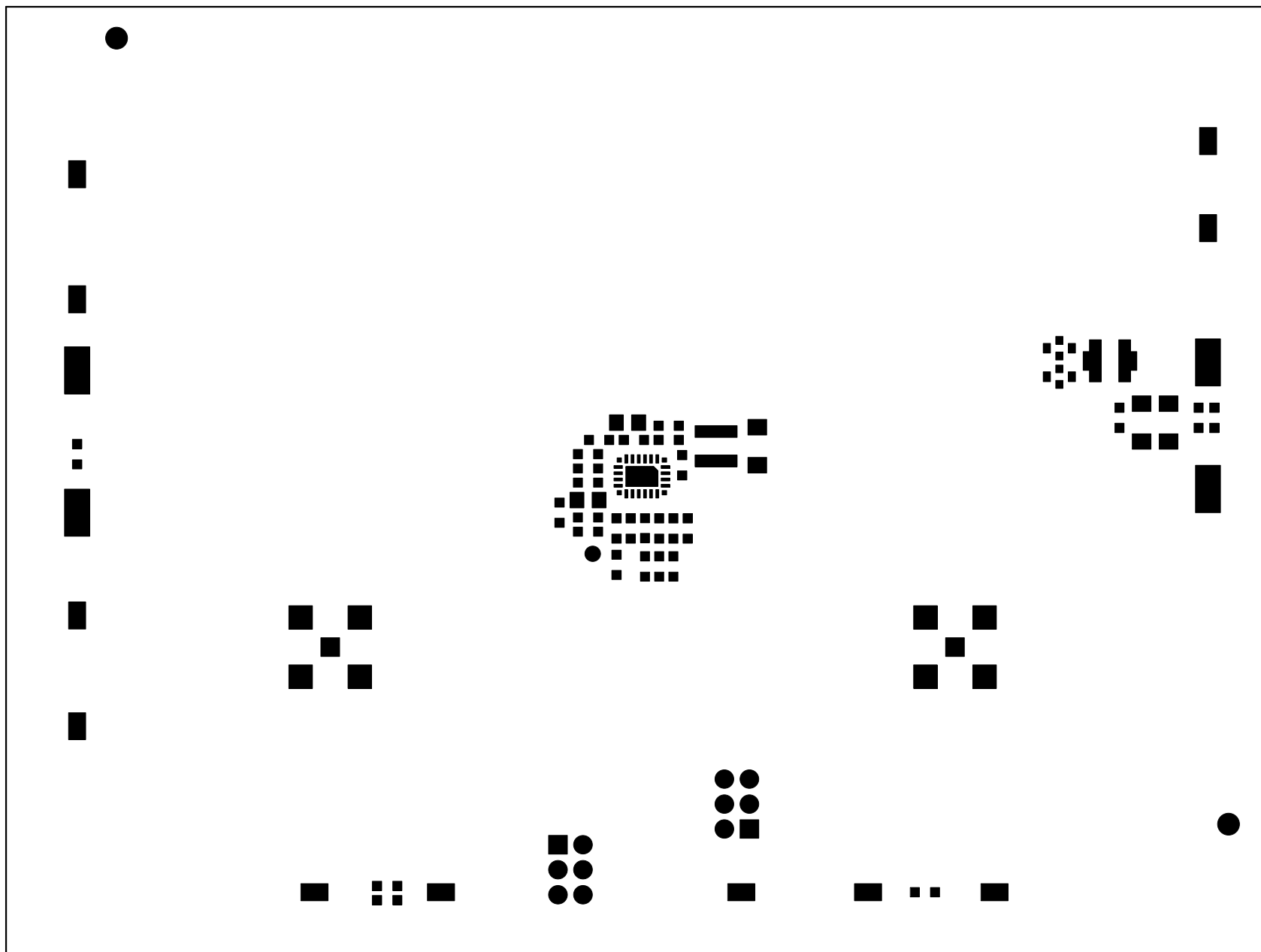


**ANALOG
DEVICES**
www.analog.com

TITLE: BOTTOM ASSEMBLY DRAWING

18V, 8A MONOLITHIC SYNCHRONOUS STEP-DOWN
SILENT SWITCHER 3 WITH LOW NOISE REFERENCE

SIZE	IC NO.	REV
N/A	LT8625SIV DC3219A	2
		SHT 2 of 2

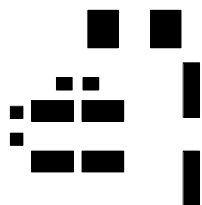


TOP SOLDER MASK

ANALOG DEVICES

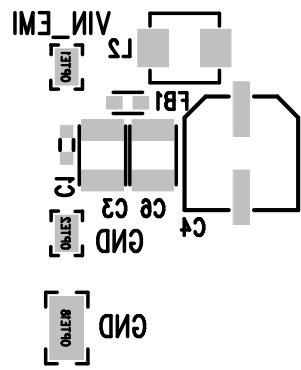
DATE: 1-13-22

DC3219A-2, LT8625SIV



BOTTOM SOLDER PASTE
ANALOG DEVICES DATE: 1-13-22
DC3219A-2, LT8625SIV

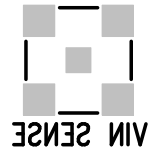
FOR CUSTOMER USE ONLY



VIN
5.2V-18V

SENSE_GND

VIN SENSE



VIN SENSE

EN

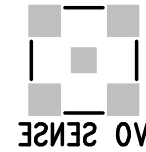


CLKOUT



PG

CLKOUT



VOUT SENSE

SENSE_GND

VOUT SENSE

VOUT
A8/V1



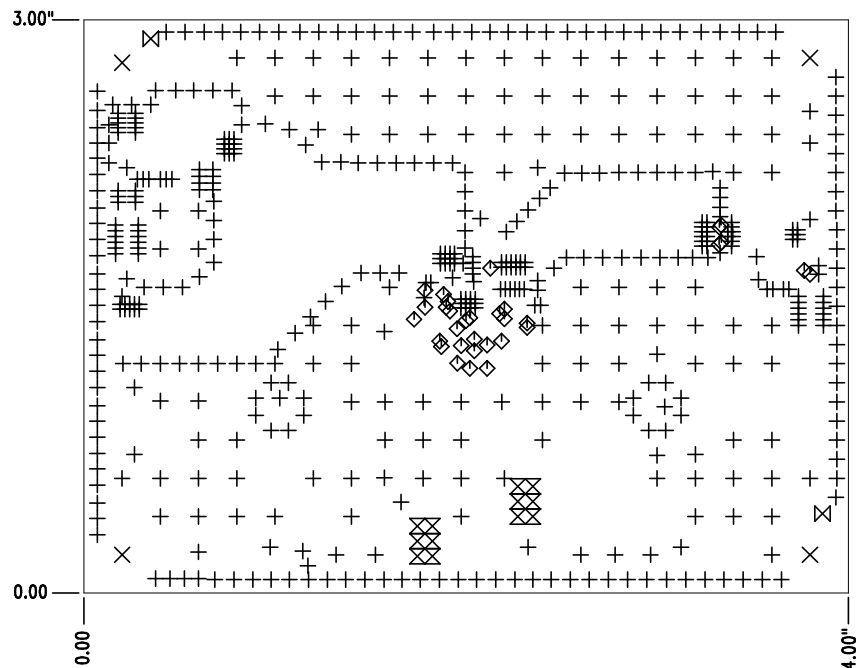
