

Single-Sided & Silver Copper Through Hole PCBs

Product Feature		Technology Roadmap		
		2017	2018	2019
Product Type		Single-sided, Silver Through Hole, Copper Through Hole	Single-sided, Silver Through Hole, Copper Through Hole	Single-sided, Silver Through Hole, Copper Through Hole
Laminate Type		FR1, CEM1, CEM3, FR-4, High CTI FR4	FR1, CEM1, CEM3, FR-4, High CTI FR4	FR1, CEM1, CEM3, FR-4, High CTI FR4
Surface Finish		ENIG, OSP, HASL, LF HASL	ENIG, OSP, HASL, LF HASL	ENIG, OSP, HASL, LF HASL
Max Panel Size mm(inch)		520 (20.5) x 610 (24.0)	520 (20.5) x 610 (24.0)	520 (20.5) x 610 (24.0)
Board Thickness mm (mil)		1.6 (63) - Typical 3.2 (126) - Max. 0.8 (32) - Min.	1.6 (63) - Typical 3.2 (126) - Max. 0.8 (32) - Min.	1.6 (63) - Typical 3.2 (126) - Max. 0.8 (32) - Min.
Copper Foil		1/2, 1, 2oz	1/2, 1, 2oz	1/2, 1, 2oz
7 Min Drill Hole Size mm(mil)		0.55 (22) - STH 0.40 (16) - CTH	0.55 (22) - STH 0.40 (16) - CTH	0.55 (22) - STH 0.40 (16) - CTH
Line Width & Spacing	Screen Print	0.20 (8)	0.20 (8)	0.20 (8)
	LPI	0.15 (6)	0.15 (6)	0.15 (6)
Min Via Pad mm(mil)	Punching	D+0.3 (D+12)	D+0.3 (D+12)	D+0.3 (D+12)
	Drilling	D+0.25 (D+10)	D+0.25 (D+10)	D+0.25 (D+10)
Image to Hole Tolerance mm(mil)		±0.15 (6)	±0.15 (6)	±0.15 (6)
Hole to Edge Tolerance mm(mil)		±0.15 (6)	±0.15 (6)	±0.15 (6)
Min Solder Mask Bridge mm(mil)	Screen Print	0.2 (8)	0.2 (8)	0.2 (8)
	LPI	0.1 (4)	0.1 (4)	0.1 (4)
Min Solder Mask Bridge mm(mil)	Screen Print	0.15 (6)	0.15 (6)	0.15 (6)
	LPI	0.1 (4)	0.1 (4)	0.1 (4)
Min Pad to Pad Dimension Tolerance up to 16"		±0.1 (4)	±0.1 (4)	±0.1 (4)
Max. Warpage (Bow & Twist)		0.75%	0.75%	0.75%