

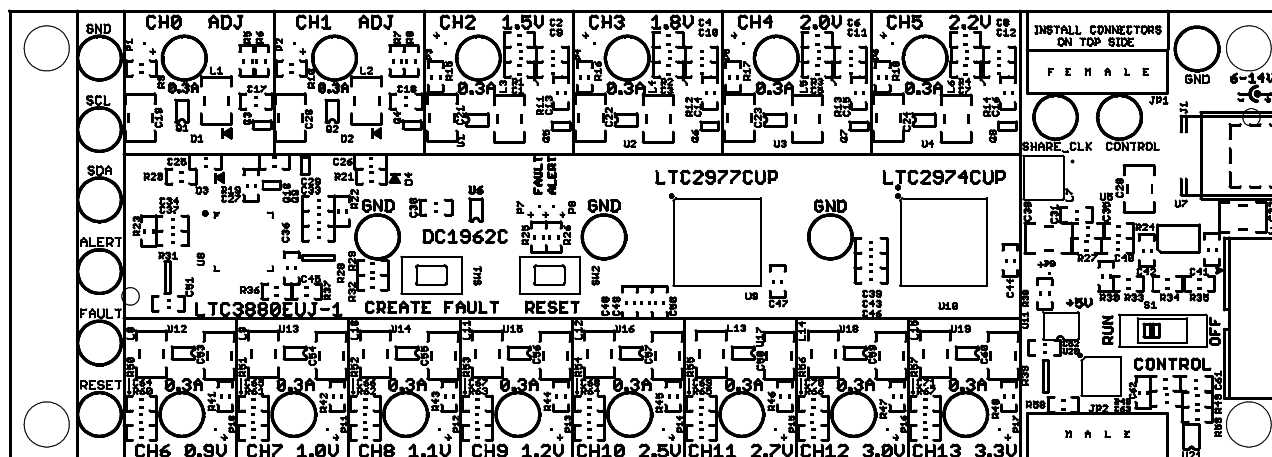
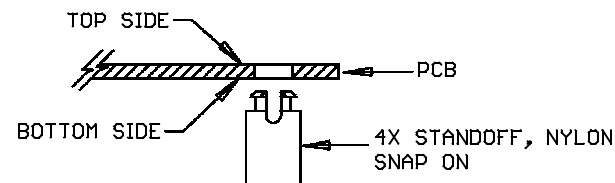
REVISION HISTORY

ECO	REV	DESCRIPTION	APPROVED	DATE
-	1	PRODUCTION	MIKE P.	01/15/2013

NOTES: UNLESS OTHERWISE SPECIFIED

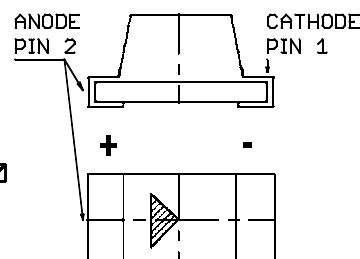
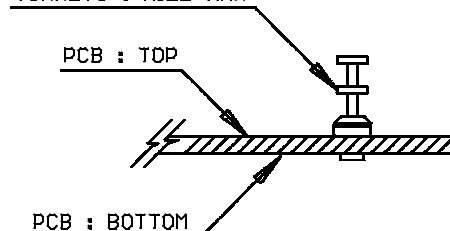
1. WORKMANSHIP SHALL BE IN ACCORDANCE WITH IPC-A-610.
2. PARTS TO OMIT WILL BE SPECIFIED ON THE BILL OF MATERIALS. MASK THE SOLDER STENCIL WHERE SMT PARTS ARE OMITTED.
3. DEPANELIZE BOARDS AFTER ASSEMBLY AND ROUTE-OUT THE BREAKOUT TABS ON 4 SIDES OF THE BOARD EDGE.
4. ASSY PROCESS SHALL INCLUDE: REFLOW SOLDER TOP SIDE SMD.
5. DO NOT APPLY ANY KIND OF ASSEMBLY STAMP OR QA STAMP ON ANY BOARD.

6. INSTALL 4 STANDOFFS AT 4 CORNERS FROM THE BOTTOM SIDE.

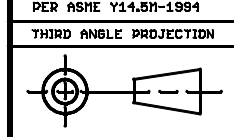


7. INSTALL TURRETS and LEDS AS SHOWN BELOW:

TURRETS : MILL-MAX



UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON ANGLE +/- 1°
0.XXX" = +/- 0.01"
0.XXX" = +/- 0.005"
INTERPRET DIM AND TOL
PER ASME Y14.5M-1994