GND

BOTTOM SILKSCREEN

ANALOG DEVICES

DATE: 1-13-22

DC3219A-2, LT8625SIV



SIZE	QTY	SYM	PLATED	TOL
0.01	526	+	YES	+/-0.003
0.187	4	X	NO	+/-0.003
0.006	32	◇	YES	+/-0.003
0.035	12	⊗	YES	+/-0.003
0.07	2	⊠	NO	+/-0.003

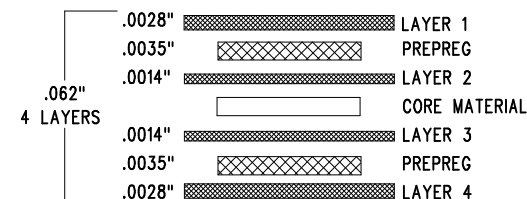
ADDITIONAL REQUIREMENT FOR PROTOTYPE FAB ONLY:

1. OUTGOING INSPECTION REPORT (BASED ON ACTUAL MEASUREMENTS AND CROSS SECTION).

ADDITIONAL REQUIREMENTS FOR PRODUCTION FAB ONLY:

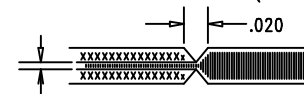
1. PROVIDE COMPLIANCE CERTIFICATES FOR RoHS, REACH AND CONFLICT-FREE MINERALS.
2. SOLDERABILITY BOARD WITH TEST RESULTS.
3. OUTGOING INSPECTION REPORT (BASED ON ACTUAL MEASUREMENTS AND CROSS SECTION).
4. VACUUM PACKED WITH DESICCANT.
5. FULL PANEL WITH NO REJECT.

