


REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	22JUL24	X

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

DRILL CHART: TOP to BOTTOM				
ALL UNITS ARE IN MILS				
FIGURE	SIZE	PLATED	QTY	TOLERANCE/NOTES
+	6.0	PLATED	14	
□	10.0	PLATED	632	
⊗	35.0	PLATED	8	
⊙	50.0	PLATED	2	
⊖	60.0	PLATED	8	
△	100.0	PLATED	12	
Ⓜ	213.0	PLATED	4	
Ⓨ	187.0	NON-PLATED	4	

PRIMARY SIDE					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES ..XX .. .010 -- 1/32 -- 2 ..XXX .. .005 ..XXXX .. .0050	APPROVAL		DATE		
	TEMPLATE ENGINEER X		d d M M y y		
	HARDWARE SERVICES X		d d M M y y		
	HARDWARE SYSTEMS X		d d M M y y		
MATERIAL	TEST ENGINEER X		d d M M y y		
	COMPONENT ENGINEER X		d d M M y y		
	TEST PROCESS X		d d M M y y		
	HARDWARE RELEASE X		d d M M y y		
FINISH	DESIGNER K.Chan		d d M M y y		
	PTD ENGINEER X		d d M M y y		
	CHECKER X		d d M M y y		
DO NOT SCALE DWG					

		ANALOG DEVICES		WMM DIVISION 804 WOBRUN STREET WILMINGTON, MA 01887	
		TITLE FABRICATION EVAL-LT8640SA-AZ			
SIZE	FSCM NO	DRAWING NUMBER		REV	
C	24355	09-082008		A	
SCALE		1 / 1			
				SHEET 1 OF 2	

1. DIMENSIONS ARE IN INCHES (EXCEPT WHERE NOTED).
ALL DOCUMENTS & SPECIFICATIONS REFERRED TO BELOW SHOULD BE THE LATEST REVISIONS.

2. BOARD MATERIAL:(USE CHECKED ITEMS)

- (X) ISOLA 370HR OR S1000-2 OR IT180 OR EQUIVALENT
() ISOLA-FR408HR OR EQUIVALENT
() ISOLA IS410
() MEGTRON 6
() NELCO-4000-13
() ROGERS 4350B
() ROGERS 3003
() ARLON 85N
() EM370D
() OTHER _____
3. ALL LAMINATES & BONDING MATERIALS SHOULD BE SELECTED FROM IPC-4101 OR IPC-4103. (TG>170 DEG C TD>300 DEG C)
UL FLAMMABILITY RATING 94V-0. BOARD MATERIAL & CONSTRUCTION SHALL MEET THE REQUIREMENTS OF UL796/UL796F.
4. REFER TO IPC-6010 SERIES, CLASS 2 FOR FABRICATION. WORKMANSHIP SHALL CONFORM TO IPC-A-600, CLASS 2.
5. REFER TO LAMINATION DIAGRAM FOR OVERALL BOARD THICKNESS, TOLERANCE APPLIES AFTER ALL LAMINATION AND PLATING
PROCESSES. FINISHED THICKNESS MEASURED FROM TOP COPPER TO BOTTOM COPPER.
6. BOW & TWIST NOT TO EXCEED 0.0075 INCHES (0.75%) PER LINEAR INCH AND SHOULD BE MEASURED PER IPC-TM-650, METHOD 2.4.22.
7. ACCEPTABILITY PER ADI SPECIFICATION TS00115.

IMPEDANCE REQUIREMENTS: IF NO STACKUP IS DEFINED, THE VENDOR IS ALLOWED TO ADJUST THE DIELECTRIC THICKNESS & TRACE WIDTHS TO MEET THE IMPEDANCE REQUIREMENT. IF SPECIFIED, THE VENDOR MUST MEET THE REQUIREMENTS LISTED IN THE IMPEDANCE TABLE. ANY ADJUSTMENT MADE TO THE DEFINED STACKUP, TRACE WIDTH & SPACING THAT IMPACT THE REQUIREMENTS MUST HAVE WRITTEN APPROVAL FROM ADI.

FILLET OPTIONS TO ENHANCE RELIABILITY AT PAD JUNCTIONS WHERE SPACING PERMITS.

() FILLETS ALLOWED

(X) FILLETS NOT ALLOWED

0. THIEVING:

() VENDOR MAY ADD THIEVING TO COMPENSATE FOR LOW COPPER DENSITY AREAS MAINTAINING A MINIMUM 0.100 INCH CLEARANCE FROM ALL COPPER FEATURES.

(X) VENDOR MAY NOT ADD THIEVING TO COMPENSATE FOR LOW COPPER DENSITY AREAS.

1. LAYER TO LAYER REGISTRATION SHALL BE WITHIN 0.003 INCHES.

2. DRILL SIZES ARE FINISHED HOLE SIZES. ALL HOLES SHALL BE LOCATED WITHIN 0.005 INCHES DTP, UNLESS SPECIFIED. MINIMUM BARREL PLATING OF 0.001 INCHES. PLATED HOLES SHALL NOT BE ROUGH OR IRREGULAR SO AS TO HINDER PROPER SOLDER WICKING. BARREL RELIEF ON SOLDERMASK ALLOWED IN UNFILLED VIA IN PAD HOLES.