DO NOT SCALE DRAWING

APPROVALS

NAME	DATE
PCB DES. R.S.	01-15-13
ENG MIKE P.	01-15-13



1630 MCCARTHY BLVD.
MILPITAS, CA 95033
PH (408) 432-1900
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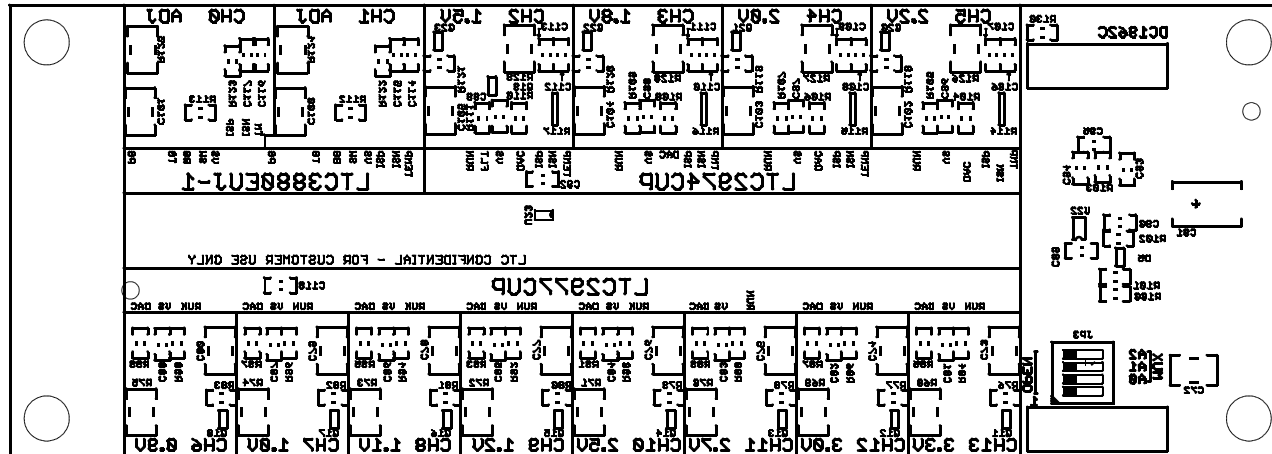
TITLE: TOP ASSEMBLY DRAWING
POWER SYSTEM MANAGEMENT WITH
LTC2977CUP, LTC2974CUP, LTC3880EUI-1

SIZE	IC NO.	REV
N/A	LTC2977, LTC2974, LTC3880 DEMO CIRCUIT 1962C	1

FILENAME: DC1962C_Rev1 SHEET 1 OF 13

SCALE: NONE

ECO	REV	DESCRIPTION	APPROVED	DATE
-	1	PRODUCTION	MIKE P.	01/15/2013



UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON ANGLE $\pm 1^\circ$
0.XX" = $\pm 0.01"$
0.XXX" = $\pm 0.005"$
INTERPRET DIM AND TOL

THIRD ANGLE PROJECTION

	NAME	DATE
PCB DES.	R.S.	01-15-13
ENS	MIKE P.	01-15-13



1630 MCCARTHY BLVD.
MILPITAS, CA 95033
PH: (408) 432-1900
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TITLE: BOTTOM ASSEMBLY DRAWING
POWER SYSTEM MANAGEMENT WITH
LTC2977CUP, LTC2974CUP, LTC3880EUJ-1

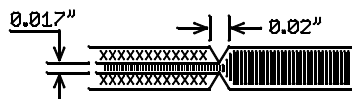
SIZE N/A	IC NO. LTC2977,LTC2974,LTC3880 DEMO CIRCUIT 1962C	REV 1
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DO NOT SCALE DRAWING	SCALE: NONE	FILENAME: DC1962C_Rev1	SHEET 2 OF 13
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NOTES: UNLESS OTHERWISE SPECIFIED

1. FAB PER IPC-A-600.
2. MATERIAL: EPOXY FIBERGLASS, NEMA GRADE FR-4
FINISHED THICKNESS TO BE 0.062" +/-0.005"
4-LAYER BOARD, 2 OZ. CU ON OUTER LAYERS,
1 OZ. CU ON INNER LAYERS,
FLAMMABILITY RATING: 94 V-2 MINIMUM.
3. SIZE: CUT TO DIMENSIONS AND TOLERANCES SHOWN.
0.00" ARE PRIMARY DATUMS.
4. FINISH: SMOBC USING LPI BOTH SIDES, COLOR BLACK.
ENIG FINISH. LEAD FREE SOLDER CAN BE USED
FOR PROTOTYPE BOARDS.
HIGH DEFINITION WHITE SILKSCREEN.

5. DRILL: PLATE THRU ALL HOLES WITH COPPER, 0.001"
THICK MIN. ALL HOLES SHALL BE DRILLED
+/-0.003" WITH RESPECT TO CTR. OF DRILLED
PAD. ALL HOLES FINISHED SIZE AFTER PLATING.
6. DROP ALL UNUSED PADS ON INNER LAYERS.
7. DO NOT ALTER ARTWORK e.g. TO ADD LOGO OR DATE CODE.
PAD SIZE CAN BE MODIFIED TO MEET END FINISH.
8. PCBs ARE TO BE RoHS COMPLIANT.
9. SCORING FOR PANELIZED PCB:

