


NOTE: UNLESS OTHERWISE SPECIFIED

1. ALL RESISTORS ARE 0402, 1%, 1/16W
ALL CAPACITORS ARE 0402, 10%

2. INSTALL SHUNTS AS SHOWN

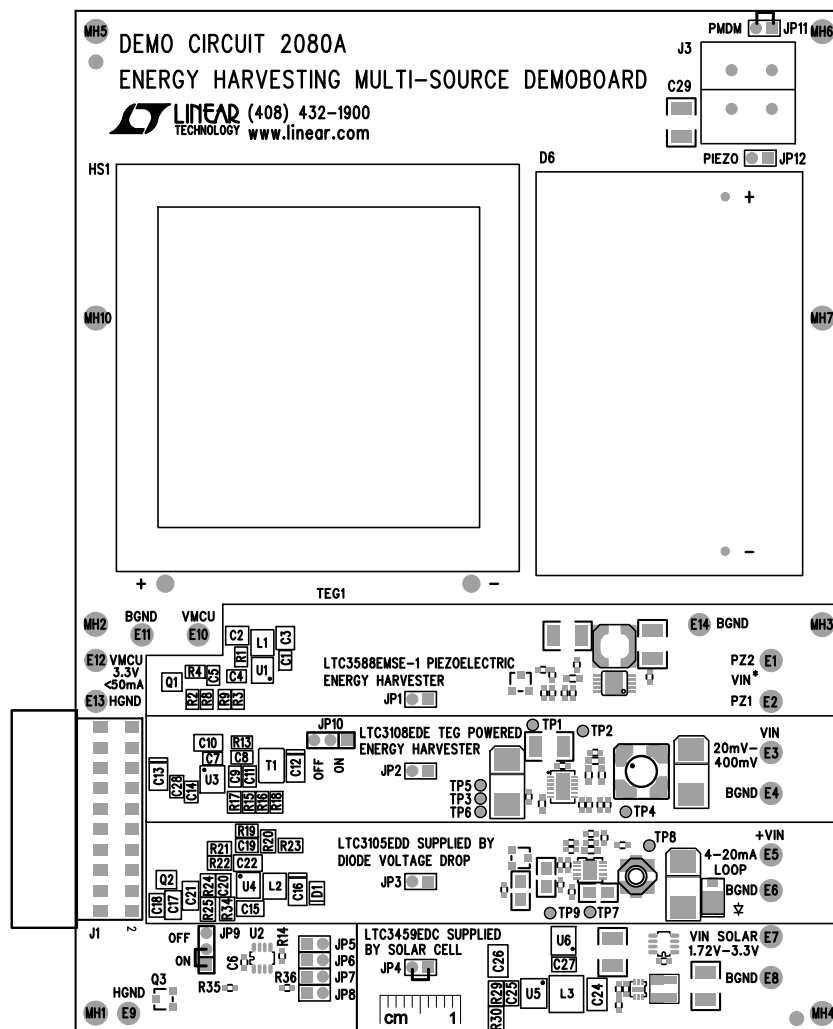
CUSTOMER NOTICE
 LINEAR TECHNOLOGY HAS MADE A BEST EFFORT TO DESIGN A CIRCUIT THAT MEETS CUSTOMER-SUPPLIED SPECIFICATIONS; HOWEVER, IT REMAINS THE CUSTOMER'S RESPONSIBILITY TO VERIFY PROPER AND RELIABLE OPERATION IN THE ACTUAL APPLICATION. COMPONENT SUBSTITUTION AND PRINTED CIRCUIT BOARD LAYOUT MAY SIGNIFICANTLY AFFECT CIRCUIT PERFORMANCE OR RELIABILITY. CONTACT LINEAR TECHNOLOGY APPLICATIONS ENGINEERING FOR ASSISTANCE.

APPROVALS		 LINEAR TECHNOLOGY 16130 McCarthy Blvd. Milpitas, CA 95035 Phone: (408)432-1900 Fax: (408)434-5957 www.linear.com LTC Confidential-For Customer Use Only	
PCB DES.	NC	TITLE: SCHEMATIC ENERGY HARVESTING MULTI-SOURCE DEMOBOARD <div style="text-align: center;"> SIZE IC NO. N/A DEMO CIRCUIT 2080A </div>	
APP ENG.	BS		
SCALE = NONE		DATE: 1-18-13	SHEET 1 OF 1 <div style="text-align: right;">REV 1</div>

Item	Qty	Reference	Part Description	Manufacturer / Part #	Kit Qty	Pkg Qty	Balance
				NUMBER OF BOARDS =	200		
1	3	C1,C7,C18	CAP, CHIP, X5R, 1uF, 10%, 6.3V, 0402	TDK, C1005X5R0J105KT	600		-600
2	4	C2,C10,C24,C26	CAP, CHIP, X5R, 100uF, 20%, 10V, 1210	TAIYO YUDEN, LMK325ABJ107MM	3800		-3800
	15	C01-C015					
3	1	C3	CAP, CHIP, X5R, 22uF, 10%, 25V, 1210	AVX, 12103D226KAT2A	200		-200
4	1	C4	CAP, CHIP, X5R, 4.7uF, 10%, 6.3V, 0603, Height=0.80mm	TDK, C1608X5R0J475K/0.80	200		-200
5	0	C5 (OPT)	CAP, CHIP, X7R, 0.1uF, 10%, 16V, 0402	MURATA, GRM155R71C104KA88D	0		0
6	3	C6,C27,C28	CAP, CHIP, X7R, 0.1uF, 10%, 16V, 0402	MURATA, GRM155R71C104KA88D	600		-600
7	1	C8	CAP, CHIP, X7R, 330pF, 50V, 10%, 0603	MURATA, GRM188R71H331KA01D	200		-200
8	0	C9 (OPT)	OPT, 0603		0		0
9	1	C11	CAP, CHIP, X7R, 1000pF, 50V, 10%, 0603	MURATA, GRM188R71H102KA01D	200		-200
11	4	C12,C13,C16,C23	CAP, POLYMER SMD, 220uF, 6.3V, 18mΩ, 2.8Arms, D2E CASE	SANYO, 6TPE220MI	800		-800
12	1	C14	CAP, CHIP, X5R, 2.2UF, 16V, 10%, 0603	MURATA, GRM188R61C225KE15D	200		-200
13	2	C15,C17	CAP, CHIP, X5R, 10uF, 10%, 6.3V, 0805	AVX, 08056D106KAT2A	400		-400
14	2	C19,C20	CAP, CHIP, NPO, 33pF, 5%, 25V, 0402	AVX, 04023A330JAT2A	400		-400
15	1	C21	CAP, CHIP, X5R, 4.7uF, 10%, 16V, 0805	TAIYO YUDEN, EMK212BJ475MG-T	200		-200
16	1	C22	CAP, CHIP, X5R, 1uF, 10%, 16V, 0603	AVX, 0603YD105KAT2A	200		-200
17	1	C25	CAP, CHIP, NPO, 47pF, 5%, 25V, 0402	AVX, 04023A470JAT2A	200		-200
18	1	C29	CAP, CHIP X5R, 10uF,10%, 25V,1210	AVX, 12103D106KAT2A	200		-200
19	1	D1	DIODE, STANDARD, 200V, 1.5A, SMP	VISHAY, AS1PD-M3/84A	200		-200
20	0	D2 - D5 (OPT)	DIODE, SCHOTTKY, 40V, 1A, SOD-123	DIODES INC, 1N5819HW-7-F	0		0
21	1	D6	SANYO, AMORPHOUS SOLAR CELL	SANYO, AM-5412	200		
22	0.01		DOUBLE SIDED MOUNTING TAPE, 35mmX38mm FOR SOLAR CELL	TESA, 55742 (Kit Qty = number of Reels, Round Up)	1.40845		
23	1	HS1	HEATSINK, 50.8mm X 50mm	FISCHER, SK 426	200		
24	4		ADHESIVE CABLE MOUNT U-STYLE CLIP,	WURTH, 523252000	800		
26	1	L1	INDUCTOR, 22uH , 0.70A, 185mΩ, 4.8mm x 4.8mm	WURTH, 744043220	200		-200
27	1	L2	INDUCTOR, 10uH, 560mA, 0.205Ω, 3.8mm x 3.8mm	WURTH, 744031100	200		-200
30	1	L3	INDUCTOR, 22uH, 270mA, 1.48Ω, 2.8mm x 2.87mm	WURTH, 744028220	200		-200
32	1	T1	TRANSFORMER, 100:1 TURNS RATIO	WURTH, 74488540070	200		
33	1	TEG1	PELTIER MODULE CP85438	CUI INC., CP85438			
34	1		KERAFOL, KL 90 40mmX40mmX3mm DOUBLE SIDED ADHESIVE TAPE	KERATHERM, KL 90 40mmX40mmX3mm			
35	0	Q1,Q2 (OPT)	N-CHANNEL MOSFET, 20V, SOT23	DIODES/ZETEX, ZXMN2F30FHTA	0		0
36	1	Q3	N-CHANNEL MOSFET, 20V, SOT23	DIODES/ZETEX, ZXMN2F30FHTA	200		-200
37	0	R1 (OPT)	RES, CHIP, 4.99KΩ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW04024K99FKED	0		0
38	0	R2,R7,R9,R10,R11,R12,R14,R15,R18,R31,R32,R33,R36	RES., CHIP, 0402	NOPOP	0		0
39	11	R1,R3,R5,R6,R8,R16,R17,R26,R27,R28,R35	RES, CHIP, 0Ω jumper, 1/16W, 0402	VISHAY, CRCW04020000Z0ED	2200		-2200
40	0	R4 (OPT)	RES, CHIP, 50.5KΩ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW040250K5FKED	0		0
41	2	R13,R21	RES, CHIP, 499KΩ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW0402499KFKED	400		-400
42	1	R19	RES, CHIP, 392KΩ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW0402392KFKED	200		-200
43	1	R20	RES, CHIP, 750KΩ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW0402750KFKED	200		-200

