



Board Characteristics

- All dimensions are given in inches unless specified otherwise.
- Material FR4 with $T_g > 170C$, E.g. FR406
- Minimum trace width and clearance: 0.006" on Signal_1,6 (Top and Bottom); 0.005" on Signal_2,3,4,5 (all stripline traces);
- 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).
- Immersion Gold over copper, with min. Ni: 2.5-5 μm ; Au: 0.05-0.2 μm . 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 thickness of 0.062" +/- 0.008
- Silkscreen on Component and Solder Sides.
- 45 degree chamfer.
- FHS tolerances: +/- 0.002 unless specified otherwise.
- Interlayer spacing as specified
- This is a pressfit technology thru hole with the following specs:
 - 12-1. Finished hole size: 0.59 - 0.65 mm.
 - 12-2. Drilled hole size: 0.7mm +/- 0.02mm
 - 12-3. Min. Thickness of thru hole plating: Cu: 25 μm ; Ni: 2.5-5 μm ; Au: 0.05-0.2 μm .
- Zc=60 Ohm +/- 5 Ohm for 0.005" stripline and 0.006" microstrip traces on all layers.
- Zdiff=105 Ohm +/- 5 Ohm for 0.005" (0.005" apart) stripline and 0.006" (0.006" apart) microstrip traces on all layers.
- Perform TDR test (Zc and Zdiff) for all signal layers.
- Present TDR test results for all signal layers.

BOARD'S DRILL SCHEDULE

DRILL SYMBOL	DRILL SIZE	COUNT	PLATED	Tolerance	COMMENT
○	.014	1560	YES	---	
⊞	.018	2724	YES	---	
⊙	.02	351	YES	---	
⊞	.0236	387	YES	Note 12.	Note 12.
⊙	.035	272	YES	---	
⊞	.041	733	YES	---	
⊙	.042	60	YES	---	
□	.05	1	YES	---	
	.052	20	YES	---	
	.057	54	YES	---	
	.095	12	YES	---	
	.106	9	NO	---	
	.113	6	NO	---	
	.12	8	YES	---	
	.16	3	YES	---	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES .xxx	CONTRACT NO.		UNIVERSITY OF CHICAGO ELECTRONICS DEVELOPMENT GROUP	
	APPROVALS		DATE	TITLE
TREATMENT	DRAWN	M. Bogdan	6/3/04	TDC Board Specification Drawing
FINISH	CHECKED	M. Bogdan	6/3/04	
SIMILAR TO	ACT. WT	CALC. WT	ISSUED	
			SIZE B	FSCM NO.
			DWG. NO. A - 2530	REV B
			SCALE 1/4	SHEET