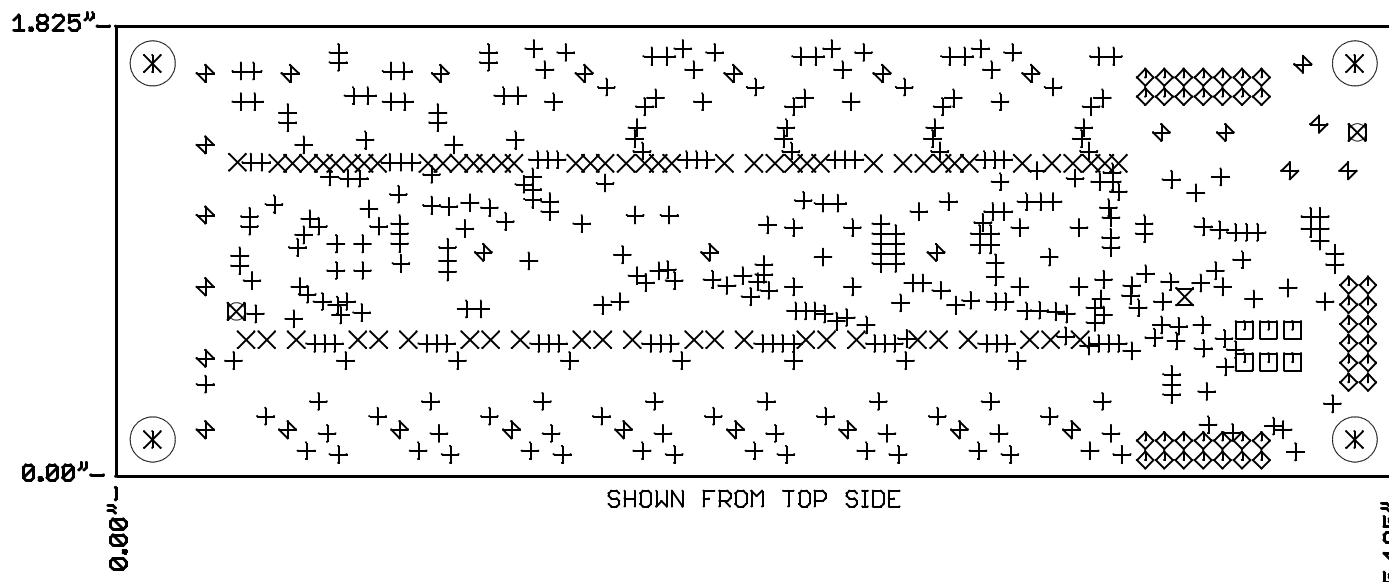


REVISION HISTORY

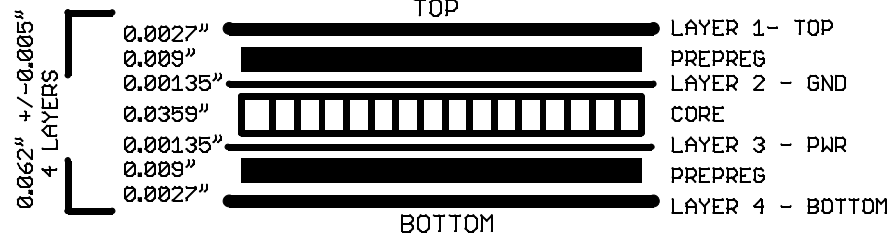
ECO	REV	DESCRIPTION	APPROVED	DATE
-	1	PRODUCTION	MIKE P.	01/15/2013

DRILL TABLE

Sym	Nº	Mils	MM	Qty	Plated
+	1	10	0.25	360	YES
X	2	15	0.38	65	YES
□	3	35	0.90	6	YES
◇	4	36	0.91	40	YES
⊗	5	67	1.70	1	YES
⊗	6	71	1.80	2	NOT
⊕	7	96	2.44	26	YES
⊕	8	118	3.00	3	YES
⊗	9	183	4.65	4	NOT



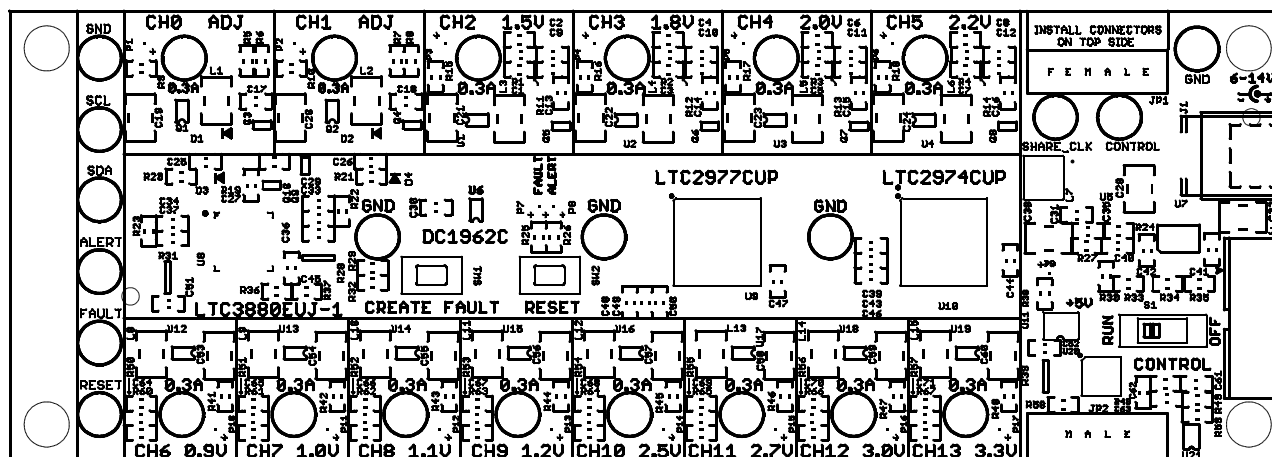
LAYER STRUCTURE


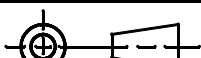


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON ANGLE +/- 1° 0.XX" = +/- 0.01" 0.XXX" = +/- 0.005" INTERPRET DIM AND TOL PER ASME Y14.5M-1994	APPROVALS				1630 MCCARTHY BLVD. MILPITAS, CA 95033 PH: (408) 432-1900 LTC CONFIDENTIAL FOR CUSTOMER USE ONLY
	PCB DES.	R.S.	01-15-13		
	ENG	MIKE P.	01-15-13		
	THIRD ANGLE PROJECTION				
	TITLE: FABRICATION DRAWING POWER SYSTEM MANAGEMENT WITH LTC2977CUP, LTC2974CUP, LTC3880EIJ-1			SIZE N/A	IC NO. LTC2977, LTC2974, LTC3880 DEMO CIRCUIT 1962C
DO NOT SCALE DRAWING	SCALE: NONE			FILENAME: DC1962C_Rev1	SHEET 3 OF 13

