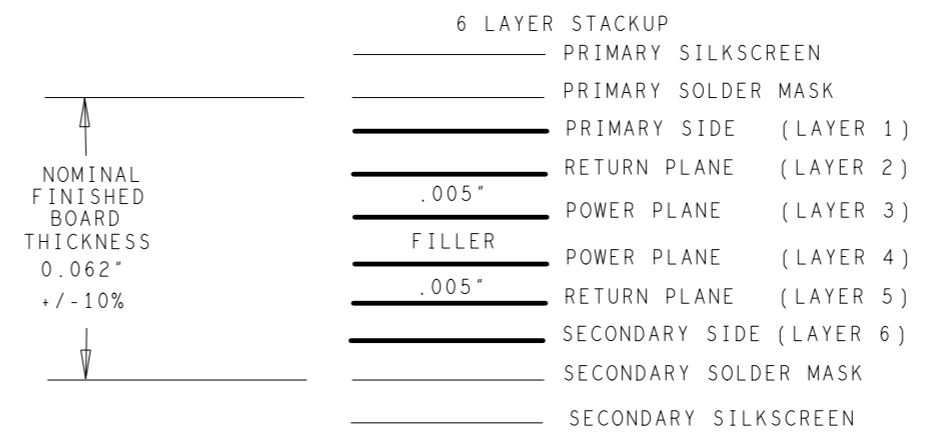
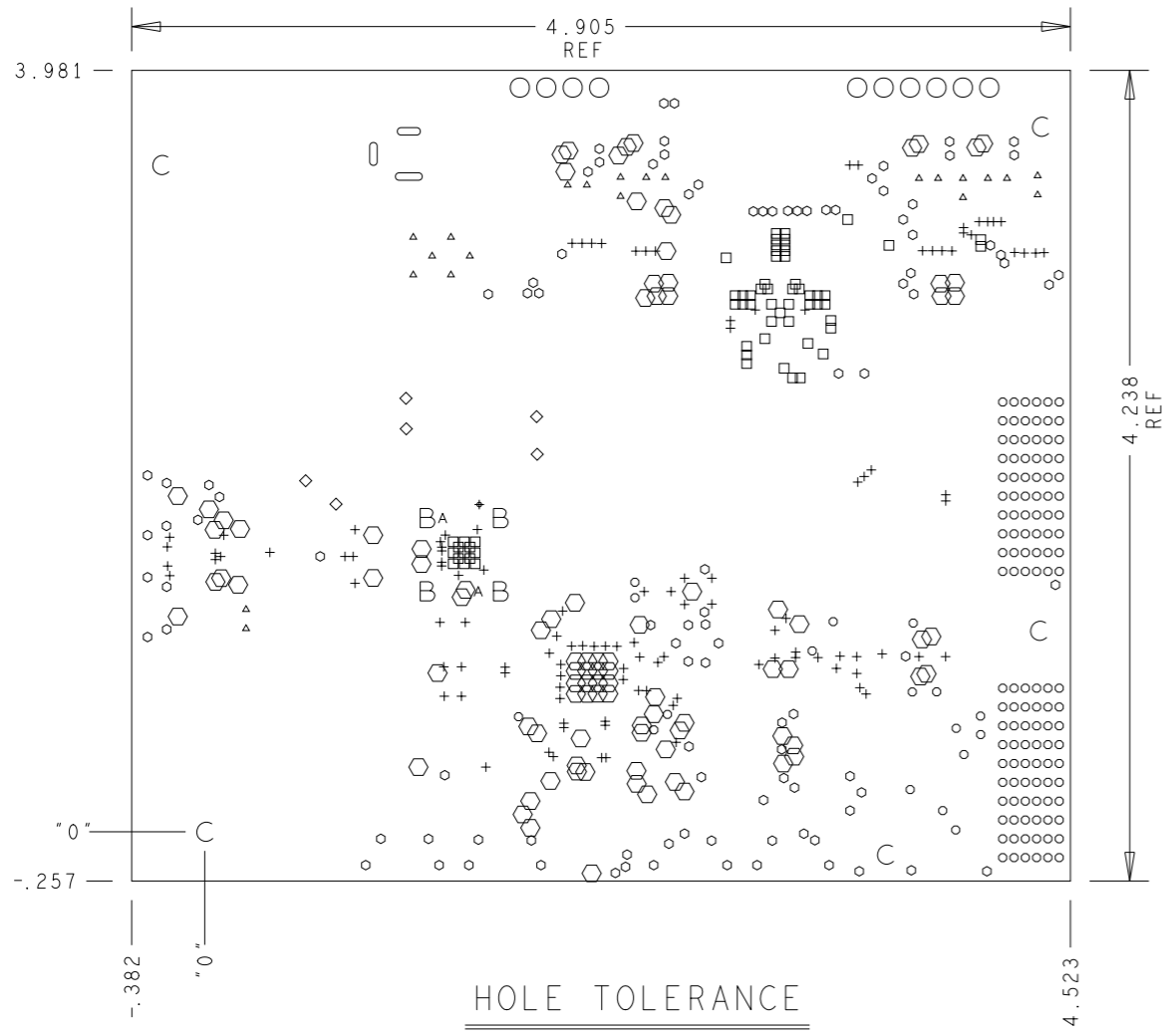