3. PLATING SPECIFICATION:
- (X) REFER TO LAMINATION DIAGRAM FOR FINISHED COPPER WEIGHT/THICKNESS REQUIREMENTS
- THE STARTING COPPER WEIGHT/THICKNESS CAN VARY AS LONG AS THE FINISHED COPPER WEIGHT/THICKNESS IS NOT LESS THAN THE SPECIFIED VALUE.
4. SURFACE FINISH:
- (X) IMMERSION GOLD (ENIG) 1.58-3.94 MICRO INCHES OVER 118-236 MICRO INCHES MIN. OF ELECTROLESS NICKEL PER IPC-4552
- () OSP (ORGANIC SOLDERABILITY PRESERVATIVE)
- () IMMERSION SILVER
- () SOFT WIRE BONDABLE GOLD 30-50 MICRO INCHES OF SOFT WIRE
- BONDABLE GOLD OVER 100-150 MICRO INCHES OF NICKEL
- () EDGE CONNECTOR FINGERS ARE TO BE PLATED WITH 100 MICRO-INCHES(.0001") OF LOW STRESS NICKEL UNDER 30 MICRO-INCHES (.0003") OF GOLD
- () OTHER _____
5. SOLDERMASK:
- SOLDERMASK OVER BARE COPPER OR BARE GOLD (BOTH SIDES) TO MEET IPC-5M-840.
- IF PRESENT, DO NOT MODIFY SOLDERMASK DEFINED PADS (MASK OPENINGS LESS THAN COPPER PAD) WITHOUT APPROVAL.
- (X) LPI
- () OTHER _____
- COLOR
- (X) GREEN
- () OTHER _____
16. APPLY SILKSCREEN TO BOTH SIDES USING A NON-CONDUCTIVE, EPOXY BASED INK PER ARTWORK.
- (X) WHITE
- () OTHER _____

7. FINAL ELECTRICAL TEST TO BE PERFORMED USING PROVIDED IPC-D-356A NETLIST OR ODB++ FORMAT FILE. THE PCB SHALL HAVE A VERIFICATION STAMP.

8. A TIME DOMAIN REFLECTOMETER REPORT (TDR) FOR EACH IMPEDANCE CONTROLLED LAYER & A CERTIFICATE OF COMPLIANCE SHALL BE PROVIDED BY VENDOR AT TIME OF SHIPMENT. INSTANCES WHERE TDR TESTING CAN'T BE PERFORMED BECAUSE THE TRACE LENGTH IS TOO SHORT ON THE OUTER LAYERS AT THE PIN ESCAPES IS ACCEPTABLE. ALL OTHER INSTANCES MUST BE REPORTED.

9. IF PRESENT, ALL BLIND/BURIED VIAS WITH AN ASPECT RATIO <1:1 TO BE PLATED SHUT WITH COPPER WHEN USED AS VIA-IN-PAD OR AS A STACKED VIA. BLIND/BURIED VIAS WITH AN ASPECT RATIO >1:1 TO BE FILLED WITH NON-CONDUCTIVE EPOXY.

10. FOR VIA FILL INFORMATION REFER TO DRILL CHART:

- () NON-CONDUCTIVE EPOXY FILL ALL 0.XXXX INCHES DRILLED VIAS
- () COPPER FILL ALL 0.XXXX INCHES DRILLED VIAS

11. INTENTIONAL SHORTS:

IF AN INTENTIONAL SHORT REPORT IS SUPPLIED AND DOES NOT MATCH THE FAB DATA THEN ADI APPROVAL IS REQUIRED.

12. PEMNUTS:

- () PEMNUTS TO BE INSTALLED BY FABRICATOR
- () PEMNUTS NOT TO BE INSTALLED BY FABRICATOR
- (X) NOT APPLICABLE

13. MANUFACTURER TO ETCH/STAMP WITH PERMANENT NON-CONDUCTIVE INK ON SECONDARY SIDE UNLESS OTHERWISE SPECIFIED:

- A. UL CODE-FLAMMABILITY RATING FOR THOSE APPROVED MATERIALS(IF APPLICABLE)
- B. DATE CODE
- C. LOT NUMBER
- D. MANUFACTURER LOGO

25. PANELIZATION:

- BOARDS TO BE SHIPPED IN ARRAY AND KEPT INTACT
- PANEL TO BE SUBJECTED TO CUSTOMERS APPROVAL
- PANEL SOLDER PASTE STENCIL GERBER TO BE PROVIDED TO ANALOG


