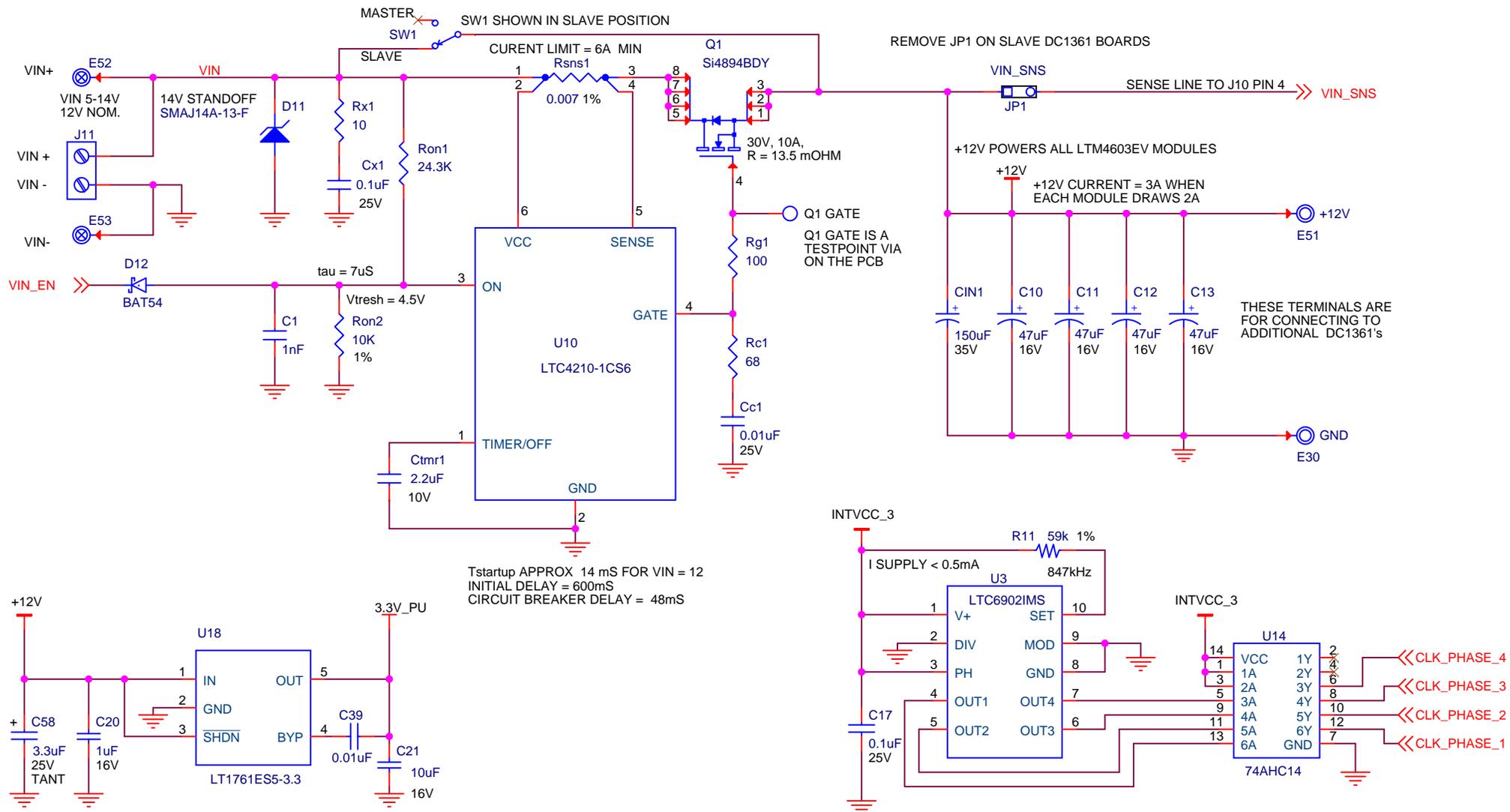
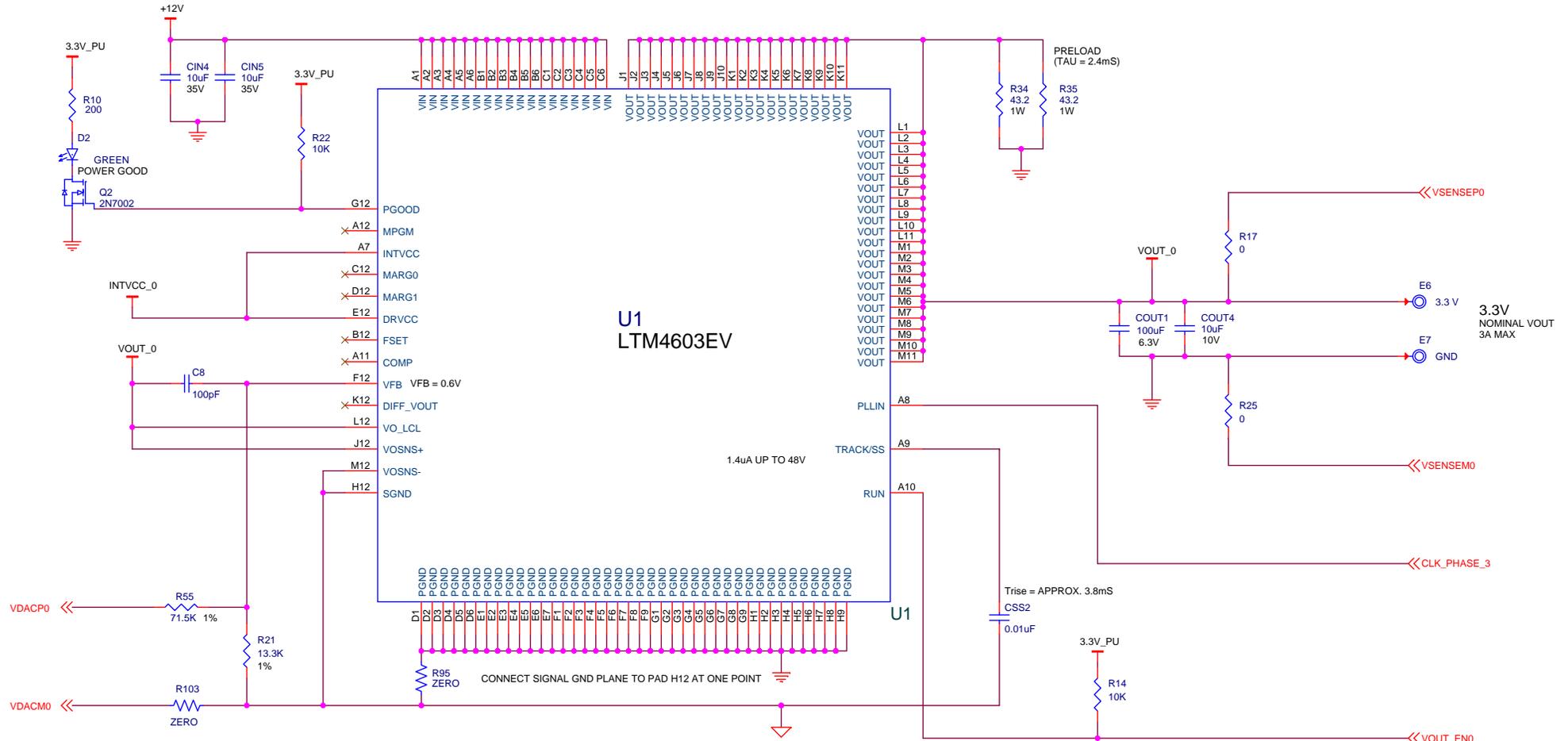


