BITTELE Electronics Inc.
2680 14th Ave, Unit 1& 2, Markham, Ontario, L3R 5B2, Canada Tel: 416-800-7540 Fax: 416 -800-7548 www.7pcb.com

Item	Technical Capability
Layers:	2--50layers
Max manufacturing size:	650mm*1100mm
Copper foil thickness:	0.5 oZ-20.0 oZ
Board thickness:	Double sided: 0.2mm-6.0mm
4 layers:	0.4mm-8.0mm
6 layers:	0.8mm-8.0mm
8 layers:	1.0mm-8.0mm
10 layers:	1.2mm-8.0mm
12 layers:	1.5mm-8.0mm
14 layers:	1.5mm-8.0mm
16 layers:	1.6mm-8.0mm
18 layers:	2.2mm-8.0mm
20 layers:	2.4mm-8.0mm
Min line width/space:	3mil/3mil
Min finished holes size:	0.15mm
Aspect ratio:	12:01
Impedance control:	+/-10%
Surface treatment:	HASL;LF HASL;ENIG;Immersion Silver;Immersion Tin;Gold Finger;Flash Gold;OSP
Materials:	FR4, Tg: 130℃/170℃,IT 180A,Bergquist,Rogers,Arlon,Taconic, PTFE.
Special technique:	blind & buried holes,via in pad,Semi-plating holes,countersink holes, Step mounting holes,controlled depth holes,Edge-plating PCB and metal base PCB.

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Item		Technical Parameters	Specification
Min.Line Width(mil)		3/4mil	Partial 3mil lines is allowed
Min.Space(mil)		3/4mil 4/5mil	Partial 4mil lines is allowed
Min.Annular Ring Width (mil)		vias:3mil	Remained ring width means the distance between the hole edge to the ring outskirt.
		Component Holes:6mils	
Min.Hole Size	**Board Thickness<2.0mm**	0.15mm	___
	Board Thickness>=2.0mm	Aspect Ratio<=12	___
Max.Board Thickness	**Single and Double Sided**	6.0mm	
	Multilayer	8.0mm	
Min.Board Thickness	**Single and Double Sided**	0.15mm	
	Multilayer	4 layers:0.4mm; 6 layers:0.6mm 8 layers:0.8mm;10 layers:1.0mm	
Max.Board Size	**Single and Double Sided**	650*1100mm	
	Multilayer	650*1100mm	
Distance between Line to Board edge		Outline:0.20mm	
		V-CUT:0.4mm	
Max.Layers		50 layers	
Solder mask	**Mask Window(mil)**	2-4mil	1. Single side; 2. 2mil is allowed for mask bridge or avoiding exposed lines.
	Mask Bridge(mil)	6mil	Between IC pins
	Color	White,Black, Blue,Green,Yellow,Red,ect.	___
Legend	**Min.Line Width(mil)**	5mil	___
	Color	White,Black,Yellow(orange),ect.	___

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Surface Plating		HALS(with Pb free),ENIG,immersion silver,immersion tin,OSP, gold plating etc.			___
Plating Thickness(micro inch)	**Technique**	Plating Type	Min.Thickness	Max.Thickness	
	Plated Ni/Au	Ni	100	150	
		Au	1	3	
	Immersion Ni/Au	Ni	100	150	
		Au	1	4	
	Gold Finger	Ni	120	150	
		Au	5	20	
Copper Plating Hole (micron)		Copper Thickness	20um	30um	
Base Copper Thickness	**Inner Layers and Outer Layers(OZ)**		0.5	6	
Finished Copper Thickness	**Outer Layers**		1	20	
	Inner Layers		0.5	6	
Insulation Layer(mm)			0.06mm	----	
4/4; 4/5			0.5 OZ	___	Line width shouldn't be less than the required value under ensure of space.
4/6; 5/5; 6/5			1 OZ	___	
5/6; 6/6			2 OZ	___	
6/8; 7/8; 8/8			3 OZ		
8/10; 9/10; 10/10			5 OZ	___	
Board Material		FR-4; Aluminum Base; High Frequency; PFTE; FPC; Thick Copper; BT Base;PI Base; Tg130℃/ Tg170℃ ,IT180A,Rogers,Berquist, Thermagon, (Taconic)			___

Finished Product Thickness Tolerance:

T>=1.0mm, tolerance +/-0.1mm;
1.0mm<T<=1.6mm, tolerance +/-0.13mm;
1.6mm<T<2.0mm, tolerance +/-0.16mm;
T>=2.0mm, tolerance +/-8%

Tolerance of Impedance Control:	**+/-10%**