

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	29MAR22	F.LUPAS
B	ECR-114532	13JUN23	M.BANCISOR

HOLE TOLERANCE

UNLESS SPECIFIED
PLATED: +/- .003
NON PLATED: +/- .002


FINISHED HOLES IN MILS				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
+	10.0	PLATED	294	DIA MAX
□	45.0	PLATED	3	
°	50.0	PLATED	3	
A	28.0	NON-PLATED	4	
B	100.0	NON-PLATED	2	

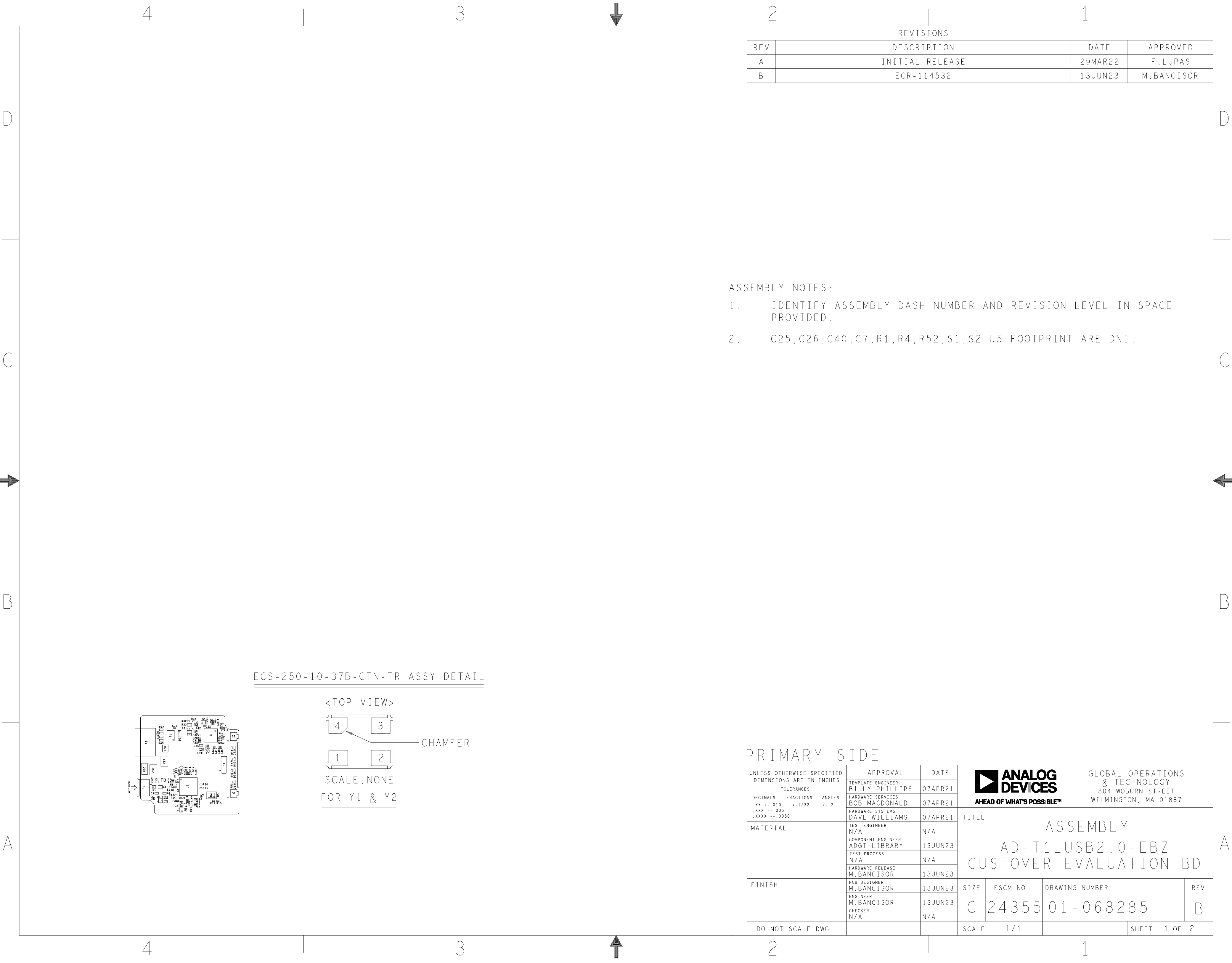
TOTAL HOLES: 306

FINISHED HOLES IN MILS				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
°	33.0x22.0	PLATED	2	
°	45.0x20.0	PLATED	2	