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	01/18/11	JH
B	AS PER ECR-089213	07/08/19	JH



CHARACTERISTIC IMPEDANCE:
 50 OHMS +/- 10% ARTWORK LINE WIDTH .0085"
 100 OHM DIFFERENTIAL ARTWORK LINE .005" TRACE / .005" SPACE

HOLE TOLERANCE
 UNLESS SPECIFIED
 PLATED: +/- 3 MILS
 NON PLATED: +/- 2 MILS

FINISHED HOLES IN MILS				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
+	10.0	PLATED	117	DIA MAX SEE NOTE 15
□	12.0	PLATED	62	DIA MAX SEE NOTE 15
○	16.0	PLATED	96	DIA MAX SEE NOTE 15
◦	20.0	PLATED	102	
◌	30.0	PLATED	137	
◇	35.0	PLATED	6	
△	40.0	PLATED	22	
○	50.0	PLATED	10	
A	33.0	NON-PLATED	2	
B	73.0	NON-PLATED	4	
C	160.0	NON-PLATED	5	
⊃	120.0x39.0	PLATED	1	
⊂	120.0x39.0	PLATED	1	
⊄	140.0x39.0	PLATED	1	

PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES .XX0101/32 . . 2 .XXX005	FABRICATION		ANALOG DEVICES HSC DIVISION 7910 TRIAD CTR. DR. GREENSBORO, NC 27409
	APPROVAL	DATE	
MATERIAL	DESIGNED BY B.M.	18JAN11	TITLE AD9642 ENG.EVAL. PCB
FINISH	DESIGNED BY		SIZE FSCM NO DRAWING NUMBER REV D 9642EE01 B
DO NOT SCALE DWG	SCALE	2/1	SHEET 1 OF 2

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	01/18/11	JH
B	AS PER ECR-089213	07/08/19	JH

REQUIREMENTS:

1. REFER TO IPC-6010 SERIES (LATEST REV.), CLASS 2 FOR FABRICATION UNLESS OTHERWISE SPECIFIED.
2. ACCEPTABILITY PER ANALOG DEVICES, INC. SPECIFICATION TST00115, (LATEST REVISION.)
3. MODIFICATIONS TO THE ARTWORK ARE NOT ALLOWED WITHOUT WRITTEN AUTHORIZATION.
4. HOLE PATTERN TOLERANCES FOR UNDIMENSIONED HOLES SHALL BE A DIAMETER OF 0.005 INCHES FROM THEIR TRUE POSITION.
5. PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN 0.001 INCH MINIMUM AVERAGE, WITH NO READING LESS THAN .0008 BY CROSS SECTION.
6. HOLE DIAMETERS APPLY AFTER PLATING.
7. FINISHED CONDUCTOR WIDTHS SHALL NOT BE REDUCED FROM THE NOMINAL INDICATED ON THE MASTER PATTERN, BY MORE THAN THE CONDUCTOR THICKNESS.
8. MINIMUM DESIGN LINE WIDTH IS .005 INCH.
9. MINIMUM DESIGN SPACING IS .005 INCH.
- ~~10. NON-FUNCTIONAL PAD REMOVAL FROM INNER SIGNAL LAYERS MAY BE PERFORMED AFTER CUSTOMER APPROVAL.~~
11. IF PAD SIZES PROVIDED ARE NOT LARGE ENOUGH TO MAINTAIN ANNULAR RING REQUIREMENT, MFR. MAY REQUEST APPROVAL TO TEAR DROP PADS TO MAINTAIN ANNULAR RING. (AT PAD TO TRACE INTERSECTION ONLY AND ELECTRICAL INTEGRITY MUST BE MAINTAINED.)
12. THIEVING MAY BE ADDED TO COMPENSATE FOR LOW COPPER DENSITY AREAS ON THIS DESIGN ONLY AFTER REVIEW AND APPROVAL FROM THE CUSTOMER:
 - A. THIEVING TO CARD EDGE, FIDUCIALS, NON-PLATED THROUGH HOLES, ALL OTHER FEATURES TO BE 0.200 INCH MINIMUM.
 - B. THERE SHALL BE NO THIEVING IN ANY AREAS FREE OF SOLDER MASK OR INTERNAL COPPER PLANES.
 - C. LOT NUMBER
 - D. MFR LOGO
 - E. SUCCESSFUL ELECTRICAL TEST.
13. MFR. 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-FLAMMABILITY RATING
 - B. DATE CODE (STAMP).
 - C. LOT NUMBER
 - D. MFR LOGO
 - E. SUCCESSFUL ELECTRICAL TEST.
14. REPAIRS PER IPC-7711/21 (LATEST REV.) ARE ALLOWED. REPAIRS ARE NOT ALLOWED IN ANY AREA DEFINED ON GOLD_PRM AND/OR
15. NON-CONDUCTIVE EPOXY FILL AND PLATED OVER.

