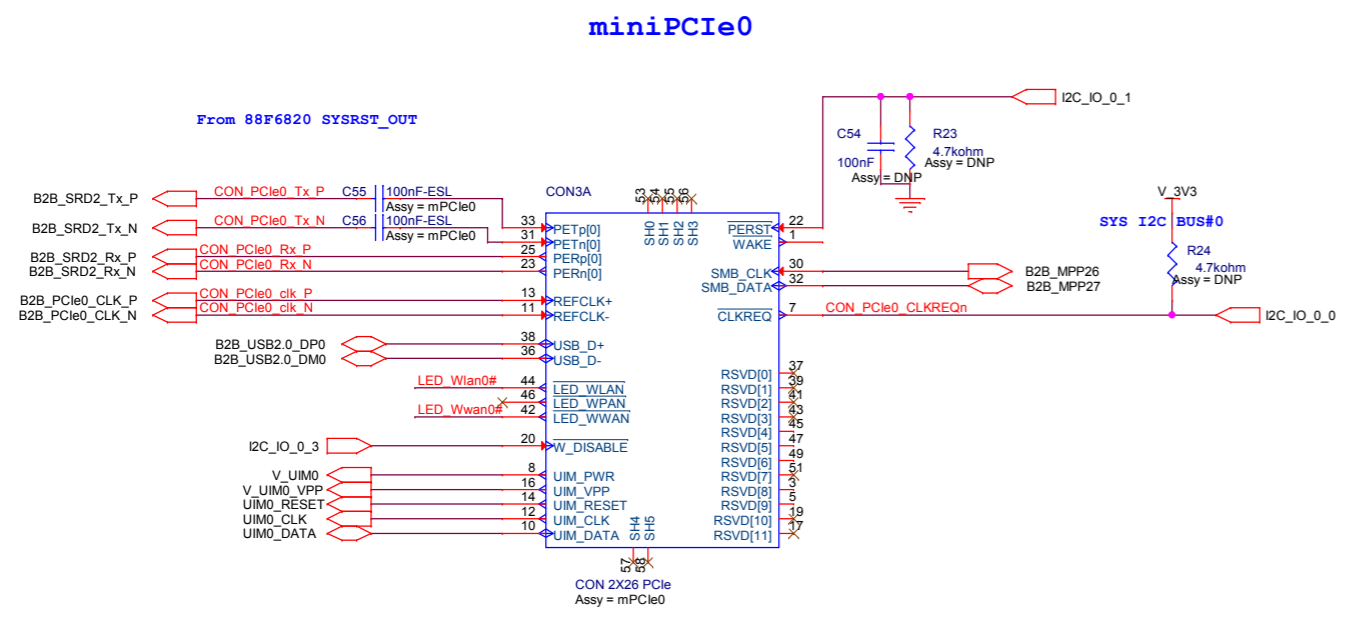


5v/1A Power out  
to USB3 device  
V\_5V0\_USB3\_HST\_VBUS

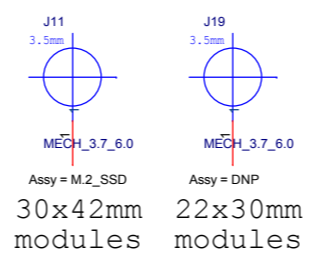
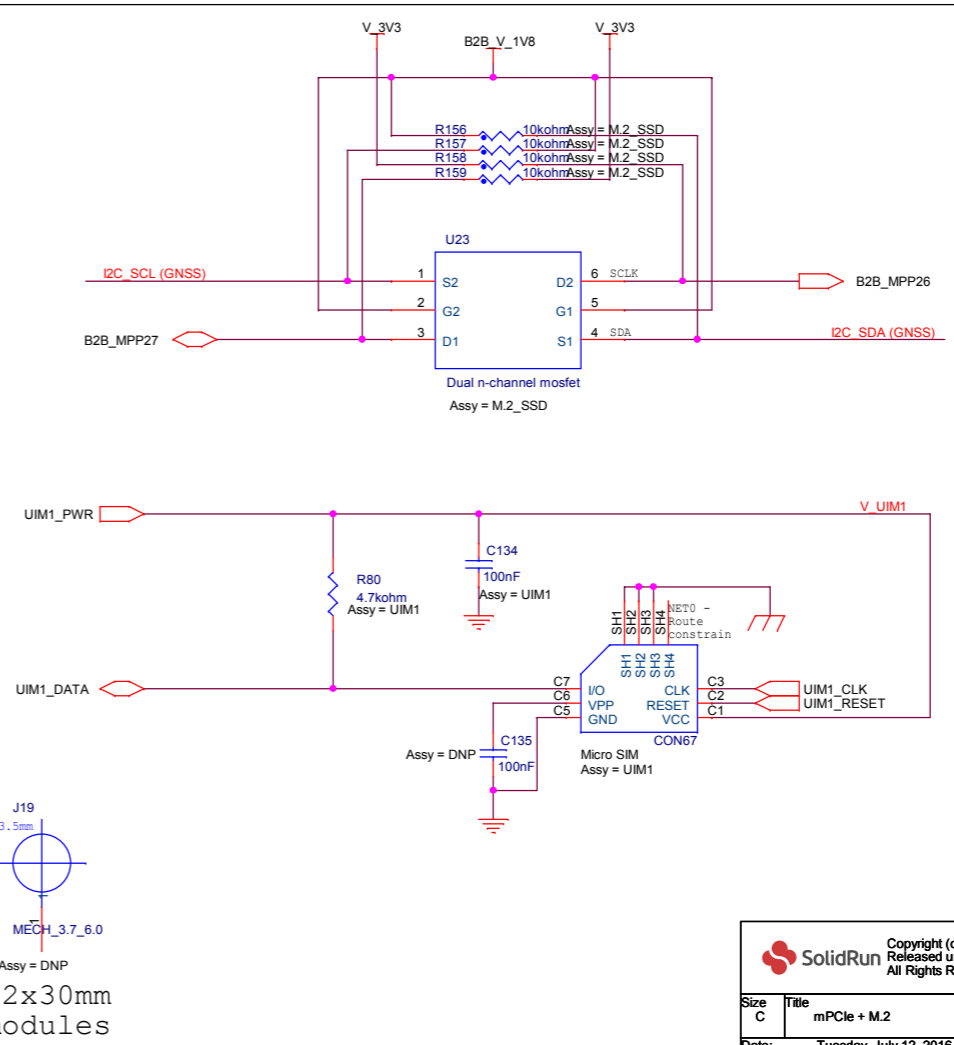