TOTAL HOLES: 4

PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			APPROVAL		DATE		<div><div>ANALOG DEVICES</div><div>AHEAD OF WHAT'S POSSIBLE™</div></div>		GLOBAL OPERATIONS & TECHNOLOGY 804 WOBURN STREET WILMINGTON, MA 01887					
TOLERANCES			TEMPLATE ENGINEER BILLY PHILLIPS		07APR21									
DECIMALS FRACTIONS ANGLES			HARDWARE SERVICES BOB MACDONALD		07APR21									
.XX .010 --1/32 -- 2			HARDWARE SYSTEMS DAVE WILLIAMS		07APR21									
.XXX .005							TITLE		FABRICATION AD-T1LUSB2.0-EBZ CUSTOMER EVALUATION BD					
.XXXX .0050														
MATERIAL			TEST ENGINEER N/A		N/A									
			COMPONENT ENGINEER ADGT LIBRARY		13JUN23									
			TEST PROCESS N/A		N/A									
			HARDWARE RELEASE M. BANCISOR		13JUN23									
FINISH			PCB DESIGNER M. BANCISOR		13JUN23		SIZE		FSCM NO		DRAWING NUMBER		REV	
			ENGINEER M. BANCISOR		13JUN23		C		24355		09-068285		B	
			CHECKER N/A		N/A									
DO NOT SCALE DWG							SCALE		1/1				SHEET 1 OF 2	

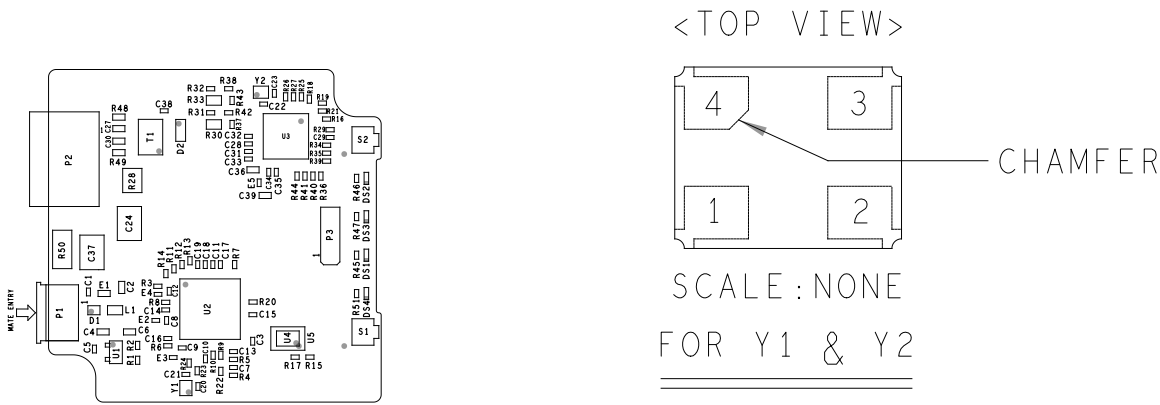


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	29MAR22	F.LUPAS
B	ECR-114532	13JUN23	M.BANCISOR


ASSEMBLY NOTES:

