

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	ddMMMyy	X

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; EPOXY FIBERGLASS, NEMA GRADE FR-4

CLADDING; EXTERNAL LAYERS 2 OZ. COPPER
 INTERNAL PLANE LAYERS 2 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

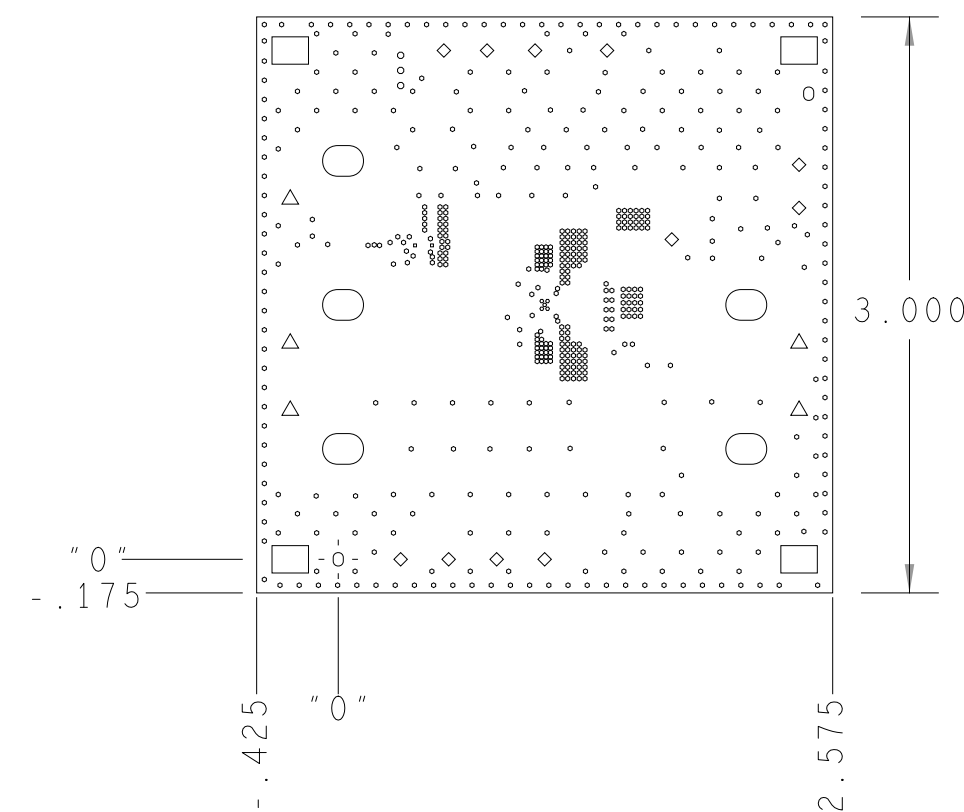
SURFACE FINISH; ENIG (ELECTROLESS NICKEL IMMERSION GOLD) BOTH SIDES.
PER IPC-4552 LATEST REVISION

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 .005 INCHES FROM THEIR TRUE POSITION.
5. PLATED HOLE WALL THICKNESS SHALL NOT BE LESS THAN .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 .008 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. 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 GOLD_SEC ARTWORK LAYERS WHEN PROVIDED IN GERBER OR ODB++ DATA.
15. TENT VIAS BOTH SIDES.
16. PRODUCTION BOARDS TO BE PANELIZED AND SHIPPED INTACT. PROTOTYPE BOARDS ARE SHIPPED AS SINGLE PCS. SOLDER SAMPLE REQUIRED.

