



PCB FABRICATION

NATIONAL INSTITUTE OF ELECTRONICS

PRODUCTION PARAMETERS

S. NO	PARAMETER	VALUE
General		
1	Substrate (Customer provided material also acceptable)	FR-4
2	Type of PCB (Customer provided flexible material also acceptable)	Rigid
3	Max. number of Layers	6
4	PCB size – Single and Double Layer	11 x 14 inches
5	PCB Size – Multilayer	11 x 8 inches
6	PCB Thickness	1mm, 1.6mm, 2mm
Production		
7	Track to Track Outer Layer clearance	15 mil
8	Track to Track Inner Layer clearance	10 mil
9	Track to Pad clearance Outer Layer	10 mil
10	Track to Pad clearance Inner Layer	10 mil
11	Pad to Pad clearance	10 mil
12	Minimum Track Width Outer Layer	10 mil
13	Minimum Track Width Inner Layer	10 mil
14	Minimum Annular Ring	10 mil
15	Minimum Board Edge to Conductor	3 mm
Drilling/Routing		
16	Minimum Hole/Drill Size	0.4 mm
17	Maximum Hole/Drill Size	3.5 mm
18	Minimum Two Drill Hole Distance	10 mil
19	Drill Hole to Inner Layer Track clearance	16 mil
20	Minimum PTH Slot width	1 mm
Surface Finish		
21	Surface Finish	Tin Immersion
22	Solder Mask Color	Green
23	Solder Mask Clearance	8 mil
24	Minimum Solder Mask ring	8 mil
25	Legend Component Designator & Writing Clearance from SMT Pads	10 mil
26	Legend Character Height	1.2 mm or 45 mil
Gerber Formats (supported)		
27	Gerber RS-274D, RS-274X (Extended Gerber), Gerber X2, ODB++ (zip and tgz), Excellon Drill format, NC Drill/Mill, Autodesk DXF, HPGL and HPGL/2, HP RTLFire 9XXX, Barco DPF	

Note:

Standard lead time may vary, depending upon availability of raw material.

In case work is required on any special substrate or frequency specific board (e.g., Roger, Flex sheet) customer will provide board in bare condition.