SYNERGY ELECTRONICS - FLEX PCB MANUFACTURE CAPABILITIES			
No	**ITEM**		**STANDARD**
1	**Material**	FCCL (adhesive)	Shengyi SF305:PI=0.5mil&1mil&2mil; Cu=0.33oz&0.5pz & 1 oz
2		FCCL (adhesiveless)	Panasonic R-F775:PI=1mil&2mil&3mil; Cu=0.5oz & 1oz
			Taiflex MHK: PI=1mil&2mil, Cu=0.33oz&0.5oz&1oz
			DuPont Pyralux AP:PI=1mil&2mil&3mil; Cu=0.5oz & 1oz
3		Coverlay	Shengyi SF305C: 0515&0525&1025&2030
			Taiflex FHK: 1025 & 2035
4		Adhesive	Taiflex BT: AD=10um and 40um
5		PI Stiffener	Taiflex MHK: PI=3mil & 5mil & 7mil & 9mil
6		3M	9077 & 6677 & 9058
7	**Others**	Design Software	CAM350&PROTEL&PADS&POWERPCB&AUTOCAD&GENESIS&ORCAD
8		Gerber format	RS-274-D RS-274-X
9		Drill format	EXCELLON format
10		Layer	1-4
11		Board thickness (without stiffener)	0.05-0.5mm
12		Tolerance of single layer	±0.05mm
13		Tolerance of double-layer (≤0.3mm)	±0.05mm
14		Tolerance of multi-layer (<0.3mm)	±0.05mm
15		Tolerance of multi-layer (0.3mm-0.8mm)	±0.1mm
16		Tolerance of board thickness (including PI stiffener)	±0.05mm
17		Tolerance of board thickness (including FR4 stiffener)	±0.1mm
18		Min. board size	5*10mm (without bridge);10mm*10mm (with bridge)
19		Max. board size	9*14 inch
20		Impedance control tolerance	Single-ended: ±5Ω(≤50Ω),±10%(>50Ω)
			Differential: ±5Ω(≤50Ω), ±10%(>50Ω)
21		Min. coverlay bridge	8mil
22		Min. bend radius of single layer	3-6 times of board thickness
23		Min. bend radius of double-layer	6-10 times of board thickness
24		Min. bend radius of multi-layer	10-15 times of board thickness
25		Min. dynamic bend radius	20-40 times of board thickness
26	**Inner layer**	Min. line width/spacing (12/18um copper)	3.0/3.2mil (loop lines 6.0/6.2mil)
27		Min. line width/spacing (35um copper)	4.0/4.0mil (loop lines 8.0/8.0mil)
28		Min. line width/spacing (70um copper)	6/6.5 (loop lines 10/10.5mil)
29		Max. copper thickness	2oz
30	**Outer Layer**	Min. line width/spacing (18um copper)	3/3.2mil (loop lines 6/6 mil)
31		Min. line width/spacing (35um copper)	4/4.5mil (loop lines 8/8.5mil)
32		Min. line width/spacing (70um copper)	6/7mil (loop lines 10/11mil)
33		Min. line width/spacing (105um copper	10/13mil (loop lines 12/15mil)
34		Max. finished copper thickenss	3oz
35	**Drilling**	Min. distance between via and conductors	6 mil (<4 layer)
			8 mil (4~6 layer)
			12 mil (7-8 layer)
36		Min. mechanical drill hole	6 mil
37	**Solder mask and silk screen**	Soler mask color	green
38		Min. solder dam (base copper ≤1oz)	4mil (green), 8.0mil (solder dam on the large copper)
39		Min. clearance	3mil (part for 2.5mil)
40		Silk color	white, yellow
41	**Surface treatment**	Surface treatment	HASL, ENIG, ENEPIG, Electrolytic Nickel Gold, Soft Gold, Hard gold, Immersion silver and OSP
42		Mixed surface treatment	ENIG+OSP, ENIG+G/F
43		Gold thickness (ENIG)	0.05 - 0.10um
44		Nickel thickness (ENIG)	3-6um
45		Gold thickness (ENEPIG)	0.05-0.10um
46		Palladium thickness (ENEPIG)	0.05-0.15um
47		Nickel thickness (ENEPIG)	3-6um
48		Electrolytic Nickel thickness	3-6um
49		Electrolytic Gold thickness	0.05-0.10um
50		Hard gold thickness (including lead)	0.1-1.5um
51		OSP thickness	0.1-0.3um
52		Immersion silver thickness	0.2-0.4um
53	**Routing**	Laser accuracy	±0.05mm
54		Punch accuracy	±0.05mm - ±0.15mm