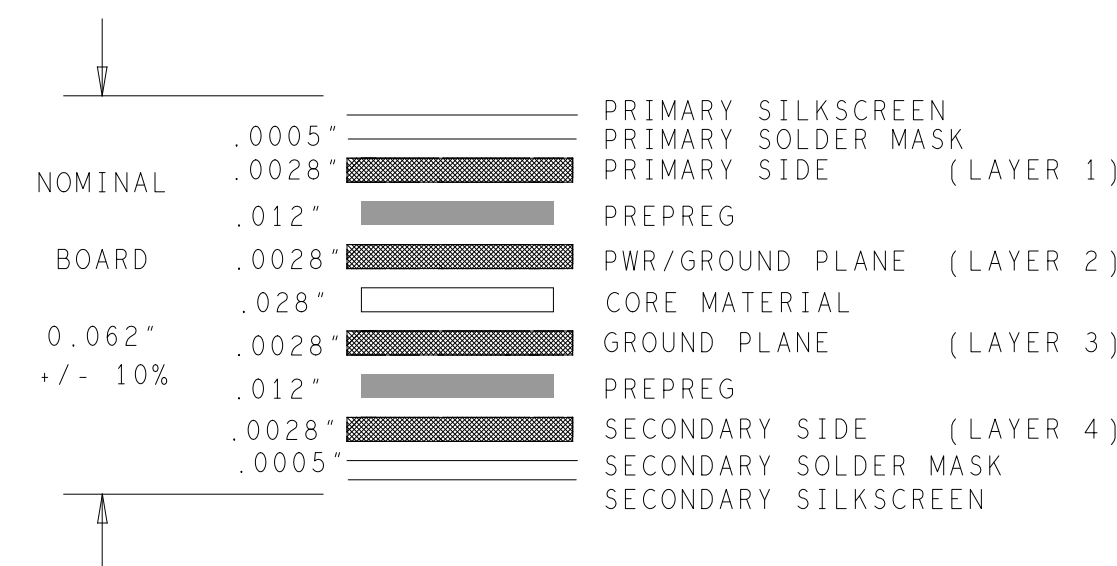


HOLE TOLERANCE

UNLESS SPECIFIED
PLATED: $\pm .003$
NON PLATED: $\pm .001$


FINISHED HOLES IN MILS				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
•	6.0	PLATED	2	
•	11.0	PLATED	5	
•	12.0	PLATED	514	
◦	35.0	PLATED	3	
◊	70.0	PLATED	11	
△	100.0	PLATED	5	
○	213.0	PLATED	5	
◦	70.0	NON-PLATED	2	
□	190.0	NON-PLATED	4	

4 LAYER STACKUP



CHARACTERISTIC IMPEDANCE = NONE REQUIRED
ARTWORK LINE WIDTH FOR
IMPEDANCE CONTROLLED LINES = NONE REQUIRED

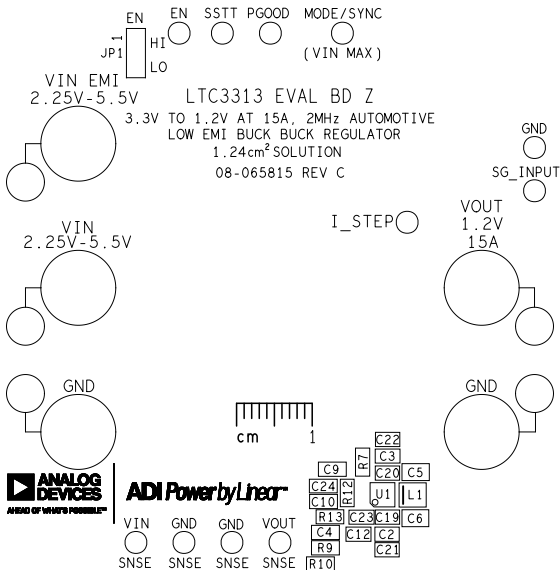
PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		APPROVAL		DATE		 ANALOG DEVICES <small>AHEAD OF WHAT'S POSSIBLE™</small>		ADI Power by Linear™	
TOLERANCES		TEMPLATE ENGINEER BILLY PHILLIPS		01SEP20		<div> <div>TITLE</div> <div>FABRICATION EVALUATION BOARD LTC3313-EBZ</div> </div>			
DECIMALS FRACTIONS ANGLES		HARDWARE SERVICES BOB MACDONALD		01SEP20					
.XX .XX .010 -- 1/32 -- 2		HARDWARE SYSTEMS DAVE WILLIAMS		01SEP20					
XXX -- .005		COMPONENT ENGINEER ADGT LIBRARY		01SEP20					
XXXX -- .0050									
MATERIAL						<div> <div>SIZE</div> <div>FSCM NO</div> <div>DRAWING NUMBER</div> </div>			
		HARDWARE RELEASE X		ddMMMyy		<div> <div>D</div> <div>2435509-065815</div> <div>C</div> </div>			
FINISH		PCB DESIGNER NICK CARLONE		29OCT21					
		APPLICATIONS ENGINEER WENWEI LI		29OCT21					
		CHECKER WENWEI LI		TBD		<div> <div>SCALE</div> <div>1/1</div> <div>SHEET 1 of 3</div> </div>			
DO NOT SCALE DWG									