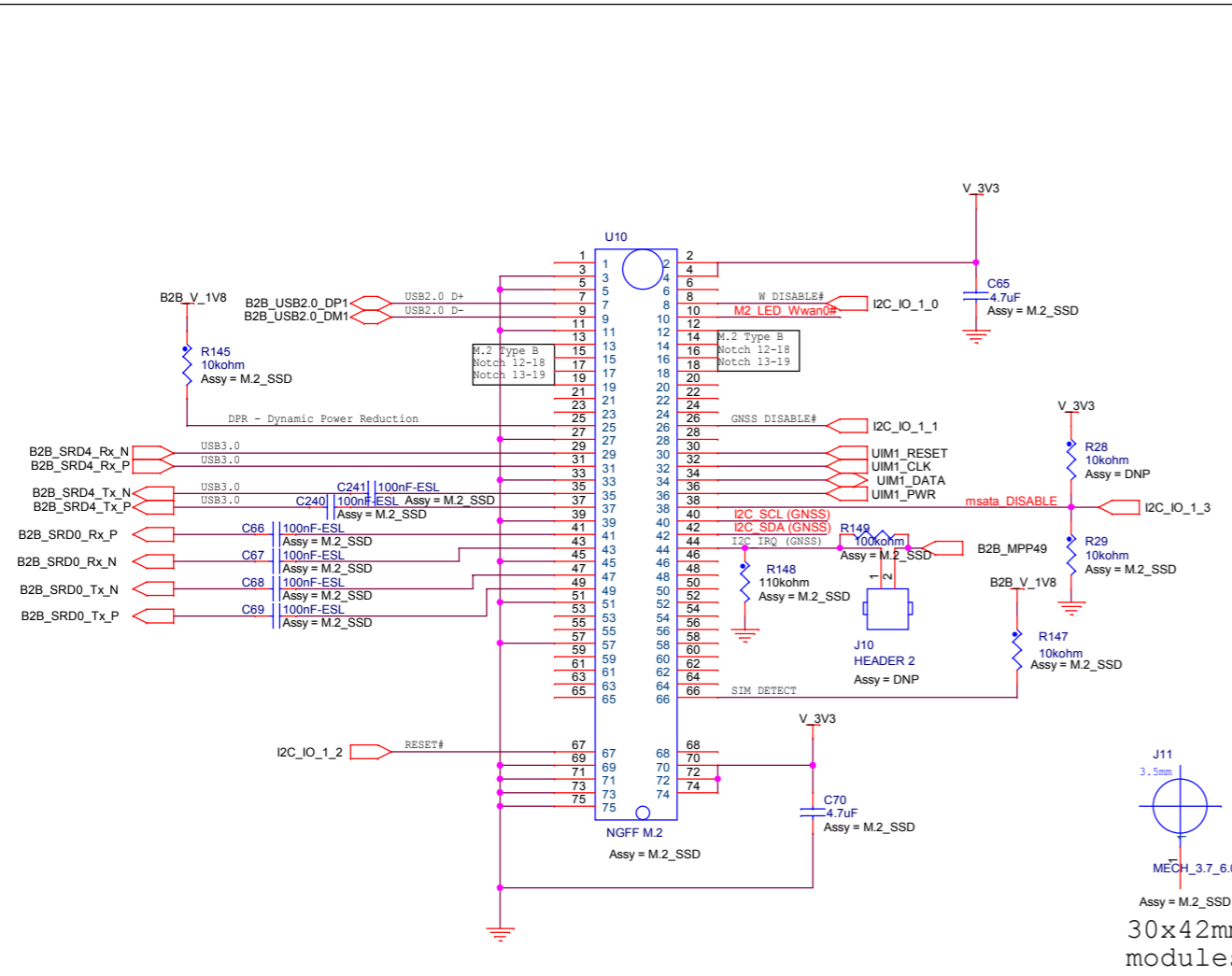
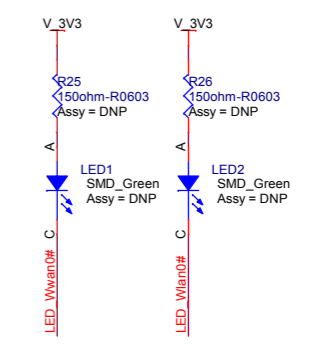
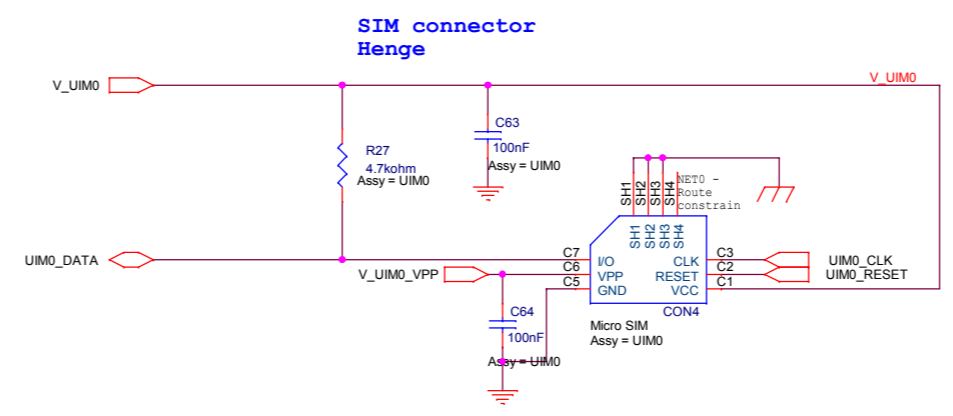
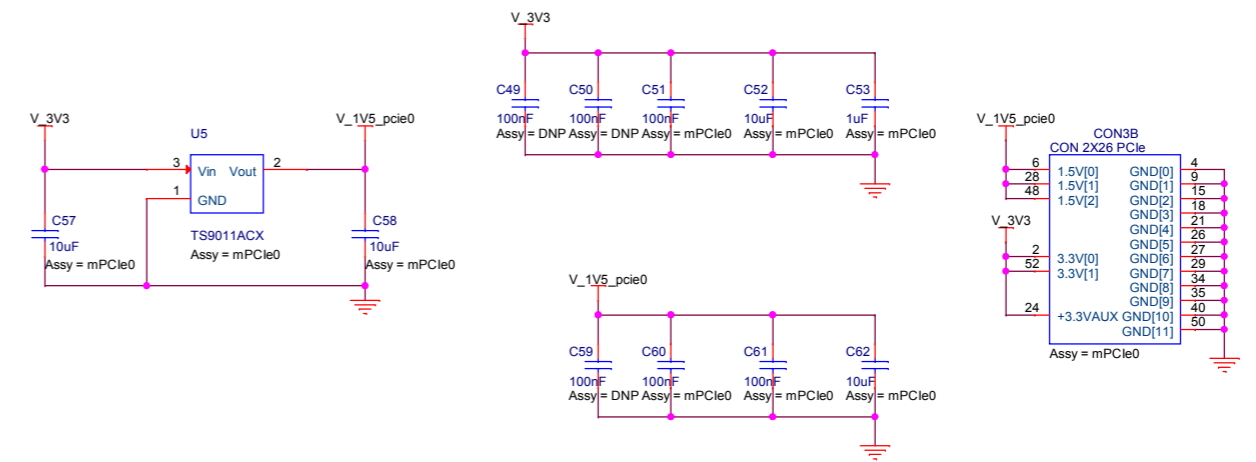
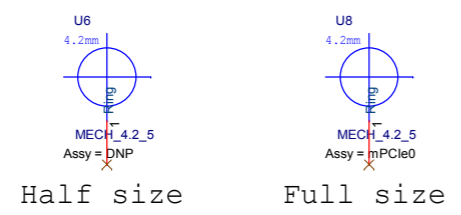
MV USB3.0 HOST