REVISION HISTORY

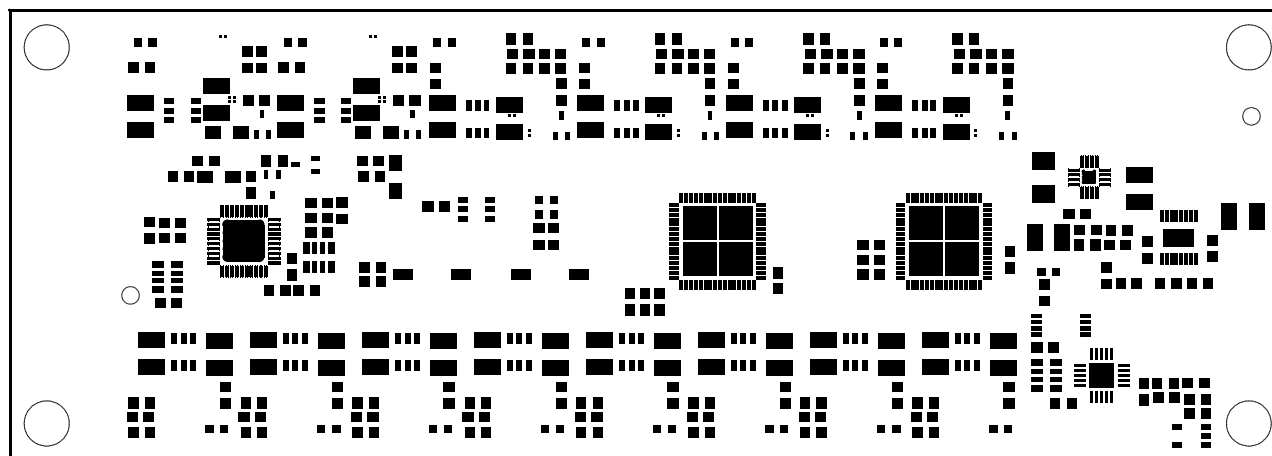
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-	1	PRODUCTION	MIKE P.	01/15/2013


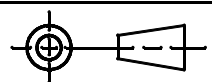


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		NAME	DATE			
	PCB DES.	R.S.	01-15-13			
	ENG	MIKE P.	01-15-13			
	THIRD ANGLE PROJECTION					
				TITLE: TOP SILKSCREEN POWER SYSTEM MANAGEMENT WITH LTC2977CUP, LTC2974CUP, LTC3880EUJ-1		
				SIZE N/A	IC NO. LTC2977, LTC2974, LTC3880 DEMO CIRCUIT 1962C	REV 1
DO NOT SCALE DRAWING	SCALE: NONE			FILENAME: DC1962C_Rev1		SHEET 4 OF 13

REVISION HISTORY

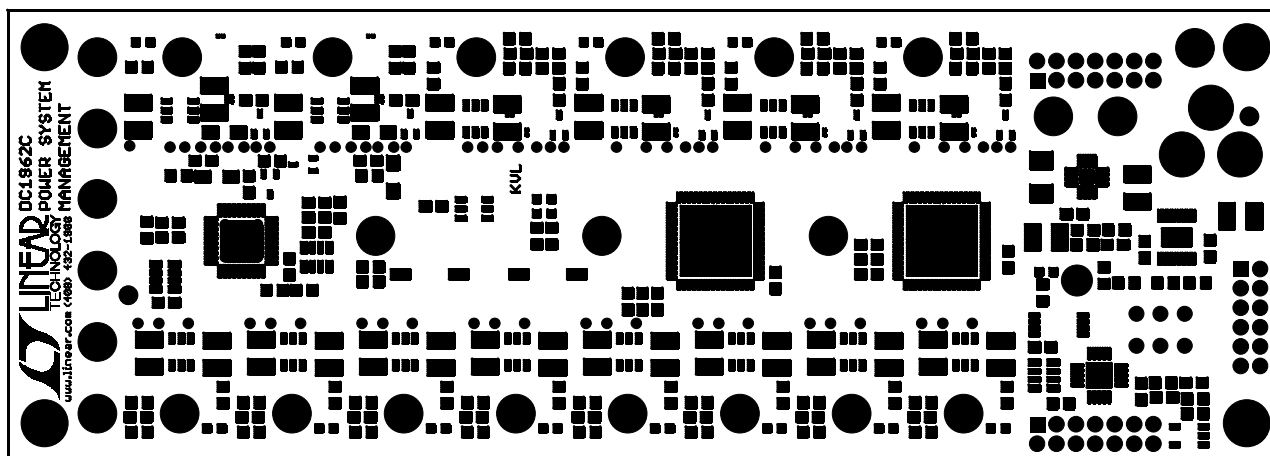
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-	1	PRODUCTION	MIKE P.	01/15/2013


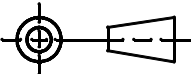
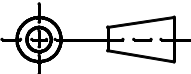


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON ANGLE +/- 1° 0.XXX" = +/- 0.01" 0.XXX" = +/- 0.005" INTERPRET DIM AND TOL PER ASME Y14.5M-1994	APPROVALS			 LINEAR TECHNOLOGY 1630 MCCARTHY BLVD. MILPITAS, CA 95033 PH: (408) 432-1900 LTC CONFIDENTIAL FOR CUSTOMER USE ONLY
	PCB DES.	NAME	DATE	
	ENS	MIKE P.	01-15-13	
	THIRD ANGLE PROJECTION 			
DO NOT SCALE DRAWING	SCALE: NONE		TITLE: TOP PASTE POWER SYSTEM MANAGEMENT WITH LTC2977CUP, LTC2974CUP, LTC3880EUJ-1 SIZE N/A IC NO. LTC2977, LTC2974, LTC3880 DEMO CIRCUIT 1962C REV 1	
FILENAME: DC1962C_Rev1		SHEET 5 OF 13		

