USB signal line trace:
1. Keep traces of USB bus D+ and D- the same length.
2. Achieve 90 ohm differential characteristic impedance.
3. Achieve 45 ohm common characteristic impedance.
4. Maintain parallelism between D+ and D-.
5. Do not route USB 2.0 D+ and D- over the power plane split.
6. Do not route USB 2.0 D+ and D- over the high frequency signals.
7. It is preferred to route USB 2.0 D+ and D- over ground layer.
8. It is preferred to route USB 2.0 D+ and D- using single layer.
Power Supply & Pin Headers
Filter capacitors must be placed as close as possible to relative pin, as drawn in the schematic.