Item	Qty	Reference	Part Description	Manufacturer / Part #	Kit Qty	Pkg Qty	Balance
				NUMBER OF BOARDS =	200		
44	0	R22 (OPT)	RES, CHIP, 2.80M Ω , \pm 1%, 1/16W, 0402, +/-100ppm/ $^{\circ}$ C	VISHAY, CRCW04022M80FKED	0		0
45	1	R23	RES, CHIP, 200K Ω , \pm 1%, 1/16W, 0402, +/-100ppm/ $^{\circ}$ C	VISHAY, CRCW0402200KFKED	200		-200
46	1	R24	RES, CHIP, 1.10M Ω , \pm 1%, 1/16W, 0402, +/-100ppm/ $^{\circ}$ C	VISHAY, CRCW04021M10FKED	200		-200
47	1	R25	RES, CHIP, 549K Ω , \pm 1%, 1/16W, 0402, +/-100ppm/ $^{\circ}$ C	VISHAY, CRCW0402549KFKED	200		-200
48	1	R29	RES, CHIP, 1.96M Ω , \pm 1%, 1/16W, 0402, +/-100ppm/ $^{\circ}$ C	VISHAY, CRCW04021M96FKED	200		-200
49	1	R30	RES, CHIP, 1.15M Ω , \pm 1%, 1/16W, 0402, +/-100ppm/ $^{\circ}$ C	VISHAY, CRCW04021M15FKED	200		-200
50	1	R34	RES, CHIP, 40.2K Ω , \pm 1%, 1/16W, 0402, +/-100ppm/ $^{\circ}$ C	VISHAY, CRCW040240K2FKED	200		-200
51	1	U1	PIEZOELECTRIC ENERGY HARVESTING POWER SUPPLY, DFN 3mmx3mm	LINEAR TECH., LTC3588EMSE-1	200	10	-190
52	1	U2	IC, ULTRA-LOW POWER SUPERVISOR WITH POWER-FAIL OUTPUT, TSOT-23, 8-PIN	LINEAR TECH., LTC2935CTS8-2	200	10	-190
53	1	U3	IC,ULTRA-LOW VOLTAGE STEP-UP CONVERTER AND POWER MANAGER, DFN 3mmX4mm	LINEAR TECH., LTC3108EDE	200	10	-190
54	1	U4	IC, 400mA STEP-UP DC/DC CONVERTER with MPPC and 250mV Start-Up, DFN 3mmX3mm	LINEAR TECH., LTC3105EDD	200	10	-190
55	1	U5	IC, 10V MICROPPOWER SYNC BOOST CONVERTER, DFN 2mmX2mm	LINEAR TECH., LTC3459EDC	200	10	-190
56	1	U6	IC, ULTRA-LOW POWER SUPERVISOR WITH POWER-FAIL OUTPUT, TSOT-23, 8-PIN	LINEAR TECH., LTC2935CTS8-4	200	10	-190
57	14	E1 - E14	TURRET, 0.061 DIA	MILL-MAX, 2308-2	2800		-2800
58	10	JP1 - JP8,JP11,JP12	HEADER, 2 PINS, 2mm	SAMTEC, TMM-102-02-L-S	2000		-2000
59	2	JP9,JP10	HEADER, 3 PINS, 2mm	SAMTEC, TMM-103-02-L-S	400		-400
60	3	JP4,JP9,JP11	SHUNT 2MM	SAMTEC, 2SN-BK-G	600		-600
61	0	JP1,JP2,JP3,JP5,JP6,JP7,JP8, JP10,JP12	SHUNT 2MM, (DO NOT INSTALL)	SAMTEC, 2SN-BK-G			
62	1	J1	HEADER, 2X10, 20-PIN, SMT HORIZONTAL SOCKET, 0.100"	SAMTEC, SMH-110-02-L-D	200	10	-190
63	0	J2 (OPT)	HEADER, 2X6, 12-PIN, SMT HORIZONTAL SOCKET w/KEY, 0.100"	SAMTEC, SMH-106-02-L-D-05	0	10	10
64	1	J3	PIEZO CONNECTOR 4 PIN, TERMINAL BLOCK, WR-TBL	WURTH, 691411710002			
65	1		FAB, PRINTED CIRCUIT BOARD	DEMO CIRCUIT 2080A-1	200		-200
66	2	STENCILS	STENCILS - TOP & BOTTOM	DC2080A-1	0		0

Item	Qty	Reference - Des	Part Description	Manufacturer, Part #
REQUIRED CIRCUIT COMPONENTS:				
1	3	C1,C7,C18	CAP, CHIP, X5R, 1uF, 10%, 6.3V, 0402	TDK, C1005X5R0J105KT
2	4	C2,C10,C24,C26	CAP, CHIP, X5R, 100uF, 20%, 10V, 1210	TAIYO YUDEN, LMK325ABJ107MM
2	15	C01-C015 (OPTIONAL ENERGY STORAGE)		
3	1	C3	CAP, CHIP, X5R, 22uF, 10%, 25V, 1210	AVX, 12103D226KAT2A
4	1	C4	CAP, CHIP, X5R, 4.7uF, 10%, 6.3V, 0603, Height=0.80mm	TDK, C1608X5R0J475K0.80
5	3	C6,C27,C28	CAP, CHIP, X7R, 0.1uF, 10%, 16V, 0402	MURATA, GRM155R71C104KA88D
6	1	C8	CAP, CHIP, X7R, 330pF, 50V, 10%, 0603	MURATA, GRM188R71H331KA01D
7	1	C11	CAP, CHIP, X7R, 1000pF, 50V, 10%, 0603	MURATA, GRM188R71H102KA01D
8	4	C12,C13,C16,C23	CAP, POLYMER SMD, 220uF, 6.3V, 18mQ, 2.8Arms, D2E CASE	SANYO, 6TPE220MI
9	1	C14	CAP, CHIP, X5R, 2.2uF, 16V, 10%, 0603	MURATA, GRM188R61C225KE15D
10	2	C15,C17	CAP, CHIP, X5R, 10uF, 10%, 6.3V, 0805	AVX, 08056D106KAT2A
11	2	C19,C20	CAP, CHIP, NPO, 33pF, 5%, 25V, 0402	AVX, 04023A330JAT2A
12	1	C21	CAP, CHIP, X5R, 4.7uF, 10%, 16V, 0805	TAIYO YUDEN, EMK212BJ475MG-T
13	1	C22	CAP, CHIP, X5R, 1uF, 10%, 16V, 0603	AVX, 0603YD105KAT2A
14	1	C25	CAP, CHIP, NPO, 47pF, 5%, 25V, 0402	AVX, 04023A470JAT2A
15	1	C29	CAP, CHIP, X5R, 10uF, 10%, 25V, 1210	AVX, 12103D106KAT2A
16	1	D1	DIODE, STANDARD, 200V, 1.5A, SMP	VISHAY, AS1PD-M3/84A
17	1	D6	SANYO, AMORPHOUS SOLAR CELL	SANYO, AM-5412
18	1	HS1	HEATSINK, 50.8mm X 50mm	FISCHER, SK 426
19	1	L1	INDUCTOR, 22uH, 0.70A, 185mQ, 4.8mm x 4.8mm	WURTH, 744043220
20	1	L2	INDUCTOR, 10uH, 560mA, 0.205Q, 3.8mm x 3.8mm	WURTH, 744031100
21	1	L3	INDUCTOR, 22uH, 270mA, 1.48Q, 2.8mm x 2.87mm	WURTH, 744028220
22	1	T1	TRANSFORMER, 100:1 TURNS RATIO	WURTH, 74488540070
23	1	TEG1	PELTIER MODULE CP85438	CUI INC., CP85438
24	1	Q3	N-CHANNEL MOSFET, 20V, SOT23	DIODES/ZETEX, ZXMN2F30FHTA
25	11	R1,R3,R5,R6,R8,R16,R17,R26,R27,R28,R35	RES, CHIP, 0Q jumper, 1/16W, 0402	VISHAY, CRCW04020000Z0ED
26	2	R13,R21	RES, CHIP, 499KQ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW0402499KFKE
27	1	R19	RES, CHIP, 392KQ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW0402392KFKE
28	1	R20	RES, CHIP, 750KQ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW0402750KFKE
29	1	R23	RES, CHIP, 200KQ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW0402200KFKE
30	1	R24	RES, CHIP, 1.10MQ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW04021M10KFKE
31	1	R25	RES, CHIP, 549KQ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW0402549KFKE
32	1	R29	RES, CHIP, 1.96MQ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW04021M96KFKE
33	1	R30	RES, CHIP, 1.15MQ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW04021M15KFKE
34	1	R34	RES, CHIP, 40.2KQ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW040240K2FKED
35	1	U1	PIEZOELECTRIC ENERGY HARVESTING POWER SUPPLY, DFN 3mmx3mm	LINEAR TECH., LTC3588EMSE-1
36	1	U2	IC, ULTRA-LOW POWER SUPERVISOR WITH POWER-FAIL OUTPUT, TSOT-23, 8-PIN	LINEAR TECH., LTC2935CTS8-2
37	1	U3	IC, ULTRA-LOW VOLTAGE STEP-UP CONVERTER AND POWER MANAGER, DFN 3mmX4mm	LINEAR TECH., LTC3108EDE
38	1	U4	IC, 400mA STEP-UP DC/DC CONVERTER WITH MPPC and 250mV Start-Up, DFN 3mmX3mm	LINEAR TECH., LTC3105EDD
39	1	U5	IC, 10V MICROPOWER SYNC BOOST CONVERTER, DFN 2mmX2mm	LINEAR TECH., LTC3459EDC
40	1	U6	IC, ULTRA-LOW POWER SUPERVISOR WITH POWER-FAIL OUTPUT, TSOT-23, 8-PIN	LINEAR TECH., LTC2935CTS8-4
ADDITIONAL DEMO BOARD CIRCUIT COMPONENTS:				
1	0	C5 (OPT)	CAP, CHIP, X7R, 0.1uF, 10%, 16V, 0402	MURATA, GRM155R71C104KA88D
2	0	C9 (OPT)	OPT, 0603	
3	0	D2 - D5 (OPT)	DIODE, SCHOTTKY, 40V, 1A, SOD-123	DIODES INC, 1N5819HW-7-F
4	0	Q1,Q2 (OPT)	N-CHANNEL MOSFET, 20V, SOT23	DIODES/ZETEX, ZXMN2F30FHTA
5	0	R1 (OPT)	RES, CHIP, 4.99KQ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW04024K99KFKE
6	0	R2,R7,R9,R10,R11,R12,R14,R15,R18,R31,R32,R33,R36	RES, CHIP, 0402	NOPOP
7	0	R4 (OPT)	RES, CHIP, 50.5KQ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW040250K5KFKE
8	0	R22 (OPT)	RES, CHIP, 2.80MQ, ±1%, 1/16W, 0402, +/-100ppm/°C	VISHAY, CRCW04022M80KFKE
HARDWARE FOR DEMO BOARD ONLY:				
1	14	E1 - E14	TURRET, 0.061 DIA	MILL-MAX, 2308-2
2	10	JP1 - JP8, JP11, JP12	HEADER, 2 PINS, 2mm	SAMTEC, TMM-102-02-L-S
3	2	JP9,JP10	HEADER, 3 PINS, 2mm	SAMTEC, TMM-103-02-L-S
4	3	JP4,JP9,JP11	SHUNT 2MM	SAMTEC, 2SN-BK-G
5	0	JP1,JP2,JP3,JP5,JP6,JP7, JP8, JP10,JP12	SHUNT 2MM, (DO NOT INSTALL)	SAMTEC, 2SN-BK-G
6	1	J1	HEADER, 2X10, 20-PIN, SMT HORIZONTAL SOCKET, 0.100"	SAMTEC, SMH-110-02-L-D
7	0	J2 (OPT)	HEADER, 2X6, 12-PIN, SMT HORIZONTAL SOCKET w/KEY, 0.100"	SAMTEC, SMH-106-02-L-D-05
8	1	J3	PIEZO CONNECTOR 4 PIN, TERMINAL BLOCK, WR-TBL	WURTH, 691411710002
9	4		ADHESIVE CABLE MOUNT U-STYLE CLIP,	WURTH, 523252000
10	1		KERAFOL, KL 90 40mmX40mmX3mm DOUBLE SIDED ADHESIVE TAPE	KERATHERM, KL 90 40mmX40mmX3mm
11	0.007		DOUBLE SIDED MOUNTING TAPE, 35mmX38mm FOR SOLAR CELL	TESA, 55742 (Kit Qty = number of Reels, Round Up)