SILKSCREEN PRIMARY

08-065815-03

REV C



ART FILM - paste_prm

PASTEMASK PRIMARY

08-065815 - 9

REV C

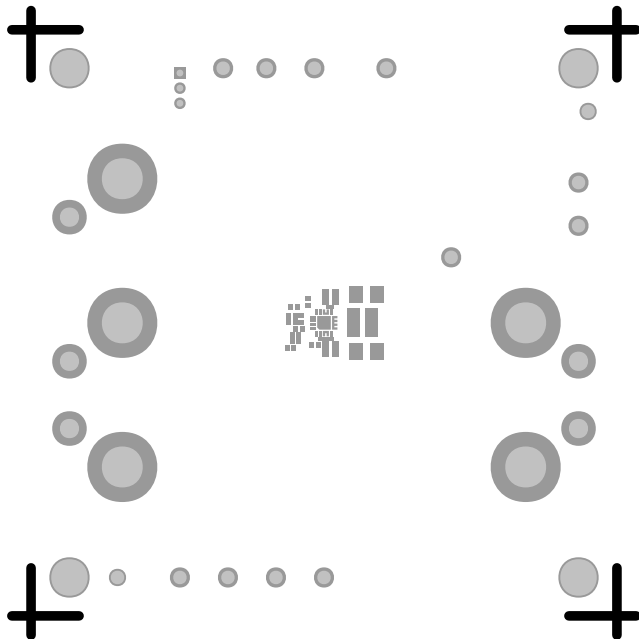


ART FILM - paste_prm

SOLDERMASK PRIMARY

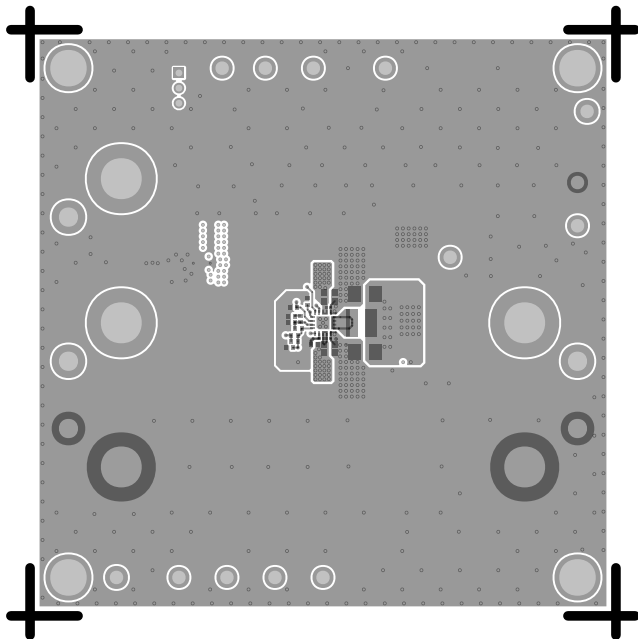
08-065815-04

REV C



ART FILM - 11_primary

L1 PRIMARY
08-065815-01
REV C

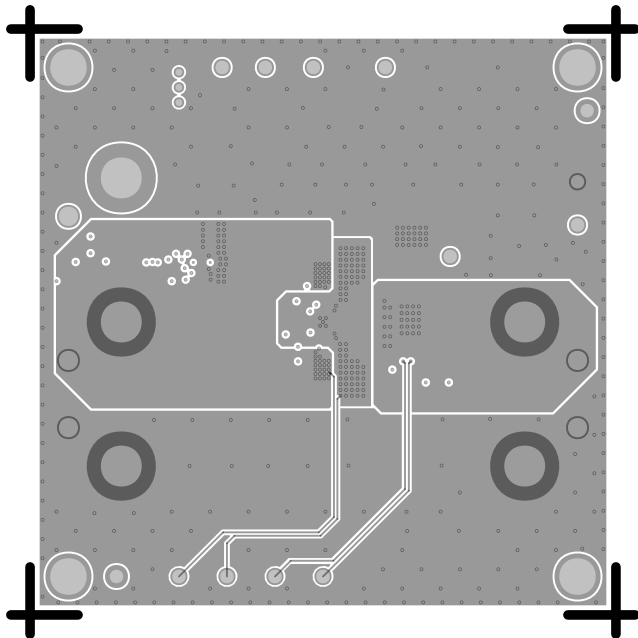


ART FILM - 11_primary

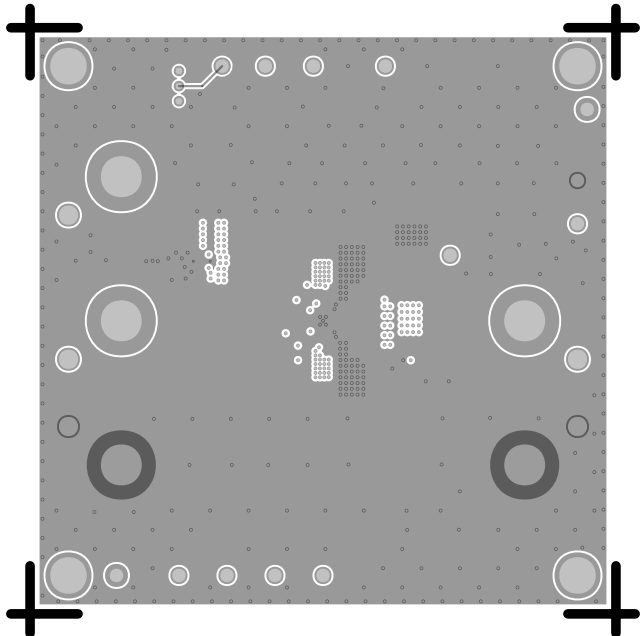
L2 POWER/GROUND

08-065815-07

REV C



L3 GROUND
08-065815-08
REV C

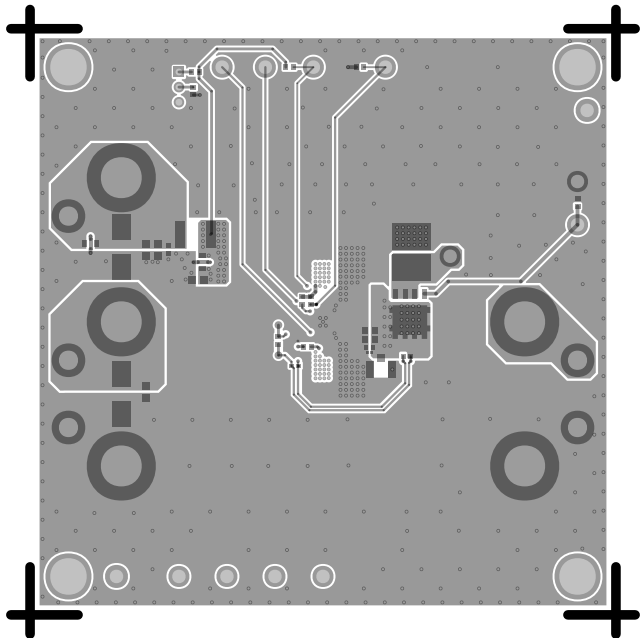


ART FILM - 14_secondary

L4 SECONDARY

08-065815-02