REVISION HISTORY

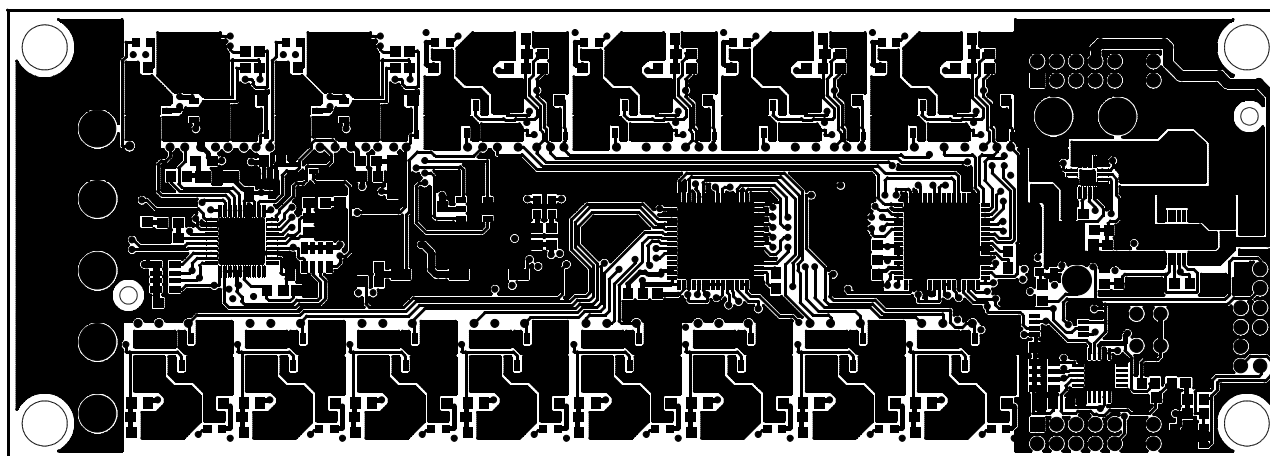
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-	1	PRODUCTION	MIKE P.	01/15/2013



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON ANGLE +/- 1° 0.XXX" = +/- 0.01" 0.XXX" = +/- 0.005" INTERPRET DIM AND TOL PER ASME Y14.5M-1994	APPROVALS		 LINEAR TECHNOLOGY 1630 MCCARTHY BLVD. MILPITAS, CA 95033 PH: (408) 432-1900 LTC CONFIDENTIAL FOR CUSTOMER USE ONLY
	NAME	DATE	
	PCB DES. R.S.	01-15-13	
	ENG MIKE P.	01-15-13	
THIRD ANGLE PROJECTION			TITLE: TOP SOLDERMASK POWER SYSTEM MANAGEMENT WITH LTC2977CUP, LTC2974CUP, LTC3880EUJ-1
	SIZE	IC NO.	REV
	N/A	LTC2977, LTC2974, LTC3880 DEMO CIRCUIT 1962C	1
DO NOT SCALE DRAWING	SCALE: NONE		FILENAME: DC1962C_Rev1 SHEET 6 OF 13

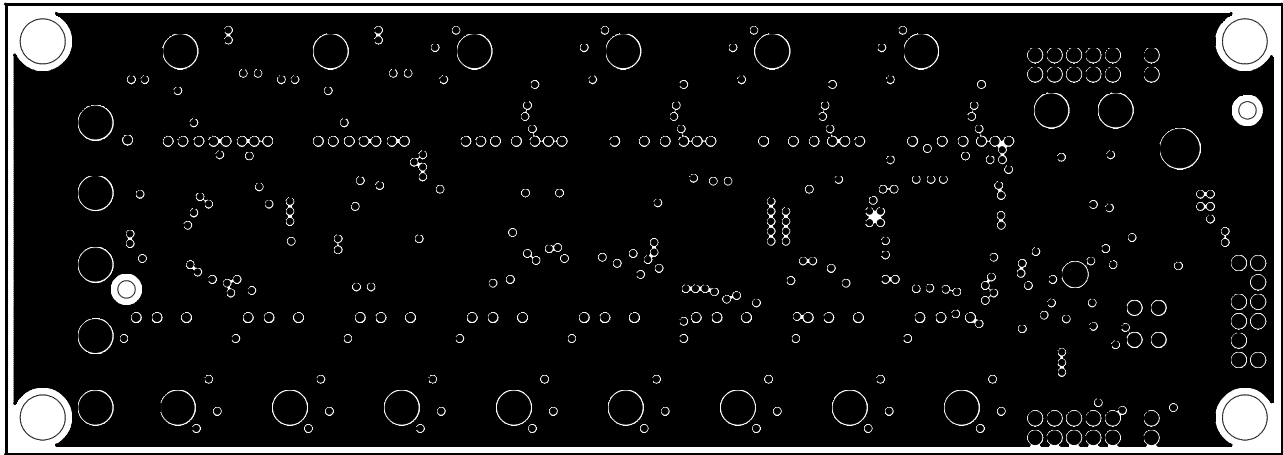
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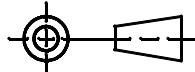
ECO	REV	DESCRIPTION	APPROVED	DATE
-	1	PRODUCTION	MIKE P.	01/15/2013



<p>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</p> <p>THIRD ANGLE PROJECTION</p> <p>DO NOT SCALE DRAWING</p>	<p>APPROVALS</p> <table border="1"> <thead> <tr> <th></th> <th>NAME</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>PCB DES.</td> <td>R.S.</td> <td>01-15-13</td> </tr> <tr> <td>ENG</td> <td>MIKE P.</td> <td>01-15-13</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>			NAME	DATE	PCB DES.	R.S.	01-15-13	ENG	MIKE P.	01-15-13										<p>LINEAR TECHNOLOGY</p> <p>1630 MCCARTHY BLVD. MILPITAS, CA 95033 PH: (408) 432-1900 LTC CONFIDENTIAL FOR CUSTOMER USE ONLY</p>	
		NAME	DATE																			
	PCB DES.	R.S.	01-15-13																			
	ENG	MIKE P.	01-15-13																			
<p>TITLE: 1 - TOP COPPER (SIGNAL) POWER SYSTEM MANAGEMENT WITH LTC2977CUP, LTC2974CUP, LTC3880EIJ-1</p>																						
<p>SIZE N/A</p>		<p>IC NO. LTC2977, LTC2974, LTC3880 DEMO CIRCUIT 1962C</p>																				
		<p>REV 1</p>																				
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		<p>SHEET 7 OF 13</p>																				

