

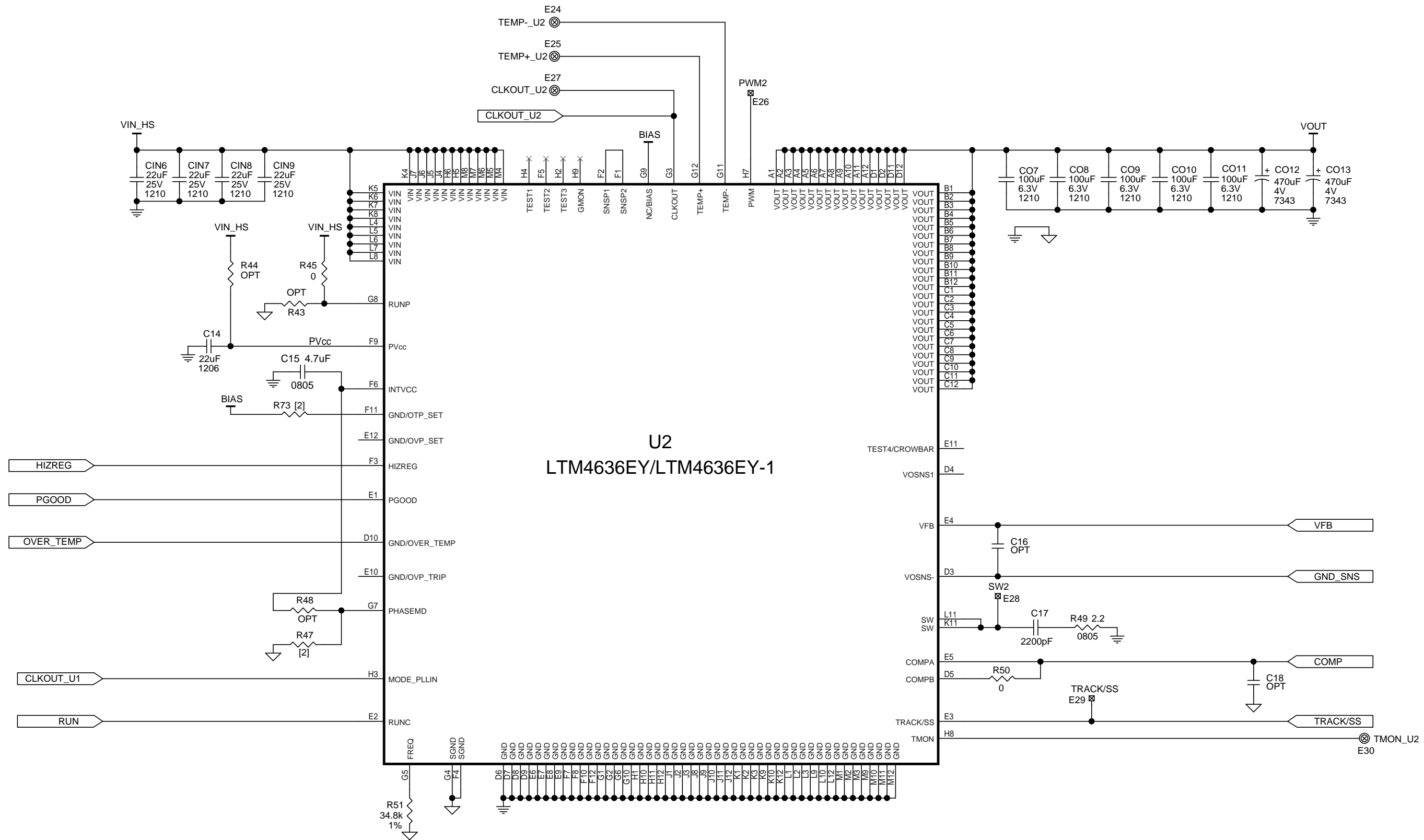
REVISION HISTORY				
ECO	REV	DESCRIPTION	DATE	APPROVED
-	4	PROD	03/08/17	<i>[Signature]</i>

NOTE: UNLESS OTHERWISE SPECIFIED,
 1. ALL CAPACITORS, RESISTORS 0603.
 [2] ASSEMBLY OPTIONS.


