

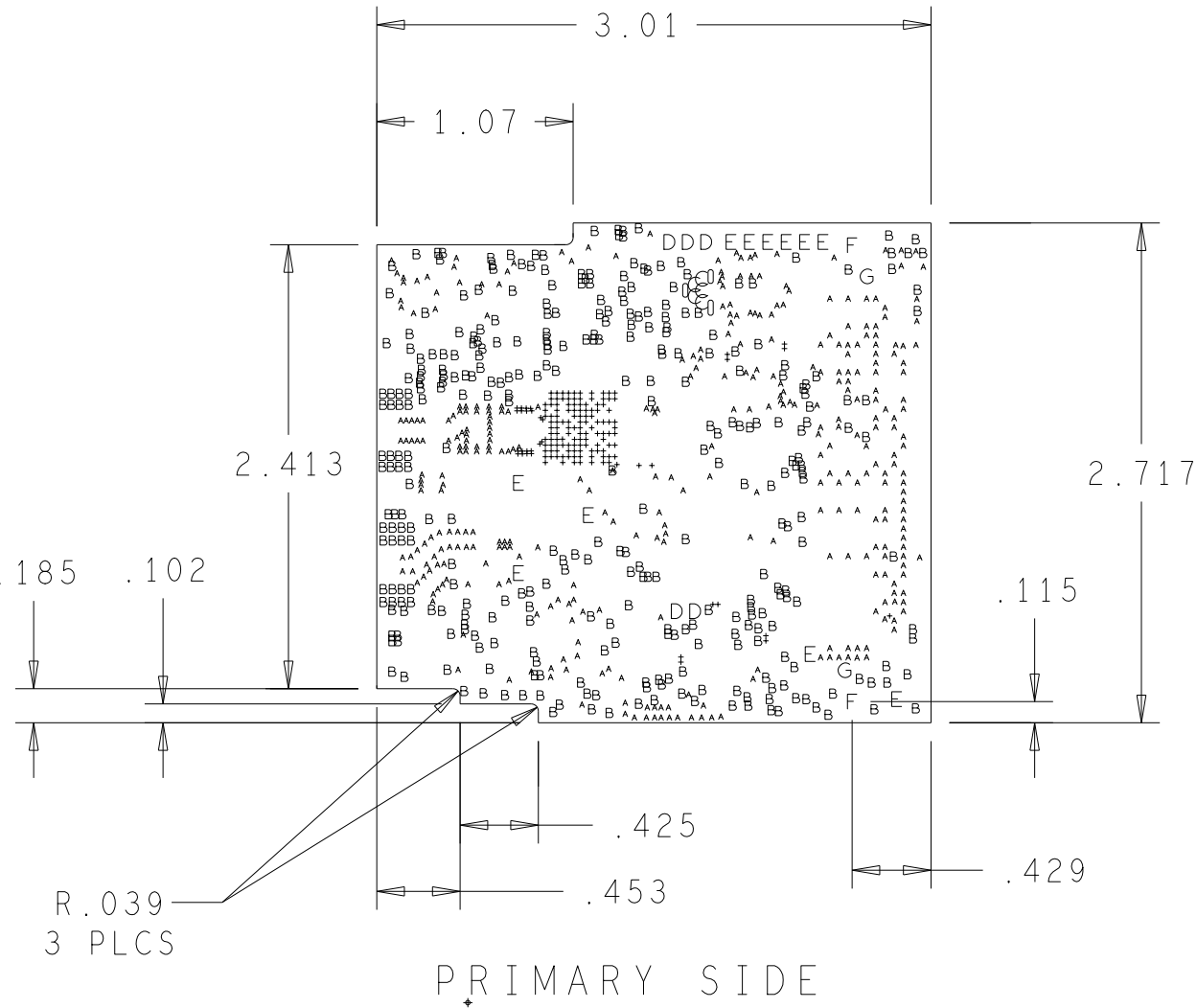
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	02JUL15	B.H.
B	POWER CORRECTION	22JUL15	B.H.
C	BALUN UPDATE	09DEC15	B.H.

NOTES:

- MATERIALS: ROGERS 4350.  
FR-4, IN ACCORDANCE WITH IS410 (LATEST REV.). GLASS FABRIC BASE, EPOXY RESIN, FIRE RESISTANT.
- BONDING AGENT: PREIMPREGNATED B STAGE EPOXY GLASS CLOTH IN ACCORDANCE WITH IPC-L-109 (LATEST REV.).
- CLADDING: EXTERNAL LAYERS 1/2 OZ. COPPER, OVERPLATE TO 1 1/2 OZ. INTERNAL SIGNAL LAYERS 1 OZ. COPPER. INTERNAL PLANE LAYERS 1 OZ. COPPER.
- SOLDER MASK: SHALL BE LIQUID PHOTOIMAGABLE (LPI) APPLIED ON BOTH SIDES OVER BARE COPPER AND SHALL MEET IPC-SM-840 (LATEST REV.) CLASS 3. COLOR: BLUE.
- SILK SCREEN: SHALL BE PERMANENT NON-CONDUCTIVE EPOXY INK, COLOR WHITE.
- U.L. RATING: 94VO MINIMUM.