27. MINIMUM DESIGN LINE WIDTH IS .006 INCH.

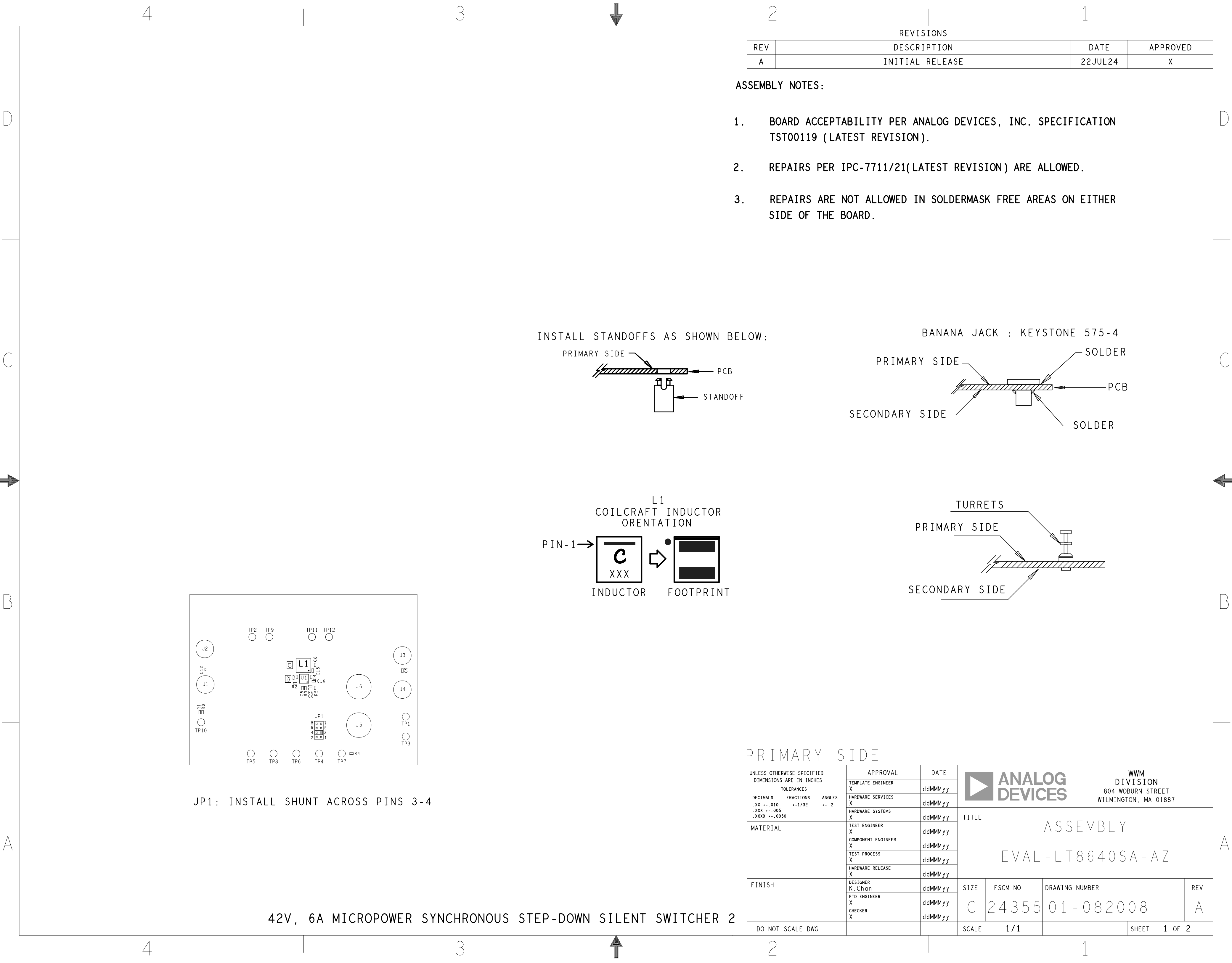
28. MINIMUM DESIGN LINE SPACING IS .006 INCH.

FAB NOTES REVISION: 2ND NOVEMBER 2022

LAMINATION DIAGRAM				
LAYER NUMBER	LAYER NAME	COPPER THICKNESS (OZ., INCH)	DIELECTRIC THICKNESS (INCH)	MATERIALS
1	TOP	2 OZ., 0.0028"		FINAL CU (THICKNESS AFTER PLATING)
			0.0062	ISOLA 370HR/EQUIVALENT
2	LAYER_2	2 OZ., 0.0028"		CU CLAD
				ISOLA 370HR/EQUIVALENT
3	LAYER_3	2 OZ., 0.0028"		CU CLAD
			0.0062	ISOLA 370HR/EQUIVALENT
4	BOTTOM	2 OZ., 0.0028"		FINAL CU (THICKNESS AFTER PLATING)

THE FINISHED PCB THICKNESS TO BE: 0.062" +/-10%

	<h1>ANALOG DEVICES</h1>		WWM DIVISION	
			804 WOBURN STREET WILMINGTON, MA 01887	
SIZE	FSCM NO	DRAWING NUMBER		REV
C	24355	09-082008		A
SCALE 1/1		SHEET 2 OF 2		

