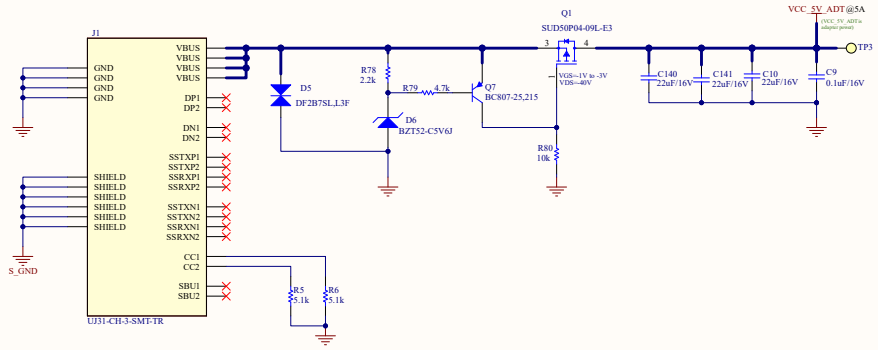
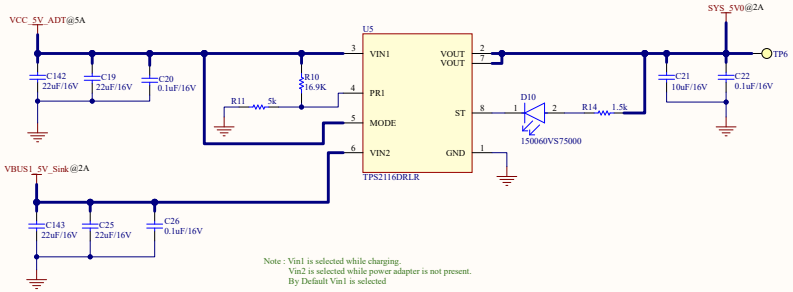
Power Adapter

Type-C Connector (Power Port)



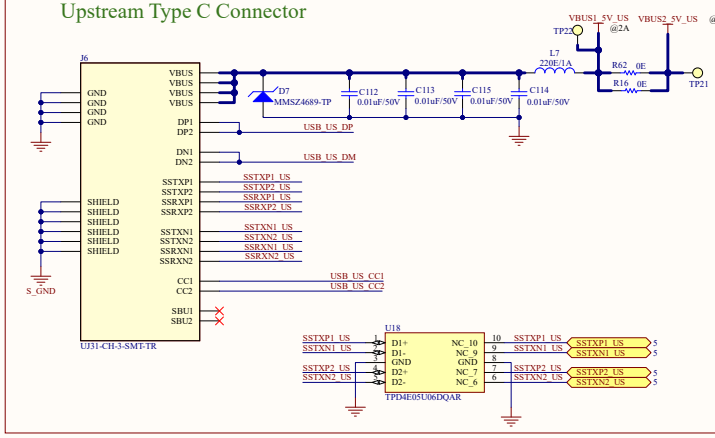
Voltage Switch For VBUS@2A



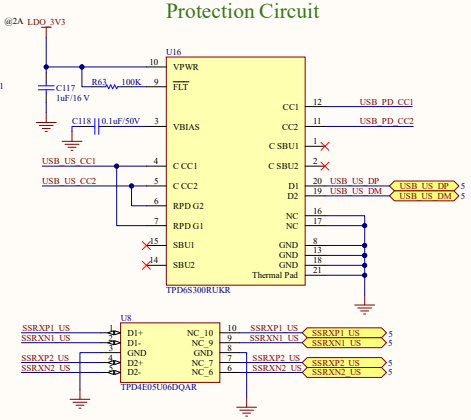
Up Stream Port

(Always Tablet Connected)

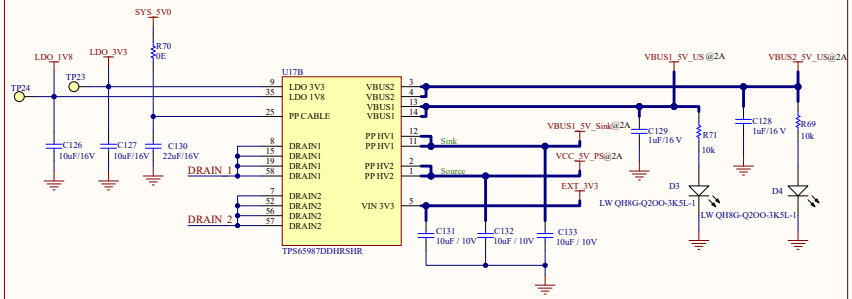
Upstream Type C Connector

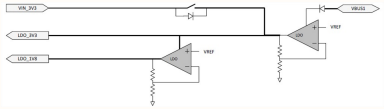


Protection Circuit



PD Controller

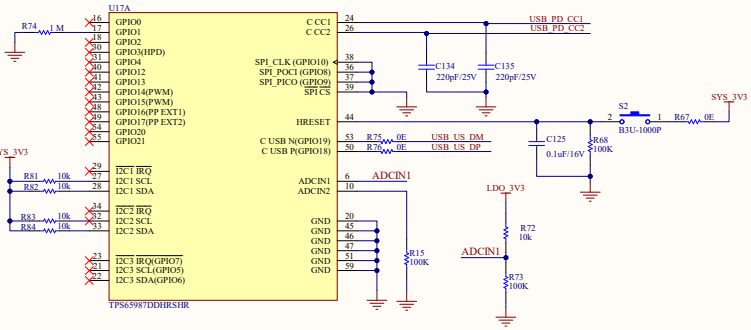




Note-1: The normal power supply input is VIN_3V3. In this mode, current flows from VIN_3V3 to LDO3V3 to power the core 3.3-V circuitry and I/Os and LDO_3V3 to LDO_1V8 to power the 1.8-V core digital circuitry.

