

ELEPRINT CAPABILITIES

Rigid PCB	Standard	Advanced	Critical	Remark
Single-Side Board	x			
Double-Sided Board	x			
Multilayer board without blind and/or buried vias	x			
Multilayer board with blind and/or buried vias	x			
Multilayer metal core board without blind or buried vias	x			
Multilayer metal core board with blind and/or buried vias		x		
Multilayer board with blind or buried and sequential build-up	x			
Multilayer with metal core board with blind or buried and sequential build-up			x	

Flex / RigidFlex PCB	Standard	Advanced	Critical	Remark
Flex Single-Side Board, one conductive layer with PTHs with or without stiffeners	x			
Flex Double-Side Board, two conductive layer with PTHs with or without stiffeners	x			
Multilayer flexible board with three or more conductive layers with PTHs.		x		
Multilayer rigid and flexible material with three or more conductive layers with PTHs.		x		
Flexible or rigid-flex board containing two or more conductive layers without PTHs.		x		

Technical Capability	Standard	Advanced	Critical	Remark
SBU - Sequential Build-Up		x		
Buried vias	x			
Blind vias	X			
Laser drill			x*	External process
Copper filling and capped vias		x Capped	x* CVF	*External process
Vias in pad		x		
Conductive filled vias			x*	External process
Non conductive filled vias		x		
RF/Microwave applications	X			

Board & Build Up Dimension	Standard	Advanced	Critical	Remark
Maximum PCB size	600 x 450	610 x 500	620 x 520	Millimeters

Maximum number of layer	<24	<30		Micrometers
Minimum board thickness	100	75	50	Micrometers
Maximum board thickness	3,2	4	5	Micrometers
Board thickness tolerance	+/- 10%	+/- 8%	+/- 5%	Micrometers
Minimum Cu-thickness internal layers	12	9	5	Micrometers
Minimum Cu-thickness external layers	40	35	30	Micrometers
Maximum Cu-thickness internal layers	105	140	>140	Micrometri
Maximum Cu-thickness external layers	105	140	>140	Micrometri
Maximum Cu-thickness layers tolerance	+ 15%	+ 10%	+ 5%	rif ad un cross-shield -test
Minimum dielectric thickness	100/50	50/25	NA	FR4/polyamide (no-glass)

Conductor Dimension & Tolerance	Standard	Advanced	Critical	Remark
Minimum trace width inner layer	100	75	NA	
Minimum trace width outer layer	100	75*		< 2 :1 L x H
Trace tolerance on 9um -1/4 OZ Cu	+/- 15%*	+/- 10%*		< 2 :1 L x H
Trace tolerance on 18um -1/2 OZ Cu	+/- 15%*	+/- 10%*		< 2 :1 L x H
Trace tolerance on 35um -1 OZ Cu	+/- 15%*	+/- 10%*		< 2,5 :1 L x H
Trace tolerance on 70um -2 OZ Cu	+/- 15%*	+/- 10%*		< 3 :1 L x H
Trace tolerance > 70um -2 OZ Cu	+/- 150%*	+/- 15%*		< 3 :1 L x H
Minimum copper clearance inner layer	125	100	75	
Minimum copper clearance outer layer	125	100	75	
Minimum drill to copper clearance	320	240	200	
Minimum annular ring inner layer	250	200	160	se requisito cl° 3 (cl2°-50um)
Minimum annular ring outer layer	250	200	160	se requisito cl° 3 (cl2°-50um)
Minimum SMD land pattern pitch	320	250	200	

Drill Hole Dimension & Tolerance	Standard	Advanced	Critical	Remark
Minimum diameter mechanical hole not plated	0,15	0,1	na	
Tolerance mechanical hole not plated	+/- 50 um	+/- 50 um		
Minimum diameter mechanical hole plated	0,9			After plated!
Tolerance mechanical hole plated	+/- 50 um	+/- 50 um		
Minimum diameter laser hole (Plated)	100*	75*		*External process
Tolerance laser hole plated	-0/+25	-0/+25		*External process
Mechanical depth control	-20/+20	-15/+15		
Maximum aspect ratio THT-holes	11:1	18:1*		*TP<0,73
Maximum aspect ratio blind holes	0,8:1	1:1		

Base Material	Standard	Advanced	Critical	Remark
FR-4-Standard (130 degrees)	x			

High Tg FR4 (170 degrees)	x			
Polyamide	X			

Surface finishing	Standard	Advanced	Critical	Remark
ENIG (electroless Ni/Au)	x			External process
Nickel thickness	x			External process
Gold thickness	x			External process
HASL SnPb	x			External process
SnPb thickness	x			External process
HASL lead free	x			
Alloy lead free	x			
Alloy lead free thickness	x			External process
Immersion Silver	x			External process
Electrolytic Ni/Au	x			External process

Facilities	Yes / No	Remark
AOI automatic optical inspection	Yes	
Drilling laser system	NO	External process
100% electrical test (Continuity & Insulation)	Yes	
Flying Probe (Model Type)	Yes	
Visual final inspection	Yes	
Microsection and Lab Analysis	Yes	

Quality Certifications	List
ISO 9001	CSQ n°9151 EMGR
IRIS	IMQ IR -013
UL - (+Canada)	UL ZPMV2/8.E135333