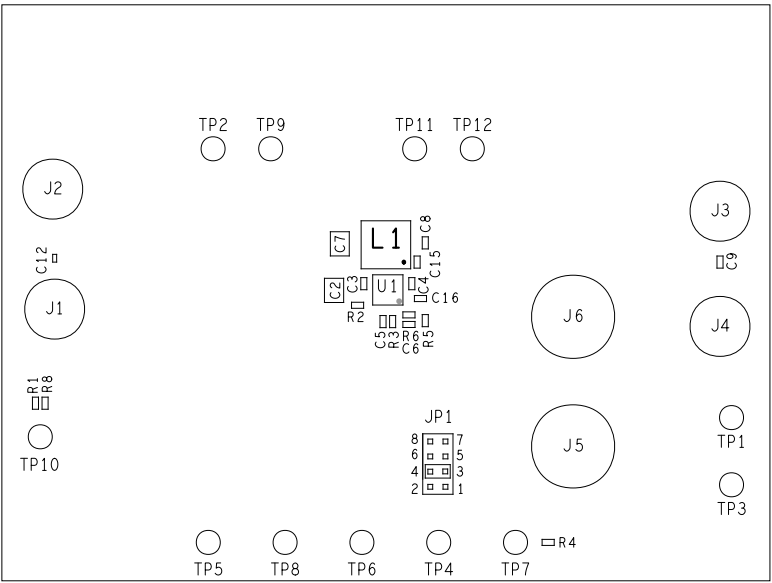
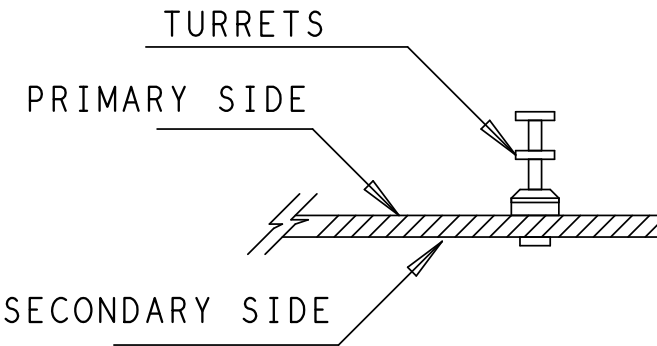
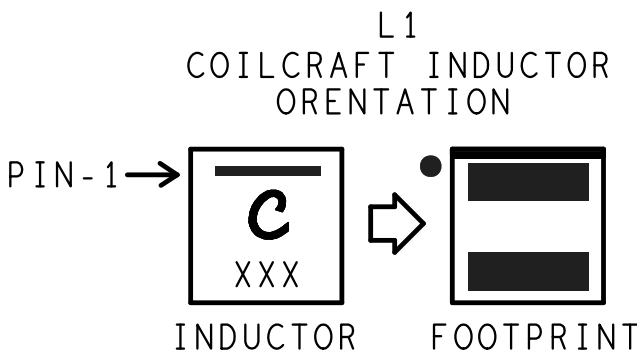
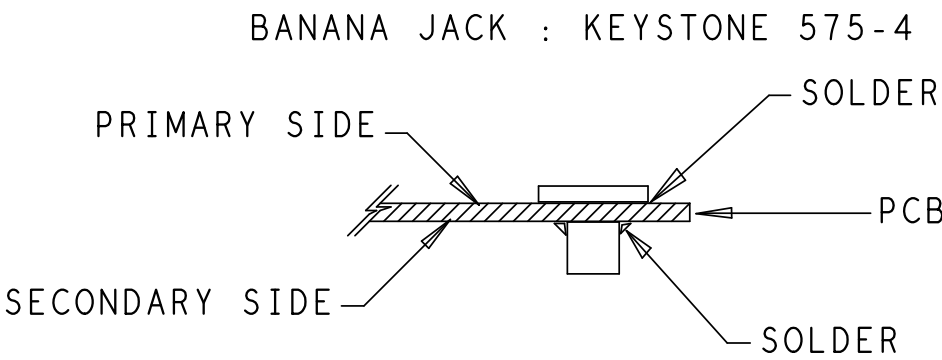
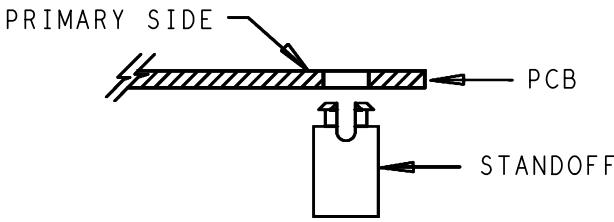


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A	INITIAL RELEASE	22JUL24	X

ASSEMBLY NOTES:

1. BOARD ACCEPTABILITY PER ANALOG DEVICES, INC. SPECIFICATION TST00119 (LATEST REVISION).
2. REPAIRS PER IPC-7711/21(LATEST REVISION) ARE ALLOWED.
3. REPAIRS ARE NOT ALLOWED IN SOLDERMASK FREE AREAS ON EITHER SIDE OF THE BOARD.

