

Recommended parameters of baking of PCBs before assembly

We recommend to bake PCBs always before assembly in order to reduce humidity in the laminate. This way you avoid many problems with assembly, functionality and reliability.

Oven for baking of PCBs should be high temperature oven with circular air or vacuum drying oven.

Parameters and time of drying is dependent on type of material, final finish surface, stackup of PCB, time to assembly and also on design.

All recommendations come from the norm IPC-1601 3.4.

When using vacuum drying oven, at 50mbar, you can reduce temperature by 20°C and time by 60 minutes.

Recommended parameters of baking

Material of PCB	Parameters	Max. time to assembly
VT-47	130°C >= 120min	6h
VT-901	140°C >=240min*	2h
Rogers RO4350B	120°C >=240min*	2h
Flex	120°C >= 120min	6h
Flex-Rigid	120°C >= 240min	2h

* Baking has to be done in a nitrogenous or vacuum atmosphere.

* For complex PCBs, HDIs, thick copper PCBs and thick PCBs, baking needs to be even longer. For exact values please contact us.