[TYPE-A]

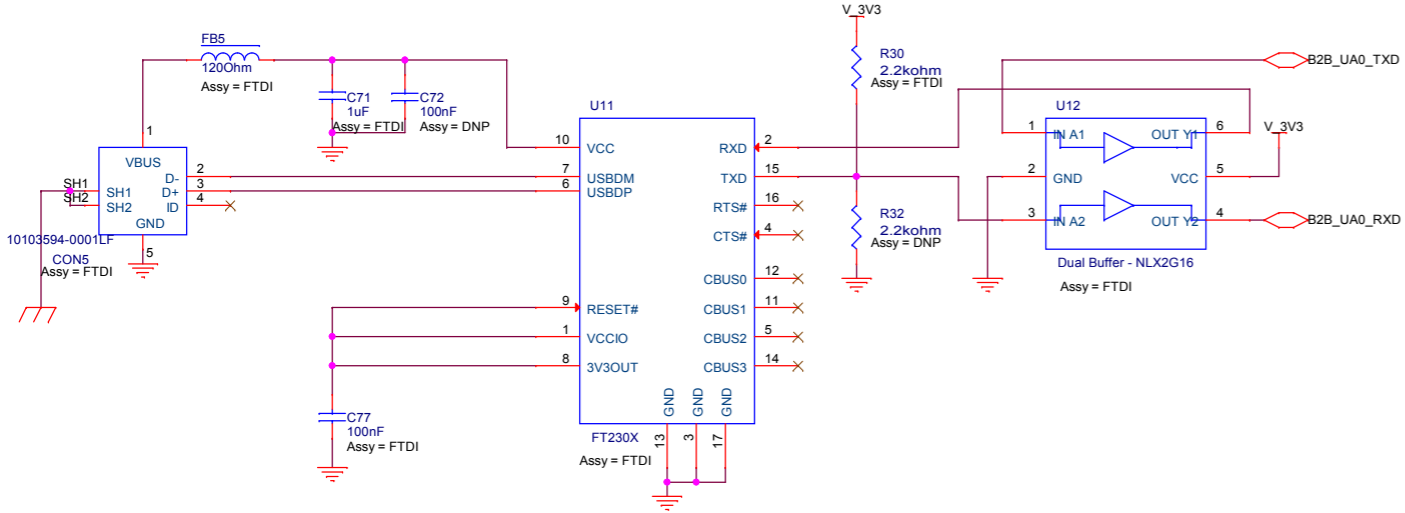




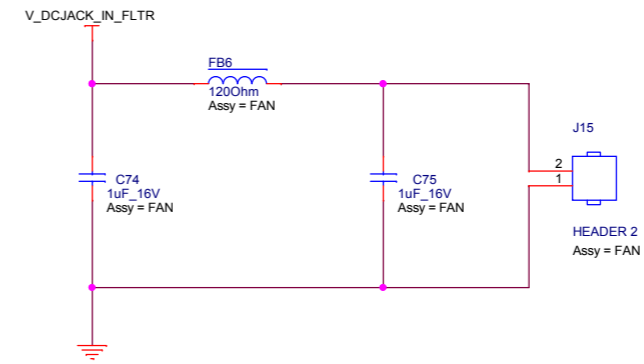
Mechanical holes/spacers for the mPCIe module



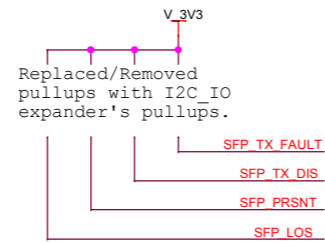
### microUSB to UART



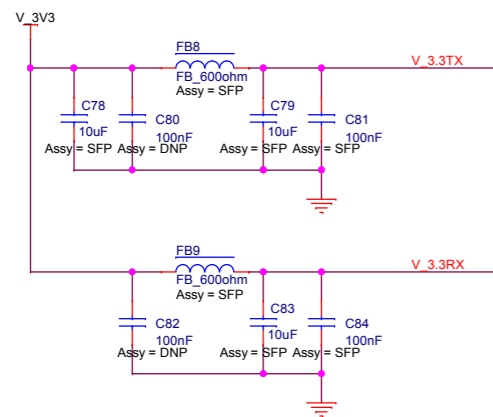
### FAN Power



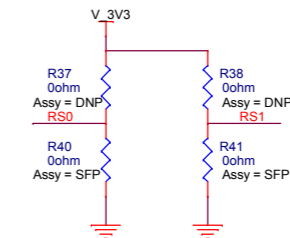
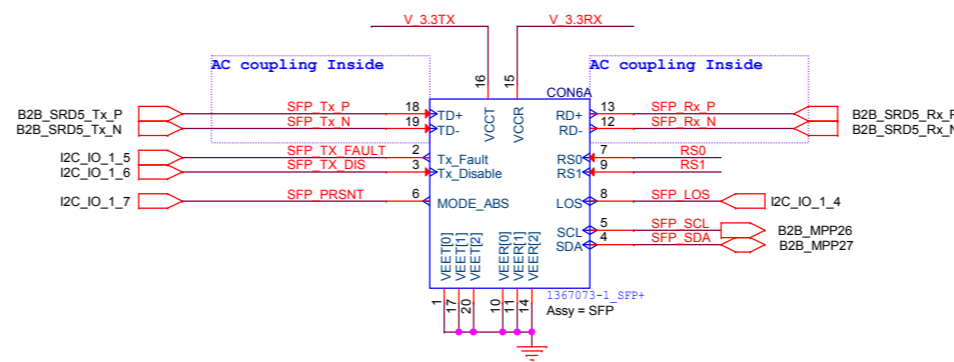
SFP + defines maximum current withdraw from V\_3.3TX and V\_3.3RX as 300mA each.