INSTALL STANDOFFS AS SHOWN BELOW:

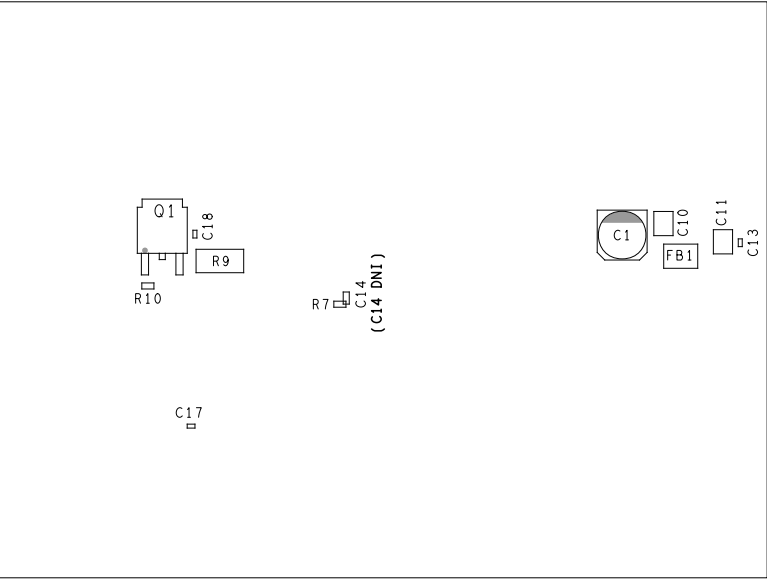
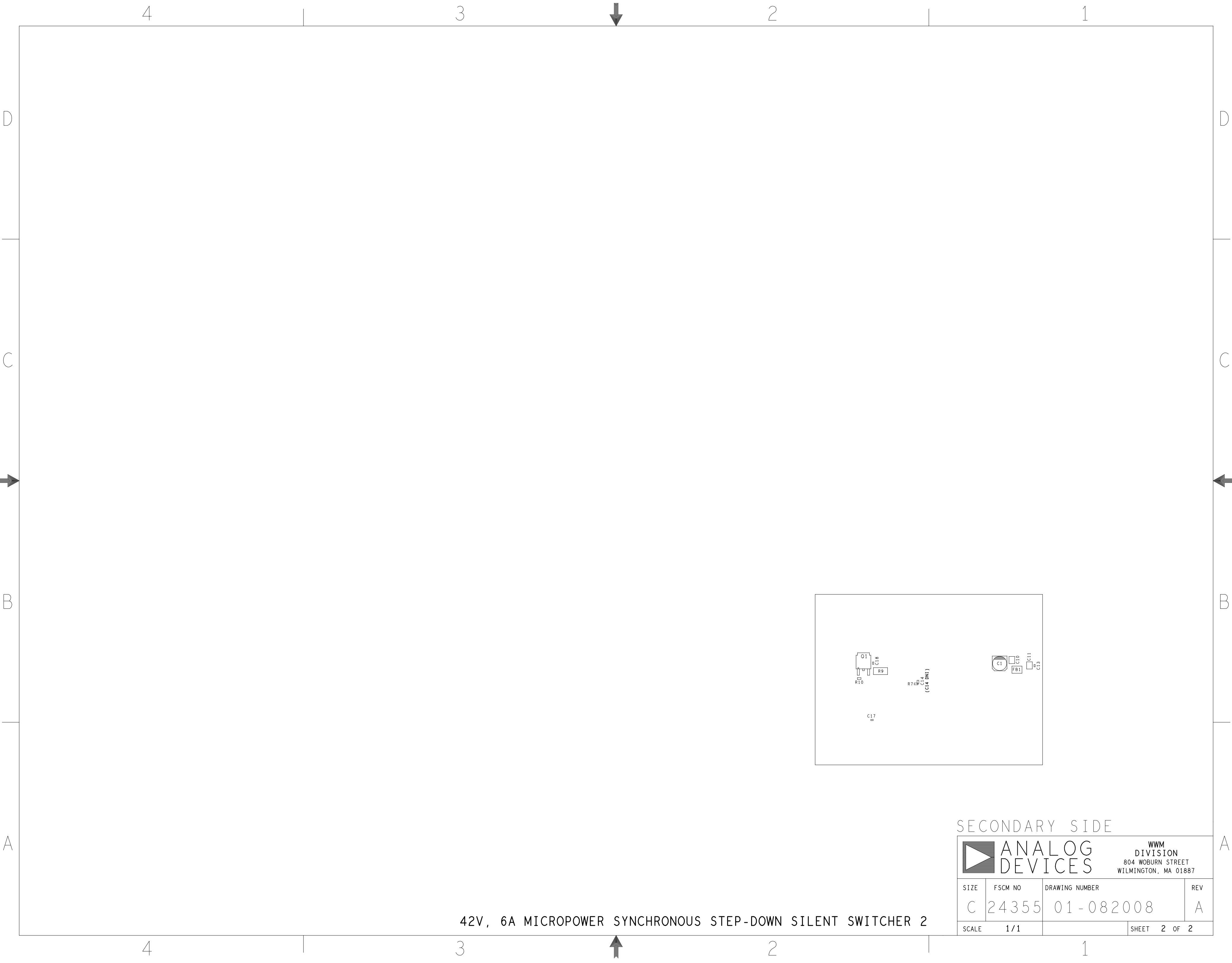