<p><b>CUSTOMER NOTICE</b></p> <p>LINEAR TECHNOLOGY HAS MADE A BEST EFFORT TO DESIGN A CIRCUIT THAT MEETS CUSTOMER-SUPPLIED SPECIFICATIONS; HOWEVER, IT REMAINS THE CUSTOMER'S RESPONSIBILITY TO VERIFY PROPER AND RELIABLE OPERATION IN THE ACTUAL APPLICATION. COMPONENT SUBSTITUTION AND PRINTED CIRCUIT BOARD LAYOUT MAY SIGNIFICANTLY AFFECT CIRCUIT PERFORMANCE OR RELIABILITY. CONTACT LINEAR TECHNOLOGY APPLICATIONS ENGINEERING FOR ASSISTANCE.</p>	CONTRACT NO.		 <p>1630 McCarthy Blvd. Milpitas, CA 95035 Phone: (408)432-1900 Fax: (408)434-0507</p>		
	APPROVALS	DATE			
	DRAWN Dave Clemans	08-13-13	TITLE		
	CHECKED		8 OUTPUT POWER SUPPLY		
	APPROVED		SIZE	CAGE CODE	DWG NO
ENGINEER Dave Clemans	08-13-13			DC1361B	
DESIGNER				REV B	
THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS.		Tuesday, August 13, 2013	SCALE:	FILENAME:	SHEET 1 OF 10



<h3>CUSTOMER NOTICE</h3> <p>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.</p>		CONTRACT NO.		<p>1630 McCarthy Blvd. Milpitas, CA 95035 Phone: (408)432-1900 Fax: (408)434-0507</p>	
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DESIGNER				DWG NO	
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				FILENAME:	
				SHEET 2 OF 10	
				REV B	

# VOUT\_0



NOTE: THE "ZERO" OHM RESISTORS IN VDACn LINE AND BETWEEN PGND AND SGND AND BETWEEN THE OUTPUTS AND THE SENSE LINES ARE NOT COMPONENTS. THEY ARE TRACES ON THE PCB.

VDAC injects the control voltage from the LTC2977 into the feedback divider of the LTM4603 to trim and margin VOUT

## 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.

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CONTRACT NO.

APPROVALS	DATE
DRAWN Dave Clemans	08-13-13
CHECKED	
APPROVED	
ENGINEER Dave Clemans	08-13-13
DESIGNER	