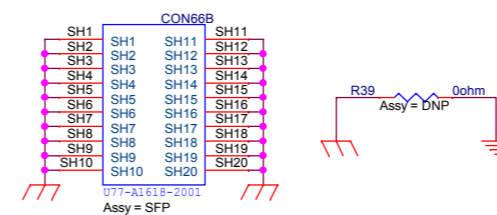
### SFP TRANSCEIVER Power



### SFP TRANSCEIVER

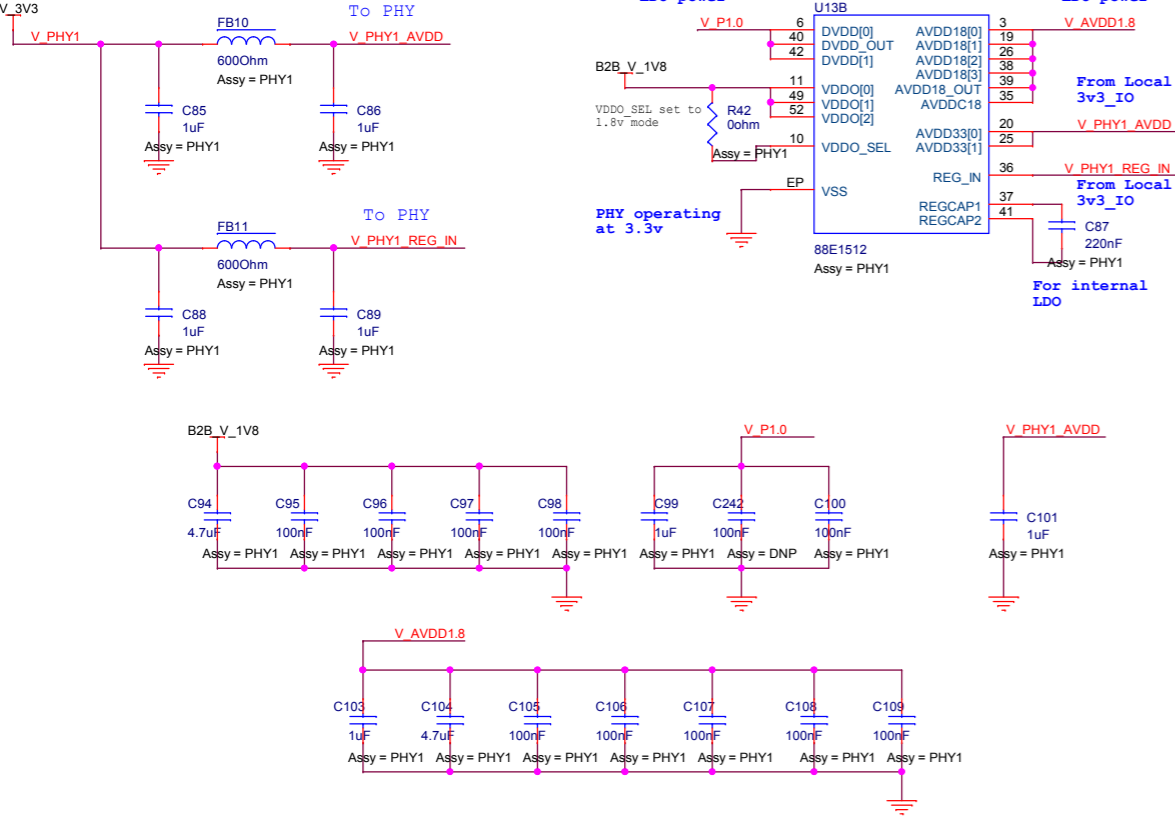


### SFP Shield



**PHY Power configurations**

88E1512 power configurations:  
 1. using internal lv8 and lv0 regulators.  
 2. VDDO\_SEL config VDDO to operate at 2v5/3v3.



