



- Board Characteristics - 16 LAYER BOARD
- All dimensions are given in inches unless specified otherwise.
 - Material FR4 with Tg>170C, E.g. FR406
 - Minimum trace width: 0.005" and clearance: 0.005".
 - 1 oz copper for all power layers and for Top and Bottom
1/2 oz copper for Stripline trace layers (Signal_2,3,4,5,7,10).
Zc=50 Ohm and Zdiff=100 Ohm for all 0.005" traces
Perform TDR test for all signal layers.
Present TDR test results for all signal layers.
 - Immersion Gold with min. Ni: 2.5-5 um; Au: 0.05-0.2 um.
Apply Solder Mask.
 - Board Thickness: 0.093 +/- 0.008
 - Mill the Top and Bottom of board on the solder side to a thickness of 0.063" +/- 0.008
 - Silkscreen on Component and Solder Sides.
 - 45 degree chamfer.
 - FHS tolerances: +/- 0.002 unless specified otherwise.
 - Press Fit Holes with Specifications as per TE Conn. Application Specification 114-13219:
Drilled Hole Diameter: 0.54-0.58mm
0.46mm Ref Finished Hole Diameter After Plating
0.025-0.050 Copper Plating (Max Hardness 150 Knoop)
0.0001-0.0005 Au, 0.004-0.0076 Ni Immersion Gold Over Nickel (ENIG)
 - Press Fit Holes with Specifications as per TE Conn. Application Specification 114-13219:
Drilled Hole Diameter: 1.13-1.17mm
1.05mm Ref Finished Hole Diameter After Plating
0.025-0.050 Copper Plating (Max Hardness 150 Knoop)
0.0001-0.0005 Au, 0.004-0.0076 Ni Immersion Gold Over Nickel (ENIG)
 - Via in Pad - Via Fill and Overplate:
Vias of this diameter must be completely filled with Peters PP-2795 or equivalent, planarized and plated over with Copper and surface finish.
The plated cap must adhere to fill material after 1 x 550F solder shock.
 - Remove all non-functional inner layer pads for pins and vias.
 - Do Not increase size of thermal pads and associated spoke connections in holes.

BOARD'S DRILL SCHEDULE

DRILL SYMBOL	DRILL SIZE	COUNT	PLATED	Tolerance	COMMENT
○	.009	1278	YES	---	
⊞	.0091	1804	YES	---	Note 13
⊕	.014	48	YES	---	
⊞	.0181	80	YES	---	Note 11
⊖	.035	16	YES	---	
⊞	.041	574	YES	---	
⊕	.0413	26	YES	---	Note 12
□	.042	20	YES	---	
	.057	6	YES	---	
	.062992126	24	YES	---	
	.073	4	YES	---	
	.106	6	NO	---	
	.12795	5	YES	---	
	.15	3	NO	---	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES .XX .XXX DO NOT SCALE DRAWING	CONTRACT NO.		UNIVERSITY OF CHICAGO ELECTRONICS DEVELOPMENT GROUP		
	APPROVALS	DATE	TITLE		
	DRAWN M. Bogdan	10/14/16	KOTO - CDT Module Specification Drawing		
	CHECKED M. Bogdan	10/14/16	SIZE B	FSCM NO.	DWG. NO. 2878
FINISH	ISSUED			REV. A	
SIMILAR TO	ACT. WT	CALC WT	SCALE 1/2	SHEET	