Tuesday, September 17, 2013

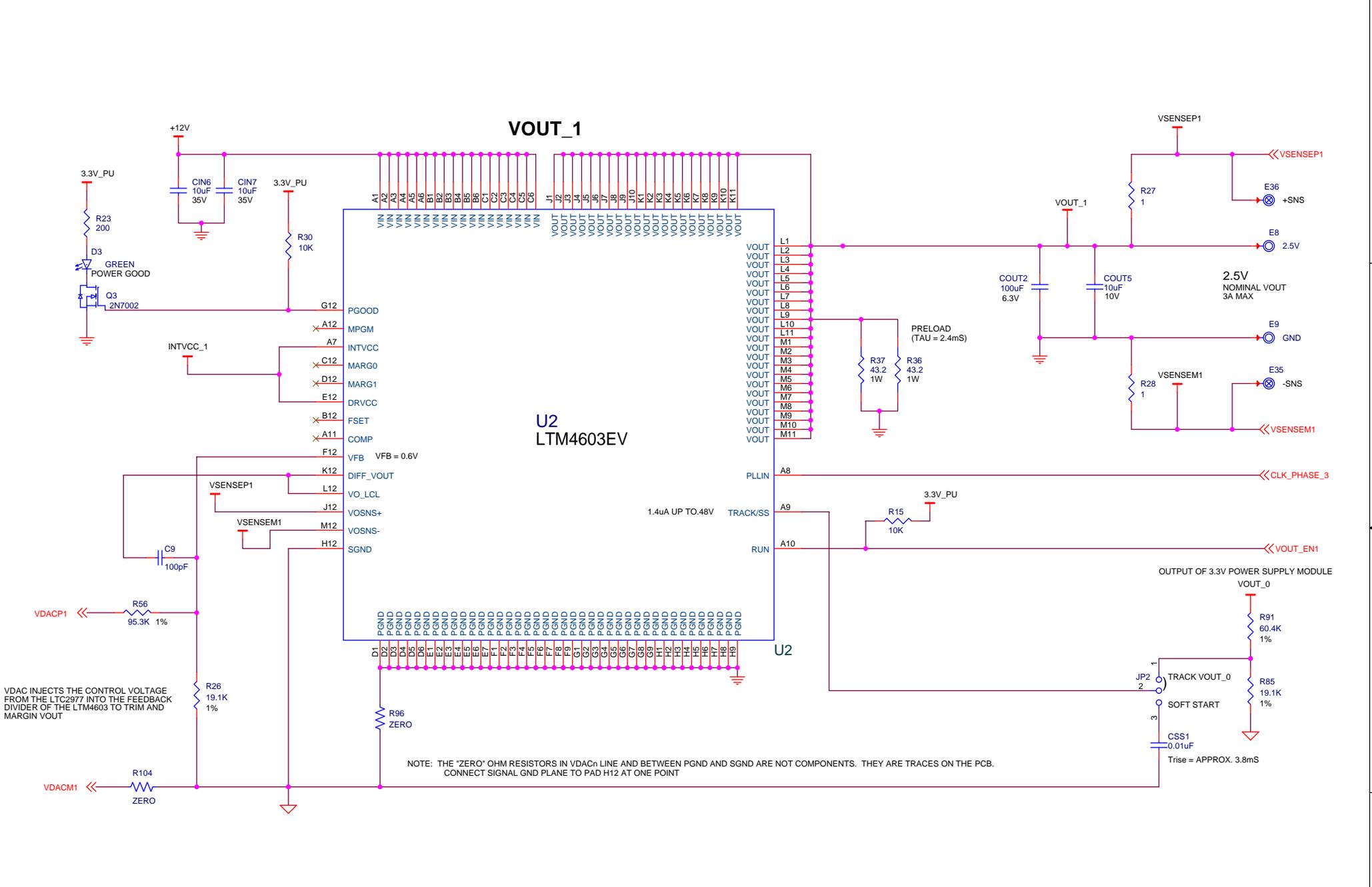


1630 McCarthy Blvd.  
Milpitas, CA 95035  
Phone: (408)432-1900  
Fax: (408)434-0507

TITLE  
8 OUTPUT POWER SUPPLY

SIZE	CAGE CODE	DWG NO	REV
		DC1361B	B

SCALE: FILENAME: SHEET 3 OF 10



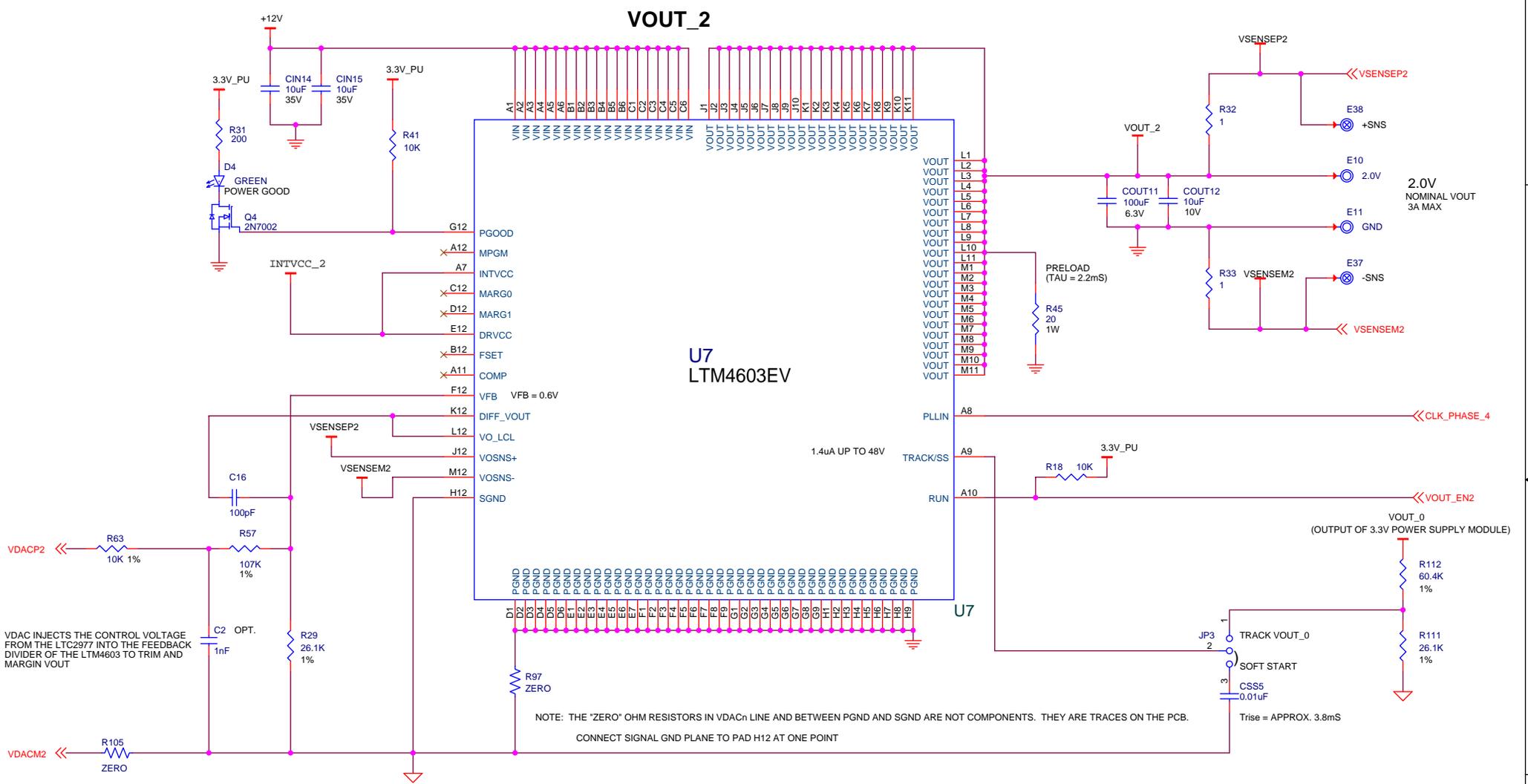
**VOUT\_1**

**U2  
LTM4603EV**

NOTE: THE "ZERO" OHM RESISTORS IN VDACC<sub>n</sub> LINE AND BETWEEN PGND AND SGND ARE NOT COMPONENTS. THEY ARE TRACES ON THE PCB.  
CONNECT SIGNAL GND PLANE TO PAD H12 AT ONE POINT

VDAC INJECTS THE CONTROL VOLTAGE FROM THE LTC2397 INTO THE FEEDBACK DIVIDER OF THE LTM4603 TO TRIM AND MARGIN VOUT

CUSTOMER NOTICE		CONTRACT NO.		 1630 McCarthy Blvd. Milpitas, CA 95035 Phone: (408)432-1900 Fax: (408)434-0507													
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APPROVALS	DATE																
DRAWN Dave Clemans	08-13-13																
CHECKED																	
APPROVED																	
ENGINEER Dave Clemans	08-13-13																
DESIGNER																	
THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS.		Tuesday, September 17, 2013	<table border="1"> <tr> <th>SIZE</th> <th>CAGE CODE</th> <th>DWG NO</th> </tr> <tr> <td></td> <td></td> <td><b>DC1361B</b></td> </tr> </table>	SIZE	CAGE CODE	DWG NO			<b>DC1361B</b>	<b>SHEET 4 OF 10</b>							
SIZE	CAGE CODE	DWG NO															
		<b>DC1361B</b>															



VDAC INJECTS THE CONTROL VOLTAGE FROM THE LTC2977 INTO THE FEEDBACK DIVIDER OF THE LTM4603 TO TRIM AND MARGIN VOUT

NOTE: THE "ZERO" OHM RESISTORS IN VDACn LINE AND BETWEEN PGND AND SGND ARE NOT COMPONENTS. THEY ARE TRACES ON THE PCB.  
CONNECT SIGNAL GND PLANE TO PAD H12 AT ONE POINT