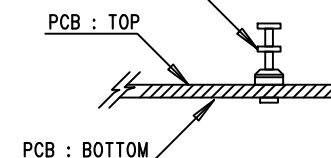


REVISION HISTORY				
ECO	REV	DESCRIPTION	APPR	DATE
-	1	PRODUCTION FAB	BS	1-8-13

NOTES: UNLESS OTHERWISE SPECIFIED

- WORKMANSHIP SHALL BE IN ACCORDANCE WITH IPC-A-610.
- ASSEMBLY PROCESS SHALL INCLUDE: REFLOW SOLDER TOP SIDE SMD. MAXIMUM SOLDER TEMPERATURE IS 240 DEGREES CELCIUS.
- 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.
- INSTALL SHUNTS AS SHOWN ON ASSY DRAWING.
- DEPANELIZE BOARDS AFTER ASSEMBLY AND ROUTE-OUT THE BREAKOUT TABS ON FOUR SIDES OF THE BOARD EDGE.
- INSTALL TURRETS SHOWN BELOW:

(14 PLCS) : MILL-MAX 2308-2

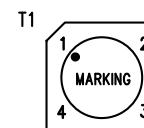


- TRANSFORMER T1 NEEDS TO BE INSTALLED AS SHOWN BELOW:

PLACEMENT ORIENTATION USING:

WURTH, 74488540070 TRANSFORMER

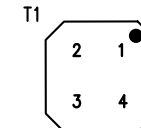
TOP VIEW



PLACEMENT ORIENTATION USING:

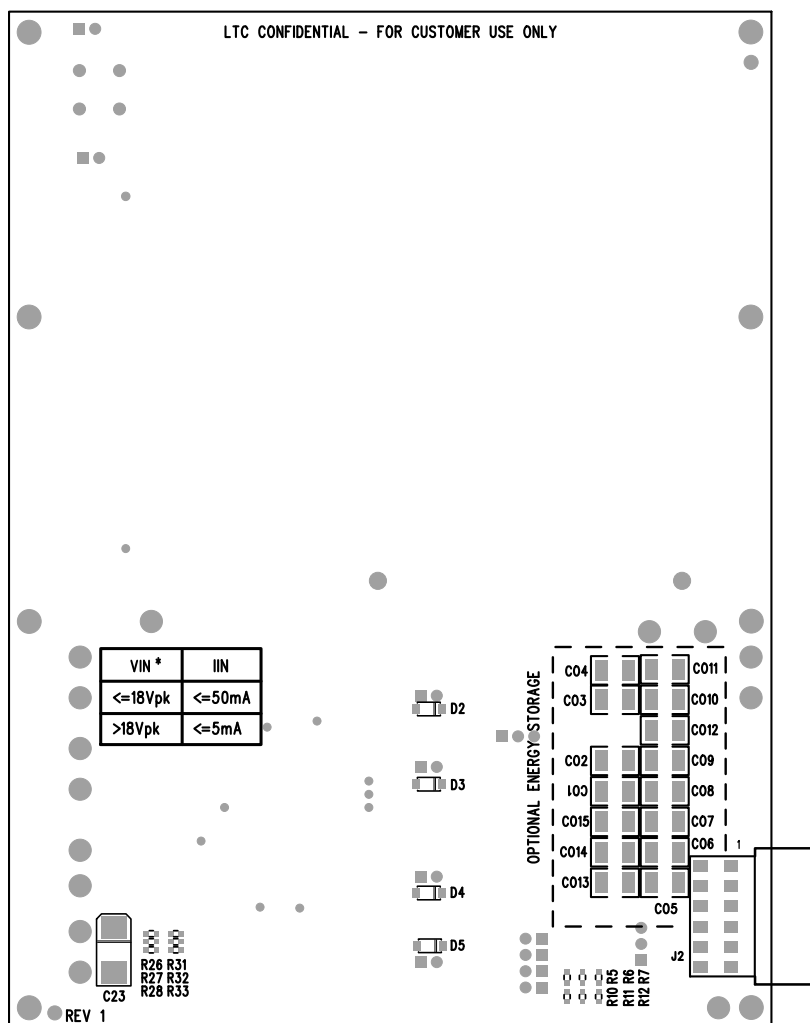
COILCRAFT, LPR6235-752SMLC TRANSFORMER

TOP VIEW

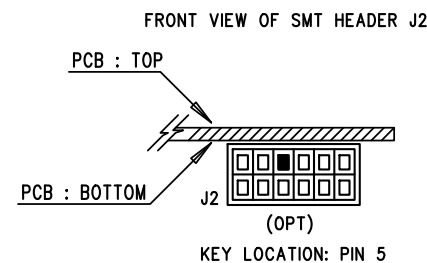



OPTIONAL

APPROVALS		 1630 MCCARTHY BLVD MILPITAS, CA 95035 PH: (408)432-1900 www.linear.com LTC CONFIDENTIAL - FOR CUSTOMER USE ONLY		
PCB DES.	NC			
APP ENG.	BS			
		TITLE: TOP ASSEMBLY DRAWING: ENERGY HARVESTING MULTI-SOURCE DEMOBOARD		
		SIZE	IC NO.	REV.
		N/A	DEMO CIRCUIT 2080A	1
SCALE = NONE		FILENAME: DC2080A-1.PCB		SHT 1 of 2