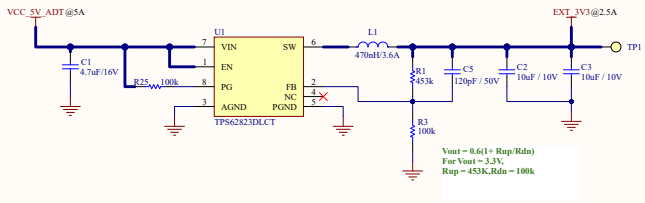
Note-2: When VIN_3V3 power is unavailable and power is available on VBUS1 or VBUS2 , the TPS65987D is powered from VBUS. In this mode, the voltage on VBUS1 or VBUS 2 is stepped down through an LDO to LDO_3V3 and LDO_1V8.

Note-3: LDO_3V3 may be generated from either VIN_3V3 or VBUS. If LDO_3V3 is generated from VBUS, TPS65987D port only operate as sinks.

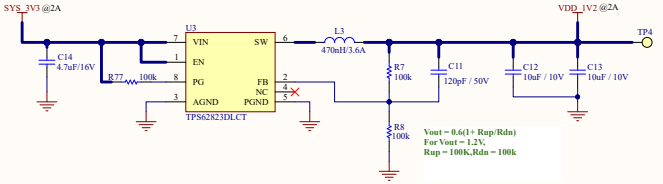


Power Supply

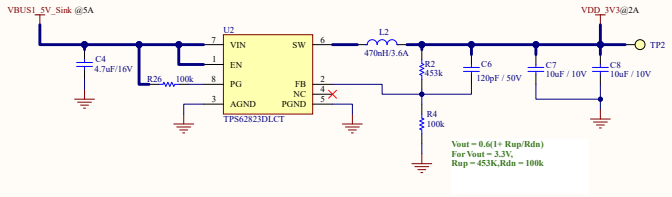
3.3V@2A Buck Regulator(Charging)



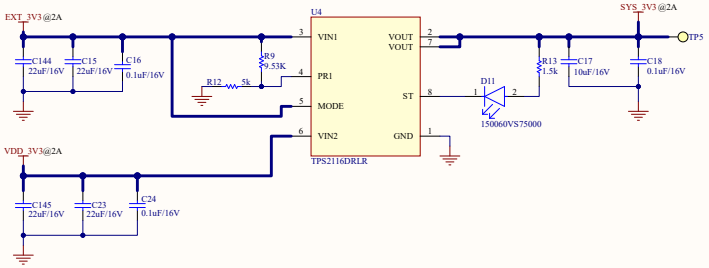
1.2V Buck Regulator@1.5A



3.3V@2A Buck Regulator(Discharging)

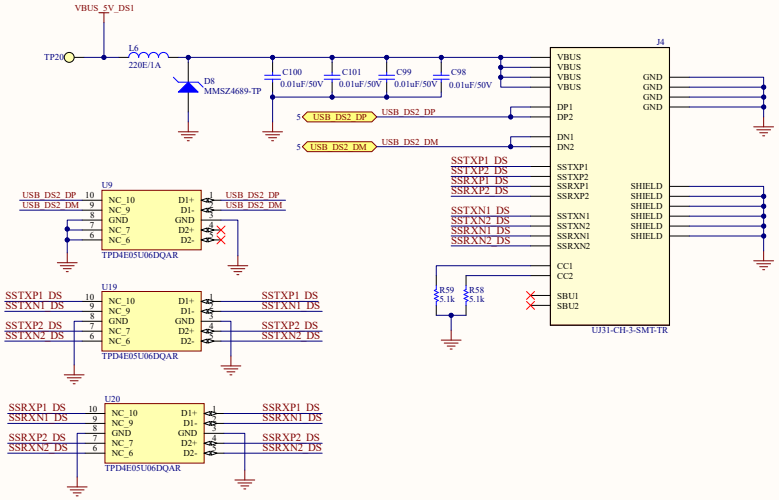


Voltage Swtich For 3.3V@2A

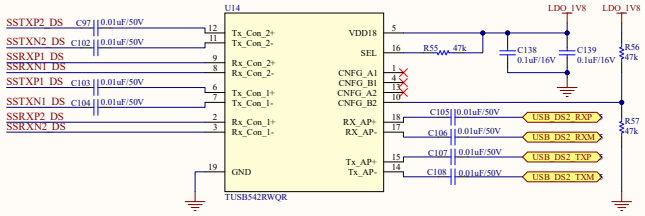


Down Stream Port

Type-C Connector (Card Reader)



DownStream 2:1 MUX



5GMM Connector (RaPID)