LAYER STRUCTURE

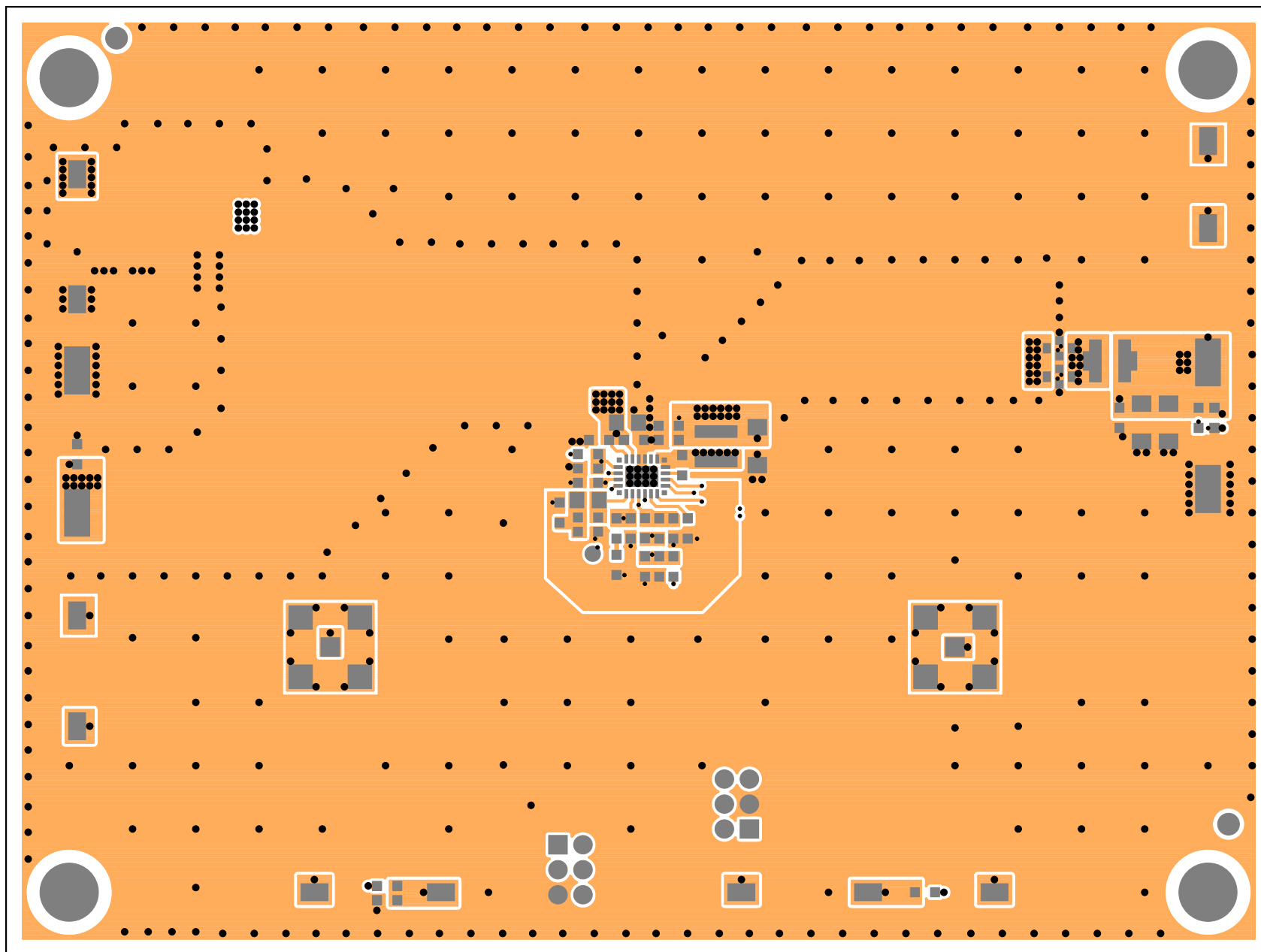


NOTES: UNLESS OTHERWISE SPECIFIED

1. FAB PER IPC-A-600.
2. MATERIAL: -LEAD FREE ASSEMBLY COMPLIANT, ISOLA FR-370HR OR EQUIVALENT.
-FINISHED THICKNESS TO BE 0.062 +/- .005
-TOTAL OF 4 LAYERS WITH 2 OZ. CU ON THE OUTER LAYERS AND 1 OZ. CU ON THE INNER LAYERS.
-FLAMMABILITY RATING: 94 V-0 MINIMUM.
3. SIZE: CUT TO DIMENSIONS AND TOLERANCES SHOWN.
0.00" ARE PRIMARY DATUMS.
4. DRILLING: -DRILL HOLES PER SCHEDULE. PLATE THROUGH HOLES WITH COPPER, 0.001 THICK MIN.
-ALL HOLE SIZES ARE SPECIFIED AFTER PLATING.
-HOLE LOCATION TOLERANCES ARE +/-0.003 IN RELATION TO CENTER
5. FINISH: -SMOBC USING LPI BOTH SIDES, COLOR GREEN.