[2]	ASSY	IC	IOUT	R16	R17	R47	R56	R65	R71,R73,R74,R75	R11	R25	R76	CIN10-CIN13	CIN14-CIN17	CO19,CO20	CO26,CO27	CO14-CO18	CO21-CO25
-A	U1,U2	80A	0	OPT	OPT	OPT	OPT	OPT	OPT	OPT	0	0	OPT	OPT	OPT	OPT	OPT	OPT
-B	U1,U2,U3	120A	OPT	OPT	OPT	OPT	OPT	OPT	OPT	OPT	0	0	22uF	OPT	470uF	OPT	100uF	OPT
-C	U1,U2,U3,U4	160A	OPT	0	0	0	0	0	OPT	OPT	0	0	22uF	22uF	470uF	470uF	100uF	100uF
-D	U1,U2,U3,U4	160A	OPT	0	0	0	0	0	66.5K 1%	100K 1%	0.001 1%	OPT	22uF	22uF	470uF	470uF	100uF	100uF

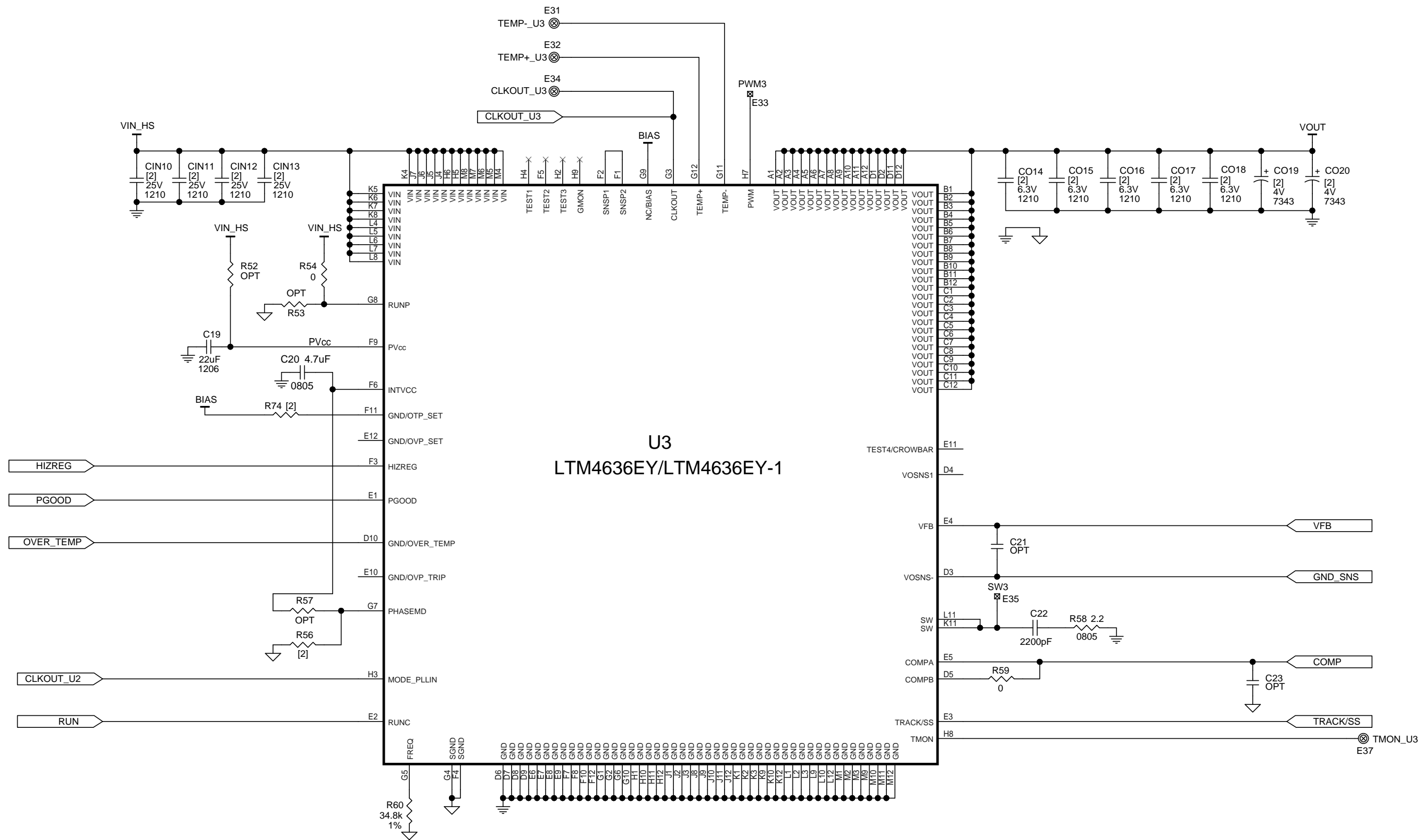
SEE LTM4636/LTM4636-1 DATASHEET
 U1,U2,U3, AND U4 ARE CONNECTED IN PARALLEL TO DEVELOP 160 AMP DESIGN.
 WHEN VIN < 5.5V, SHORT PVCC TO VIN WITH R1 = 0 OHM, AND SET R3 = 0 OHM AND REMOVE R2.
 R11 = 100K FOR OVP TRIP OF 1V
 R11 CAN BE CHANGED TO THE DESIRED RESISTOR VALUE FOR SETTING THE OVP.
 OR R11 CAN BE STUFFED WITH 0 OHM RESISTOR TO DISABLE OVP.
 CONNECT VOUT (0.9V) TO LOADSTEP GENERATOR THROUGH R24,R26,R32,R37 FOR TRANSIENT TESTING
 R19 IS SET TO 0 OHM FOR ON BOARD COMPENSATION, OR UNSTUFF R19 FOR EXTERNAL OPTIMIZED COMPENSATION.
 U1,U2,U3,U4, TMON PINS CAN BE GROUNDED TO DISABLE OVER TEMP PROTECTION FOR EACH SPECIFIC DEVICE.