**PHYADD configuration**

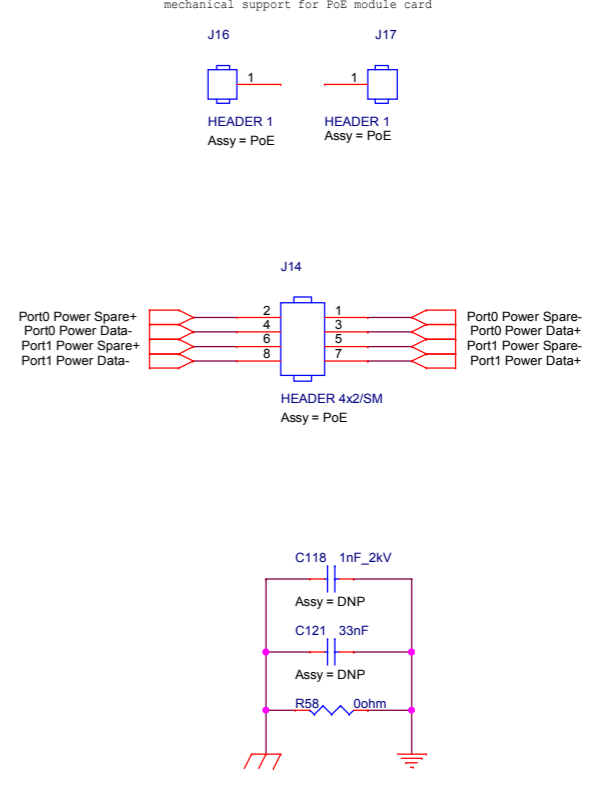
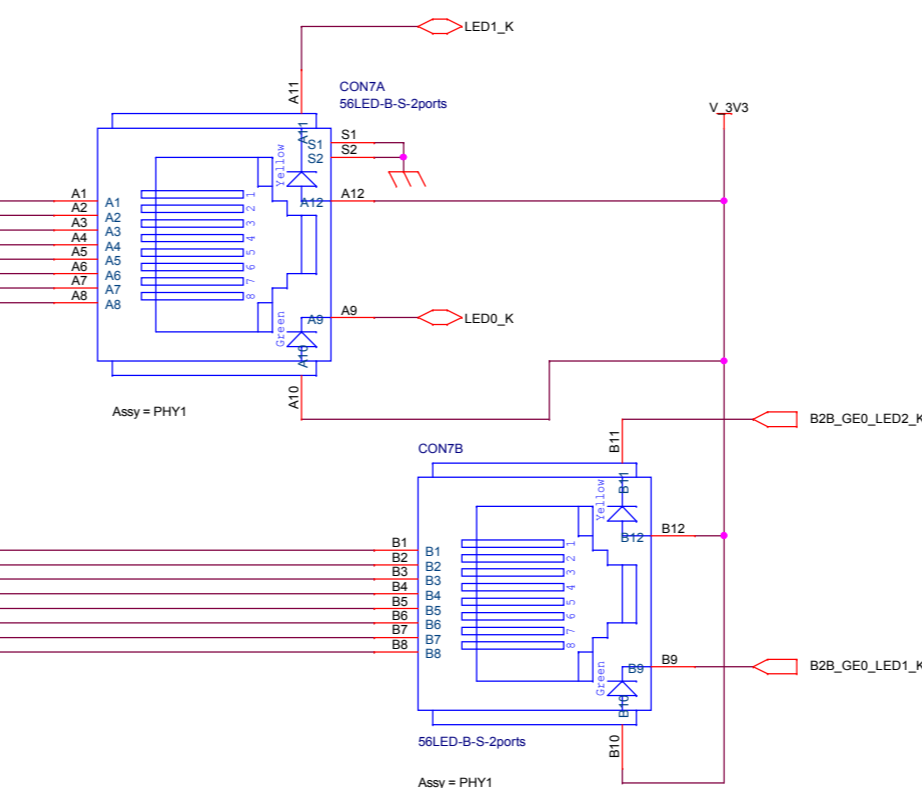