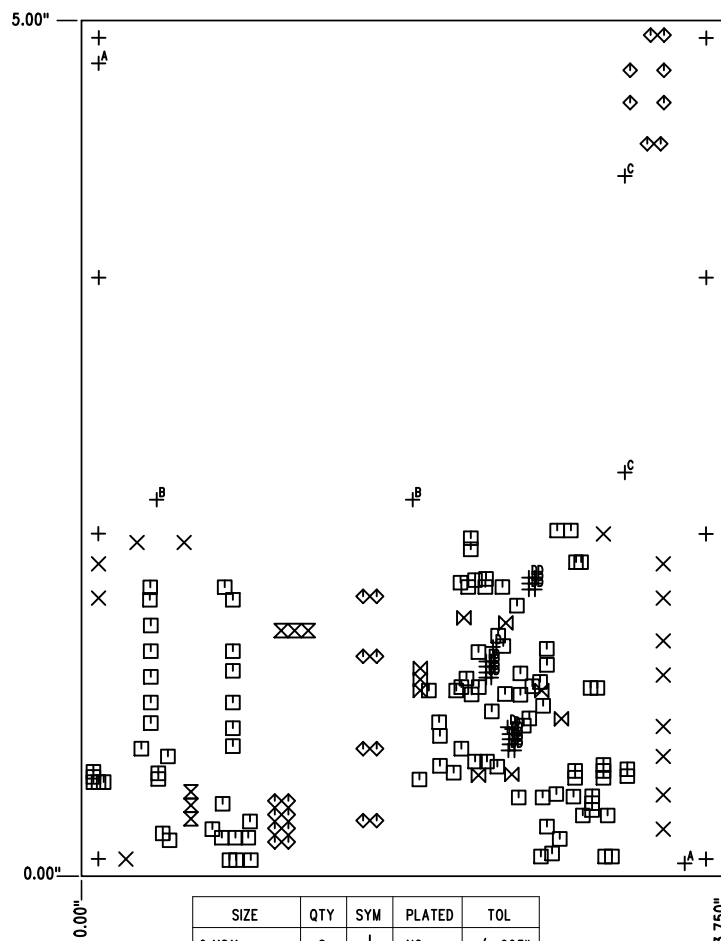


1. ENSURE HEADER KEY FOR OPTIONAL J2 IS INSTALLED AND LOCATED AS SHOWN BELOW:



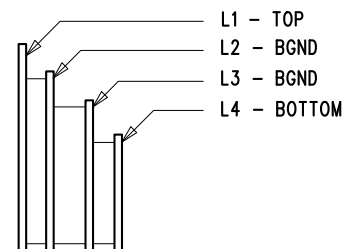
APPROVALS		 LINEAR TECHNOLOGY 1630 MCCARTHY BLVD MILPITAS, CA 95035 PH: (408)432-1900 www.Linear.com LTC CONFIDENTIAL - FOR CUSTOMER USE ONLY	
PCB DES.	NC		
APP ENG.	BS	TITLE: BOTTOM ASSEMBLY DRAWING: ENERGY HARVESTING MULTI-SOURCE DEMOBOARD	
		SIZE	IC NO.
		N/A	DEMO CIRCUIT 2080A
			REV. 1
SCALE = NONE		FILENAME: DC2080A-1.PCB SHT 2 of 2	

REVISION HISTORY				
ECO	REV	DESCRIPTION	APPR	DATE
-	1	PRODUCTION FAB	BS	1-8-13



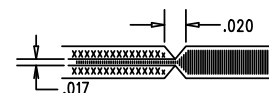
SIZE	QTY	SYM	PLATED	TOL
0.11811	8	+	NO	+/- .003"
0.063	14	X	YES	+/- .003"
0.015	100	□	YES	+/- .003"
0.035	24	◇	YES	+/- .003"
0.031	6	⊗	YES	+/- .003"
0.02	9	⊗	YES	+/- .003"
0.07	2	+	NO	+/- .003"
0.06	2	+	YES	+/- .003"
0.022	2	+	YES	+/- .003"
0.01	25	+	YES	+/- .003"


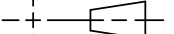
LAYER STRUCTURE



NOTES: UNLESS OTHERWISE SPECIFIED

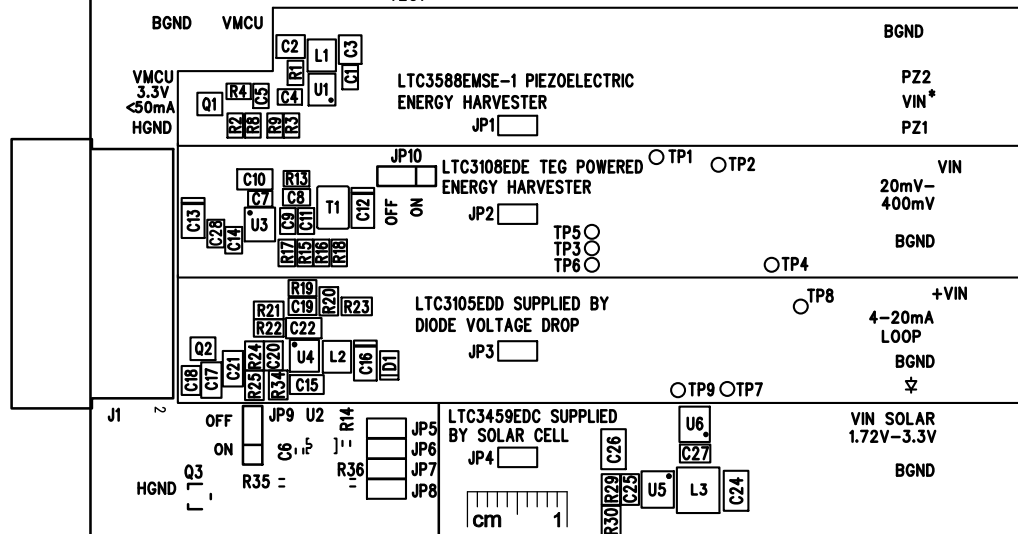
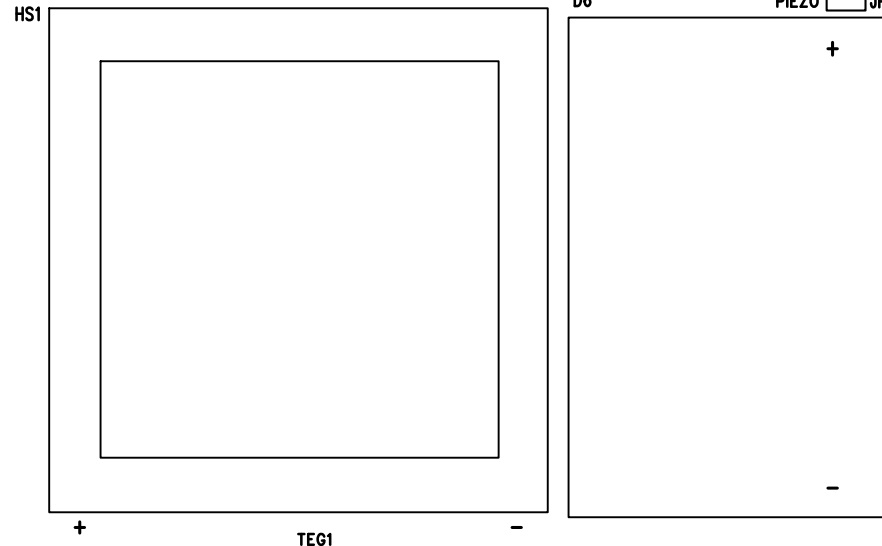
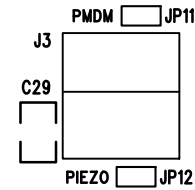
- FAB PER IPC-A-600.
- MATERIAL: -EPOXY FIBERGLASS, NEMA GRADE FR-4
-FINISHED THICKNESS TO BE 0.062" +/- .005"
-TOTAL OF 4 LAYERS WITH 1 OZ. CU ON THE ALL LAYERS
-FLAMMABILITY RATING: 94 V-0 MINIMUM.
- SIZE: CUT TO DIMENSIONS AND TOLERANCES SHOWN.
0.00 ARE PRIMARY DATUMS.
- DRILLING: -DRILL HOLES PER 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
- FINISH: -SMOBC USING LPI BOTH SIDES, COLOR GREEN.
-GOLD IMMERSION BOTH SIDES.
(LEAD FREE SOLDER CAN BE USED FOR PROTOTYPE)
-FOR SILKSCREEN: BOTH SIDES USE WHITE NON-CONDUCTIVE INK.
- DO NOT ALTER ARTWORK e.g. TO ADD LOGO OR DATE CODE.
PAD SIZE CAN BE MODIFIED TO MEET END FINISH.
- PCBS ARE TO BE RoHS COMPLIANT.
- DO NOT ALTER SOLDER MASK MAINTAIN .0018" OVERSIZE ON SMT PADS. A .005" WEBBING IS REQUIRED BETWEEN SMD PADS.
- SCORING FOR PANELIZED PCB: "PRODUCTION FAB ONLY"