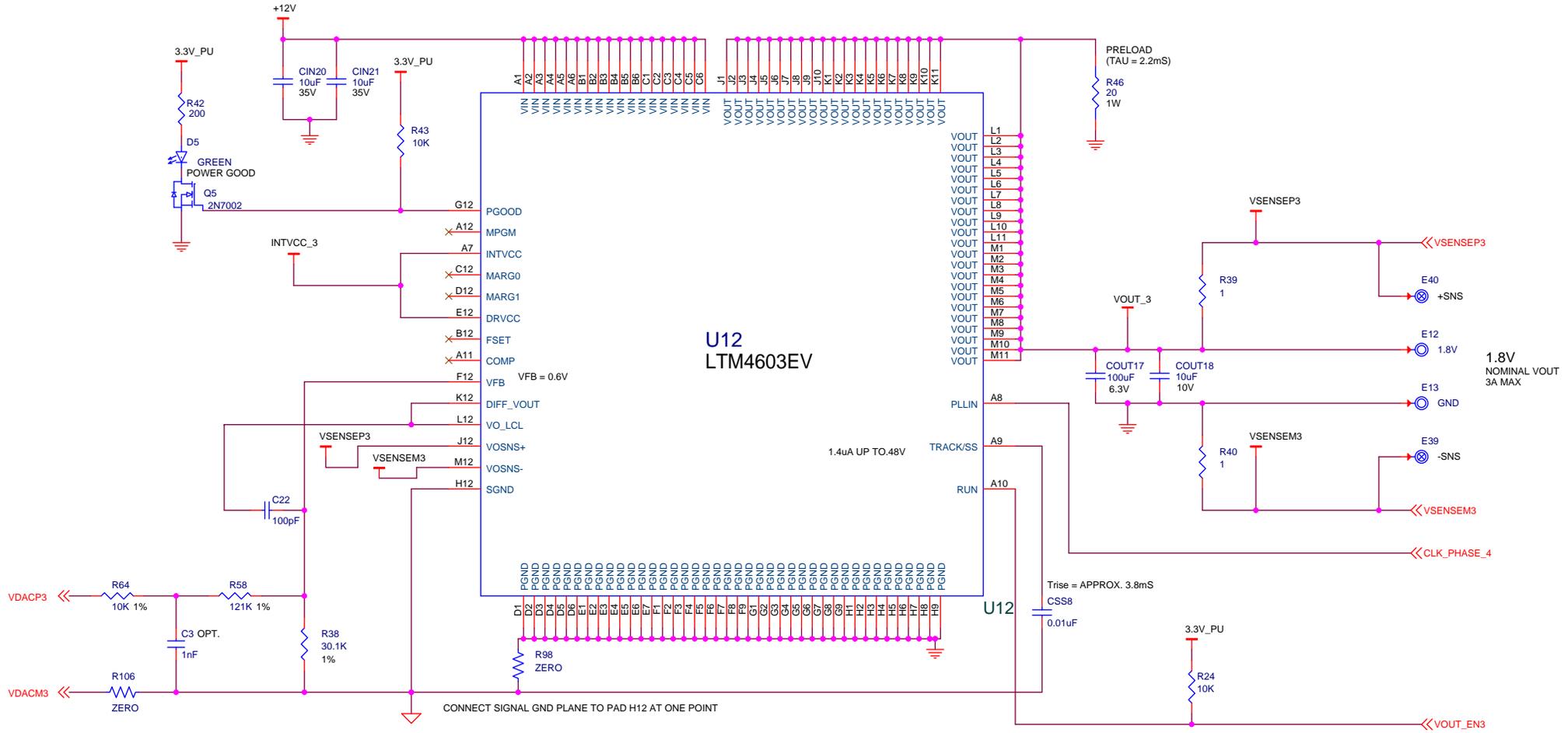
### CUSTOMER NOTICE

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APPROVALS	DATE		
DRAWN Dave Clemans	08-13-13	TITLE	
CHECKED		8 OUTPUT POWER SUPPLY	
APPROVED		SIZE CAGE CODE DWG NO	
ENGINEER Dave Clemans	08-13-13	DC1361B	
DESIGNER		REV B	
Tuesday, September 17, 2013		SCALE:	FILENAME:
		SHEET 5	OF 10

# VOUT\_3



NOTE: THE "ZERO" OHM RESISTORS IN VDACn LINE AND BETWEEN PGND AND SGND ARE NOT COMPONENTS. THEY ARE TRACES ON THE PCB.

VDAC INJECTS THE CONTROL VOLTAGE FROM THE LTC2977 INTO THE FEEDBACK DIVIDER OF THE LTM4603 TO TRIM AND MARGIN VOUT

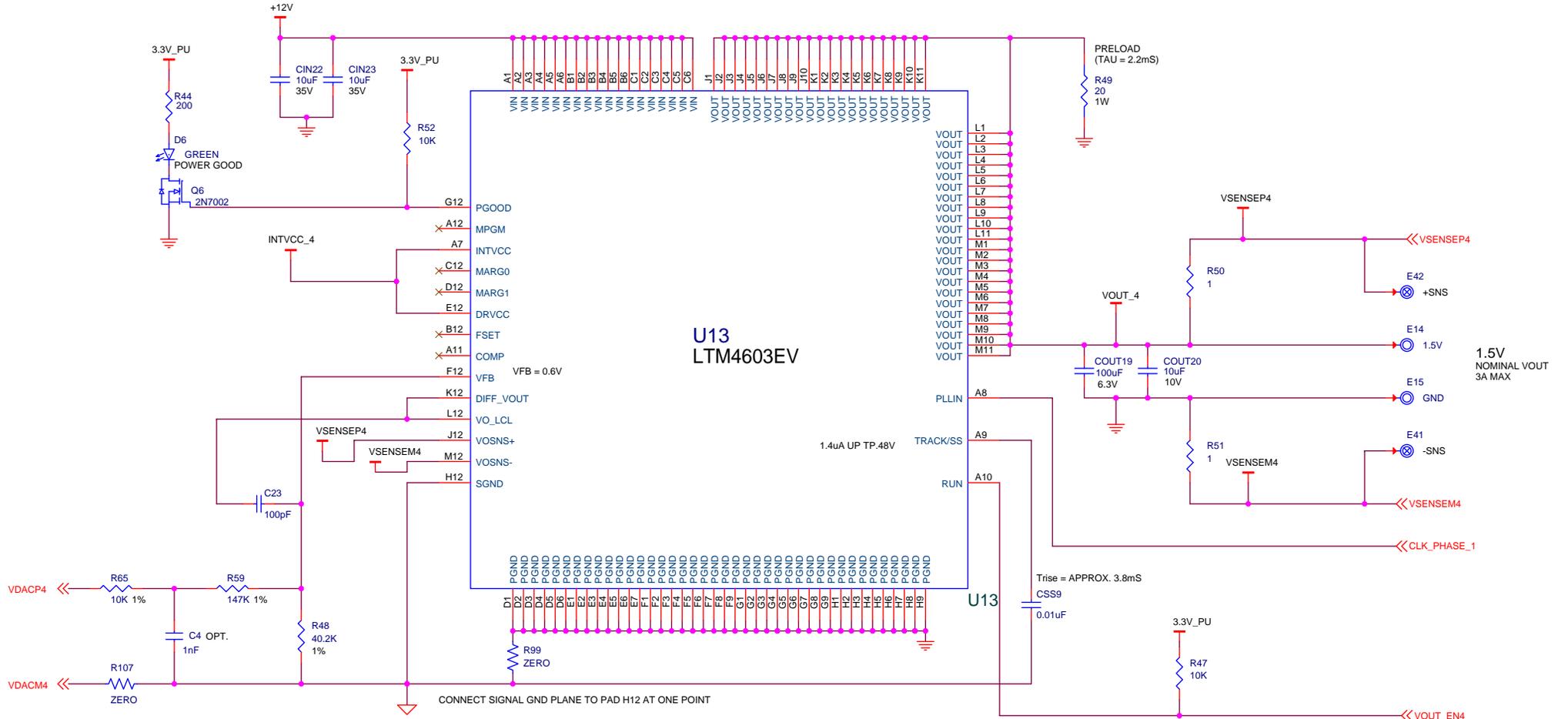
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APPROVALS	DATE		
DRAWN Dave Clemans	08-13-13	TITLE	
CHECKED		8 OUTPUT POWER SUPPLY	
APPROVED		SIZE	
ENGINEER Dave Clemans	08-13-13	CAGE CODE	
DESIGNER		DWG NO	
		DC1361B	
		REV B	
Tuesday, September 17, 2013		SCALE:	FILENAME:
		SHEET	6 OF 10

