

Process	Techniques		Max		Min		
			British system	Metric system	British system	Metric system	
Material	Board Thickness		0.13"	3.2mm	0.03"	0.8mm	
	Common Copper Thickness		3OZ	105µm	HOZ	18µm	
	Production Dimension		19.69" X 24.80"	500mm X 630mm	5.91" X 7.87"	150mm X 200mm	
	End Product Dimension		18.90" X 24.00"	480mm X 610mm	0.20" X 0.40"	5mm X 10mm	
Drilling	Drill Plate Dimension		20.5" X 25.5"	520mm X 648mm			
	Holes size		0.24"	6.0mm	0.016"	0.4mm	
	Hole Diameter Tolerance	Plated Hole Diameter Tolerance		±3.0mil	±0.075mm	±2.0mil	±0.05mm
		Non plated Hole Diameter Tolerance		±3.0mil	±0.075mm	±2.0mil	±0.05mm
		Location-tolerance of 1st drilling		±3.0mil	±0.075mm		
		Location-tolerance of 2nd drilling(The 2 nd drilling NPTH after routing)		±5.0mil	±0.125mm		
	Slot hole tolerance	PTH Slot Size (L>=2W)		±5.9mil	±0.15mm		
		NPTH Slot Size (L>=2W)		±5.1mil	±0.13mm		
		PTH Slot Size (L<2W)		±5.9mil	±0.15mm		
		NPTH Slot Size (L<2W)		±5.1mil	±0.13mm		
	Shortest distance between edges of holes	edge of hole to edge-hole for 1 st drilling Hole Diameter (1.61-6.50)		5.9mil	0.15mm		
		edge of hole to edge-hole for 2nd drilling Hole Diameter (1.61-6.50)		8mil	0.20mm		
	The space between hole wall and line	2nd drilling NPTH		8mil	0.20mm	/	/
		Countersink Hole (depth tolerance)		±8mil	±0.20mm		
Countersink Hole (angle tolerance)		±10°					
Countersink Hole (Deviation of hole position tolerance)		±4mil	±0.1mm				
Dry Film	Lines to locating holes tolerance		±3mil	±0.076mm			
	Trace to 2nd drilling mis-registration tolerance		±5mil	±0.125mm			
	The max diameter of NPTH covered by the dry film		5.0mm (based on 1.5mil dry film thickness)				
	Minimum Line /Space		5.9mil/5.9mil	0.15mm/0.15mm			
	The trace space on the dry film (Line to Line)		4mil	0.1mm			
	Spacing between tracks and ground copper reflected on the dry film		6mil	0.15mm			
	Size of copper grid reflected on the dry film		/	/	10mil×10mil	0.25mm X 0.25mm	
Silk screen	Liquid Photo Resist Thickness	Basic material	0.39-1.18mil	10-30µm			
		Track or Copper surface	0.28-0.79mil	7-20µm			
	Legend Ink thickness		0.28 -0.59mil	7-15µm			
	Gap between open window and pad		3 mil	76µm	1.5 mil	38µm	
	Soldermask Bridge Capability		4mil	102µm			
	Legend Width		5.0mil	127µm			
	Distance between Legend and Etched Pad		>6mil	>0.15mm			
Punching	Punched Board Dimension Tolerance		± 8mil	±0.2mm			
	Distance between track and the edge of board		>=15mil	>=0.38mm			
	Punched board dimension		11.02" X 16.93"	280mm × 430mm	0.20" X 0.40"	5mm×10mm	
	Punched Hole Diameter		/	/	78mil	2.0mm	
	Punched board Thickness		63mil	1.6mm	31.5mil	0.8mm	
	Distance between the edges of drilled hole and punched hole		/	/	>=9.0mil	>=0.23mm	
	Automotive Machine	V-Cut center to V-Cut center spacing(Tolerance)		±4mil	±0.1mm	±8mil	±0.2mm
		V-Cut center to edge of board spacing(Tolerance)		±5mil	±0.13mm	±8mil	±0.2mm
		V-CUT remained thickness(Tolerance)		±4mil	±0.1mm	±6mil	±0.15mm
		V-Cut center to edge of board spacing		/	/	0.20"	5mm
	Manual Machine	V-Cut center to V-Cut center spacing(Tolerance)		±8mil	±0.2mm		
		V-Cut center to edge of board spacing(Tolerance)		±8mil	±0.2mm		
		V-CUT remained thickness(Tolerance)		±6mil	±0.15mm		
		V-Cut center to edge of board spacing		0.20"	5mm		
V-Cut center to line spacing	V blade angle		45°	45°	30°	30°	
	V-Cut center to copper (mm)		16mil	0.4mm	12mil	0.3mm	
	V blade angle tolerance		±5°				
Routing	Router bit size		12mil	3.0mm	78mil	2.0mm	
	Outline tolerance		±8mil	±0.2mm (Common)	±6mil	±0.15mm	
	Slot width		/	/	0.078"	2.0mm	
	Routing board dimension		21.00" X 24.00"	533mm×610mm	/	/	
	The distance of pattern to routing edge		>= 12mil	>=0.30mm			
	Router bit diameter		/	/	0.078"	2.0mm	
Special process	Insulated hole wall in countersink hole		Yes	Yes	Yes	Yes	
	Milling and bending process		Yes	Yes	Yes	Yes	
Test	Test point number		/	7000	/	/	
	IC pin width		>=10.0mil	>= 0.25mm			
	Pad Size		/	/	>=8.0mil	>=203µm	
	Space between pads		/	/	>=8.0mil	>=203µm	
	Test Board Dimension		11.8" X 15.75"	300mm×400mm	1.18" X 1.18"	30mm×30mm	
	Test Board Thickness		126mil	3.2mm	31.5mil	0.8mm	