

## TS PCB technical specification

PARAMETER	DESCRIPTION	
Number of layers	1÷8	
Max. PCB dimensions	463.0 x 576.0 mm for 1- and 2-layer PCB	421.0 x 573.4 mm for multi-layer PCB
Min. PCB dimensions	5 x 5 mm (up to 30 x 30 mm PCB must be panelised)	
Base material	ALU MCPCB FR4 TG135°C ÷ 180°C, CTI PLC0, Isola 370HR Rogers 4000, 3000	
Base material thickness: 1- and 2-layer	0.2 ÷ 3.2 mm	
Base material thickness: multi-layer	0.5 ÷ 3.2 mm	
Base copper foil: 1- and 2-layer	<b>12 µm / ½ oz *</b> 18 µm / ½ oz 35 µm / 1 oz 70 µm / 2 oz 105 µm / 3 oz	
Base copper foil: multi-layer	<b>12 µm / ½ oz *</b> 18 µm / ½ oz 35 µm / 1 oz 70 µm / 2 oz 105 µm / 3 oz	
Copper inner layers	<b>12 µm / ½ oz *</b> 18 µm / ½ oz 35 µm / 1 oz 70 µm / 2 oz 105 µm / 3 oz	
Multilayer-build	1080, 2125, 7628	
Extra PTH cycles: blind - buried	blind via min $\varnothing=0.15$ mm, Aspect Ratio 1:1.2 (drilled) buried vias min $\varnothing=0.20$ mm	
Min. track width outer layer	0.100 mm / 4 mils (max 18 µm base Cu) <b>0.075 mm / 3 mils (max 12 µm base Cu) *</b>	
Min. spacing outer layer	0.100 mm / 4 mils (max 18 µm base Cu) <b>0.075 mm / 3 mils (max 12 µm base Cu) *</b>	
Min. annular ring outer layer	0.125 mm / 5 mils <b>0.100 mm / 4 mils *</b>	

Min. track width inner layer	0.100 mm / 4 mils (max 18 $\mu$ m base Cu) <b>0.075 mm / 3 mils (max 12 <math>\mu</math>m base Cu) *</b>		
Min. spacing inner layer	0.100 mm / 4 mils (max 18 $\mu$ m base Cu) <b>0.075mm / 3 mils (max 12 <math>\mu</math>m base Cu) *</b>		
Min. annular ring inner layer	<b>4-layer PCB</b>	<b>6-layer PCB</b>	<b>8-layer PCB</b>
	0.125 mm / 5 mils <b>0.100 mm / 4 mils *</b>	0.150 mm / 6 mils <b>0.125 mm / 5 mils *</b>	0.175 mm / 7 mils <b>0.125 mm / 5 mils *</b>
Min. finished pth hole size	0.15 mm / 6 mils		
Min. outer layer pad diameter =selected finished hole size + "value"	0.25 mm / 10 mils <b>0.20 mm / 8 mils *</b>		
Min. inner layer pad diameter =selected finished hole size + "value"	0.25 mm <b>0.20 mm *</b>	0.30 mm <b>0.25 mm *</b>	0.35 mm <b>0.25 mm *</b>
Min. Cu to board-edge	routing: 0.2 mm V-cut: 0.4 mm (for 1.55 mm FR4 material)		
Extra features in copper	0.5 mm / 20 mils		
Surface finish	ENIG, LF HASL		
Soldermask color	white, yellow, black, blue, green, red		
Soldermask clearance	0.05 mm / 2.0 mils <b>0.01 mm / 0.5 mils *</b>		
Solder bridge	0.075 mm / 3 mils		
Milling tolerance	$\pm$ 0.10 mm <b><math>\pm</math>0.05 mm *</b>		
Legend color	white, yellow, black, blue, green, red		
Extra options	blind vias, burried vias, peelable mask, via filling, carbon print		
Slots and cut-outs	0.5 mm		
<b>* advanced technology</b>			