

Технологические параметры печатных плат

Категория	Параметр	Значение
Files can be	Gerber files – preferred format	274-X, 274-D, DPF, ODB++
	Drill file	X & Y coordinates, with tool sizes included.
Size	Maximum finished dimension	18.89" x 13" – Single / Double Layer 18.11 x12.2" – 4 ~12 Layer
Thickness	Standard processed thickness	1.6mm +/-10% (0.062" +/-10%)
	Minimum thickness	Single/Double: 0.012"+/-0.003" (0.3mm +/-0.076mm) 4-Layer: 0.016"+/-0.003"(0.4 +/- 0.076mm) 6-Layer: 0.024"+/-0.004"(0.6 +/- 0.1mm) 8-Layer: 0.040"+/-0.004"(1.0 +/- 0.1mm) 10-Layer: 0.040"+/-0.005"(1.0 +/- 0.12mm) 12-Layer: 0.048"+/-0.005"(1.2 +/- 0.12mm)
	Maximum thickness	0.165" +/-10% (4.2mm +/-10%)
	Bow and twist	< 7/1000
Laminate Materials	FR4 laminate thickness (standard)	0.062" (1.6mm)
	High TG FR4 (170 deg C)	0.062" (1.6mm)
	Metal core	Alluminum Thickness: 0.6mm / 0.8mm / 1.0mm / 1.6mm Thermally Conductive Epoxy: 4 mil
Layer Construction	Maximum processed layer count	20L
	Minimum core thickness	0.003" (0.07mm)
Drilling	Minimum Size	0.008" (0.2mm)
	Maximum Size	NIL / MAX. DRILL BIT 6.0mm
	True position tolerance olerance of PTH	+/-0.002" (0.05mm) +/-0.003" (0.075mm)
	Tolerance of NPTH	+/-0.002" (0.050mm)
	Annular Ring	+/-0.005" (0.127mm)
Copper Plating	Minimum in holes	0.0008"
	Minimum in holes with 2 oz Finished Copper Weight	0.001"
	Aspect Ratio	8

Traces	Finished trace size Minimum Trace Width / Space (1 oz Finished Copper Weight) starting from 1/3 oz	+/-20% 0.003" / 0.003" (0.076mm)
	Minimum Trace Width / Space (1 oz Finished Copper Weight) starting from 1/2 oz	0.005" / 0.005" (0.127mm)
	Minimum Trace Width / Space (2 oz Finished Copper Weight)	0.007" / 0.007" (0.18mm)
	Minimum Trace Width / Space (3 oz Finished Copper Weight)	0.008" / 0.008" (0.2mm)
	Minimum Trace Width / Space (4 oz Finished Copper Weight)	0.012" / 0.012" (0.3mm)
	Inner layers	Minimum space drill to conductor
Minimum annular ring		0.005" (0.3mm)
Layer to layer registration		+/- 0.005" (0.127mm)
Solder mask	Colors	Green, Light Green, Matte Green, White, Black, Yellow, Red, Blue
	Min. Solder Mask clearance	0.003"
	NPTH Min. Solder Mask clearance	0.004"
	Solder dam	0.003"
	Nominal thickness	0.0007"
Silkscreen	Colors	White, Black, Yellow, Red, Blue, Green
	Minimum Silkscreen clearance	0.005"
	Minimum height / width	0.028" / 0.028"
Electrical Testing	Continuity	YES
	Isolation	YES
Controlled Impedance	Tolerance	+/- 10%
	Impedance measurement technique	HP54750
Board Routing & Profile	Tolerance Board Edge & Cutouts	+/- 0.006"
	Score Line to Edge of Board	Min. 0.012"
	Depth of V-Scoring (Board Thickness > =0.04")	+/- 0.004"
	Scoring Angle	40° +/- 10°
	Deviation of V-scoring	+/- 0.004"
	HALF-MOON SHAPE	YES
Surface Finishes	HASL / Lead Free HASL	YES
	Immersion Gold	YES
	Immersion Silver	YES
	Immersion Tin	YES
	OSP	YES
	Soft Gold	YES
	CARBON	YES
Gold fingers	Gold plated edge connectors	Max. 30 u" Au, over 100 u" Ni
Others	UL (Underwriters Laboratory)	When requested on order
	Date Code	When requested on order
Standards	IPC-600 Pictorial guide	We use Class II to determine defects
Quality	Quality certifications	ISO9001