

Capability Matrix - Bellmann BV - The Netherlands

	Material					Soldermask		Silk-screen	Contact Finishes					Via Holes			Impedance		Track & Gap	Tolerances in mm / %						
	FR4	CEM1,2,3	Polyamide	Rogers	FR5	Green, Red, Blue, White and Black	Peel-able	All colours on Request	HAL	Carbon	Immersion Gold	Electrolytic Gold	Printed Silver	Blind Vias Top/Bottom Layers Only	All Burried Vias Internal Layers Only	Plugged	Differential (Twin Trace)	Controlled (Single Trace)	Minimum Track and Gap spacing of 0,127 mm	Hole Diameter Non-Plated Holes	Hole Diameter Plated Holes	Scoring Lines Position	Board Thickness 0,6 - 1,0 mm	Board Thickness 1,0 - 5,0 mm	Board Size Routed	Board Size Scored
						Green (Standard)		White (Standard)												+/-	+/-	+/-	+/-	+/-	+/-	+/-
Single-Sided	x	x	x		x	x	x	x	x	x	x	x					x	x	x	0,05		0,15	15%	10%	0,1	0,2
Double-Sided	x		x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	0,05	0,1	0,15	15%	10%	0,1	0,2
4-layer	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0,05	0,1	0,15	15%	10%	0,1	0,2
6-layer	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0,05	0,1	0,15	15%	10%	0,1	0,2
8 layer	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	0,05	0,1	0,15	15%	10%	0,1	0,2
10-layer	x			x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	0,05	0,1	0,15	15%	10%	0,1	0,2
Flexible			x															x		0,05	0,1					
Rigid Flex			x															x		0,05	0,1					

Hole Sizes (Dependant on Board Thickness)

Board Thickness	Min Hole Size Finished	Aspect Ratio	Quality	IPC A-600 as reference	Note 1: These capabilities maybe subject to modification following the receipt of the technical information.
0,6 mm	0,25 mm	2,0 : 1	Korea:	ISO 9002 No. E162-036	Note 2: Layercount to board thickness is also subject to holesizes Note 3: Etch factors: 18µ : 0,025 mm; 35µ : 0,05 mm; 70µ : 0,1 mm (total loss of both sided)
0,8 mm - 1,0 mm	0,25 mm	3,0 : 1		QS 9002 No. E162-032	
1,0 mm - 1,6 mm	0,25 mm	4,0 : 1		UL Class 94-V-0 E173573	
1,6 mm - 2,4 mm	0,3 mm	5,0 : 1			
2,4 mm - 3,2 mm	0,3 mm	8,0 : 1			
3,2 mm - 4,0 mm	0,4 mm	9,0 : 1			



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