JP1: INSTALL SHUNT ACROSS PINS 3-4

42V, 6A MICROPOWER SYNCHRONOUS STEP-DOWN SILENT SWITCHER 2

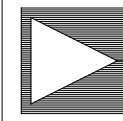
PRIMARY SIDE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS FRACTIONS ANGLES .XX -.010 --1/32 -- 2 .XXX -.005 .XXXX -.0050	APPROVAL		DATE		<div><div></div><div>ANALOG DEVICES</div></div> <div>WWM DIVISION 804 WOBURN STREET WILMINGTON, MA 01887</div>			
	TEMPLATE ENGINEER X		ddMMyy					
	HARDWARE SERVICES X		ddMMyy					
	HARDWARE SYSTEMS X		ddMMyy					
MATERIAL	TEST ENGINEER X		ddMMyy		TITLE ASSEMBLY EVAL-LT8640SA-AZ			
	COMPONENT ENGINEER X		ddMMyy					
	TEST PROCESS X		ddMMyy					
	HARDWARE RELEASE X		ddMMyy					
FINISH	DESIGNER K.Chan		ddMMyy		SIZE C	FSCM NO 24355	DRAWING NUMBER 01-082008	REV A
	PTD ENGINEER X		ddMMyy					
	CHECKER X		ddMMyy					
DO NOT SCALE DWG				SCALE	1 / 1		SHEET 1 OF 2	



42V, 6A MICROPOWER SYNCHRONOUS STEP-DOWN SILENT SWITCHER 2

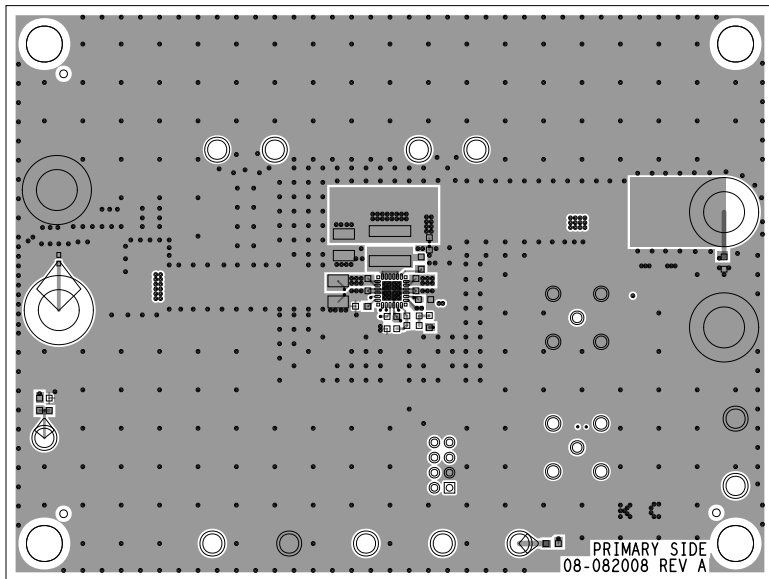
SECONDARY SIDE

ANALOG
DEVICES

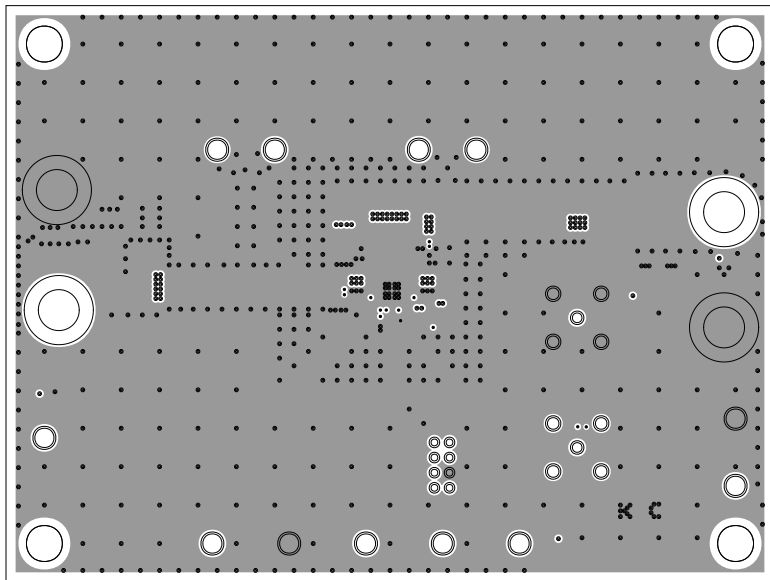
WWM
DIVISION
804 WOBURN STREET
WILMINGTON, MA 01887