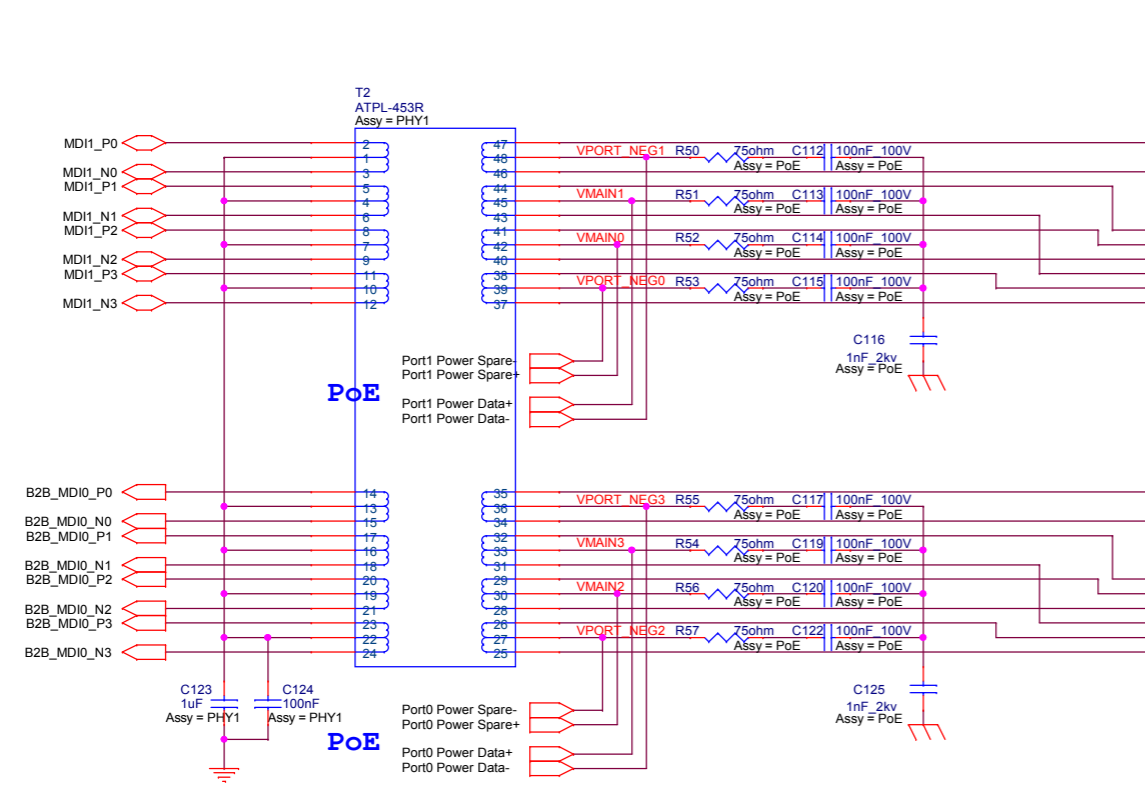
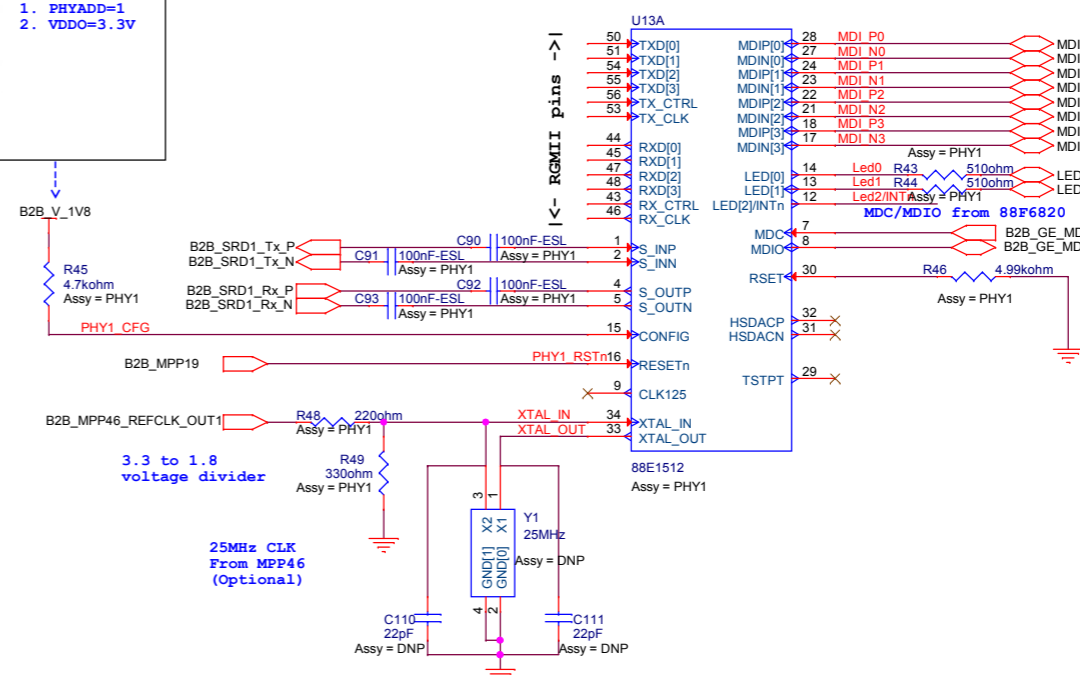
88E1512 PHY configuration options:  
**PHY\_address=1**