-GOLD IMMERSION BOTH SIDES.
-FOR SILKSCREENS: USE WHITE NON-CONDUCTIVE INK.
6. DO NOT ALTER ARTWORK e.g. TO ADD LOGO OR DATE CODE.
PAD SIZE CAN BE MODIFIED TO MEET END FINISH.
7. PCBs ARE TO BE RoHS COMPLIANT.
8. SCORING FOR PANELIZED PCB (PRODUCTION FAB ONLY):



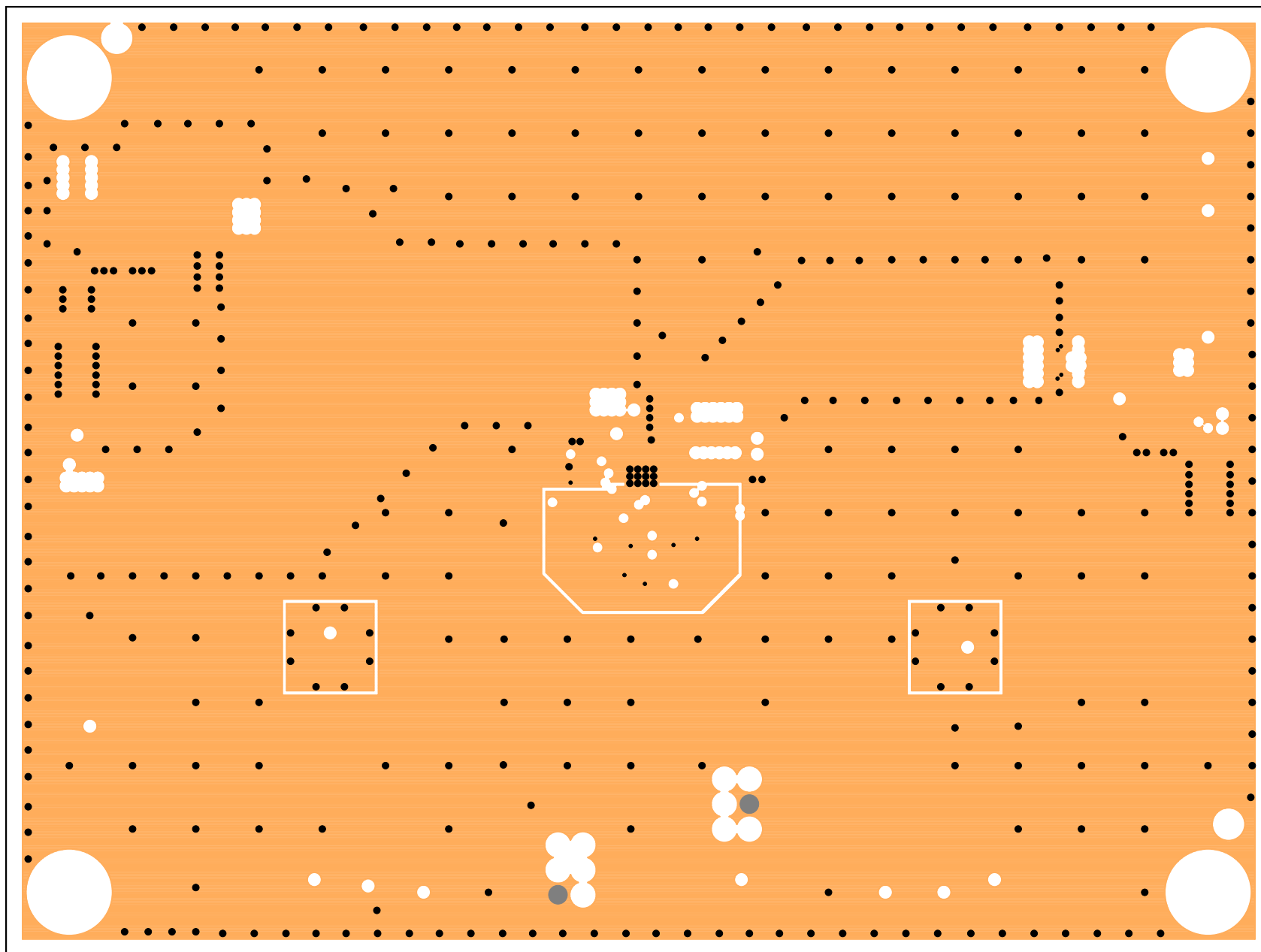
UNLESS OTHERWISE SPECIFIED		 www.analog.com	
DIMENSIONS ARE IN INCHES TOLERANCES: 0.XX" = ±0.01" 0.XXX" = ±0.005" INTERPRET DIM AND TOL PER ASME Y14.5M-1994 THIRD ANGLE PROJECTION		TITLE: FABRICATION DRAWING 18V, 8A MONOLITHIC SYNCHRONOUS STEP-DOWN SILENT SWITCHER 3 WITH LOW NOISE REFERENCE	
SIZE	IC NO.	REV	
N/A	LT8625SEV DC3219A	2	
			SHT 1 OF 1