SIZE	FSCM NO	DRAWING NUMBER	REV
C	24355	01-082008	A
SCALE	1 / 1	SHEET 2 OF 2	

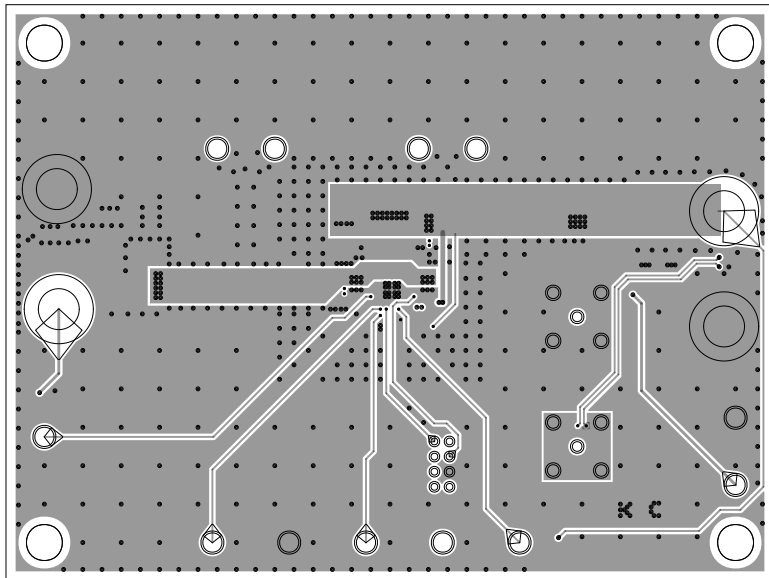
L1 PRIMARY
08-082008-01
REV A



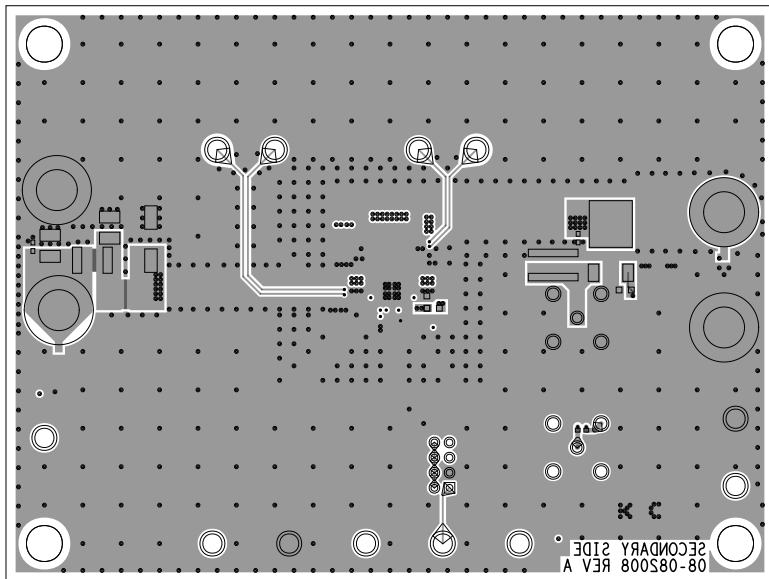
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08-082008-07
REV A



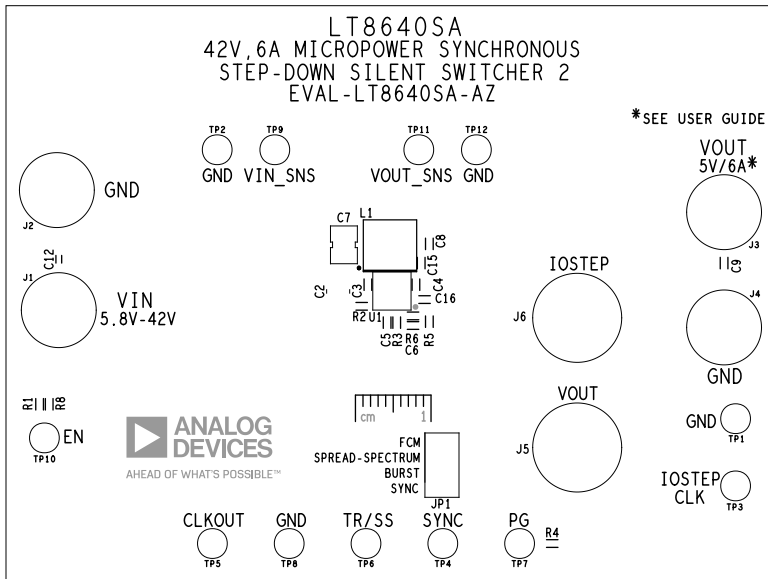
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REV A