# VOUT\_4



U13  
LTM4603EV

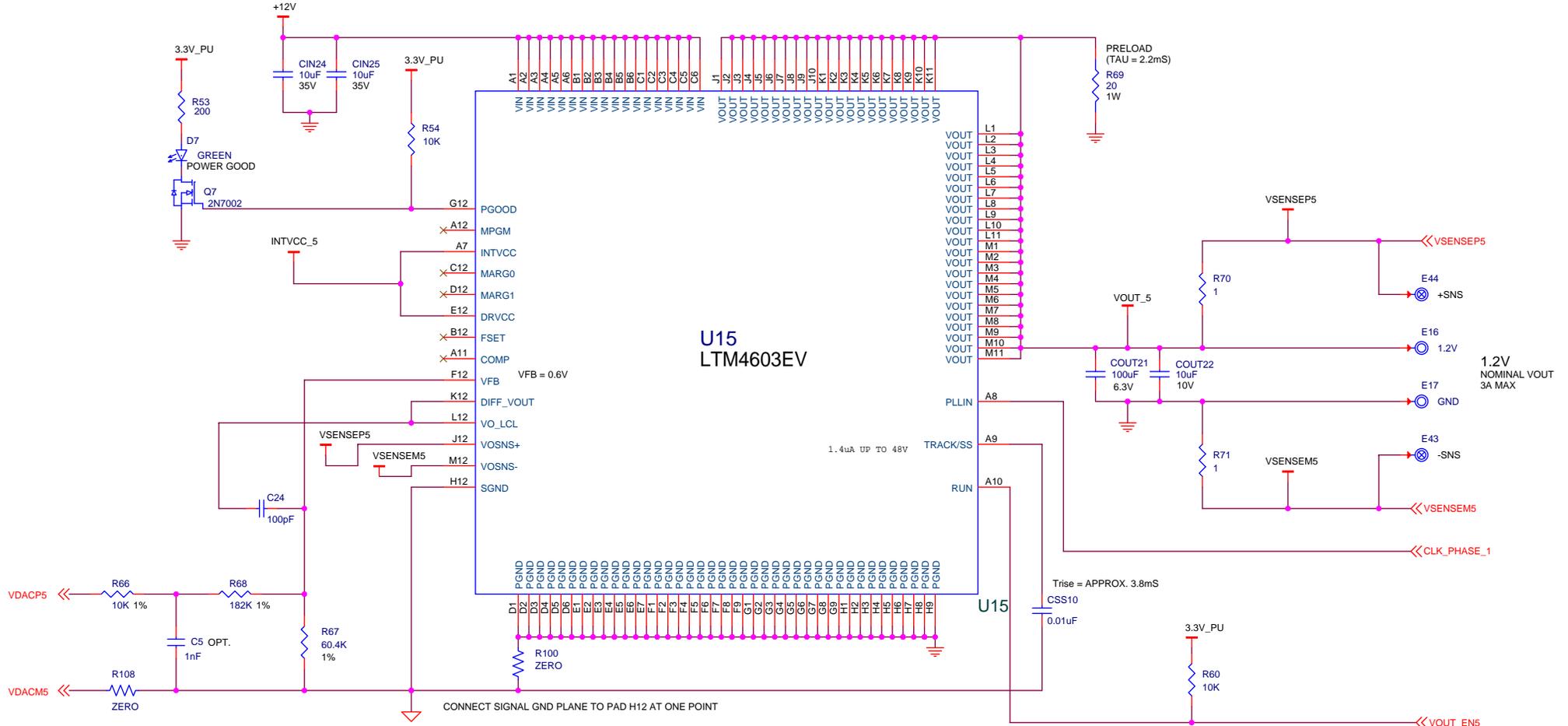
1.5V  
NOMINAL VOUT  
3A MAX

NOTE: THE "ZERO" OHM RESISTORS IN VDACH LINE AND BETWEEN PGND AND SGND ARE NOT COMPONENTS. THEY ARE TRACES ON THE PCB.