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 PCB DES. <i>[Signature]</i> APP ENG. <i>[Signature]</i>				1630 McCarthy Blvd. Milpitas, CA 95035 www.linear.com Phone: (408)432-1900 Fax: (408)434-0507 LTC CONFIDENTIAL - FOR CUSTOMER USE ONLY	
THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS.		SCALE = NONE				TITLE: SCHEMATIC FOUR PHASE, STEP-DOWN μMODULE[®] REGULATOR WITH HOTSWAP INPUT SIZE N/A IC NO. LTM4636EY/LTM4636EY-1 REV. 4 DEMO CIRCUIT 2448A DATE: Wednesday, March 29, 2017 SHEET 1 OF 5	




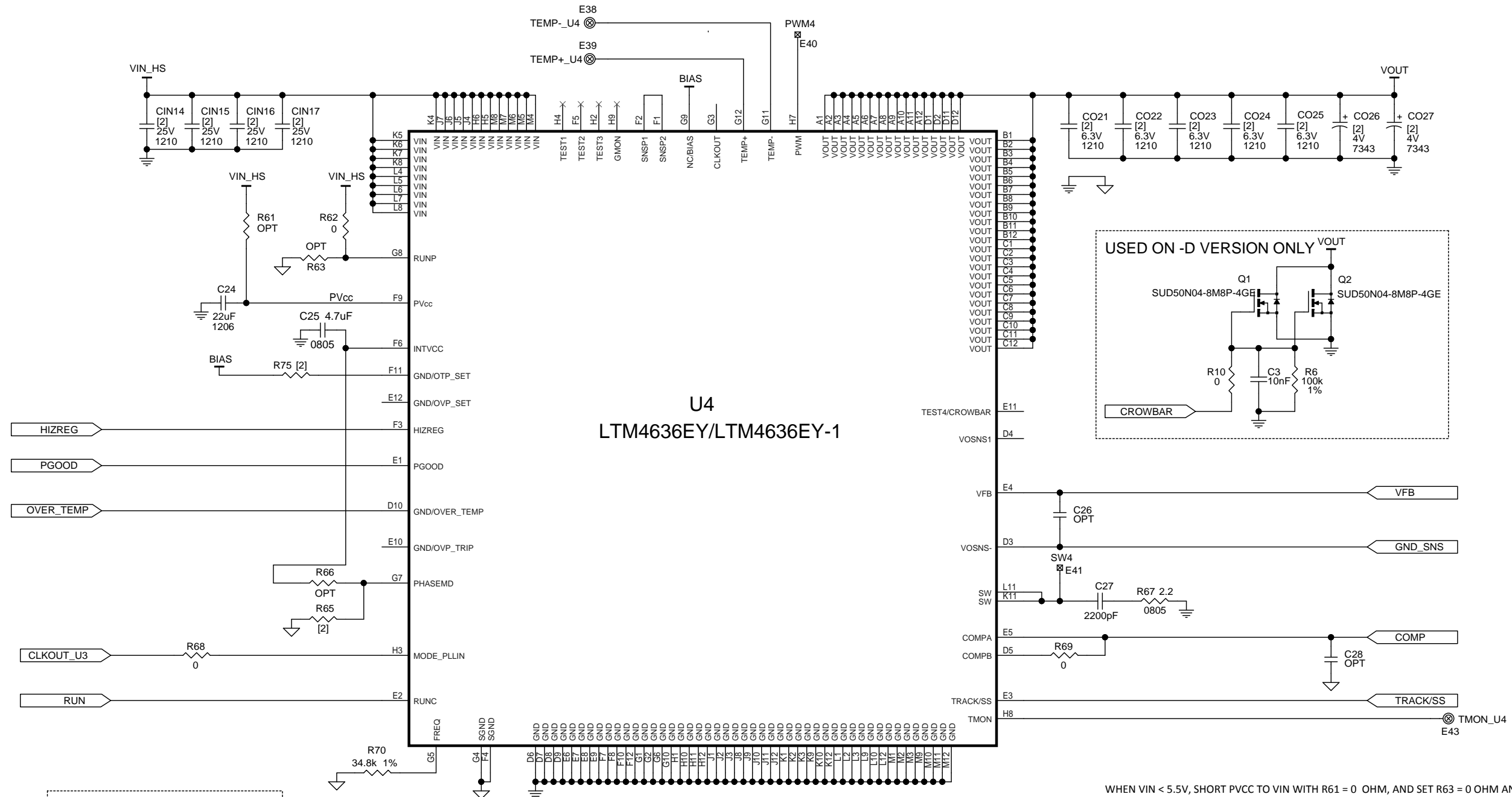
WHEN VIN < 5.5V, SHORT PVCC TO VIN WITH R44 = 0 OHM, AND SET R43 = 0 OHM AND REMOVE R45.
 R50 CAN BE SET TO 0 OHM FOR ON BOARD COMPENSATION, OR UNSTUFFED FOR EXTERNAL OPTIMIZED COMPENSATION.

