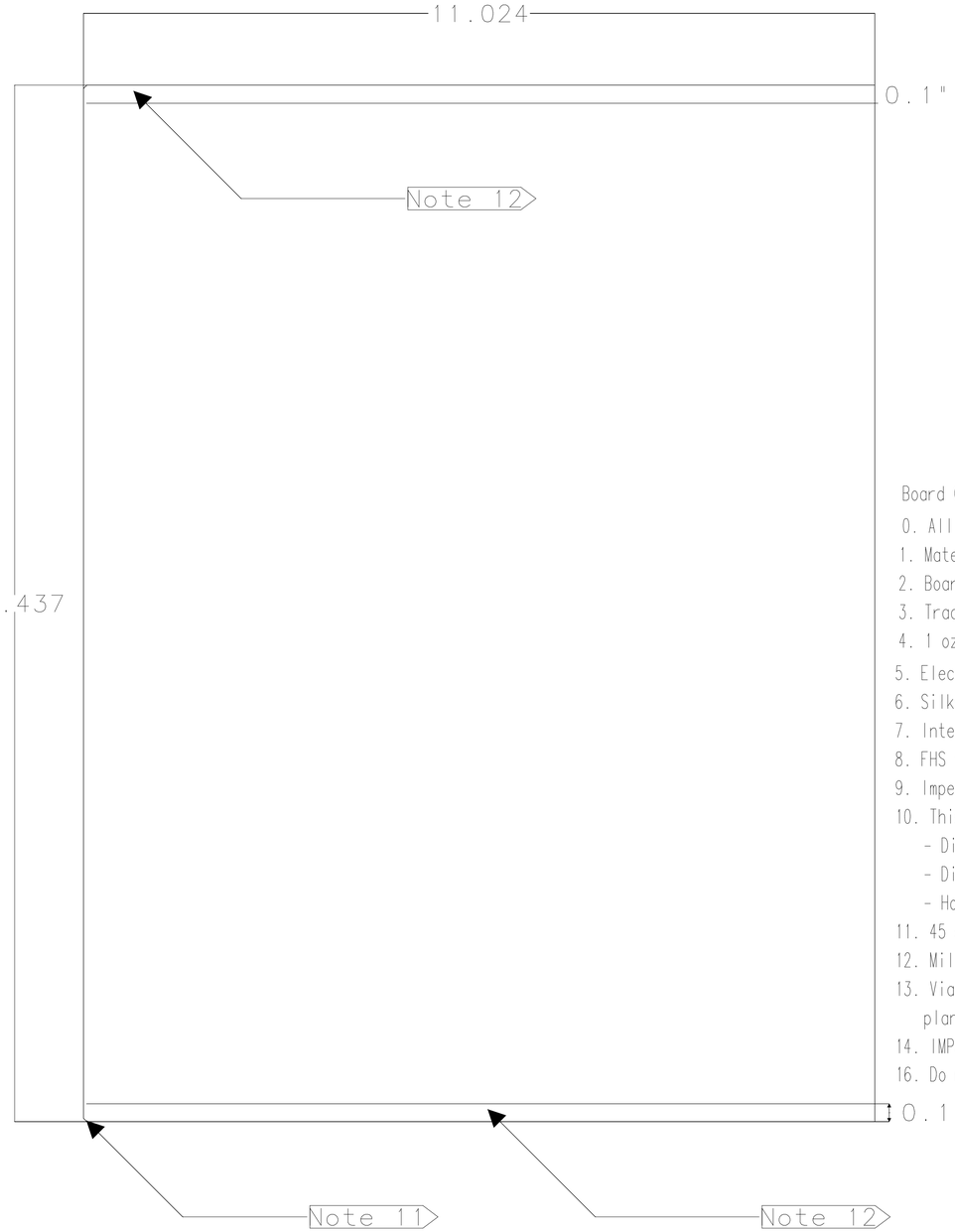
DWG.NO. 2809-C | SH 1 | REV. A



15. This is a pressfit tech. thru hole with the following specs:
    - Diameter of drilled hole: 1.15mm +/-0.02mm
    - Diameter of finished plated through hole: 1.05 mm +/-0.05mm
    - Hole Plating: 25-50 um Cu, 4-7.5 um Ni, 0.1-0.5 um Au (Electroless Ni/Immersion Au).