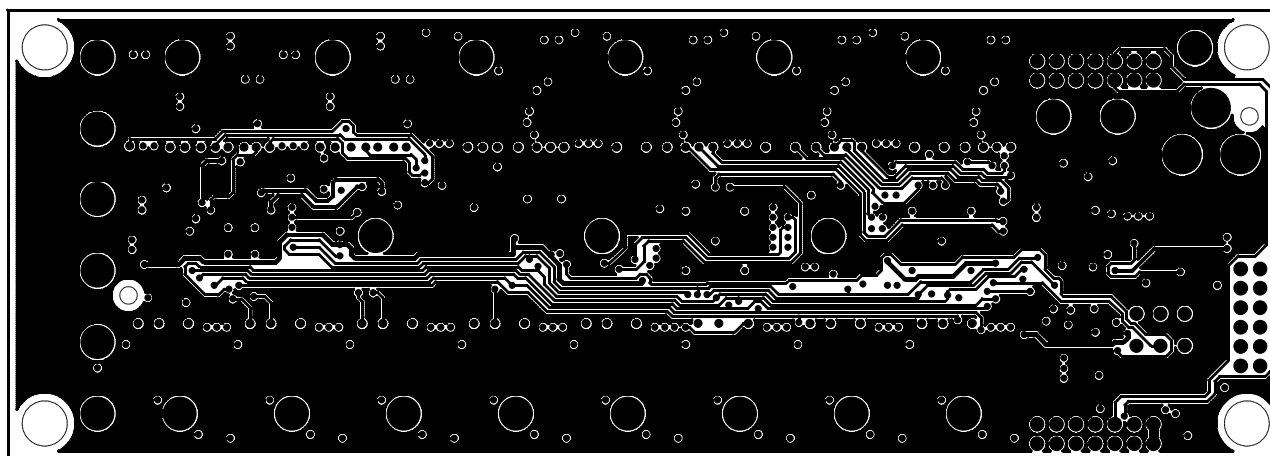
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ECO	REV	DESCRIPTION	APPROVED	DATE
-	1	PRODUCTION	MIKE P.	01/15/2013


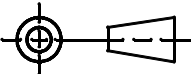


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON ANGLE +/- 1° 0.XX" = +/- 0.01" 0.XXX" = +/- 0.005" INTERPRET DIM AND TOL PER ASME Y14.5M-1994	APPROVALS			 <div>1630 MCCARTHY BLVD. MILPITAS, CA 95033 PH: (408) 432-1900 LTC CONFIDENTIAL FOR CUSTOMER USE ONLY</div>		
		NAME	DATE			
	PCB DES.	R.S.	01-15-13			
	ENG	MIKE P.	01-15-13			
THIRD ANGLE PROJECTION				TITLE: 2 - INNER COPPER (GND PLANE) POWER SYSTEM MANAGEMENT WITH LTC2977CUP, LTC2974CUP, LTC3880EUJ-1		
						
DO NOT SCALE DRAWING	SCALE: NONE			SIZE N/A	IC NO. LTC2977, LTC2974, LTC3880 DEMO CIRCUIT 1962C	REV 1
			FILENAME: DC1962C_Rev1		SHEET 8 OF 13	

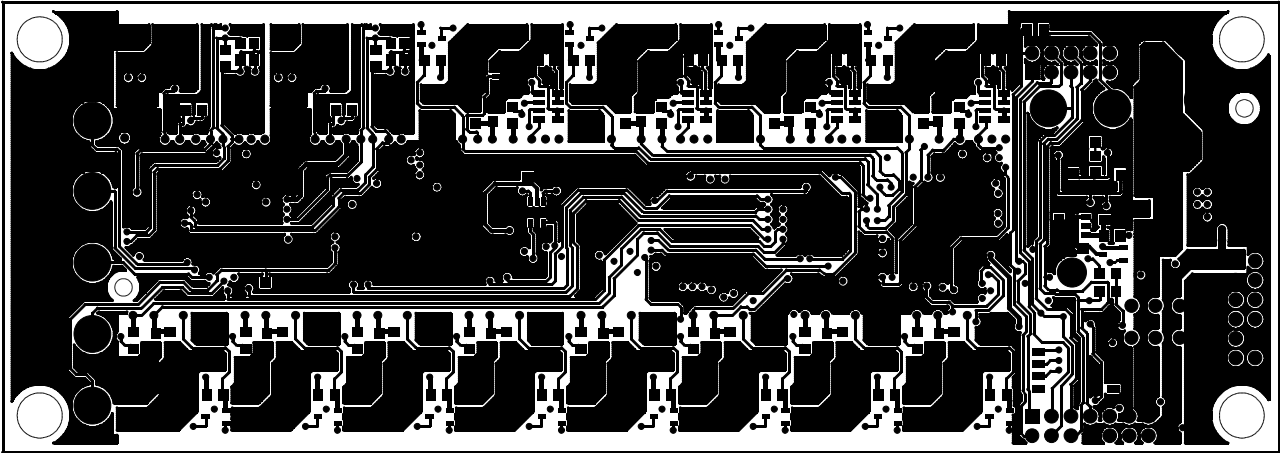
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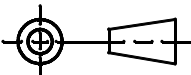
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-	1	PRODUCTION	MIKE P.	01/15/2013