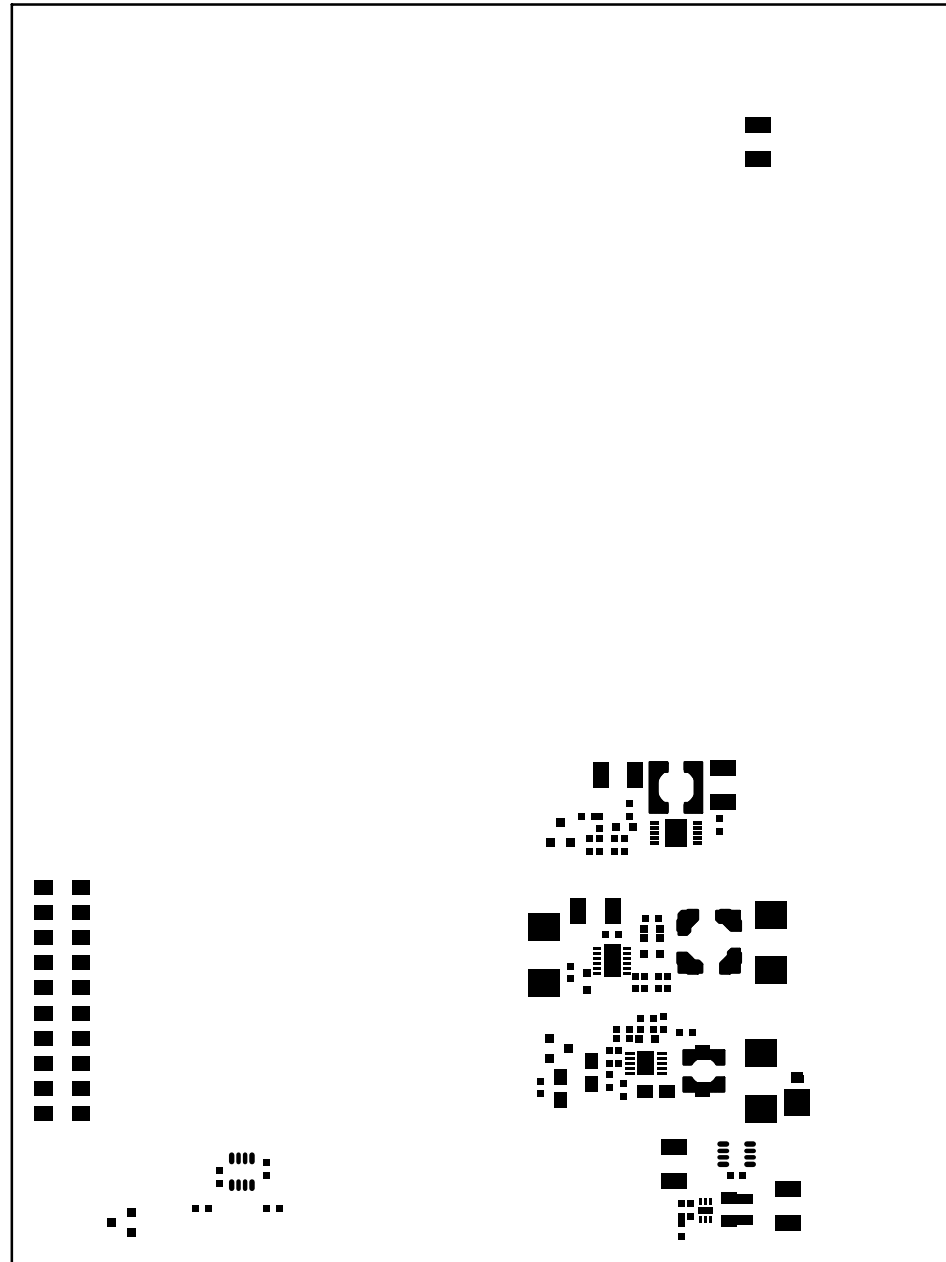


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON ANGLE ±1 0.XX" = ±0.01" 0.XXX" = ±0.005" INTERPRET DIM AND TOL PER ASME Y14.5M-1994	APPROVALS		 LINEAR TECHNOLOGY	1630 MCCARTHY BLVD MILPITAS, CA 95035 PH: (408)432-1900 www.Linear.com LTC CONFIDENTIAL- FOR CUSTOMER USE ONLY	
	PCB DES.	NC		TITLE: FABRICATION DRAWING: ENERGY HARVESTING MULTI-SOURCE DEMOBOARD	
	APP ENG.	BS			
THIRD ANGLE PROJECTION					
					