SPECIFICATIONS:

- ROHS COMPLIANCE NOTE: HOMOGENOUS MATERIALS IN THIS BOARD SHALL BE COMPLIANT THE EU RoHS DIRECTIVE 2002/95/EC
- MATERIALS; ALL LAMINATES AND BONDING MATERIALS SHOULD BE SELECTED FROM IPC-4101 OR IPC-4103, MINIMUM Tg>170degC, Td>300degC, U.L. RATING OF 94 V-0
- MATERIAL FAMILY; ISOLA370HR OR S1000-2 OR IT180 OR EQUIVALENT
- CLADDING; EXTERNAL LAYERS .5 OZ. COPPER, OVERPLATE TO 1.5 OZ. INTERNAL SIGNAL LAYERS .5 OZ. COPPER. INTERNAL PLANE LAYERS 1 OZ. COPPER.
- NOTE: IF THE LAYER STACKUP CONFLICTS WITH THE ABOVE CLADDING SPECIFICATIONS THEN THE LAYER STACKUP SHALL TAKE PRECEDENCE.
- SOLDER MASK; SHALL BE LIQUID PHOTOIMAGEABLE (LPI) APPLIED ON BOTH SIDES OVER BARE COPPER OR GOLD AND SHALL MEET IPC-SM-840 (LATEST REV.) CLASS 3. COLOR GREEN.
- SILK SCREEN; SHALL BE PERMANENT NON-CONDUCTIVE EPOXY INK, COLOR: WHITE SYNTHETIC INKJET PRINTING ALLOWED FOR DENSE BOARDS, COLOR: WHITE
- SURFACE FINISH; ENIG (ELECTROLESS NICKEL / IMMERSION GOLD) PER IPC-4552 LATEST REVISION
- INTENTIONAL SHORTS; IF SUPPLIED DATA INCLUDES A FILE "READ_ME.2", THEN INTENTIONAL NET SHORTS EXIST. CUSTOMER REVIEW AND APPROVAL IS REQUIRED IF SUPPLIED DATA REPORTS ANY CONDITION THAT DOES NOT MATCH "READ_ME.2" FILE PROVIDED.
- TEST REQUIREMENTS; 100% NETLIST ELECTRICAL VERIFICATION USING CUSTOMER SUPPLIED IPC-D-356 NETLIST FOR OPENS AND SHORTS WHEN "GERBER DATA" IS PROVIDED. THIS VERIFICATION ALSO REQUIRED FOR "ODB++" DATA PER EMBEDDED NETLIST.

PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		TOLERANCES		HSC DIVISION 7910 TRIAD CTR. DR. GREENSBORO, NC 27409	
DECIMALS	FRACTIONS	ANGLES			
.XX	.../10	.../32	.. 2		
XXX	.../100				
FABRICATION		APPROVAL	DATE	TITLE	
DRAWN BY B.M.			18JAN11	AD9642 ENG.EVAL. PCB	
DESIGNED		CHECKED			
FINISH		APPROVED		SIZE	FSCM NO
MFG ENGINEER				D	
DO NOT SCALE DWG		SCALE	2/1	DRAWING NUMBER	REV
				9642EE01	B
		SHEET 2 OF 2			