

# PCB type comparison

PCB Type	Characteristics	Ideal applications
<b>Single sided PCB</b>	A circuit board with components and traces on one side.	Simple electronic devices, e.g. remote controls, calculators.
<b>Double sided PCB</b>	Traces are placed on both sides of the board, allowing more connections.	Devices with more components, e.g. audio equipment, sensors.
<b>Multilayer PCB</b>	Several layers of copper and insulation laminated together, allowing complex connections.	Advanced applications, e.g. servers, telecommunications equipment.
<b>HDI PCB</b>	High trace density, reduced trace widths and via size.	Devices with a small form factor, e.g. smartphones, tablets, medical equipment.
<b>Flex PCB</b>	The circuit board material is flexible and thus can be bent, twisted and fit into compact spaces.	Wearable electronics, medical devices, aerospace equipment.
<b>Rigid-flex PCB</b>	Combines the features of both rigid and flexible circuit boards into a single assembly, saving space and improving reliability.	Complex applications in medical, automotive and military equipment.
<b>IMS PCB</b>	Aluminium or copper core, excellent heat dissipation.	LED systems, power supply electronics, automotive applications.
<b>RF/Microwave PCB</b>	Optimized for high frequency circuits. Increased signal stability and low signal loss.	Telecommunications, RF devices, radar circuitry, wireless systems.