LAYER 1 – TOP LAYER

ANALOG DEVICES DATE: 1-13-22

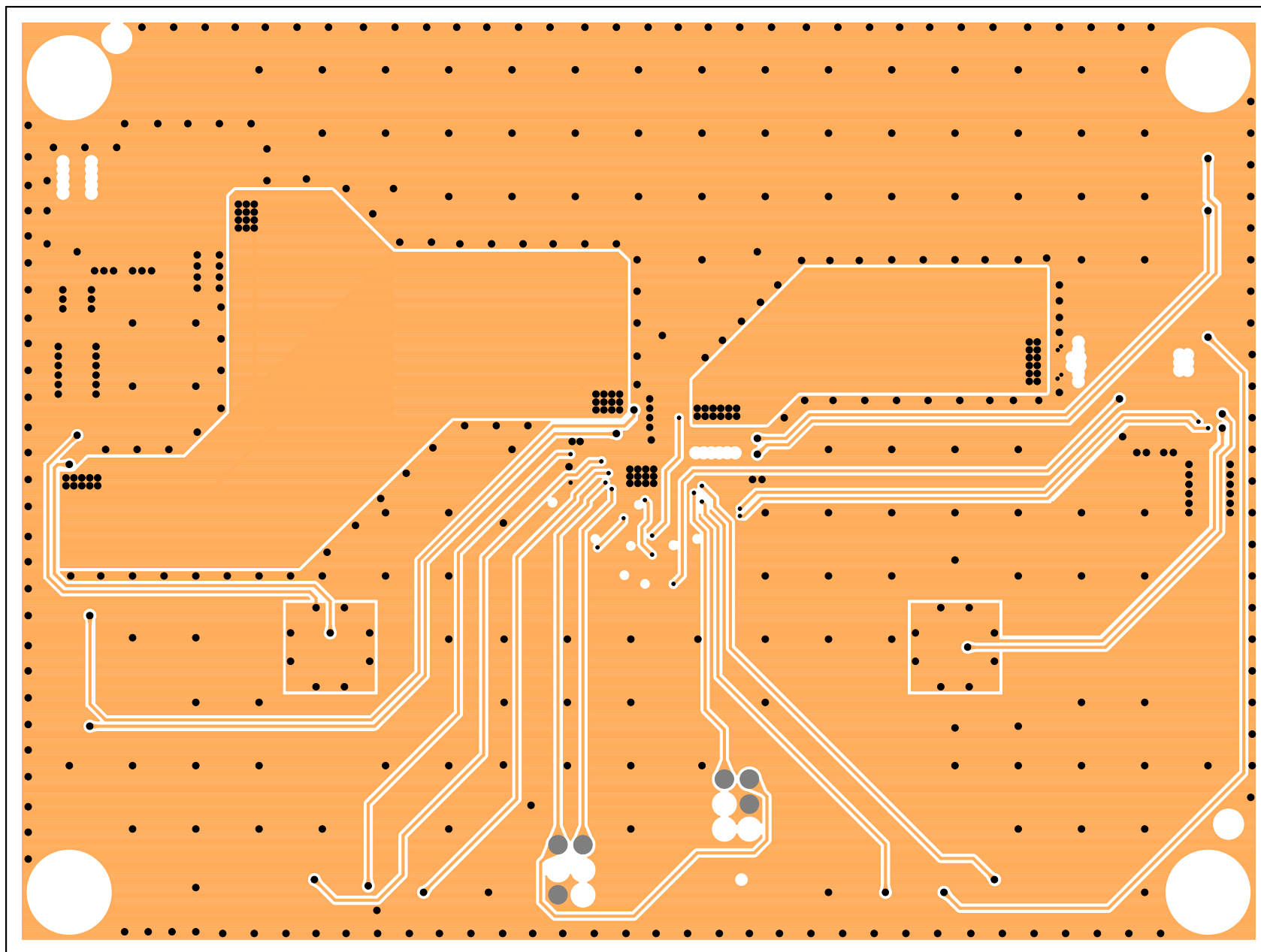
DC3219A-2, LT8625SIV



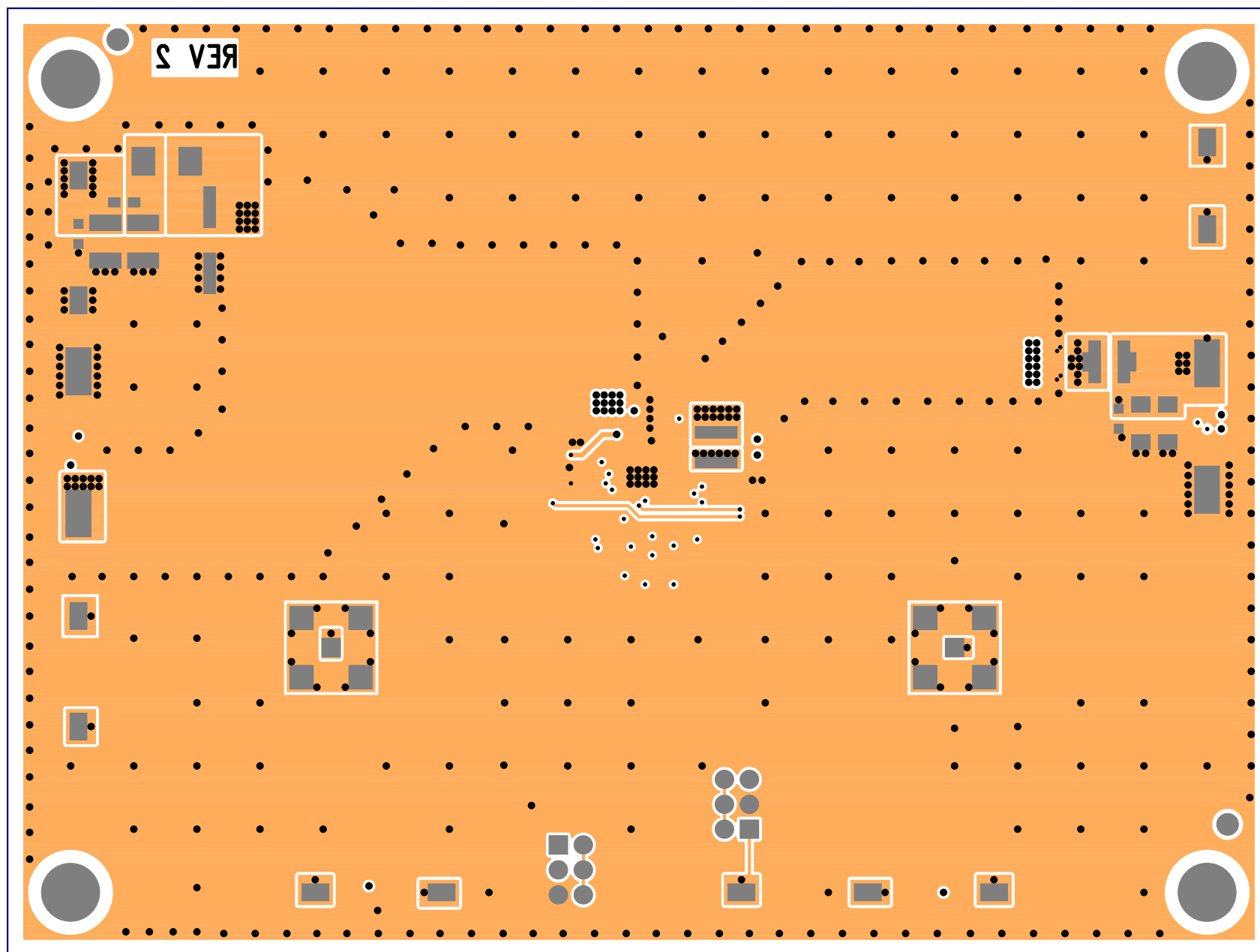
LAYER 2 – GND PLANE

ANALOG DEVICES DATE: 1-13-22

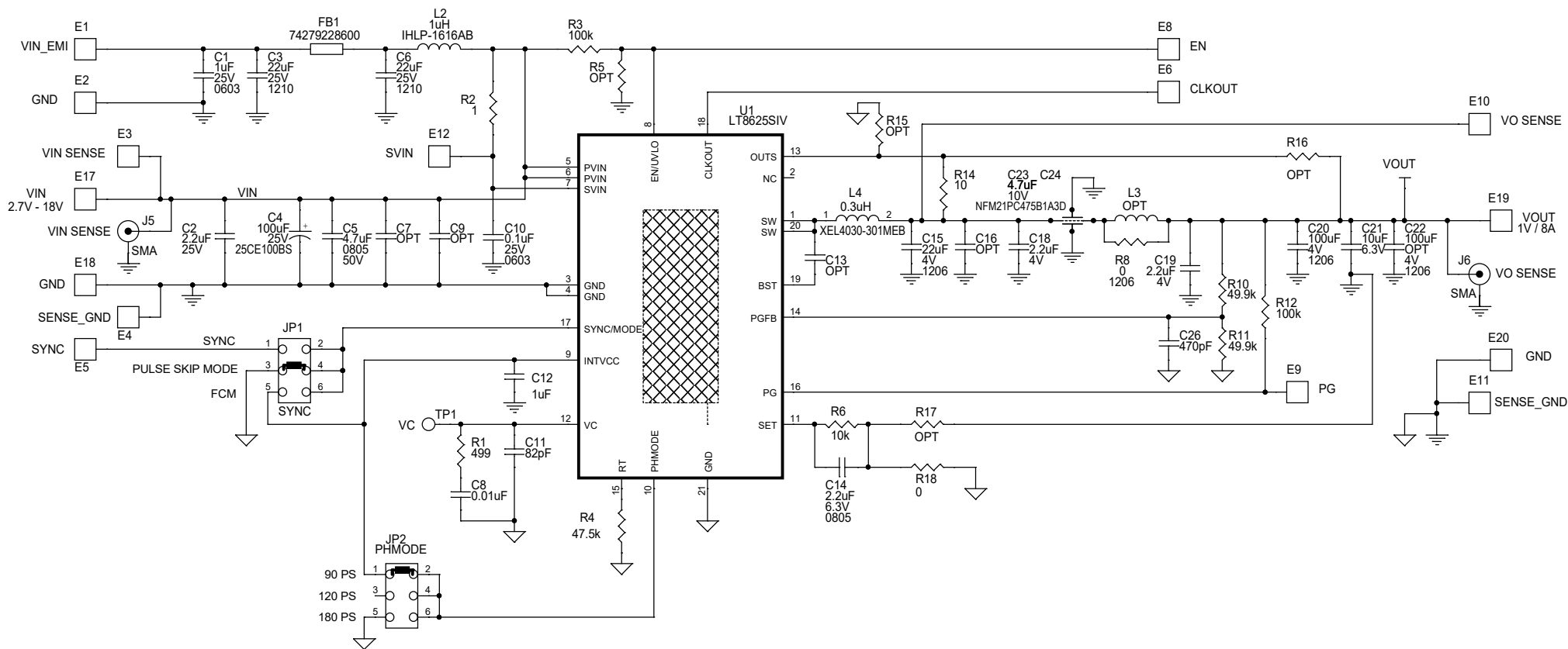
DC3219A-2, LT8625SIV



LAYER 3 – GND PLANE/SIGNAL
ANALOG DEVICES DATE: 1-13-22