<p>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</p>	APPROVALS			 <p>1630 MCCARTHY BLVD. MILPITAS, CA 95033 PH: (408) 432-1900 LTC CONFIDENTIAL FOR CUSTOMER USE ONLY</p>
	PCB DES.	R.S.	01-15-13	
	ENG	MIKE P.	01-15-13	
THIRD ANGLE PROJECTION				<p>TITLE: 3 - INNER COPPER (POWER) POWER SYSTEM MANAGEMENT WITH LTC2977CUP, LTC2974CUP, LTC3880EUJ-1</p>
				
DO NOT SCALE DRAWING	SCALE: NONE			<p>SIZE: N/A</p> <p>IC NO. LTC2977, LTC2974, LTC3880 DEMO CIRCUIT 1962C</p>
	FILENAME: DC1962C_Rev1			<p>REV: 1</p> <p>SHEET 9 OF 13</p>

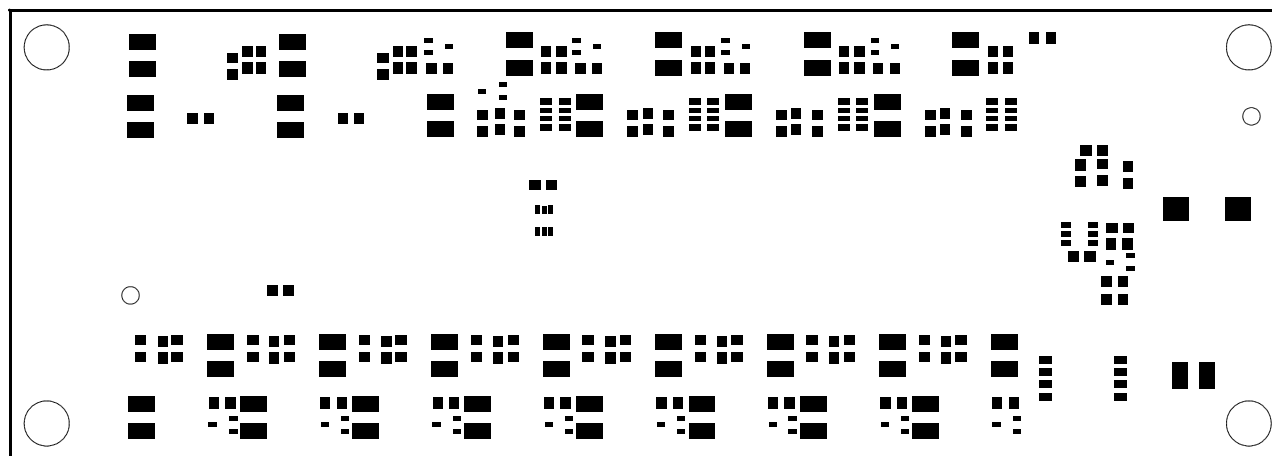
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ECO	REV	DESCRIPTION	APPROVED	DATE
-	1	PRODUCTION	MIKE P.	01/15/2013


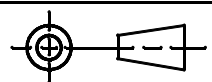


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON ANGLE +/- 1° 0.XX" = +/- 0.01" 0.XXX" = +/- 0.005" INTERPRET DIM AND TOL PER ASME Y14.5M-1994	APPROVALS			 <div> 1630 MCCARTHY BLVD. MILPITAS, CA 95033 PH: (408) 432-1900 LTC CONFIDENTIAL FOR CUSTOMER USE ONLY </div>
		NAME	DATE	
	PCB DES.	R.S.	01-15-13	
	ENG	MIKE P.	01-15-13	
THIRD ANGLE PROJECTION				TITLE: 4 - BOTTOM COPPER (SIGNAL) POWER SYSTEM MANAGEMENT WITH LTC2977CUP, LTC2974CUP, LTC3880EUJ-1
				
DO NOT SCALE DRAWING	SCALE: NONE		FILENAME: DC1962C_Rev1	<div> SIZE N/A </div> <div> IC NO. LTC2977, LTC2974, LTC3880 DEMO CIRCUIT 1962C </div> <div> REV 1 </div>

REVISION HISTORY

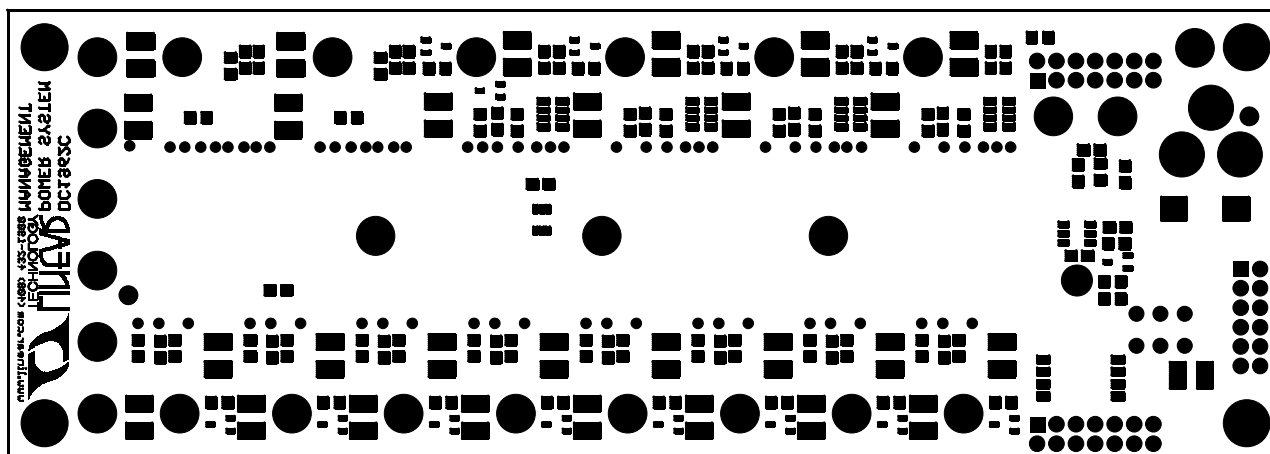
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-	1	PRODUCTION	MIKE P.	01/15/2013