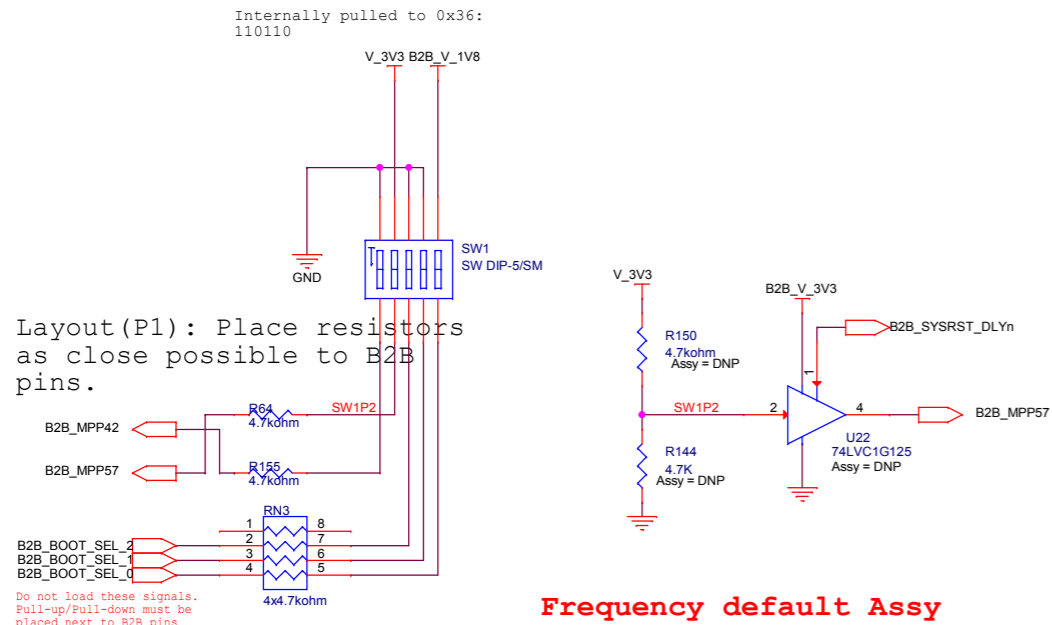
Pin	CONFIG Bit1	CONFIG Bit 0	Value Assignment
CONFIG 0	0	0	PHYADD[0] = 0 VDDO_LEVEL <sup>1</sup> = 3.3V
CONFIG 1	1	1	PHYADD[0] = 1 VDDO_LEVEL <sup>1</sup> = 3.3V
CONFIG 1	0	0	PHYADD[0] = 0 VDDO_LEVEL <sup>1</sup> = 2.5V
CONFIG 0	1	1	PHYADD[0] = 1 VDDO_LEVEL <sup>1</sup> = 2.5V

<sup>1</sup>. This is valid only for 88E1510/88E1512. For 88E1518, the VDDO\_LEVEL is fixed at 1.8V, hence the bit mapping for VDDO\_LEVEL is ignored.

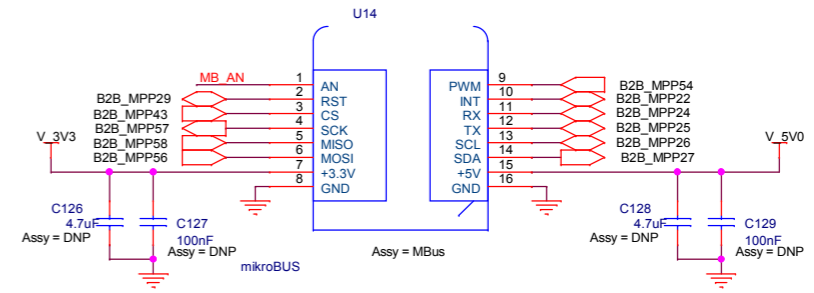
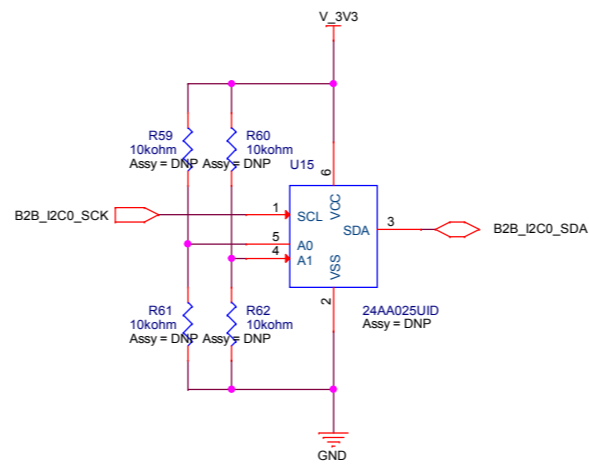
- 1. PHYADD=1
- 2. VDDO=3.3V