REV C

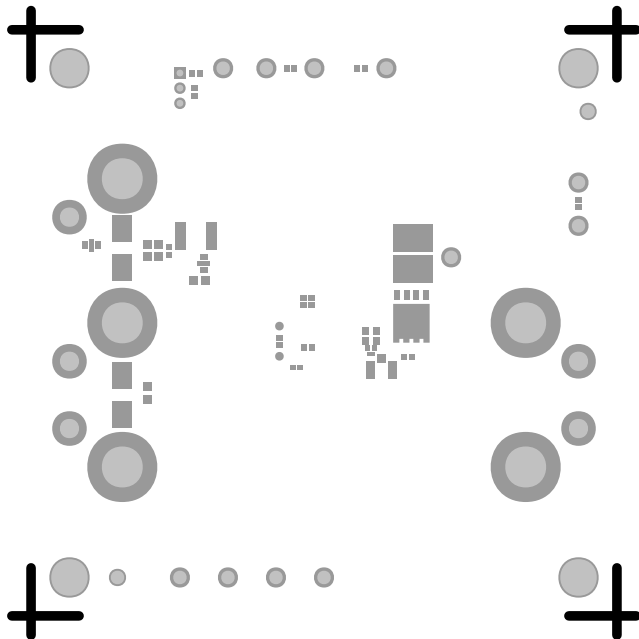


ART FILM - 14_secondary

SOLDERMASK SECONDARY

08-065815-06

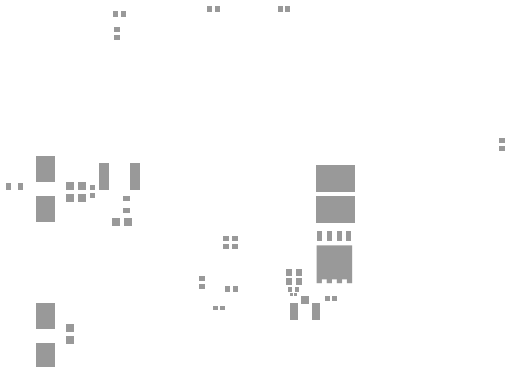
REV C



PASTEMASK SECONDARY

08-065815-10

REV C



SILKSCREEN SECONDARY

08-065815-05

REV C

219

WWW.ANALOG.COM

MODE	R3	R4	R6	R7
PULSE SKIP	100K	0	OPEN	OPEN
FORCED CONT. OPEN	0 OR OPEN	100K	POPULATED OR OPEN**	

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** MODE\SYNC PIN IS CLOCK OUTPUT WHEN R7 IS POPULATED.
* IF R7 IS POPULATED R4 MUST BE OPEN.

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