

PCB Types			
CAP or Foil Construction	Controlled Impedance	Flex	Aluminum / Copper core (single sided to multi-layer)
Blind/Buried via	Via-In-Pad Process	High Density Interconnect	
Rigid-Flex	Mixed Materials	Mixed Inner Copper Weights	
Item	English	Metric	
RIGID			
Max Board Thickness	236.22 mil	6.00 mm	
Min Board Thickness (2 Layers/ 4 Layers)	7.874 mil (2 up) / 11.8 mil (4 up)	0.2 mm (2 up) / 0.3 mm (4 up)	
Min Core Thickness (Not including copper)	2 mil	0.05 mm	
Largest Panel Size	23.62" x 47.24"	600 mm x 1200 mm	
Min Pre-Preg Thickness	2.3 mil	0.051 mm	
Board Thickness Tolerance (Standard / Upon Request)			± 10% / ± 5%
COPPER			
Max Inner Layer Copper Thickness	18 oz	0.62 mm	
Min Inner Layer Copper Thickness	0.3 oz	0.01 mm	
Max Outer Layer Copper Thickness	18 oz	0.62 mm	
Min Outer Layer Copper Thickness (no plating in holes)	0.25 oz	0.009 mm	
DRILL			
Min Mechanical Drill Size	6 mil	0.15 mm	
Min Laser Drill Size	3 mil	0.076 mm	
Min Mechanical Aspect Ratio (Laminate/Drill)			12/1
TRACES/SPACES			
Min Line Width/Spacing (Outer and Inner Layers)	2 / 2 mil	0.05 mm/ 0.05 mm	
Min Copper Space to outline CNC Rout / Score	10 / 12 mil	0.25 mm / 0.3 mm	
SOLDER MASK COLORS		SILK SCREEN COLORS	
Green, Black, White, Yellow, Red, Blue, Clear, Grey Matte Green, Matte Black		White, Black, Yellow, Red, Blue, Green, Grey Matte Green, Matte Black	
CONTROLLED IMPEDANCE			
Controlled Impedance (Standard)			± 10%
Controlled Impedance (Upon Request)			± 5%
SURFACE FINISHES			
Lead Solder (HASL)	OSP (Entek), peelable mask		
Lead Free Solder (HASL)	ENEPIG (Electroless Nickel, Palladium, Gold)		
Immersion Gold (ENIG) - Electroless Nickel Gold	Wire Bondable (99.99% Pure Gold) Flash/Soft/Hard Gold		
Immersion Silver	Carbon Ink		
Immersion Tin (White Tin)	Gold Finger (Hard Gold)		
MATERIALS			
FR4 (135°C Tg)	FR4 (170°C - 180°C Tg)	Rogers	
IT-180A	370HR	FR408	
RIGID FLEX			
Maximum Board Size	16" x 22"	406.4 x 558.8mm	
Maximum Board Thickness (1 Layer/ 2 Layers/ 4 Layers)	118 mil	3 mm	
Minimum Board Thickness (1 Layer/ 2 Layers/ 4 Layers)	11.8 mil	0.3 mm	
Maximum Number of Layers	20 Layers		
DRILL			
Maximum aspect ratio			10:1
Min PTH Thickness	6 mil	0.15 mm	
TRACES/SPACES			
Minimum Traces/Spaces	3 mil / 3 mil	0.075 mm / 0.075 mm	
SURFACE FINISHES TYPES			
Lead Solder (HASL)	Immersion Silver	OSP	ENEPIG
Lead Free Solder (HASL)	Immersion Tin (White Tin)		
Immersion Gold (Electroless Nickel Gold - ENIG)	Flash gold, Soft gold, Hard gold, Gold finger		
MATERIAL			
FR4 (135°C Tg)	FR4 (170°C - 180°C Tg)	Rogers	
IT-180A	370HR	FR408	

If you do not see your spec above please contact your sales person for review.

Our capabilities are continually evolving!



ICI PCB Manufacturing Capabilities

ITEM	English	Metric
FLEX		
Maximum Board Size	19.68" x 13.38"	500 mm x 400 mm
Maximum Board Thickness (1 Layer)	8.6 mil (7.874 mil)	0.22 mm (0.2 mm special material)
Maximum Board Thickness (2 Layers)	12.6 mil (11.811 mil)	0.32 mm (0.3 mm special material)
Maximum Board Thickness (4 Layers)	7.87 mil	0.2 mm
Minimum Board Thickness (1 Layer)	2.56 mil	0.065 mm
Minimum Board Thickness (2 Layer)	4.7 mil	0.12 mm
Minimum Board Thickness (4 Layer)	7.87 mil	0.2 mm
Maximum Number of Layers	16 layers	
DRILL		
Maximum aspect ratio	10:1	
Min PTH Thickness	5.9 mil	0.15 mm
TRACES/SPACES		
Minimum Traces/Spaces	2 mil / 2 mil	0.05 mm / 0.05 mm
SURFACE FINISHES TYPES		
Lead Solder (HASL)	OSP (Entek)	Flash Gold
Lead Free Solder (HASL)	Electrolysis gold plating	Soft Gold
Immersion Gold (Electroless Nickel Gold - ENIG)	Immersion Tin (White Tin)	Hard Gold
Immersion Silver	ENEPIG	Gold finger
MATERIAL		
FR-4	FR-5	Teflon
Aluminum	BT	Polymide
ALUMINUM		
Maximum Number of Layers	Single-sided; Double-sided; 4 layers	
Maximum Board Size	59.05" x 19.69"	1500 mm x 500 mm
Minimum Board Size	0.2" x 0.2"	5 mm x 5 mm
Max Finished Board Thickness	236.22 mil	6.0 mm
Min Finished Board Thickness	11.81 mil	0.3 mm
COPPER		
Max Copper Thickness	10 oz	0.347 mm
Min Copper Thickness	0.5 oz	0.018 mm
DRILL		
Maximum aspect ratio	10:1	
Min PTH diameter	17.71 mil	0.45 mm
TRACES/SPACES		
Min Line Width/Spacing	4 mil	0.10 mm
Min Line to Pad/ Pad to Pad	4 mil	0.10 mm
Min Copper Space to outline CNC Rout / Score	3.9 mil / 5.9 mil	0.1 mm / 0.15 mm
SOLDER MASK COLORS		
White, Yellow, Black, Green, Aureate, Matte Green, Matte Black		

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