



Board Characteristics - 16 LAYER BOARD

- Material: Megtron6
- Minimum trace width: 0.006" and clearance: 0.005" on Signal 1,6 (Top and Bottom);
- Minimum trace width and clearance: 0.005" on Signal 2,3,4,5,7,8,9,10,11,12 (all stripline);
- 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).
- Electroless Nickel Immersion Gold plating, with min. Ni: 2.5-5 um; Au: 0.05-0.2 um.
Apply Solder Mask over bare copper.
- Board Thickness: 0.093 +/- 0.008
- Mill the Top and Bottom of board on the solder side to a remaining thickness of 0.063" +/- 0.008
- Silkscreen on Component and Solder Sides.
- 45 degree chamfer.
- FHS tolerances: +/- 0.003 unless specified otherwise.
- Interlayer spacing as specified.
- Zc=50 Ohm, Zd=100 Ohm for all 0.005" stripline and all 0.006" microstrip traces.
Perform TDR test for all signal layers.
Present TDR test results for all signal layers.
- 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.
- Remove all non-functional inner layer pads for pins and vias.
- Do not increase size of thermal pads and associated spoke connections on holes.

BOARD'S DRILL SCHEDULE

DRILL SYMBOL	DRILL SIZE	COUNT	PLATED	Tolerance	COMMENT
○	.009	1364	YES	---	
⊕	.0091	1781	YES	---	Note 13
Φ	.011811024	106	YES	---	
⊖	.033464567	2	YES	---	
⊖	.035	24	YES	---	
⊖	.037401575	18	YES	---	
⊖	.039370079	6	NO	---	
□	.041	478	YES	---	
	.041338583	20	YES	---	
	.042	20	YES	---	
	.057	48	YES	---	
	.061023622	4	YES	---	
	.066	4	YES	---	
	.07	4	YES	---	
	.094488189	4	NO	---	
	.106	4	NO	---	
	.11811024	4	NO	---	
	.12598425	2	NO	---	
	.12795276	4	YES	---	
	.15	8	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	
TREATMENT	DRAWN M. Bogdan	5/14/2019	DAMIC - ODILE Board Specification Drawing	
FINISH	CHECKED M. Bogdan	5/14/2019	SIZE B	FSCM NO.
SIMILAR TO	ISSUED		DWG. NO. 2938	REV. A
ACT. WT	CALC WT		SCALE 1/2	SHEET