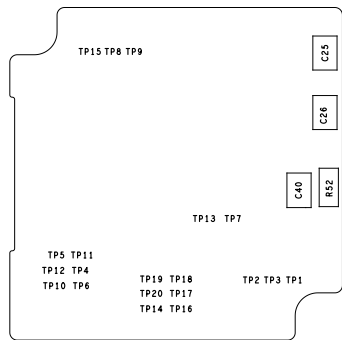
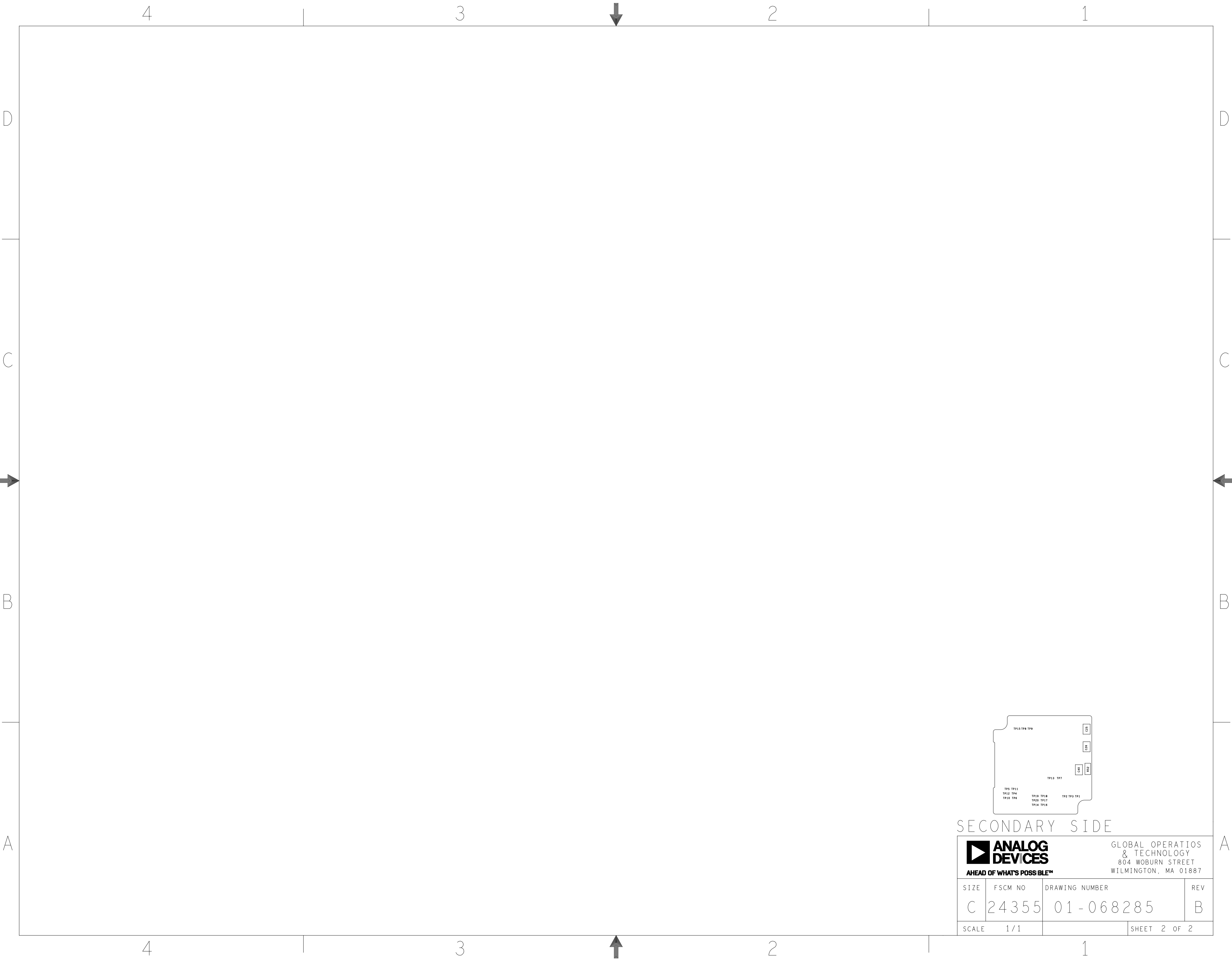
1. IDENTIFY ASSEMBLY DASH NUMBER AND REVISION LEVEL IN SPACE PROVIDED.
2. C25,C26,C40,C7,R1,R4,R52,S1,S2,U5 FOOTPRINT ARE DNI.

ECS-250-10-37B-CTN-TR ASSY DETAIL




PRIMARY SIDE

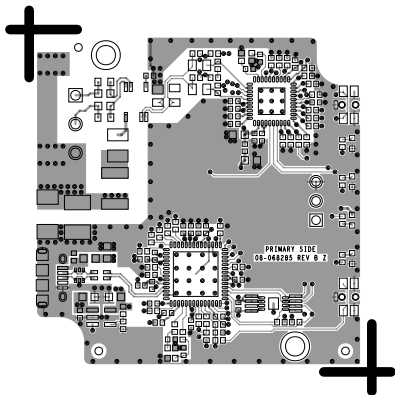
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES .XX -.010 --1/32 -- 2 .XXX -.005 .XXXX -.0050	APPROVAL		DATE	<div>GLOBAL OPERATIONS & TECHNOLOGY 804 WOBURN STREET WILMINGTON, MA 01887</div>			
	TEMPLATE ENGINEER BILLY PHILLIPS		07APR21				
	HARDWARE SERVICES BOB MACDONALD		07APR21				
	HARDWARE SYSTEMS DAVE WILLIAMS		07APR21				
MATERIAL	TEST ENGINEER N/A		N/A	TITLE ASSEMBLY AD-T1LUSB2.0-EBZ CUSTOMER EVALUATION BD			
	COMPONENT ENGINEER ADGT LIBRARY		13JUN23				
	TEST PROCESS N/A		N/A				
	HARDWARE RELEASE M.BANCISOR		13JUN23				
FINISH	PCB DESIGNER M.BANCISOR		13JUN23	SIZE	FSCM NO	DRAWING NUMBER	REV
	ENGINEER M.BANCISOR		13JUN23	C	24355	01-068285	B
	CHECKER N/A		N/A	SCALE 1/1			SHEET 1 OF 2
	DO NOT SCALE DWG						



