**Design Requirements**

**Impedance Control**

Impedance control is required. Impedance control is required in the following layers

1. 50 Ohms (+-10%) Single-Ended Microstrip
   1. L1 (F.Cu (S)) **ref.** L2 (In1.Cu (GND))
   2. Trace width = 0.23
2. 50 Ohms (+-10%) Single-Ended Microstrip
   1. L6 (In5.Cu (S)) **ref.** L7 (In6.Cu (GND)) and L5 (In4.Cu (S))
   2. Trace width = 0.14
3. 50 Ohms (+-10%) Single-Ended Microstrip
   1. L8 (B.Cu (S)) **ref.** L7 (In6.Cu (GND))
   2. Trace width = 0.23
4. 90 Ohms (+-10%) Differential Microstrip (50 Ohms (+-10%) Single-Ended)
   1. L1 (F.Cu (S)) **ref.** L2 (In1.Cu (GND))
   2. Trace width = 0.23 mm
   3. Trace spacing = 0.26mm
   4. USB Lines

**Ethernet Design**

**eMMC Memory Design**

**General**

1. Solder bridge is required. Some of them are bridged and some are left open. The ones that are bridged needs to be bridged via solder during assembly.