DO NOT SCALE DRAWING	SCALE: NONE	FILENAME: DC2080A-1.PCB	SIZE N/A	IC NO. DEMO CIRCUIT 2080A	REV. 1
			SHT 1 of 1		

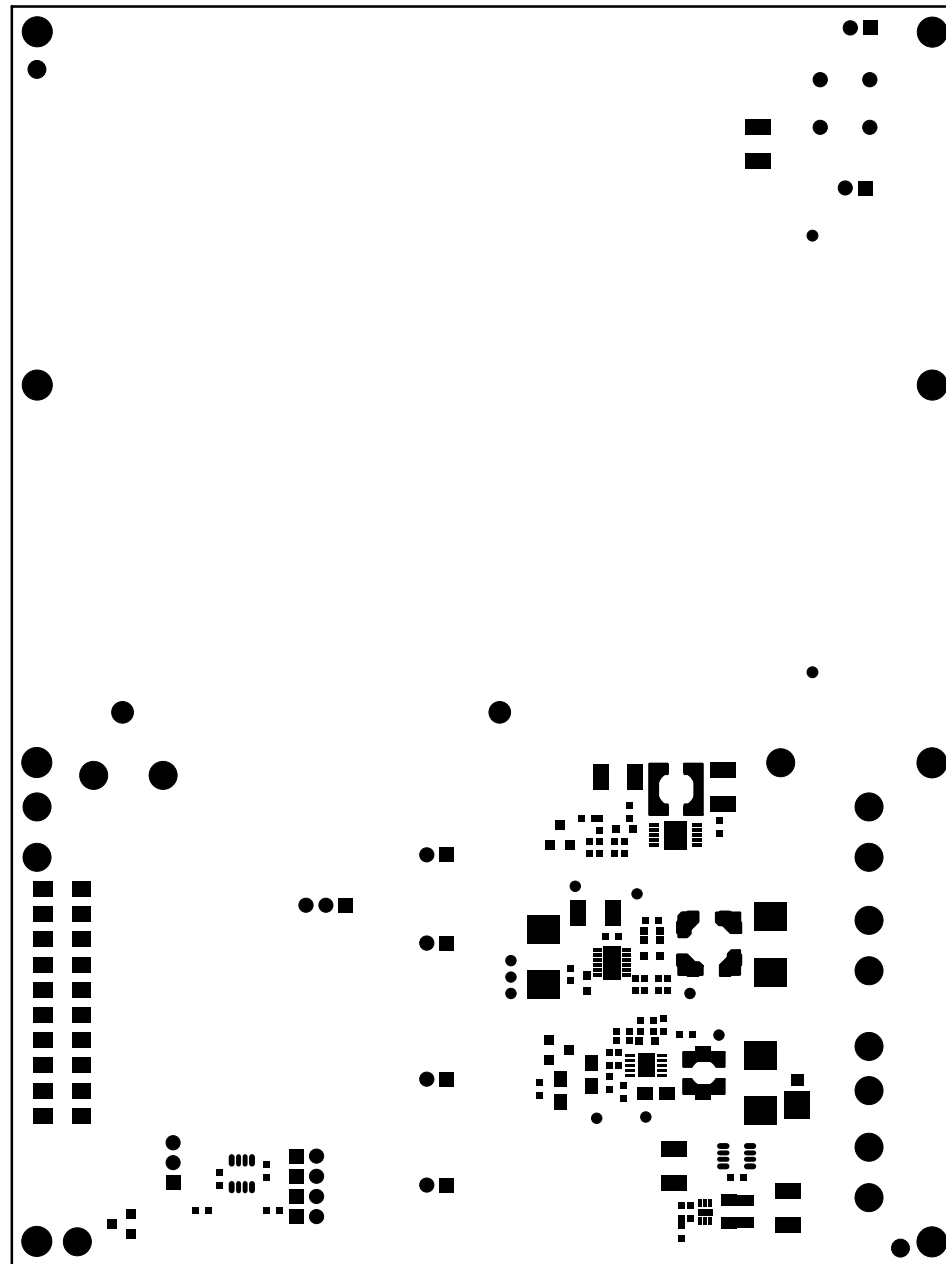
DEMO CIRCUIT 2080A

ENERGY HARVESTING MULTI-SOURCE DEMOBOARD

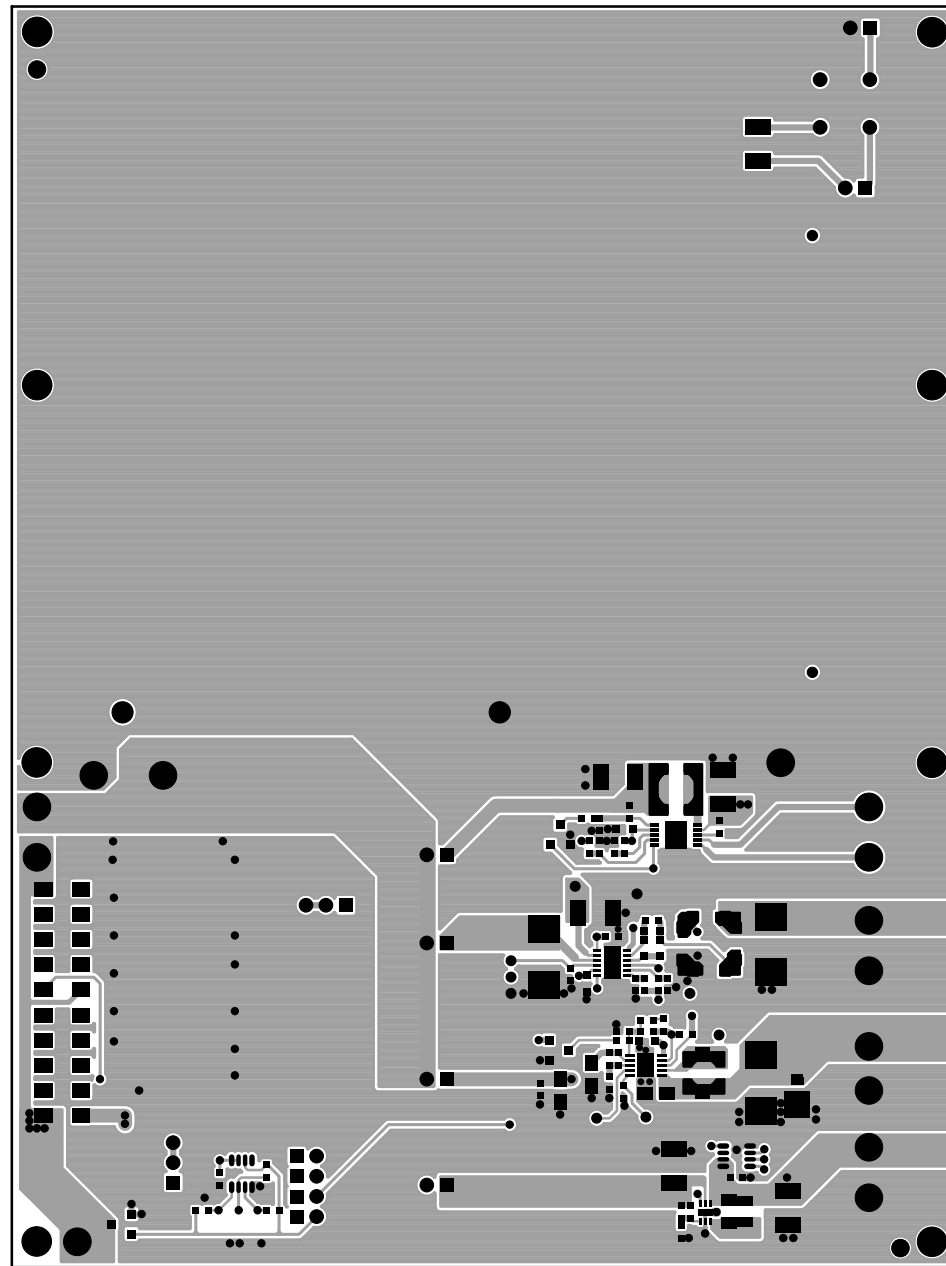




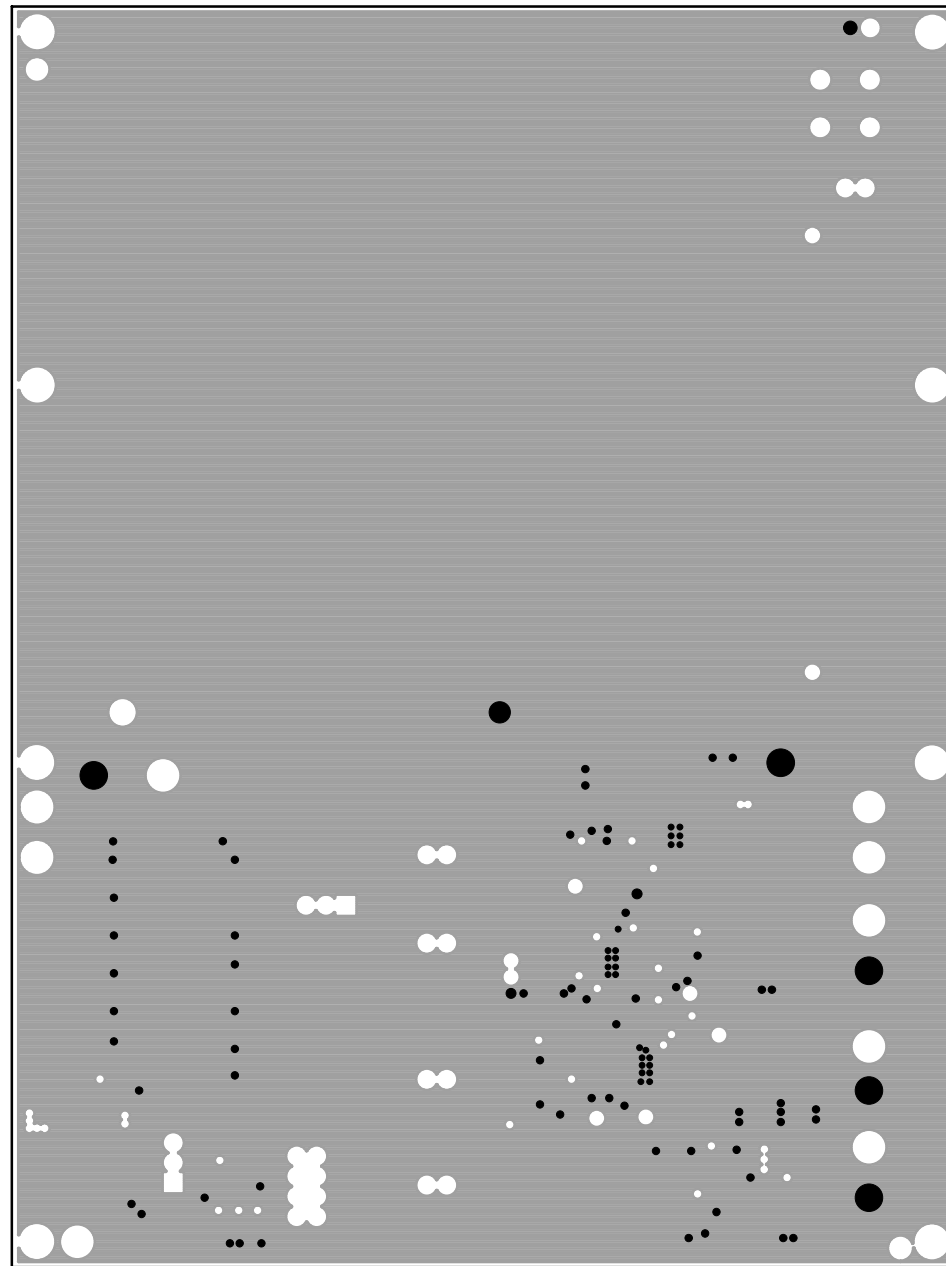
PASTEMASK TOP
LINEAR TECH CORP.
DEMO CIRCUIT 2080A-1
ENERGY HARVESTING MULTI-SOURCE DEMOBOARD
DATE: 1-8-13



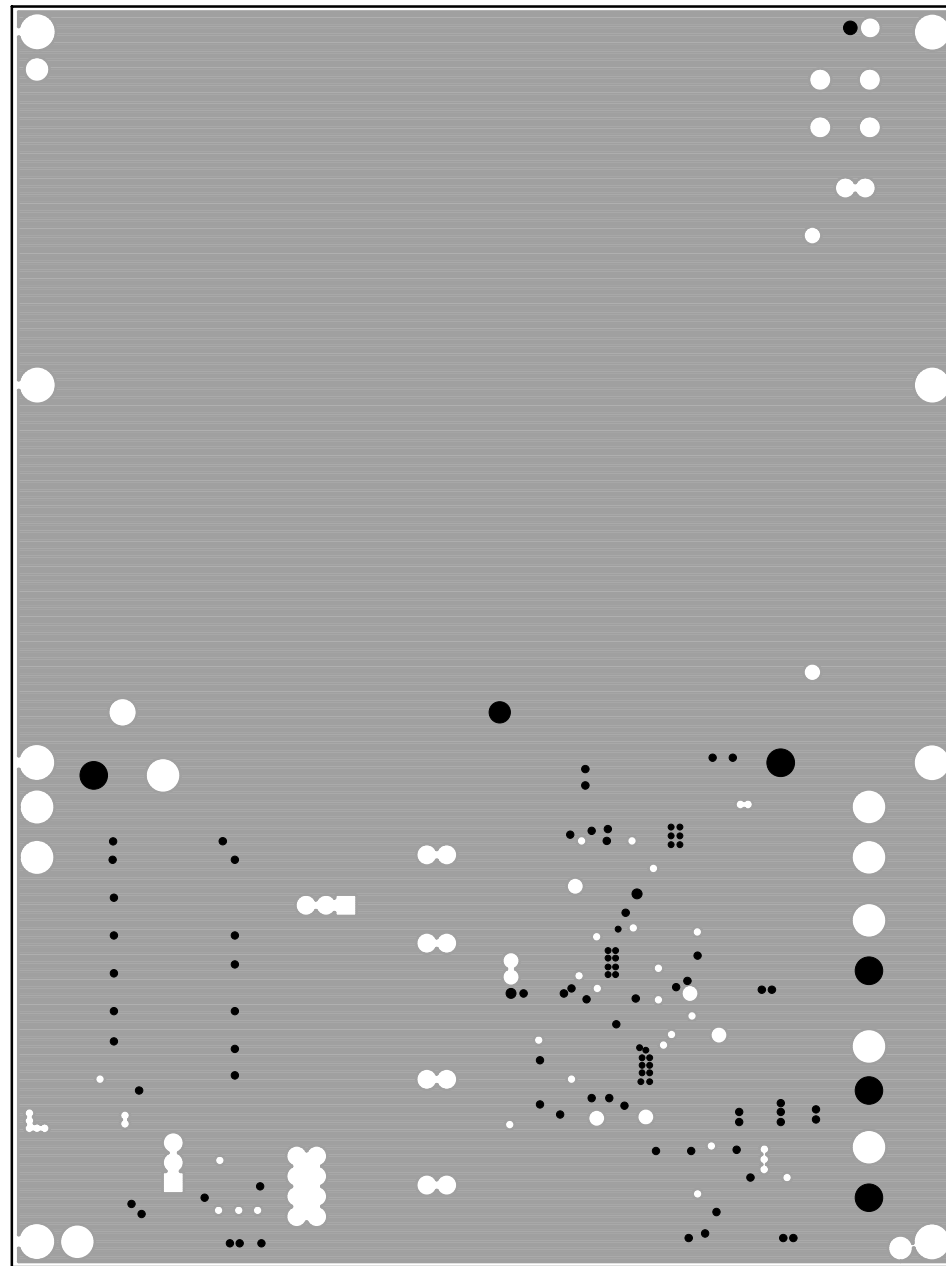
SOLDERMASK TOP
LINEAR TECH CORP.
DEMO CIRCUIT 2080A-1
ENERGY HARVESTING MULTI-SOURCE DEMOBOARD
DATE: 1-8-13