DC3219A-2, LT8625SIV




LAYER 4 – BOTTOM LAYER
 ANALOG DEVICES DATE: 1-13-22
 DC3219A-2, LT8625SIV



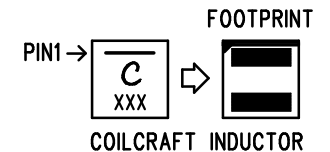
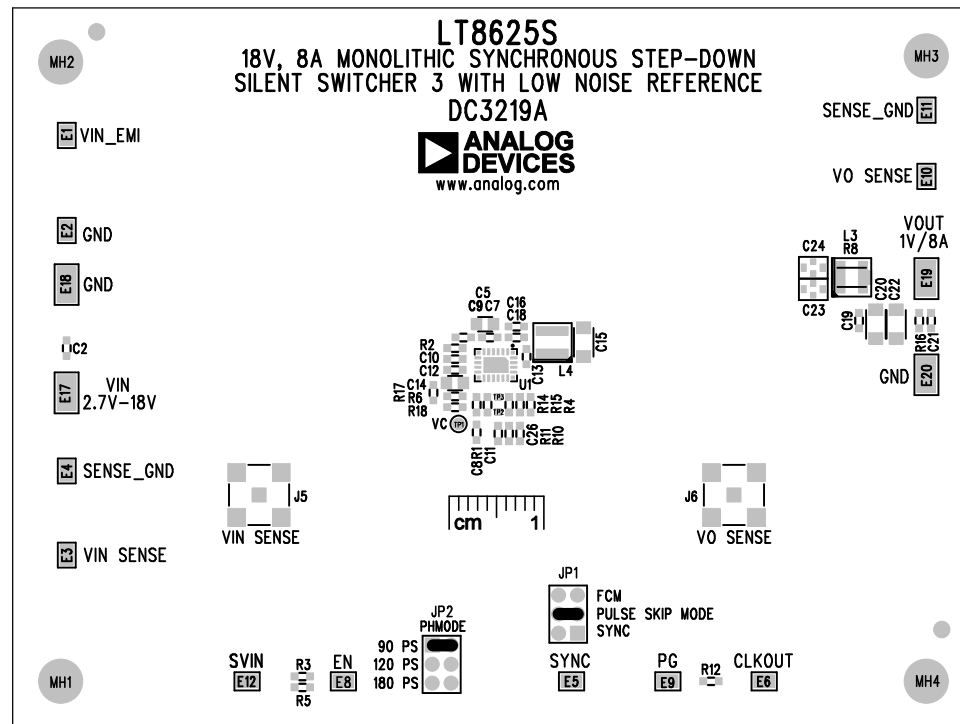
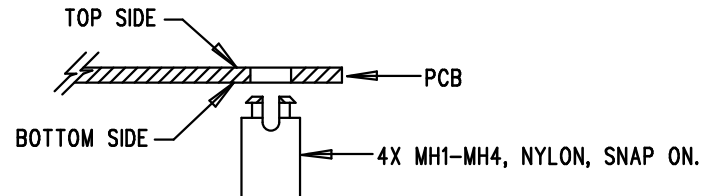
NOTES: UNLESS OTHERWISE SPECIFIED


- ALL RESISTORS ARE 0603.
ALL CAPACITORS ARE 0603.