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		APP ENG.	<i>Q/L</i>		
THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS.		SCALE = NONE	DATE:	Wednesday, March 29, 2017	SIZE N/A IC NO. LTM4636EY/LTM4636EY-1 DEMO CIRCUIT 2448A REV. 4
				SHEET 2 OF 5	

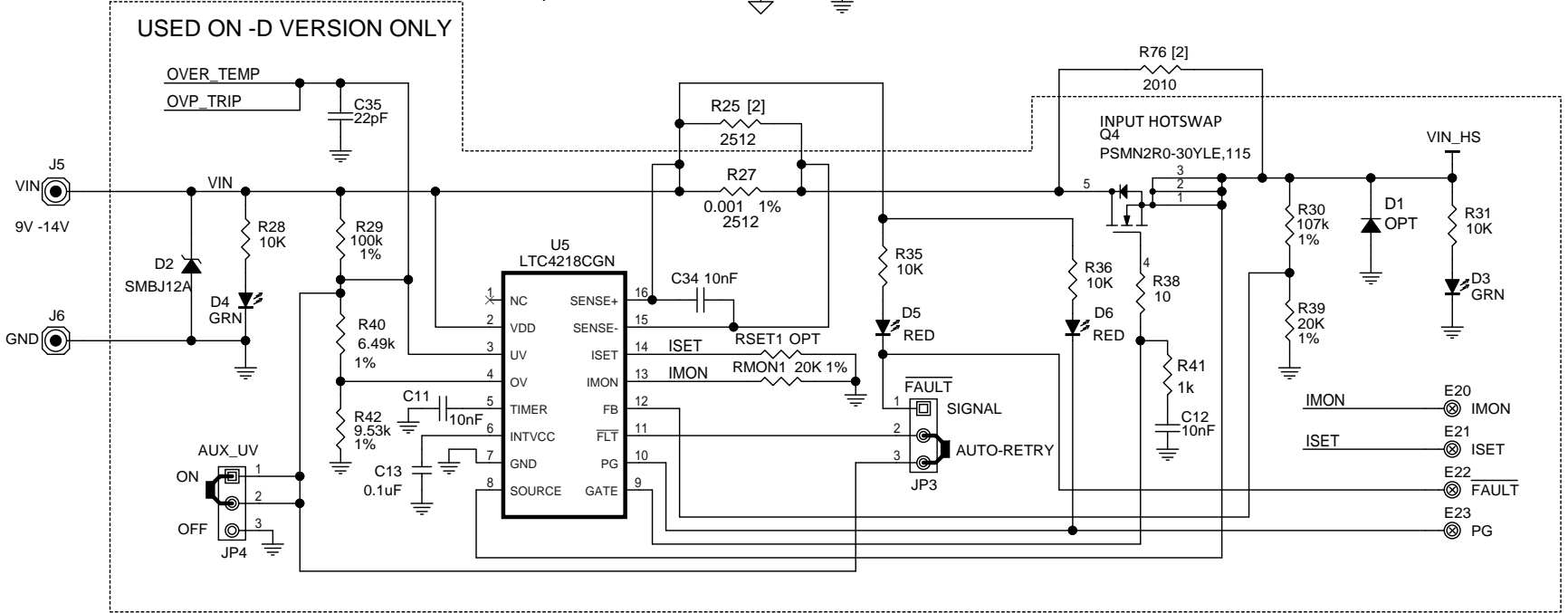


WHEN VIN < 5.5V, SHORT PVCC TO VIN WITH R52 = 0 OHM, AND SET R53 = 0 OHM AND REMOVE R54.
 R59 CAN BE SET TO 0 OHM FOR ON BOARD COMPENSATION, OR UNSTUFFED FOR EXTERNAL OPTIMIZED COMPENSATION.

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		APP ENG.	<i>Q/L</i>		
THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS.		SCALE = NONE	DATE:	Wednesday, March 29, 2017	SIZE N/A IC NO. LTM4636EY/LTM4636EY-1 DEMO CIRCUIT 2448A REV. 4
					SHEET 3 OF 5



