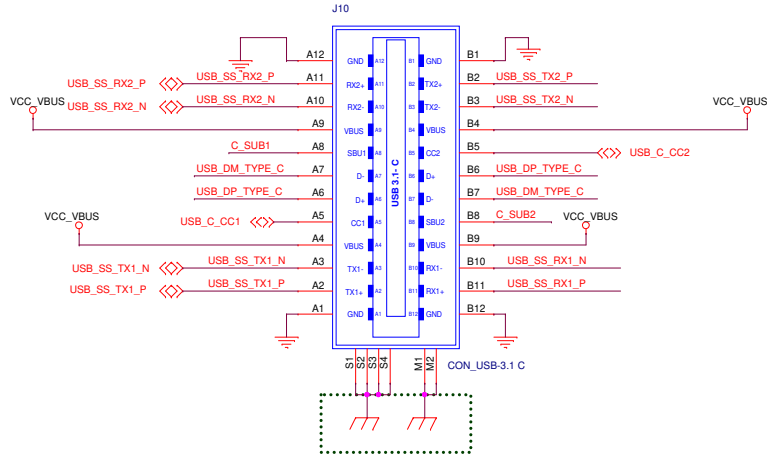


# TYPE C Connector



**VBUS 20 V @5 Amp**

- 1) Speed : 10 Gbps
- 2) Controlled impedance : 90 ohm diff, 45 ohm single ended
- 3) Diff pair  
USB\_SSRX1\_P/NUSS\_SSTX1\_P/N
- 4) DP and DM
- 5) AUX\_P/N

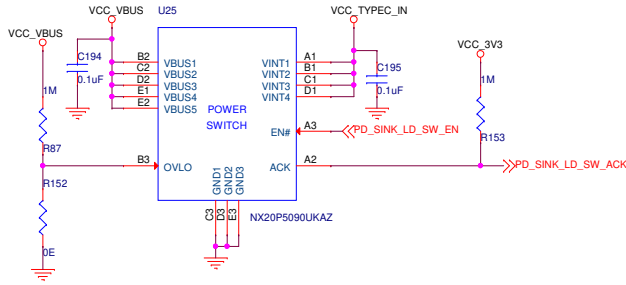
AC capacitor should be located close to USB connector or SOM module

**USB 2.0 Guidelines**  
 Max trace length : 6 inch  
 Via proximity : <3.8 mm  
 Reference plane : GND  
 Max freq : 240 Mhz , 48Mbps  
 Max Loading : 10 pF  
 Intra pair skew : 7.5 psec

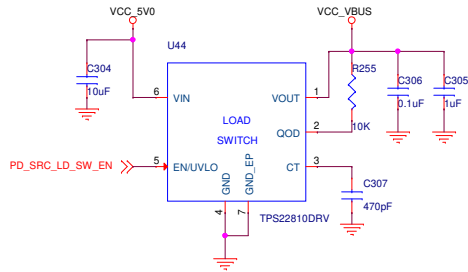
Upto four signal via can share Signal GND Via

**USB 3.0 Guidelines**  
 Data Rate : 10 Gbps  
 Termination : 90 Ohm  
 impedance : 90 / 45

**Skew :**  
 Breakout region : 3MM  
 Max trace length : 6 inch  
 Via proximity : <3.8 mm  
 Reference plane : GND  
 Max freq : 240 Mhz , 48Mbps  
 Max Loading : 10 pF  
 Intra pair skew : 7.5 psec



- 1) Why we need common mode choke
- 2) TPD4E02B04DQA is used in Eval kit
- 3) Earth to GND connection



**Query**  
 Protection on CC1 and CC2 is required. Kindly check suitable parts and add the same