SECONDARY SIDE

 ANALOG DEVICES <small>AHEAD OF WHAT'S POSSIBLE™</small>	GLOBAL OPERATIONS & TECHNOLOGY 804 WOBURN STREET WILMINGTON, MA 01887		
SIZE	FSCM NO	DRAWING NUMBER	REV
C	24355	01-068285	B
SCALE	1 / 1	SHEET 2 OF 2	

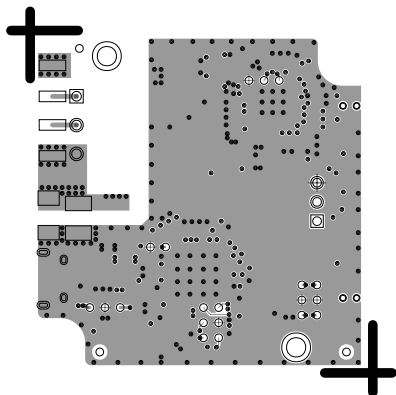
L1 PRIMARY
08-068285-01
REV B



L4 SECONDARY

08-068285-02

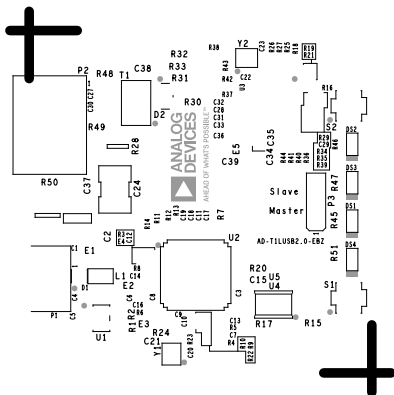
REV B



SILKSCREEN PRIMARY

08-068285-03

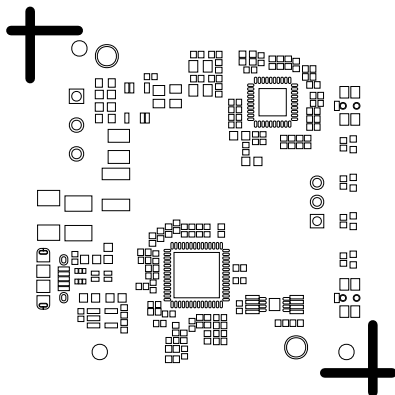
REV B



SOLDERMASK PRIMARY

08-068285-04

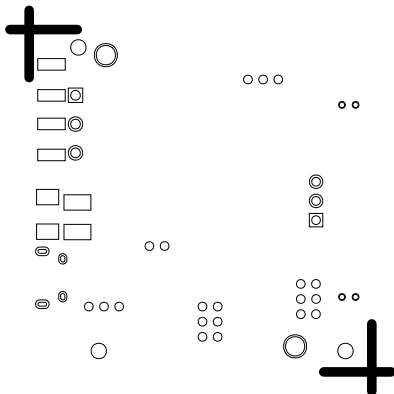
REV B



SOLDERMASK SECONDARY

08-068285-06

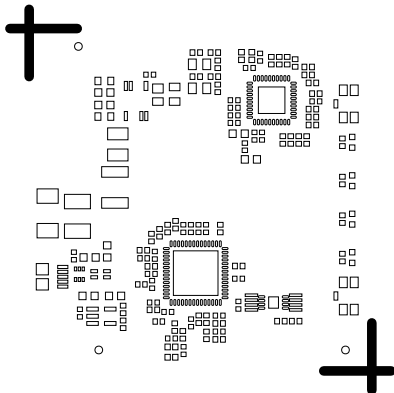
REV B



PASTEMASK PRIMARY

08-068285-09

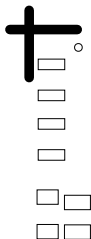
REV B



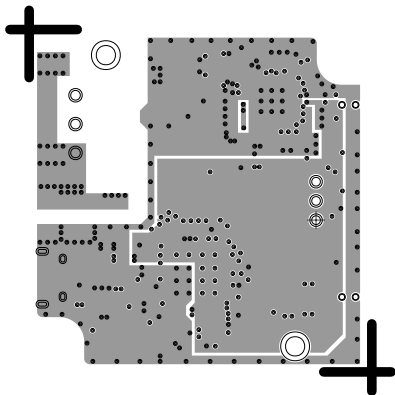
PASTEMASK SECONDARY

08-068285-10

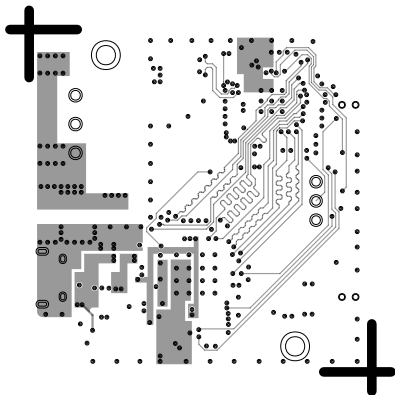
REV B



L2 SIG/PWR
08-068285-07
REV B



L3 SIG/PWR
08-068285-08
REV B



SPECIFICATIONS:

- 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;ISOLA 370HR 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.

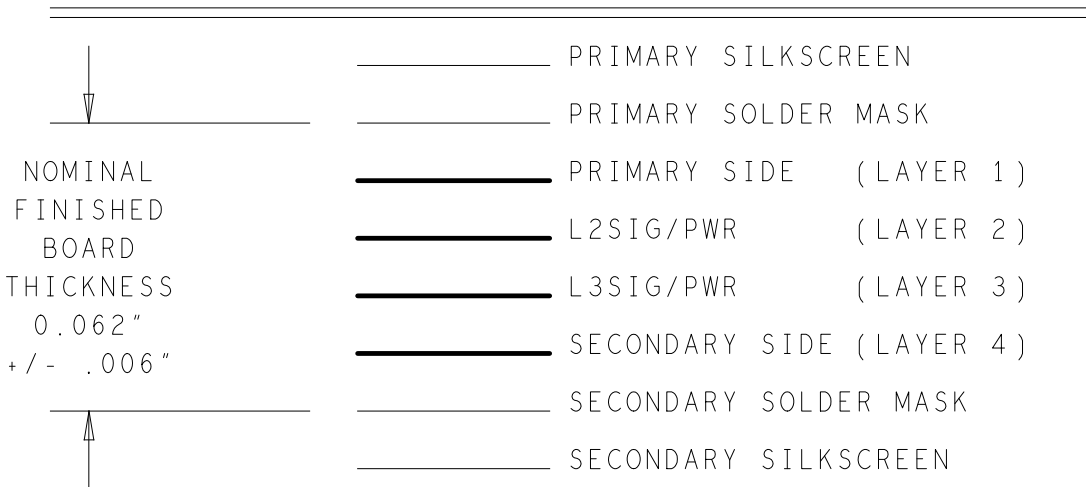
REQUIREMENTS:

- 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 .006 INCH.