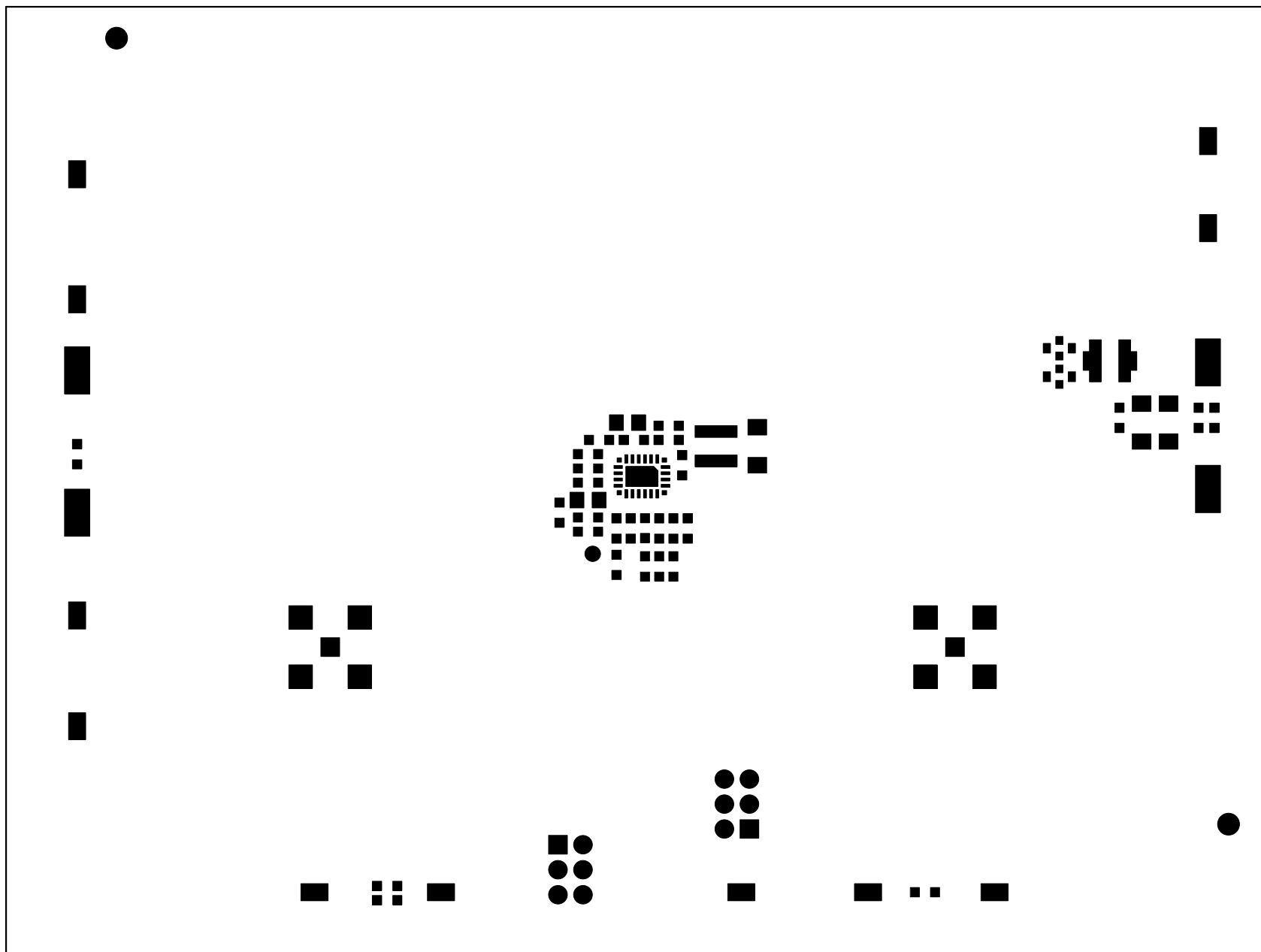
CUSTOMER NOTICE		APPROVALS		 ANALOG DEVICES AHEAD OF WHAT'S POSSIBLE™	
ANALOG DEVICES HAS MADE A BEST EFFORT TO DESIGN A CIRCUIT THAT MEETS CUSTOMER-SUPPLIED SPECIFICATIONS; HOWEVER, IT REMAINS THE CUSTOMER'S RESPONSIBILITY TO VERIFY PROPER AND RELIABLE OPERATION IN THE ACTUAL APPLICATION. COMPONENT SUBSTITUTION AND PRINTED CIRCUIT BOARD LAYOUT MAY SIGNIFICANTLY AFFECT CIRCUIT PERFORMANCE OR RELIABILITY. CONTACT ANALOG DEVICES APPLICATIONS ENGINEERING FOR ASSISTANCE.		PCB DES.			
		APP ENG.			
THIS CIRCUIT IS PROPRIETARY TO ANALOG DEVICES AND SUPPLIED FOR USE WITH ANALOG DEVICES PARTS.		TITLE: SCHEMATIC 18V, 8A MONOLITHIC SYNCHRONOUS STEP-DOWN SILENT SWITCHER 3 WITH LOW NOISE REFERENCE		IC NO. LT8625S SKU NO. DC3219A	
		SCHEMATIC NO. AND REVISION: 710-DC3219A_REV02		SIZE: N/A DATE: Thursday, January 13, 2022 SHEET 1 OF 1	

NOTES: UNLESS OTHERWISE SPECIFIED

1. WORKMANSHIP SHALL BE IN ACCORDANCE WITH IPC-A-610.
2. ASSEMBLY PROCESS SHALL INCLUDE: REFLOW SOLDER TOP SIDE SMD. MAXIMUM SOLDER TEMPERATURE IS 240 DEGREES CELSIUS.
3. PARTS TO OMIT WILL BE SPECIFIED ON THE BILL OF MATERIALS. LOCATIONS OF OMITTED PARTS SHALL BE FREE OF SOLDER. MASK THE SOLDER STENCIL WHERE SMT PARTS ARE OMITTED.
4. INSTALL SHUNTS AS SHOWN ON ASSY DRAWING.
5. DEPANELIZE BOARDS AFTER ASSEMBLY AND ROUTE-OUT THE BREAKOUT TABS ON FOUR SIDES OF THE BOARD EDGE.
6. DO NOT APPLY ANY KIND OF ASSEMBLY STAMP OR QA STAMP TO ANY BOARD.
7. INSTALL 4 STANDOFFS AS SHOWN BELOW:



 www.analog.com		
TITLE: TOP ASSEMBLY DRAWING 18V, 8A MONOLITHIC SYNCHRONOUS STEP-DOWN SILENT SWITCHER 3 WITH LOW NOISE REFERENCE		
SIZE N/A	IC NO. LT8625SIV DC3219A	REV. 2
		SHT 1 OF 2

