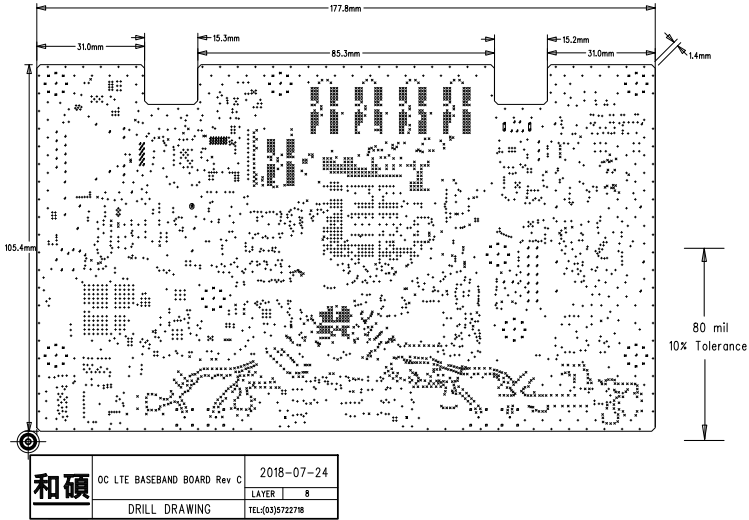


NOTES: UNLESS OTHERWISE SPECIFIED.

1. FABRICATE PER IPC-6011 AND IPC-6012 CLASS 2.
2. MATERIAL: 370HR
DIELECTRIC: FR4 PER IPC-4101.
COPPER: AS PER STACKUP.
U.L. RATING: 94V-0 MINIMUM
3. SURFACE FINISH: ENIG
4. SOLDER MASK MATERIAL SHALL MEET ALL THE REQUIREMENTS OF IPC-SM-840C.SOLDER MASK SHOULD BE BLUE COLOR.
5. SILK SCREEN LEGEND TO BE APPLIED PER LAYER STACKUP USING WHITE NON-CONDUCTIVE EPOXY INK.
6. 100% CONTINUITY TESTING USING DATABASE NETLIST SHALL BE PERFORMED, VENDOR TO IDENTIFY TEST PASSED IN SECONDARY SIDE.
7. VENDOR TO MARK DATE CODE AND LOGO IN ETCH OR IN LEGEND.
8. BOW AND TWIST SHALL NOT EXCEED 0.7% OF LONGEST SIDE .
9. DIELECTRICS AND LINewidthS MAY BE ADJUSTED TO MEET THE IMPEDANCE REQUIREMENTS.
10. REQUEST FABRICATOR TO ADD TEAR DROPS IF NOT ADDED IN THE GERBERS.
11. COMPARE SUPPLIED IPC-D-356 NETLIST TO SUPPLIED GERBER DATA PRIOR TO FABRICATION.
12. CONTROLLED IMPEDANCE: SEE LAYER STACK AND IMPEDANCE CHART.
NOTE: THE IMPEDANCE CHARTS WILL REFLECT ALL POSSIBLE IMPEDANCE VALUES WHICH MAY BE REQUIRED IN THE DESIGN. NOT ALL VALUES WILL BE PRESENT ON EACH LAYER.
13. DELIVERY REQUIREMENTS:
A. ONE BARE BOARD (SOLDER SAMPLE) AND CROSS-SECTION SHALL BE INCLUDED WITH EACH BOARD LOT.
B. A TDR REPORT, ONE PER PANEL SHALL ACCOMPANY THE MATERIAL SHIPMENT.
- 14.MINIMUM CONDUCTOR WIDTH : 4MIL
MINIMUM SPACING : 4.3 MIL

SIZE	QTY	SYM	PLATED	THR/PRTL	TOL
8	1408	✕	YES	THR	+/-3
11.811	35	⌀	YES	THR	+/-3
12	2153	+	YES	THR	+/-3
16	3	⌀	YES	THR	+/-3
19.685	64	✕	YES	THR	+/-3
25.591 x 94.489	2	⌀	YES	THR	+/-3
27.559	5	⌀	YES	THR	+/-3
32.696	4	⌀	YES	THR	+/-3
35	2	⌀	YES	THR	+/-3
35.433	10	⌀	YES	THR	+/-3
42	14	⌀	YES	THR	+/-3
43.307	4	⌀	YES	THR	+/-3
45	3	⌀	YES	THR	+/-3
45.276	3	⌀	YES	THR	+/-3
47.244	4	⊙	YES	THR	+/-3
47.244 x 84.960	1	⌀	YES	THR	+/-3
51.91	16	⊞	YES	THR	+/-3
62.892	5	⌀	YES	THR	+/-3
66.299	4	⌀	YES	THR	+/-3
108.11	12	⌀	YES	THR	+/-3
45.276	1	+	NO	THR	+/-2
51.91	1	⌀	NO	THR	+/-2
62.892	2	✕	NO	THR	+/-2
64.961	1	⌀	NO	THR	+/-2
107.953	2	⌀	NO	THR	+/-2



PCB Material : GA170LL / IT-180A Er = 4.3 L1 & L8 thickness =0.5oz [UE 02:16:41] Liu Ming Chang: T1=0.333oz+Plating=2.2mil
Overall Thickness = 80.00 +/- 10%mil T1= 0.5oz+Plating

LAYERING DETAIL	LAYER	TRACE WIDTH	SPACE WIDTH	IMPEDANCE (OHM,+/-10%)	COPPER THICKNESS
SCALE = NONE					
3.61 mil	L1 (TOP)	4.5 mil	7.5 mil	100 DIFF	0.5oz+Plating
	L2 (GND PLANE)	5.5 mil	6.5 mil	90 DIFF	
		6 mil	-	50 SINGLE	
4 mil	L3 SIGNAL	4.0 mil	8.0 mil	100 DIFF	1 OZ
		4.75 mil	7.25 mil	90 DIFF	
19.36mil	L4 (PWR PLANE)	6 mil	-	50 SIGNAL	
14 mil					1 OZ
19.36 mil	L5 (PWR PLANE)				
					1 OZ
4 mil	L6 SIGNAL	4.0 mil	8.0 mil	100 DIFF	1 OZ
		4.75 mil	7.25 mil	90 DIFF	
		5 mil	-	50 SIGNAL	
3.61 mil	L7 (GND PLANE)				1 OZ
	L8 (BOTTOM)	4.5 mil	7.5 mil	100 DIFF	0.5oz+Plating
		5.5 mil	6.5 mil	90 DIFF	
		6 mil	-	50 SINGLE	

Mask=Blue , Silkscreen=White , Hole=Plug , ENIG per IPC