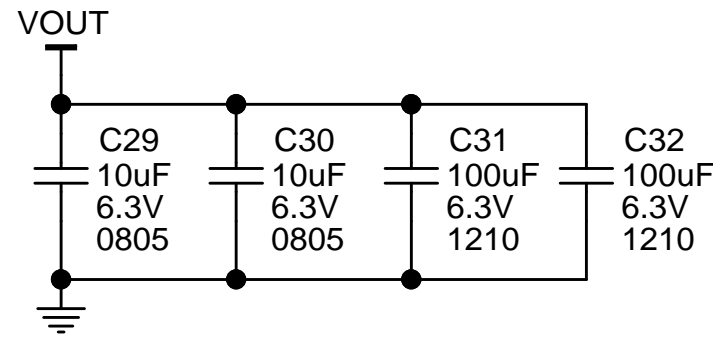
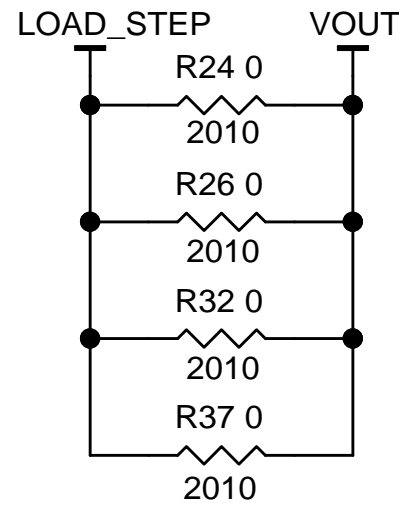
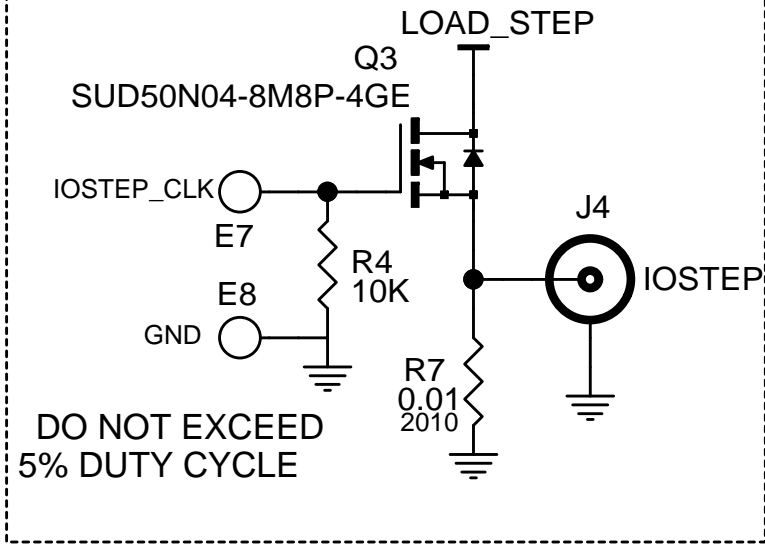
WHEN VIN < 5.5V, SHORT PVCC TO VIN WITH R61 = 0 OHM, AND SET R63 = 0 OHM AND REMOVE R62.
R69 CAN BE SET TO 0 OHM FOR ON BOARD COMPENSATION, OR UNSTUFFED FOR EXTERNAL OPTIMIZED COMPENSATION.



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PCB DES.	MS		TITLE: SCHEMATIC FOUR PHASE, STEP-DOWN μ MODULE [®] REGULATOR WITH HOTSWAP INPUT	
APP ENG.	QJL	SIZE	IC NO.	REV.
		N/A	LTM4636EY/LTM4636EY-1	4
			DEMO CIRCUIT 2448A	
SCALE = NONE		DATE:	Wednesday, March 29, 2017	SHEET 4 OF 5

DYNAMIC LOAD CIRCUIT



CUSTOMER NOTICE

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APPROVALS

PCB DES. *MS*

APP ENG. *YL*

SCALE = NONE



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TITLE: SCHEMATIC
FOUR PHASE, STEP-DOWN μ MODULE[®]
REGULATOR WITH HOTSWAP INPUT

SIZE N/A	IC NO. LTM4636EY/LTM4636EY-1 DEMO CIRCUIT 2448A	REV. 4
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DATE: Wednesday, March 29, 2017	SHEET 5 OF 5
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