FABRICATION:

- REFER TO IPC-6010 SERIES (LATEST REV.), CLASS 2 FOR FABRICATION UNLESS OTHERWISE SPECIFIED.
- UNDIMENSIONED HOLES TO BE LOCATED WITHIN +/- .005 OF THEIR TRUE POSITION WITH RESPECT TO ARTWORK.
- PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN .001 INCH MINIMUM AVERAGE, WITH NO READING LESS THAN .0008 BY CROSS SECTION.
- HOLE DIAMETERS APPLY AFTER PLATING.
- FINISHED CONDUCTOR WIDTHS SHALL NOT BE REDUCED FROM THE NOMINAL, INDICATED ON THE MASTER PATTERN, BY MORE THAN THE CONDUCTOR THICKNESS.
- MINIMUM DESIGN LINE WIDTH IS .005 INCH.
- MINIMUM DESIGN SPACING IS .005 INCH.
- BOARD/PANEL MUST MEET IPC-A-600 (LATEST REV.) CLASS 2 FOR FLATNESS.
- MFGR. TO LEGIBLY ETCH OR STAMP/SCREEN WITH PERMANENT NON-CONDUCTIVE INK ON SECONDARY SIDE IN A CLEAR AREA UNLESS OTHERWISE INDICATED;  
A. U.L. CODE                      D. MFGR. LOGO  
B. DATE CODE (STAMP)        E. SUCCESSFUL ELECTRICAL BOARD TEST.  
C. FLAMMABILITY RATING
- NON-FUNCTIONAL PADS MAY BE REMOVED FROM INNER SIGNAL LAYERS AT MFGR. DISCRETION.
- IF PAD SIZES PROVIDED ARE NOT LARGE ENOUGH TO MAINTAIN ANNULAR RING REQUIREMENT, MFGR. MAY TEAR DROP PADS TO MAINTAIN ANNULAR RING AT PAD TO CIRCUIT INTERFACE ONLY AND MUST INSURE ELECTRICAL INTEGRITY.
- REPAIRS PER IPC-R-700 ARE ALLOWED.
- MODIFICATIONS TO THE ARTWORK, OTHER THAN THOSE DESCRIBED ON THE FABRICATION DRAWING, ARE NOT ALLOWED WITHOUT WRITTEN AUTHORIZATION.
- FINISH: SURFACES SHALL HAVE ENIG FINISH PLATED WITH 2-6 MICROINCHES OF IMMERSION GOLD OVER 100-200 MICROINCHES OF ELECTROLESS NICKEL.
- INDICATED VIAS TO BE NON-CONDUCTIVE EPOXY FILLED, AND GROUND FLUSH PRIOR TO OVER PLATING.
- BOARDS TO BE PANELIZED AND SHIPPED INTACT.



12 LAYER STACKUP

	PRIMARY SILKSCREEN
	PRIMARY SOLDER MASK
	PRIMARY SIDE (LAYER 1)
ROGERS 4350	GROUND PLANE (LAYER 2)
ROGERS	INTERNAL SIGNAL (LAYER 3)
ROGERS 4350	GROUND PLANE (LAYER 4)
	POWER PLANE (LAYER 5)
	POWER PLANE (LAYER 6)
	GROUND PLANE (LAYER 7)
	POWER PLANE (LAYER 8)
	GROUND PLANE (LAYER 9)
	INTERNAL SIGNAL (LAYER 10)
	GROUND PLANE (LAYER 11)
	SECONDARY SIDE (LAYER 12)
	SECONDARY SOLDER MASK
	SECONDARY SILKSCREEN

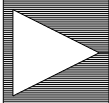
NOMINAL  
FINISHED  
BOARD  
THICKNESS  
0.063"  
+/- .007

CHARACTERISTIC IMPEDANCE = 50 OHMS +/- 10%  
ARTWORK LINE WIDTH FOR  
IMPEDANCE CONTROLLED LINES = 0.008"  
DIFFERENTIAL IMPEDENCE 100 OHMS +/- 10%  
ARTWORK LINE WIDTH FOR  
IMPEDANCE CONTROLLED LINES = 0.005"

HOLE TOLERANCE

UNLESS SPECIFIED  
PLATED: +/- .003  
NON PLATED: +/- .001

FINISHED HOLES IN MILS				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
*	5.0	PLATED	151	SEE NOTE 15
^	10.0	PLATED	359	SEE NOTE 15
B	12.0	PLATED	338	SEE NOTE 15
C	28.0	PLATED	5	
D	40.0	PLATED	5	
E	45.0	PLATED	11	
F	105.0	PLATED	2	
G	50.0	NON-PLATED	2	
0	75.0x28.0	PLATED	2	
0	83.0x28.0	PLATED	1	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES .XX -.010 --1/32 +/- 2 .XXX -.005			NCDRILL		 ANALOG DEVICES		HSC DIVISION 804 WOBURN STREET WILMINGTON, MA 01887							
MATERIAL			APPROVAL DRAWN BY P.M.A.		DATE 02JUL15		TITLE AD9162-FMC 0.8MM EVALUATION BOARD							
			DESIGNED				SIZE C		FSCM NO		DRAWING NUMBER HSC 15017		REV C	
			CHECKED											
FINISH			APPROVED											
			MFG ENGINEER											
DO NOT SCALE DWG							SCALE 2/1				SHEET 1		OF 4	