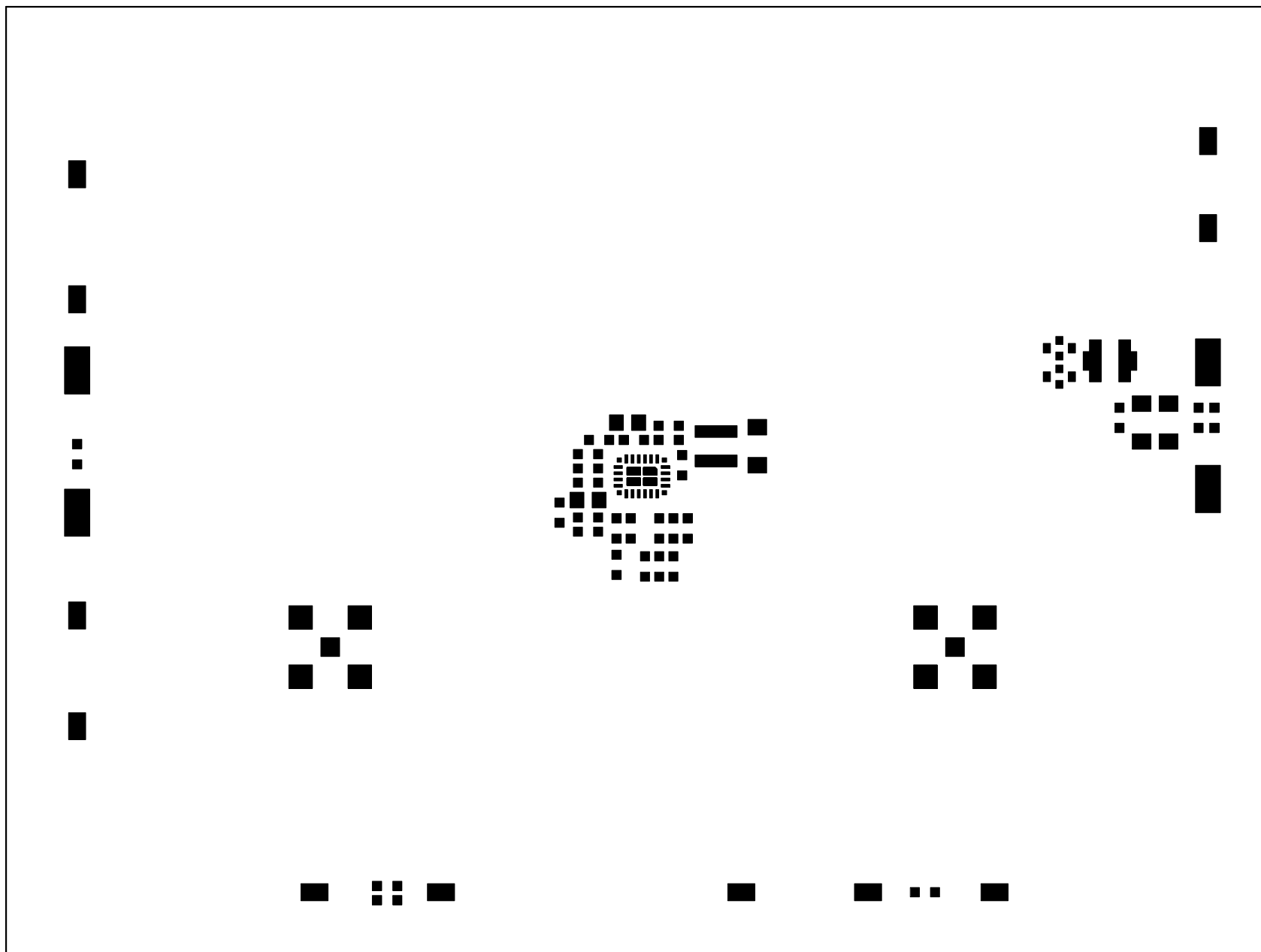


TOP SOLDER MASK

ANALOG DEVICES

DATE: 1-13-22

DC3219A-2, LT8625SIV



TOP SOLDER PASTE

ANALOG DEVICES DATE: 1-13-22

DC3219A-2, LT8625SIV

LT8625S

18V, 8A MONOLITHIC SYNCHRONOUS STEP-DOWN
SILENT SWITCHER 3 WITH LOW NOISE REFERENCE

DC3219A



E1 VIN_EMI

E2 GND

E18 GND

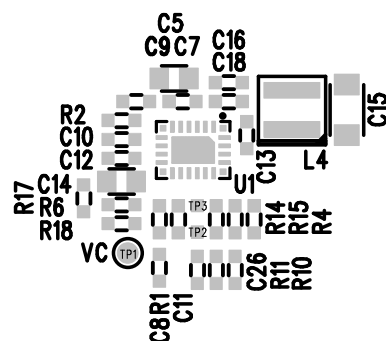
IC2

E17 VIN
2.7V-18V

E4 SENSE_GND

E3 VIN SENSE

J5
VIN SENSE



cm 1

J6
VO SENSE

SENSE_GND **E11**

VO SENSE **E10**

VOUT
1V/8A

E19

E20 GND

SVIN **E12**

R3 **R5**

EN **E8**

90 PS
120 PS
180 PS

JP2
PHMODE

JP1

FCM
PULSE
SYNC

SYNC **E5**

PG **E9**

R12

CLKOUT **E6**

TOP SILKSCREEN

ANALOG DEVICES

DATE: 1-13-22

DC3219A-2, LT8625SIV