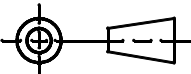


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON ANGLE +/- 1° 0.XXX" = +/- 0.01" 0.XXX" = +/- 0.005" INTERPRET DIM AND TOL PER ASME Y14.5M-1994	APPROVALS			 1630 MCCARTHY BLVD. MILPITAS, CA 95033 PH: (408) 432-1900 LTC CONFIDENTIAL FOR CUSTOMER USE ONLY	
	PCB DES.	R.S.	01-15-13		
	ENG	MIKE P.	01-15-13		
	TITLE: BOTTOM PASTE POWER SYSTEM MANAGEMENT WITH LTC2977CUP, LTC2974CUP, LTC3880EUJ-1				
THIRD ANGLE PROJECTION 	SIZE N/A			IC NO. LTC2977, LTC2974, LTC3880 DEMO CIRCUIT 1962C	REV 1
DO NOT SCALE DRAWING	SCALE: NONE			FILENAME: DC1962C_Rev1	SHEET 11 OF 13

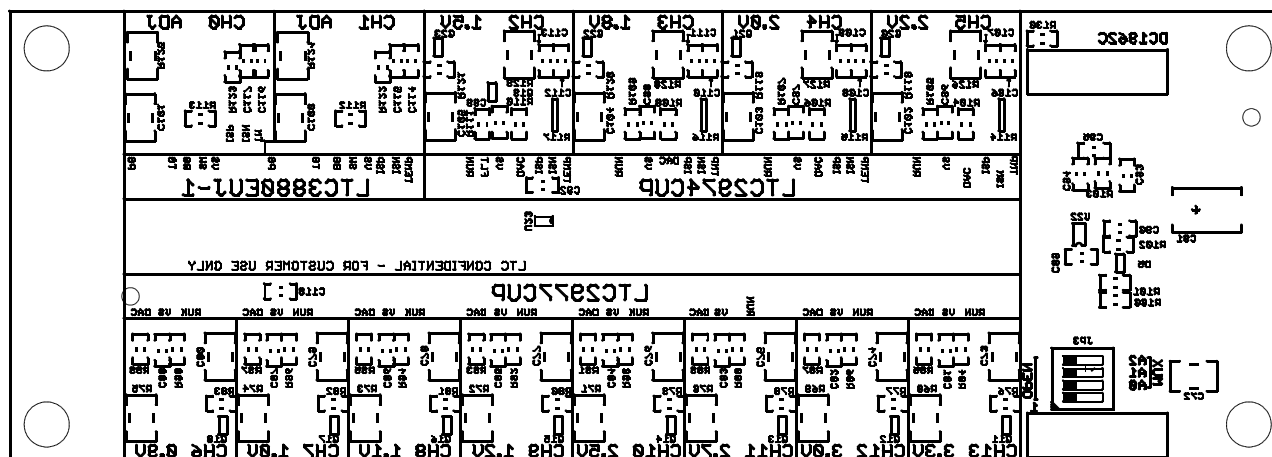
REVISION HISTORY

ECO	REV	DESCRIPTION	APPROVED	DATE
-	1	PRODUCTION	MIKE P.	01/15/2013



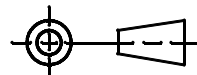
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON ANGLE +/- 1° 0.XXX" = +/- 0.01" 0.XXX" = +/- 0.005" INTERPRET DIM AND TOL PER ASME Y14.5M-1994	APPROVALS		 LINEAR TECHNOLOGY 1630 MCCARTHY BLVD. MILPITAS, CA 95033 PH: (408) 432-1900 LTC CONFIDENTIAL FOR CUSTOMER USE ONLY	
	PCB DES.	R.S.		01-15-13
	ENG	MIKE P.		01-15-13
	THIRD ANGLE PROJECTION 			
DO NOT SCALE DRAWING	SCALE: NONE		TITLE: BOTTOM SOLDERMASK POWER SYSTEM MANAGEMENT WITH LTC2977CUP, LTC2974CUP, LTC3880EUJ-1 SIZE: N/A IC NO.: LTC2977, LTC2974, LTC3880 DEMO CIRCUIT 1962C REV: 1	
FILENAME: DC1962C_Rev1		SHEET 12 OF 13		

REVISION HISTORY				
ECO	REV	DESCRIPTION	APPROVED	DATE
-	1	PRODUCTION	MIKE P.	01/15/2013



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

THIRD ANGLE PROJECTION



DO NOT SCALE DRAWING

APPROVALS

	NAME	DATE
PCB DES.	R.S.	01-15-13
ENG	MIKE P.	01-15-13



1630 MCCARTHY BLVD.
MILPITAS, CA 95033
PH: (408) 432-1900
LTC CONFIDENTIAL
FOR CUSTOMER USE ONLY

TITLE: BOTTOM SILKSCREEN
POWER SYSTEM MANAGEMENT WITH
LTC2977CUP, LTC2974CUP, LTC3880EJ-1

SIZE N/A	IC NO. LTC2977, LTC2974, LTC3000 DEMO CIRCUIT 1962C	REV 1
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FILENAME: DC1962C_Rev1

SHEET 13 OF 13