

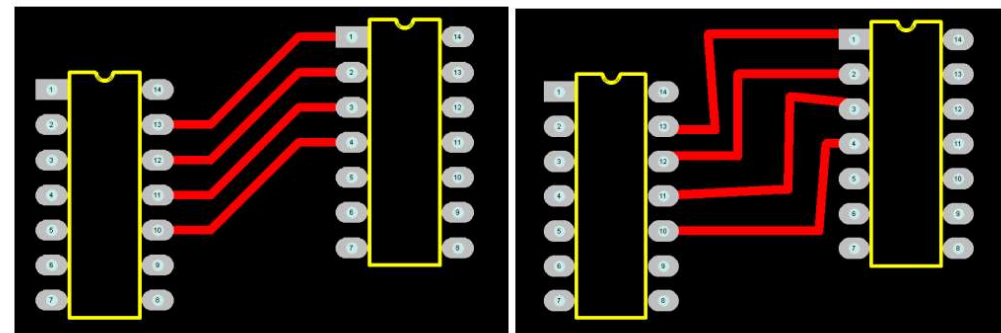
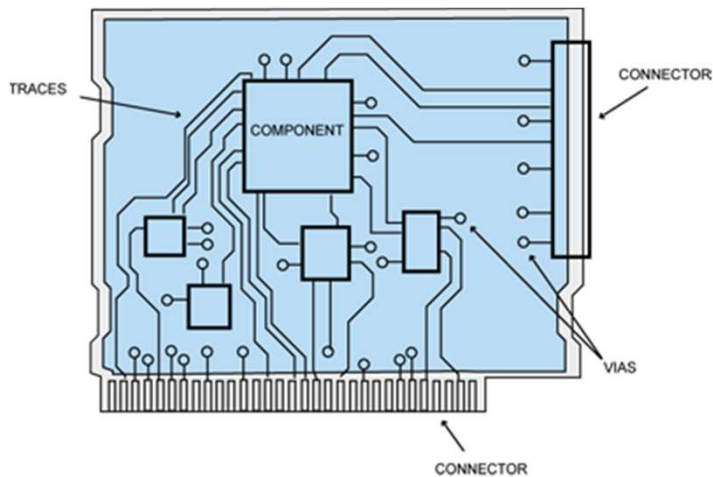
PCB – 3 main rules

Corso Materiali intelligenti e Biomimetici
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Routing is the process of laying down tracks to connect components on your board.

1. Keep nets as **short as possible**. The longer your total track length, the greater it's resistance, capacitance and inductance. All of which can be undesirable factors.
2. **Avoid the use of right angles**. This is important to give a professional and neat appearance to your board, and for manufacturing implications.
3. Put everything that as to be in the PCB (i.e. chips, tracks, etc) **inside the physical board**. For the components that are not physically part of the PCB (e.g. motor, sensors, LCD, etc) put only **connectors** (pins, headers).



An example of GOOD routing (Left) and BAD routing (Right)

Vias: electrical connection between different layer of the PCB