VDAC INJECTS THE CONTROL VOLTAGE FROM THE LTC2977 INTO THE FEEDBACK DIVIDER OF THE LTM4603 TO TRIM AND MARGIN VOUT

CUSTOMER NOTICE		CONTRACT NO.				1630 McCarthy Blvd. Milpitas, CA 95035 Phone: (408)432-1900 Fax: (408)434-0507					
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				DRAWN	Dave Clemans			08-13-13			
				CHECKED							
				APPROVED							
				DESIGNER							
THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS.				DESIGNER	Dave Clemans	08-13-13	SIZE	CAGE CODE	DWG NO	DC1361B	REV B
				Tuesday, September 17, 2013		SCALE:	FILENAME:	SHEET 7 OF 10			

# VOUT\_5



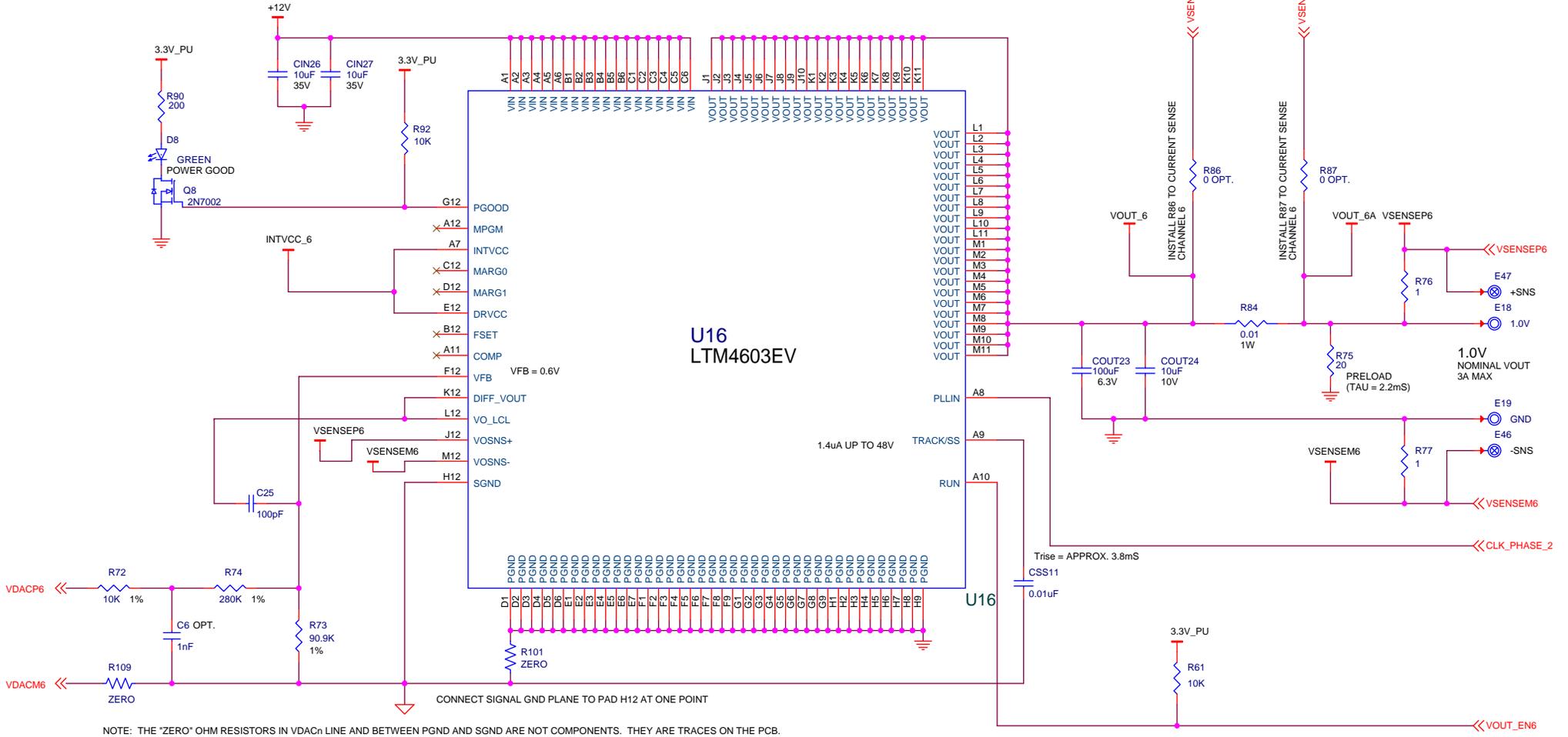
**U15**  
LTM4603EV

NOTE: THE "ZERO" OHM RESISTORS IN VDACn LINE AND BETWEEN PGND AND SGND ARE NOT COMPONENTS. THEY ARE TRACES ON THE PCB.

VDAC INJECTS THE CONTROL VOLTAGE FROM THE LTC2977 INTO THE FEEDBACK DIVIDER OF THE LTM4603 TO TRIM AND MARGIN VOUT

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		DRAWN Dave Clemans	08-13-13					8 OUTPUT POWER SUPPLY	
		CHECKED		SIZE		CAGE CODE			
		APPROVED						REV	
		DESIGNER		TUESDAY, SEPTEMBER 17, 2013		SCALE:			
DESIGNER		TUESDAY, SEPTEMBER 17, 2013						SCALE:	
THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS.				TUESDAY, SEPTEMBER 17, 2013		SCALE:			

# VOUT\_6



TO SENSE CURRENT ON VOUT\_6 USING CHANNEL 7, INSTALL R86 AND R87 ON SHEET 9 AND REMOVE R88 AND R89 ON SHEET 10.

U16  
LTM4603EV

NOTE: THE "ZERO" OHM RESISTORS IN VDACPn LINE AND BETWEEN PGND AND SGND ARE NOT COMPONENTS. THEY ARE TRACES ON THE PCB.