BOARD's HOLE SCHEDULE

FHS	COUNT	PLATED	COMMENT
.009	2172	YES	
.0091	10554	YES	Note 13
.0092	528	YES	
.0118	64	YES	
.02	172	YES	
.0236	204	YES	Note 10
.033	1	YES	
.0374	9	YES	
.041	806	YES	Note 16
.04133	34	YES	Note 15,16
.057	22	YES	
.061	6	YES	
.089	15	YES	
.1	2	YES	
.106	8	NO	
.113	5	NO	
.12204724	2	NO	
.12598425	12	NO	
.21653543	1	NO	

Dielectric Thickness [mils]

Layer Order:

3	w= 6	1 Oz	1. Signal 1, Top
3		2 Oz	2. Power
		2 Oz	3. Ground
11	w=6	0.5 Oz	4. Signal 2
3		1 Oz	5. Ground
		1 Oz	6. Power
9	w=4	0.5 Oz	7. Signal 3
		1 Oz	8. Power
		1 Oz	9. Power
9	w=4	0.5 Oz	10. Signal 4
3		1 Oz	11. Power
		1 Oz	12. Ground
11	w=6	0.5 Oz	13. Signal 5
3		2 Oz	14. Ground
3		2 Oz	15. Power
	w= 6	1 Oz	16. Signal 6, Bottom

Board Characteristics: 16-Layer Board (No changes shall be made without prior written approval.)

0. All dimension in inches unless specified otherwise
1. Material: Nelco N4000-13 EP SI
2. Board Thickness: 0.095"+/-0.008"
3. Trace Width=6 mils on Layers 1,4,13,16. Trace Width=4mils on Layers 7,10. Min Crearance = 4 mils on signal layers, and 8 mils on power planes.
4. 1 oz Copper for Layers: 1,5,6,8,,9,11,12, and 16; 2 oz Copper for Layers:2,3,14, and 15; 1/2 oz Copper for Layers 4,7,10, and 13.
5. Electroless Nickel/Immersion Gold plating; apply solder mask. min 25 um Cu, 2.5-5 um Ni, 0.05-0.2 um Au (Electroless Ni/Immersion Au).
6. Silkscreen on Both Sides. Discard any writings smaller than 10 mils.
7. Interlayer Dielectric Thickness : as specified.
8. FHS tolerances : +/- 0.003" unless specified otherwise.
9. Impedance 50 Ohm for all single ended traces, and 100 Ohm for all differential traces.
10. This is a pressfit tech. thru hole with the following specs:
    - Diameter of drilled hole: 0.7mm +/-0.02mm
    - Diameter of finished plated through hole: 0.6 mm +/-0.05mm
    - Hole Plating: min 25 um Cu, 2.5-5 um Ni, 0.05-0.2 um Au (Electroless Ni/Immersion Au).
11. 45 degree chamfer
12. Mill the Top and Bottom Edges of Board on the Solder Side to a thickness of 0.063" +/- 0.008". Width of the milled areas: 0.1" +/- 0.05"
13. Via Fill and Overplate is required. Vias of this diameter must be completely filled with Peters PP-2795 or equivalent solids fill material, planarized and plated over with Copper and surface finish. The plated cap must adhere to the fill meterial after 1x550F solder shock.
14. IMPORTANT: Remove all non-functional inner layer pads for pins and vias.
16. Do not increase size of thermal pads and their associated spoke connections on 0.041" and 0.0413" diameter holes.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMALS .008 ANGLES
DO NOT SCALE DRAWING

TREATMENT

FINISH

SIMILAR TO | ACT. WT | CALC WT

CONTRACT NO.

APPROVALS		DATE
DRAWN	M. Bogdan	~~3/24/14~~
CHECKED	M. Bogdan	~~3/24/14~~
ISSUED		3/2015

THE UNIVERSITY OF CHICAGO
ELECTRONICS DEVELOPMENT GROUP

TITLE: FTK Rear Transition Module Specification Drawing

SIZE | FSCM NO. | DWG. NO. 2809 | REV. B

SCALE 1/2 | SHEET 1 of 1

THIS SHEET IS COMPUTER GENERATED