- 9.MINIMUM DESIGN SPACING IS .00575 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, MFGR. 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.
- 13.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-FLAMMABILITY RATING D. MFGR LOGO
B. DATE CODE (STAMP). E. SUCCESSFUL ELECTRICAL TEST.
C. LOT NUMBER
- 14.REPAIRS PER IPC-7711/21 (LATEST REV.) ARE ALLOWED. REPAIRS ARE NOT ALLOWED IN ANY AREA DEFINED ON GOLD_PRM AND/OR GOLD_SEC ARTWORK LAYERS WHEN PROVIDED IN GERBER OR ODB++ DATA.
- 15.SMOOTHEN EDGES AND FREE FROM BURRS AFTER DEPANELIZATION PROCESS. BOARDS TO BE SHIPPED SINGULATED AFTER FABRICATION PROCESS.

4 LAYER STACKUP




IMPEDANCE TOLERANCE +/-10%
SE = SINGLE ENDED, DP = DIFFERENTIAL PAIR

IMPEDANCE TABLE					
IMPEDANCE TOLERANCE: +/-10%					
LAYER	50 OHM SE TRACE WIDTH	- OHM TRACE WIDTH	100 OHM DP TRACE WIDTH/SPACE	90 OHM DP TRACE WIDTH/SPACE	REFERENCE
TOP	0.01000	-	0.00650/0.00750	0.00800/0.00600	L2
L3_SIG/PWR	0.00650	-	-	-	L4

NOTE: DO NOT EDIT THIS TABLE MANUALLY;USE IMPEDANCE TABLE GENERATOR FROM ADI Tools.

PRIMARY SIDE

 AHEAD OF WHAT'S POSSIBLE™		GLOBAL OPERATIONS & TECHNOLOGY 804 WOBURN STREET WILMINGTON, MA 01887	
		SIZE C	REV B
FSCM NO	DRAWING NUMBER		
24355	09-068285		
SCALE	1/1	SHEET 2 OF 2	