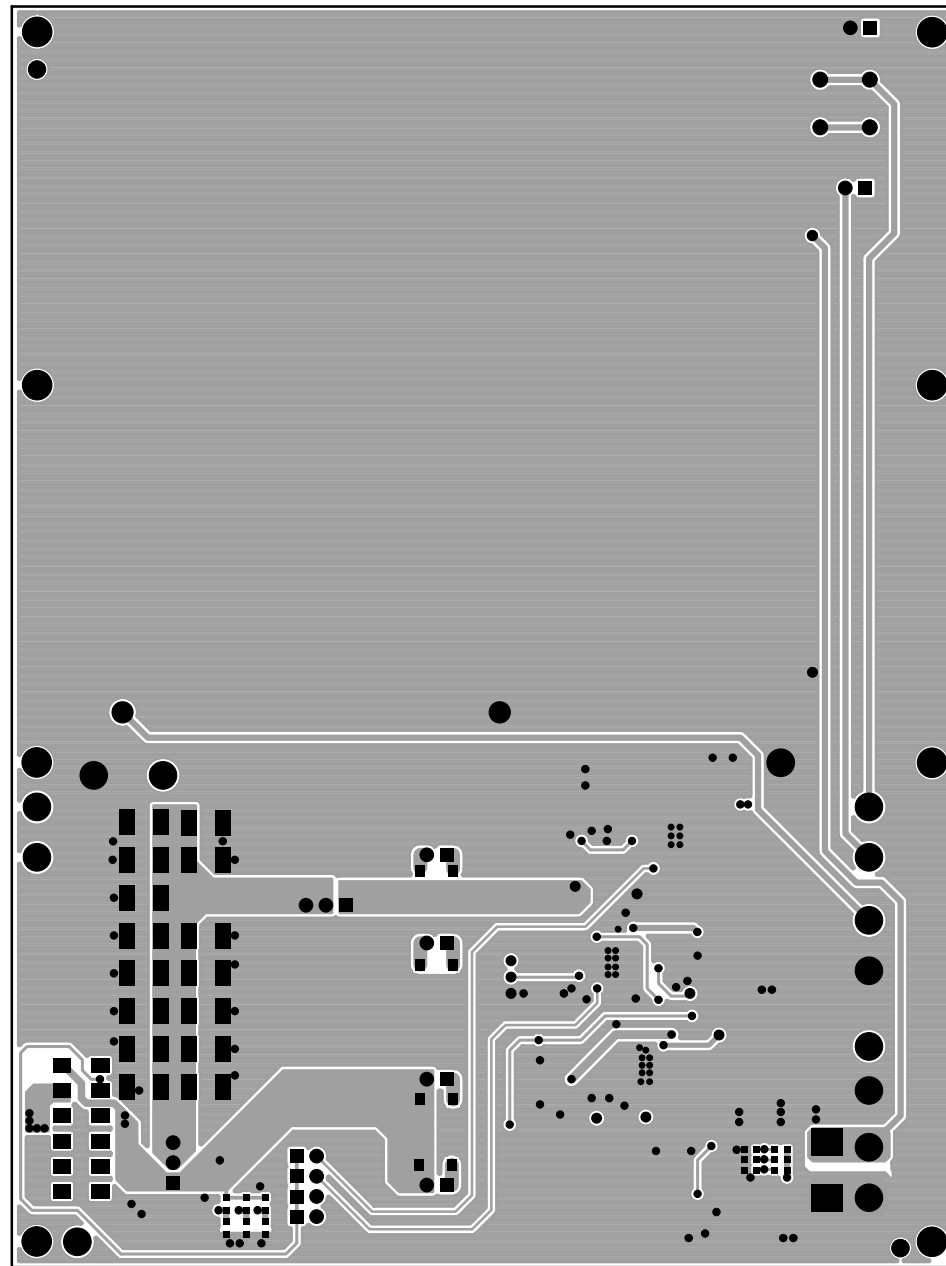
LAYER-1-TOP LAYER
LINEAR TECH CORP.
DEMO CIRCUIT 2080A-1
ENERGY HARVESTING MULTI-SOURCE DEMOBOARD
DATE: 1-8-13



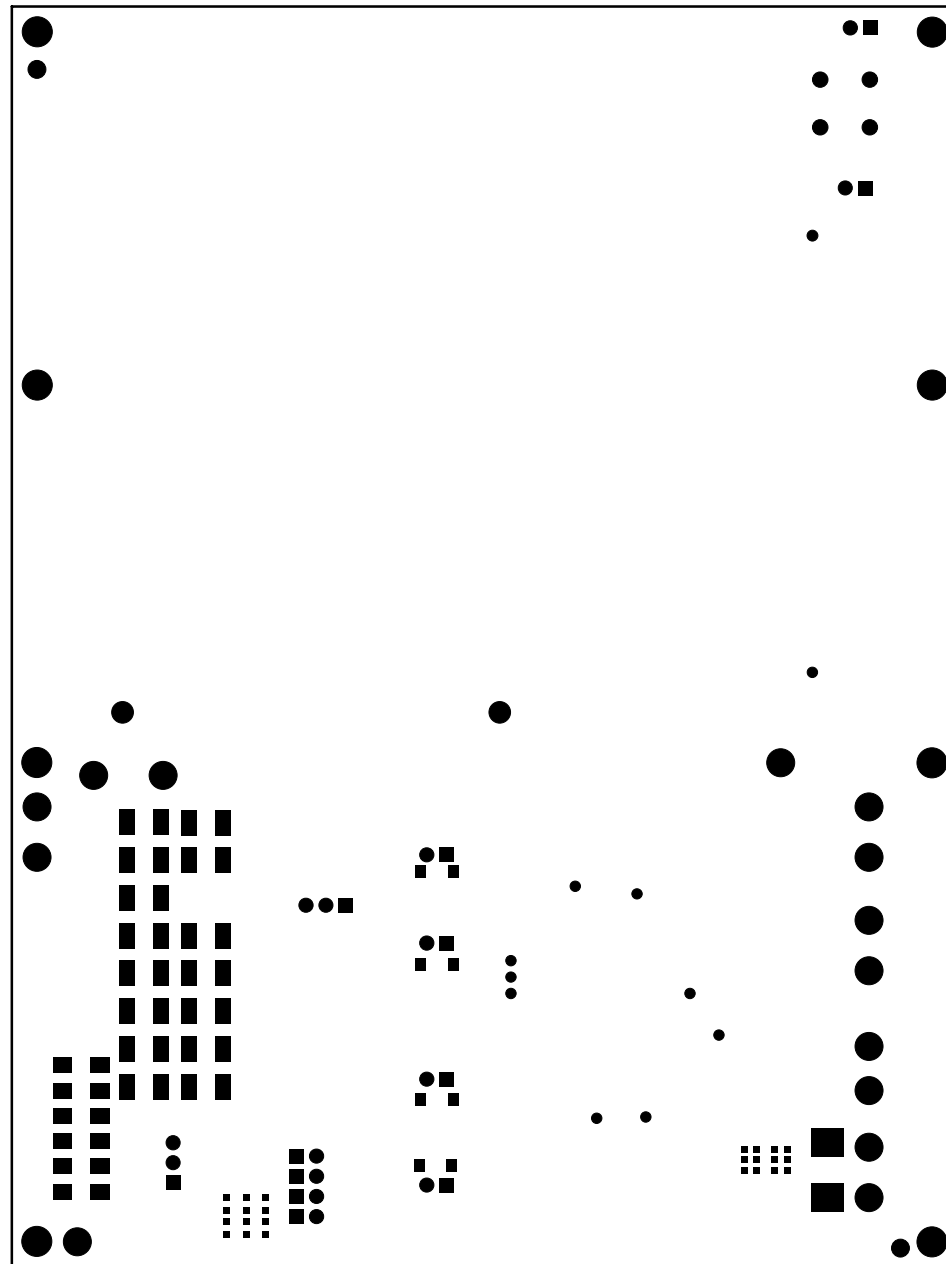
LAYER-2- BGND PLANE
LINEAR TECH CORP.
DEMO CIRCUIT 2080A-1
ENERGY HARVESTING MULTI-SOURCE DEMOBOARD
DATE: 1-8-13