**PHY1 - SGMII1 Function as GE1 Port**





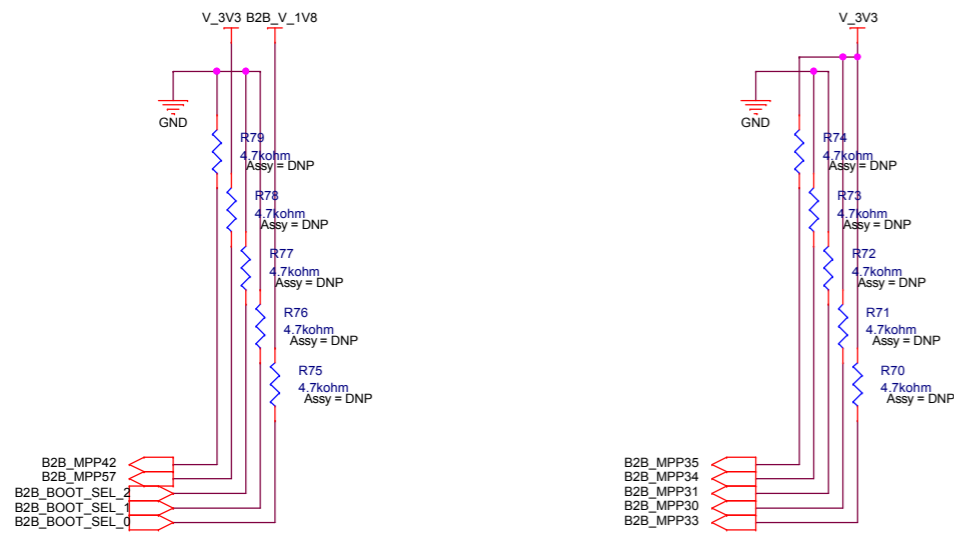
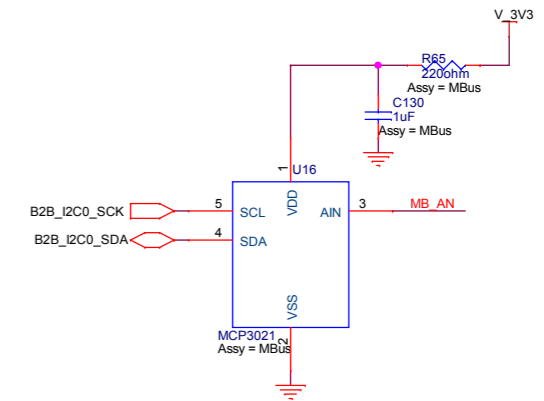
Frequency default Assy



PART NO.	XX	X	XX	
Device	Address Options	Temperature Range	Package	
Device:	MCP3021T: 10-Bit 2-Wire Serial A/D Converter (Tape and Reel)			
Temperature Range:	E = -40°C to +125°C			
Address Options:	XX	A2	A1	A0
A0	= 0	0	0	0
A1	= 0	0	0	1
A2	= 0	1	0	
A3	= 0	1	1	
A4	= 1	0	0	
A5*	= 1	0	1	
A6	= 1	1	0	
A7	= 1	1	1	
* Default option. Contact Microchip factory for other address options				
Package:	OT = SOT-23, 5-lead (Tape and Reel)			

Examples:

- MCP3021A0T-E/OT: Extended, A0 Address, Tape and Reel
- MCP3021A1T-E/OT: Extended, A1 Address, Tape and Reel
- MCP3021A2T-E/OT: Extended, A2 Address, Tape and Reel
- MCP3021A3T-E/OT: Extended, A3 Address, Tape and Reel
- MCP3021A4T-E/OT: Extended, A4 Address, Tape and Reel
- MCP3021A5T-E/OT: Extended, A5 Address, Tape and Reel
- MCP3021A6T-E/OT: Extended, A6 Address, Tape and Reel
- MCP3021A7T-IE/OT: Extended, A7 Address, Tape and Reel



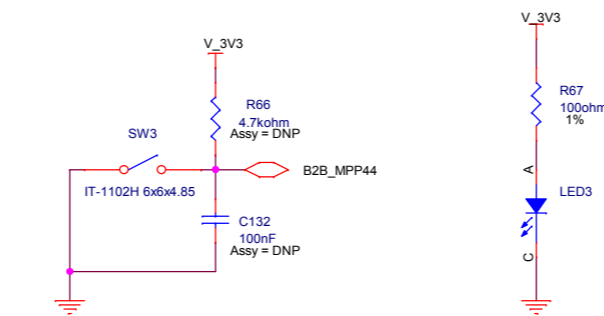
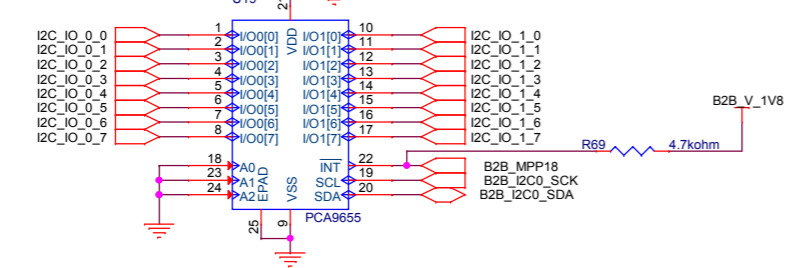
### PCA9555 16-bit I2C and SMBus I/O port with interrupt 5V tolerant I/Os

I/O port  
When an I/O is configured as an input, FETs Q1 and Q2 are off, creating a high impedance input with a weak pull-up to VDD. The input voltage may be raised above VDD to a maximum of 5.5 V

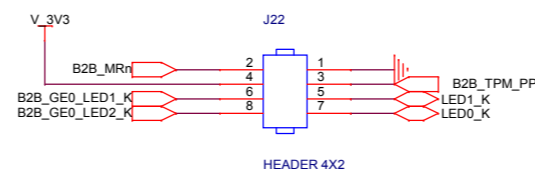
#### I/O Table

I02\_0  
I02\_1  
I02\_2  
I02\_3  
I02\_4  
I02\_5  
I02\_6  
I02\_7  
I03\_0  
I03\_1  
I03\_2  
I03\_3  
I03\_4  
I03\_5  
I03\_6  
I03\_7

#### I2C Add: 0x21



### AP Reset Switch (GPIO)



### RJ-45 LEDs, Board Reset and TPM\_PP