



Board Characteristics - 16 LAYER BOARD

1. Material: Megtron6
2. Minimum trace width: 0.005" and clearance: 0.005";
3. This is a pressfit tech hole with the following specs:
 - Diameter of drilled hole: 0.7mm/+0.02mm
 - Diameter of finished plated hole: 0.6mm/+0.05mm
 - Hole Plating: min 25um Cu, 2.5-5umNi, 0.05-0.2um Au (Electroless Ni/Immersion Au)
4. 1 oz copper for all power layers and for Signal_1,2 (Top and Bottom)
1/2 oz copper for Stripline trace layers (Signal_2,3,4,5,7,10,11,12).
5. Electroless Nickel Immersion Gold plating, with min. Ni: 2.5-5 um; Au: 0.05-0.2 um.
Apply Solder Mask over bare copper.
6. Board Thickness: 0.093 +/- 0.008
7. Mill the Top and Bottom of board on the solder side to a remaining thickness of 0.063" +/- 0.008
8. Silkscreen on Component and Solder Sides.
9. 45 degree chamfer.
10. FHS tolerances: +/- 0.003 unless specified otherwise.
11. Interlayer spacing as specified.
12. Zc=55 Ohm, Zd=100 Ohm for all 0.005" traces.
Perform TDR test for all signal layers.
Present TDR test results for all signal layers.
13. 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 1x 550F solder shock.
14. Remove all non-functional inner layer pads for pins and vias.
15. Do not increase size of thermal pads and associated spoke connections on 0.041" and 0.0413" holes.

BOARD'S DRILL SCHEDULE

DRILL SYMBOL	DRILL SIZE	COUNT	PLATED	Tolerance	COMMENT
○	.0081	1069	YES	---	Note 13
⊕	.009	366	YES	---	
⊖	.0091	3112	YES	---	Note 13
⊞	.011811024	2	YES	---	
⊗	.0236	90	YES	---	Note 3
⊠	.035	22	YES	---	
⊕	.041	617	YES	---	
□	.042	20	YES	---	
	.057	2	YES	---	
	.059	15	YES	---	
	.066	3	YES	---	
	.067	60	YES	---	
	.07	4	YES	---	
	.106	8	NO	---	
	.12598425	2	NO	---	
	.12795276	2	YES	---	
	.15	5	YES	---	
	.15	6	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 1,500MSPS ADC Module Specification Drawing		
TREATMENT	DRAWN M. Bogdan	6/22/2016	SIZE B	FSCM NO.	DWG. NO. 2869
FINISH	CHECKED M. Bogdan	6/22/2016	ISSUED	REV. A	
SIMILAR TO	ACT. WT	CALC WT	SCALE 1/2	SHEET	