

CC Electronics capabilities

	current production capability		planned production capability
PADS AND HOLES - based on a 1.6 mm pcb			
Through hole size	0.2 mm		0.15 mm
Blind/buried hole size	0.12 mm		0.1 mm
Plated through hole size tolerance (+/-)	0.05 mm		0.05 mm
Non plated hole size tolerance (+/-)	0.05 mm		0.05 mm
Hole positional tolerance	0.018 mm		0.018 mm
Through hole pad size (inner) (assume tangency)	0.4 mm		0.3 mm
Through hole pad size (outer) (assume tangency)	0.35 mm		0.3 mm
Blind/buried stop pad size	0.35 mm		0.3 mm
Resin filled through holes	Y		Y
Press fit hole tolerance (+/-)	0.050 mm		0.050 mm

	current production capability		planned production capability
PRODUCT DIMENSIONS			
Max PCB delivery unit (testable)	570 x 423		570 x 423
Min PCB thickness	0.4 mm		0.3 mm
Max PCB thickness	3.6 mm		3.6 mm
PCB thickness tolerance	10%		10%
PCB flatness (%)	1		1
Max layer count	24		32
Aspect ratio (0.2mm hole in 1.6 mm thick pcb)	8:1		10:1

	Tracks & Gaps required "as designed"		planned production capability
INNERLAYERS			
Min track width & gap for 18um copper (1/2 oz)	0.0762mm / 0.0889mm		
Min track width & gap for 35um copper (1 oz)	0.0762mm / 0.1016mm		
Min track width & gap for 53um copper (1.5 oz)	0.10mm / 0.1381mm		
Min track width & gap for 70um copper (2 oz)	0.127mm / 0.1778mm		
Min track width & gap for 105um copper (3 oz)	0.1778mm / 0.254mm		
Copper thickness (min)	18 um		12 um
Copper thickness (max)	105 um		140 um
Cores with differential copper weights	Y		Y
Min dielectric thickness [pre preg]	0.06 mm (after encapsulation)		0.05 mm (after encapsulation)
Min dielectric thickness [cores]	0.1 mm		0.075 mm

	current production capability		planned production capability
MICROVIA			
Min microvia hole size (drilled)	0.12 mm		0.1 mm
Min microvia pad size capture (outer)	0.25 mm		0.2 mm
Min microvia pad size bounce (inner)	0.2 mm		0.15 mm
Staggered microvias	Y		Y
Stacked micovias	Y		Y
Microvia: filling of vias (plated Copper)	Y		Y
Microvia: filling of vias (resin filled)	Y		Y

	Tracks & Gaps required "as designed"	Gaps required "as designed"	
OUTERLAYER	Without resin filled via's	With resin filled via's	
Min track width & gap for 5um Foil (1/7 oz)	N/A	0.0762mm / 0.0889mm	
Min track width & gap for 12um Foil (1/3 oz)	0.0762mm / 0.0847mm	0.0762mm / 0.1016mm	
Min track width & gap for 18um Foil (1/2 oz)	0.0762mm / 0.0889mm	0.0762mm / 0.1016mm	
Min track width & gap for 35um Foil (1 oz)	0.0762mm / 0.1016mm	0.0762mm / 0.1143mm	
Min track width & gap for 53um Foil (1.5 oz)	0.10mm / 0.1381mm	0.127mm / 0.2032mm	
Min track width & gap for 70um Foil (2 oz)	0.127mm / 0.1778mm	0.127mm / 0.2217mm	
Min track width & gap for 105um Foil (3 oz)	0.1778mm / 0.254mm	0.1778mm / 0.2794mm	
Copper foil thickness (min)	12 um	5 um	
Copper foil thickness (max)	105 um	105 um	
Track width tolerance	+/- 10%	+/- 10%	

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SOLDERMASK - For standard Green soldermask			
Min clearance to copper (design)	25 um		20 um
Min solder dam	75 um		75 um

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SURFACE FINISH			
Immersion Ni/Au	Y		Y
Immersion tin	Y		Y
OSP	y		y
Pb-free HASL	Y		Y
Pb HASL	Y		Y
Electrolytic Hard gold	Y		Y

	current production capability		planned production capability
SCREEN PRINT			
Peelable mask	Y		Y
Carbon touch pads	Y		Y
Via plugging	Y		Y
Notation (legend)	Y		Y
Notation - min line width	0.1 mm		0.075 mm

	current production capability		planned production capability
PROFILE			
Rout min hole to edge (+/-)	0.20 mm		0.15 mm
Scoring (V cut) location tolerance (+/-)	0.15 mm		0.1 mm
Scoring (V cut) web thickness (1.6mm PCB)	0.4 mm		0.4 mm
Scoring (V cut) web thickness tolerance (+/-)	+/- 10%		+/- 10%