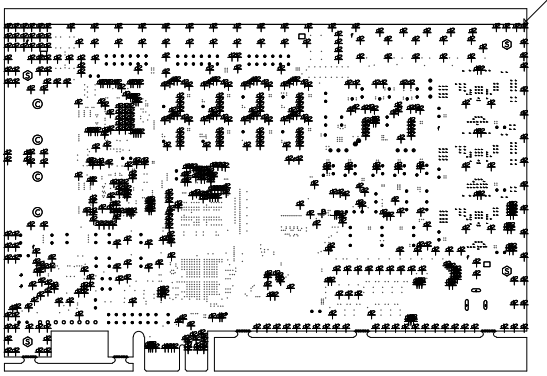
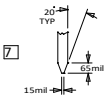
DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	TOLERANCE	PLATED	QTY
·	8.0	+2.0/-2.0	PLATED	1176
+	10.0	+0.0/-0.0	PLATED	3
+	10.0	+0.0/-0.0	PLATED	648
·	10.0	+3.0/-3.0	PLATED	239
●	20.0	+0.0/-0.0	PLATED	2
◜	35.43	+0.0/-0.0	PLATED	6
•	40.0	+3.0/-3.0	PLATED	163
○	40.0	+3.0/-3.0	PLATED	8
•	47.24	+3.0/-3.0	PLATED	9
□	77.0	+3.0/-3.0	PLATED	3
Ⓢ	125.0	+0.0/-0.0	PLATED	4
·	20.0	+0.0/-0.0	NON-PLATED	30
◜	36.0	+2.0/-0.0	NON-PLATED	2
Ⓒ	126.77	+2.0/-0.0	NON-PLATED	4
⚮	118.11x39.37	+0.0/-0.0	PLATED	1
▯	118.11x39.37	+0.0/-0.0	PLATED	1
▯	137.8x39.37	+0.0/-0.0	PLATED	1

TECHNICAL SPECIFICATION:

1. Bow&twist: <=0.7%
2. All hole sizes are specified after plating and marked.
   Thickness in hole wall: 20um (min)
3. Fabricate board per IPC-6012A.
4. Surface finish:ENIG with immersion 3-8 uinches Gold over 150 uinches Nickel.
5. Black soldermask on top and bottom sides of board, LPI applied over bare copper.
   No soldermask is allowed on solder pad. Must conform to IPC-SM-840.
6. Plug all the 0.2mm vias with epoxy from both sides in the BGA area.
7. Board edge fingers are to be:
   - [X] 50 uinches hard Gold over 200 uinches Nickel plated
   - [X] Beveled and chamfered per detail





BEVEL DETAIL, 2 PLACES

Board Name:						Board Thickness:	1.6 mm+/-10%
	Layers: 12					Panel Mode: 1x1	
Silkscreen Color:	☑ White	☐ Yellow				☐ Black	☐ Other
Soldermask Color:	☐ Green	☐ Blue				☑ Black	☐ Other
Surface Finished	☐ HASL(Sn/Pb)	☐ HASL(Pb-Free)				☑ Immersion Gold(ENIG)	
	☐ OSP	☐ InAg				☐ InSn	☐ Other
	☐ Golden Finger,Others HASL(Pb-Free)					☑ Golden Finger,Others ENIG	
	☐ Golden Finger,Others HASL(Sn/Pb)					☐ Golden Finger,Others OSP	
Dielectric Material:	☑ FR-4 TU768	☐ Other					
Tg:	☐ Default	Mid-Tg 150℃				☑ Hi-Tg 170℃	☐ Other
Compare With IPC File:	☑ Yes	☐ No					

	Layer Stack up		Type	Thickness (mil)
	Silk Top			Default
	Solder Top			1.4(1/2oz+plating)
L01-TOP			PREPREG xxxxx	3.4
FR4				0.6(0.5oz)
L02-GND			CORE xxxxx	5.12
CORE				0.6(0.5oz)
L03-SIG1			PREPREG xxxxx	5.0
FR4				0.6(0.5oz)
L04-GND			CORE xxxxx	5.12
CORE				0.6(0.5oz)
L05-POW1			PREPREG xxxxx	5.0
FR4				1.2(1.0oz)
L06-POW2			CORE xxxxx	5.12
CORE				1.2(1.0oz)
L07-GND			PREPREG xxxxx	5.0
FR4				0.6(0.5oz)
L08-SIG2			CORE xxxxx	5.12
CORE				0.6(0.5oz)
L09-GND			PREPREG xxxxx	5.0
FR4				0.6(0.5oz)
L10-SIG3			CORE xxxxx	5.12
CORE				0.6(0.5oz)
L11-GND			PREPREG xxxxx	3.4
FR4				1.4(1/2oz+plating)
L12-BOTTOM				
	Solder Bot			Default
	Silk Bot			

Single Impedance	Layer	Trace Width(mil)	Tolerance	Frequency(MHZ)	Remark
50 ohm	L01/L12	5.0	±10%	Default	
50 ohm	L03/L08/L10	4.2	±10%	Default	
			±10%	Default	
			±10%	Default	
			±10%	Default	
			±10%	Default	
			±10%	Default	

Diff impedance	Layer	Trace W/S(mil)	Tolerance	Frequency(MHZ)	Remark
100 ohm	L01/L12	4.0/6.0	±10%	Default	
100 ohm	L03/L08/L10	4.0/9.0	±10%	Default	
90 ohm	L1	4.8/5.0	±10%	Default	
85 ohm	L2/L13	5.5/5.0	±10%	Default	
			±10%	Default	
			±10%	Default	
			±10%	Default	
			±10%	Default	