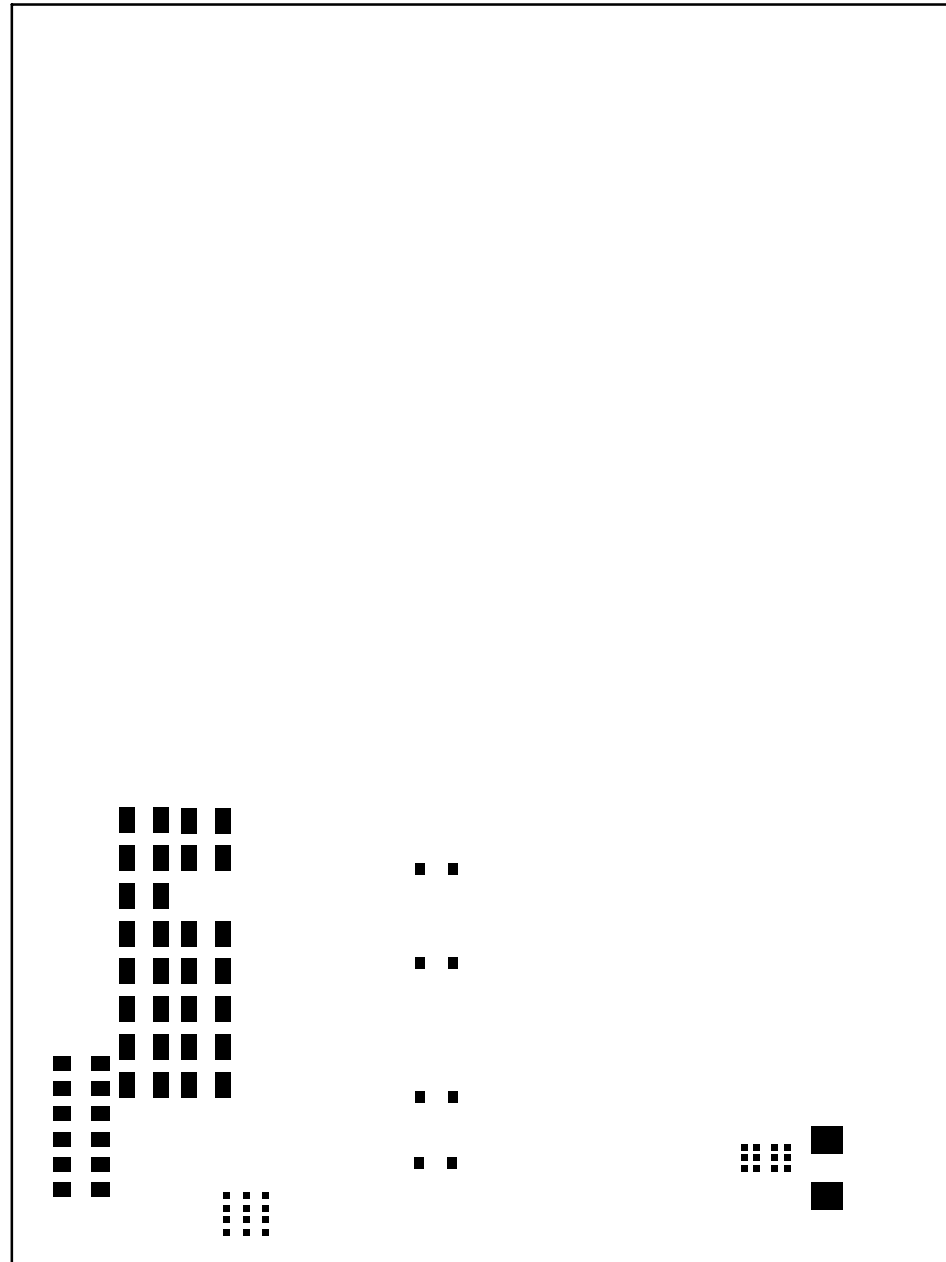
LAYER-3-BGND PLANE
LINEAR TECH CORP.
DEMO CIRCUIT 2080A-1
ENERGY HARVESTING MULTI-SOURCE DEMOBOARD
DATE: 1-8-13



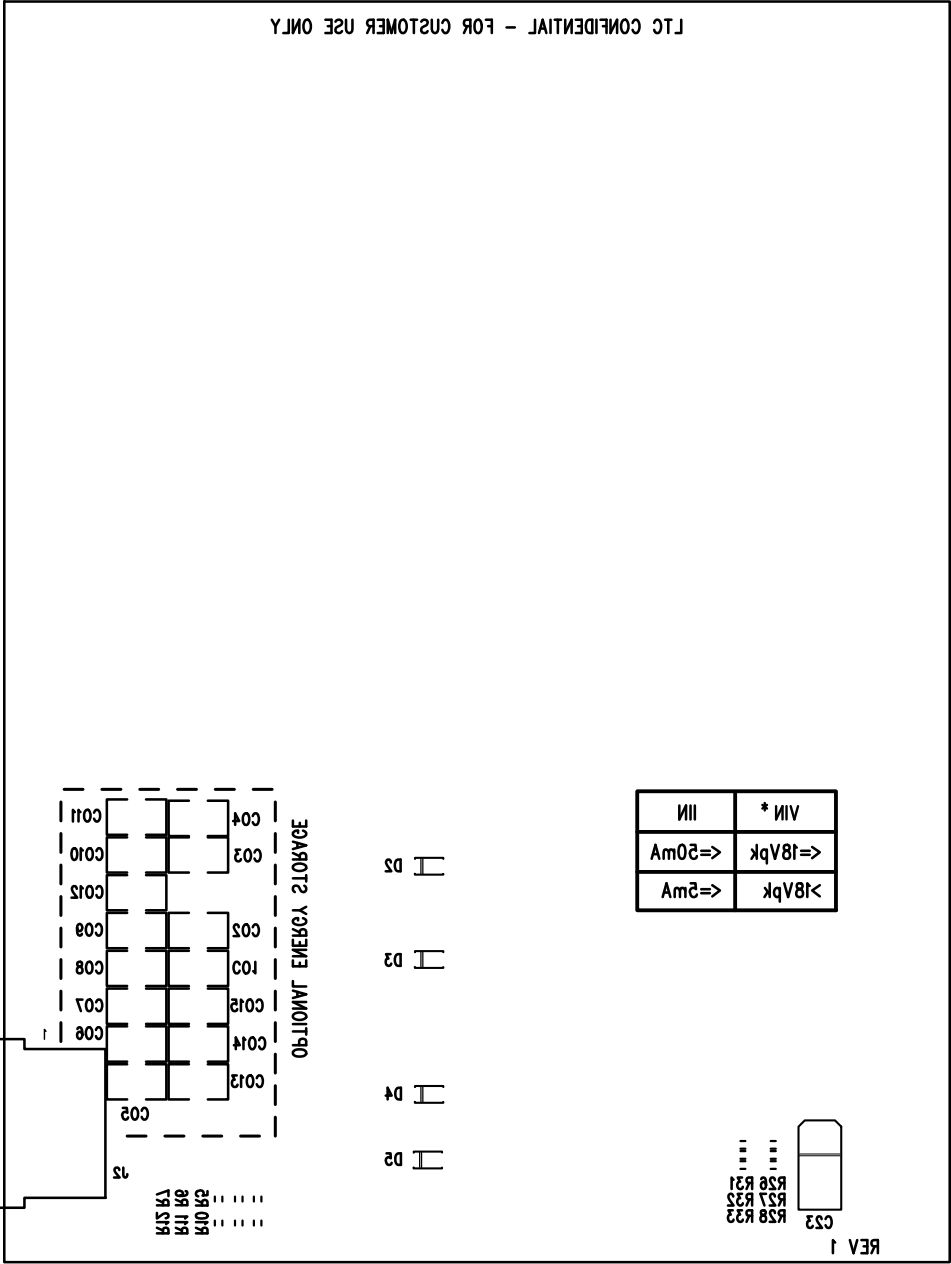
LAYER-4-BOTTOM SIDE
LINEAR TECH CORP.
DEMO CIRCUIT 2080A-1
ENERGY HARVESTING MULTI-SOURCE DEMOBOARD
DATE: 1-8-13



SOLDERMASK BOTTOM
LINEAR TECH CORP.
DEMO CIRCUIT 2080A-1
ENERGY HARVESTING MULTI-SOURCE DEMOBOARD
DATE: 1-8-13



PASTEMASK BOTTOM
LINEAR TECH CORP.
DEMO CIRCUIT 2080A-1
ENERGY HARVESTING MULTI-SOURCE DEMOBOARD
DATE: 1-8-13



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SILKSCREEN BOTTOM
 LINEAR TECH CORP.
 DEMO CIRCUIT 2080A-1
 ENERGY HARVESTING MULTI-SOURCE DEMOBOARD
 DATE: 1-8-13