VDAC INJECTS THE CONTROL VOLTAGE FROM THE LTC2977 INTO THE FEEDBACK DIVIDER OF THE LTM4603 TO TRIM AND MARGIN VOUT

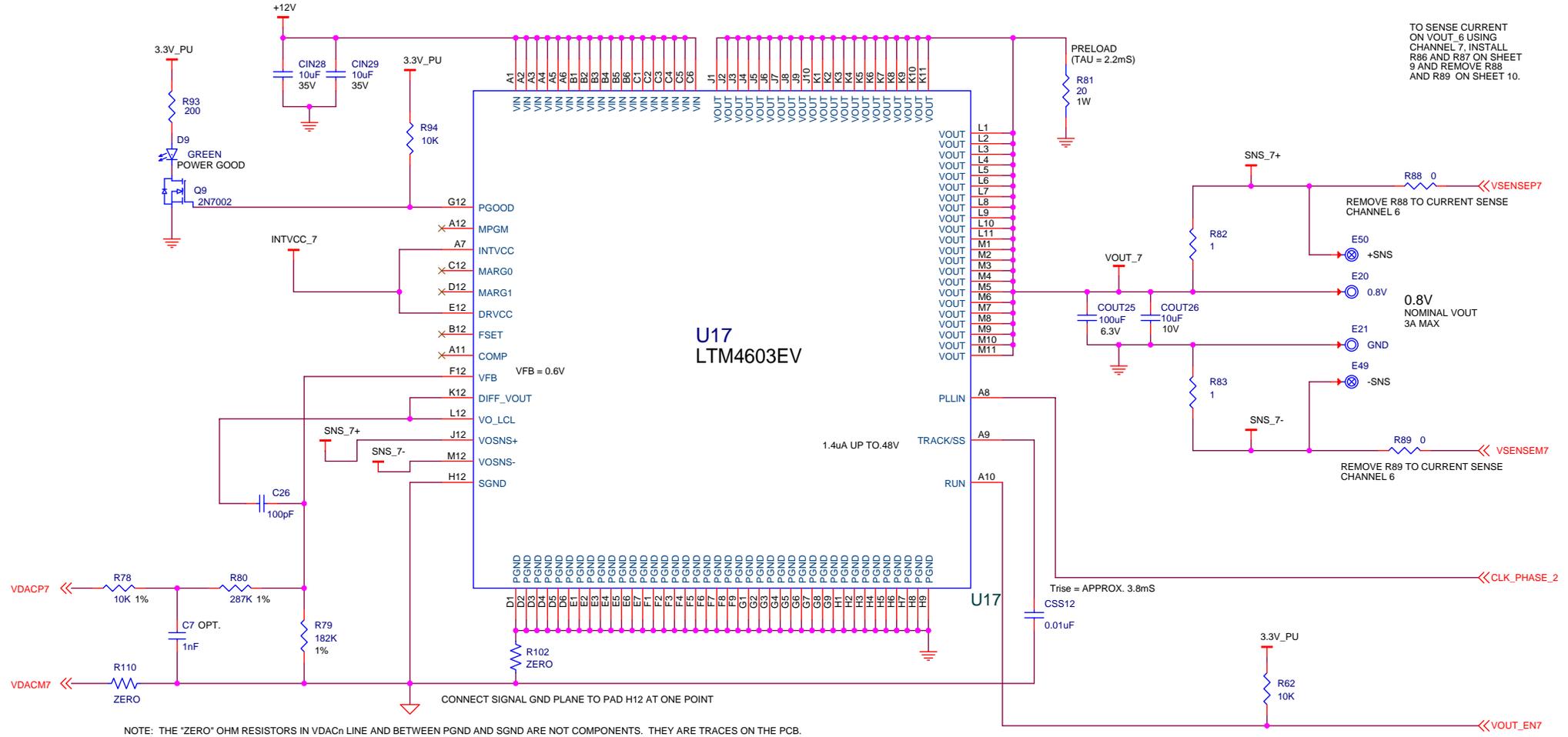
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APPROVED		SIZE	
ENGINEER Dave Clemans	08-13-13	CAGE CODE	
DESIGNER		DWG NO	
		DC1361B	
		REV B	
Tuesday, September 17, 2013		SCALE:	FILENAME:
		SHEET 9	OF 10

# VOUT\_7



TO SENSE CURRENT ON VOUT\_6 USING CHANNEL 7, INSTALL R86 AND R87 ON SHEET 9 AND REMOVE R88 AND R89 ON SHEET 10.

REMOVE R88 TO CURRENT SENSE CHANNEL 6

0.8V NOMINAL VOUT 3A MAX

REMOVE R89 TO CURRENT SENSE CHANNEL 6

Trise = APPROX. 3.8mS

CONNECT SIGNAL GND PLANE TO PAD H12 AT ONE POINT

NOTE: THE "ZERO" OHM RESISTORS IN VDACP7 LINE AND BETWEEN PGND AND SGND ARE NOT COMPONENTS. THEY ARE TRACES ON THE PCB.

VDAC INJECTS THE CONTROL VOLTAGE FROM THE LTC2977 INTO THE FEEDBACK DIVIDER OF THE LTM4603 TO TRIM AND MARGIN VOUT

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ENGINEER Dave Clemans	08-13-13	DC1361B	
DESIGNER		REV	B
Tuesday, September 17, 2013		SCALE:	FILENAME:
		SHEET	10 OF 10