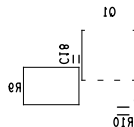
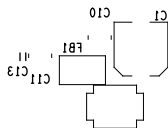
L4 SECONDARY
08-082008-02
REV A



SILKSCREEN PRIMARY
08-082008-03
REV A



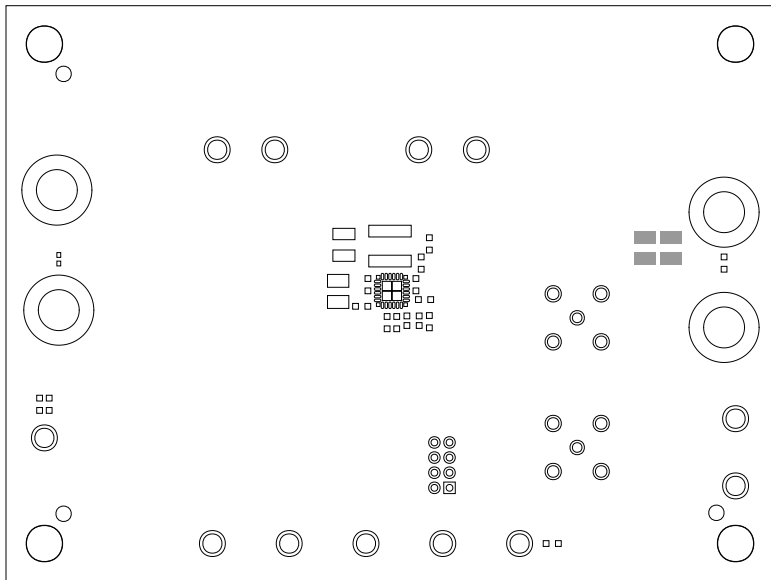
SILKSCREEN SECONDARY
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REV A



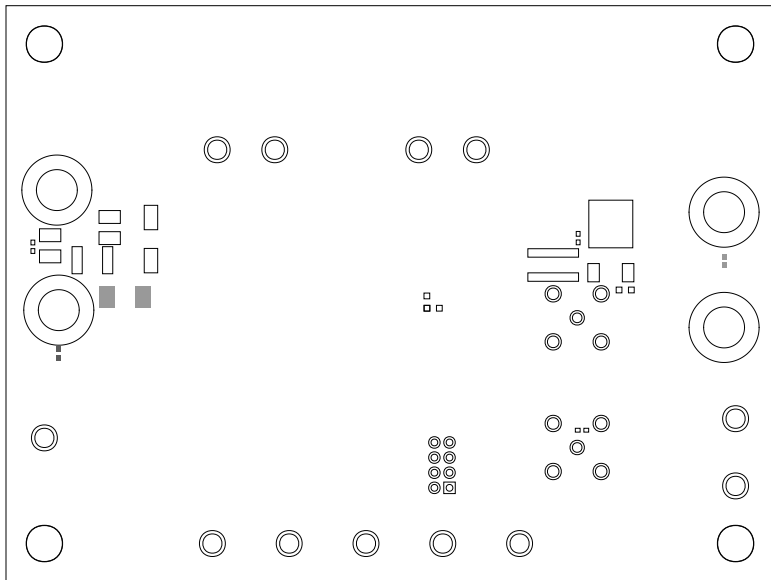
C12

C12

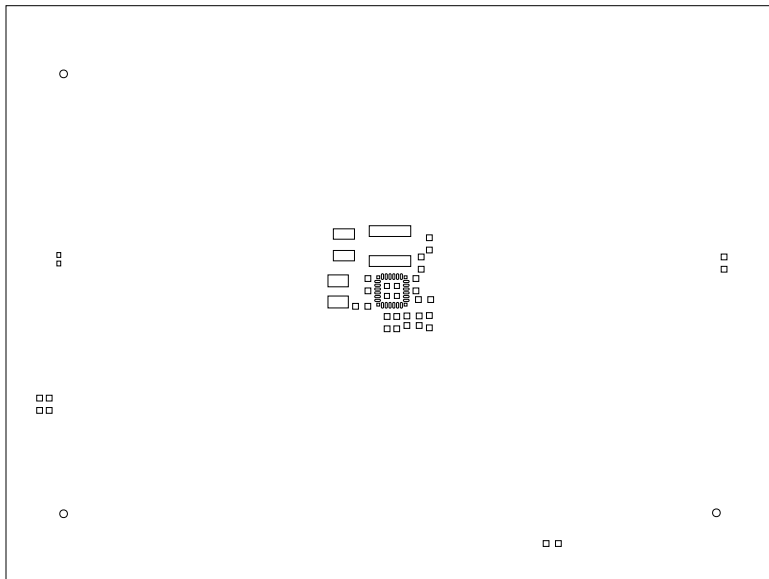
SOLDERMASK PRIMARY
08-082008-04
REV A



SOLDERMASK SECONDARY
08-082008-06
REV A



PASTEMASK PRIMARY
08-082008-13
REV A



PASTEMASK SECONDARY
08-082008-14
REV A

