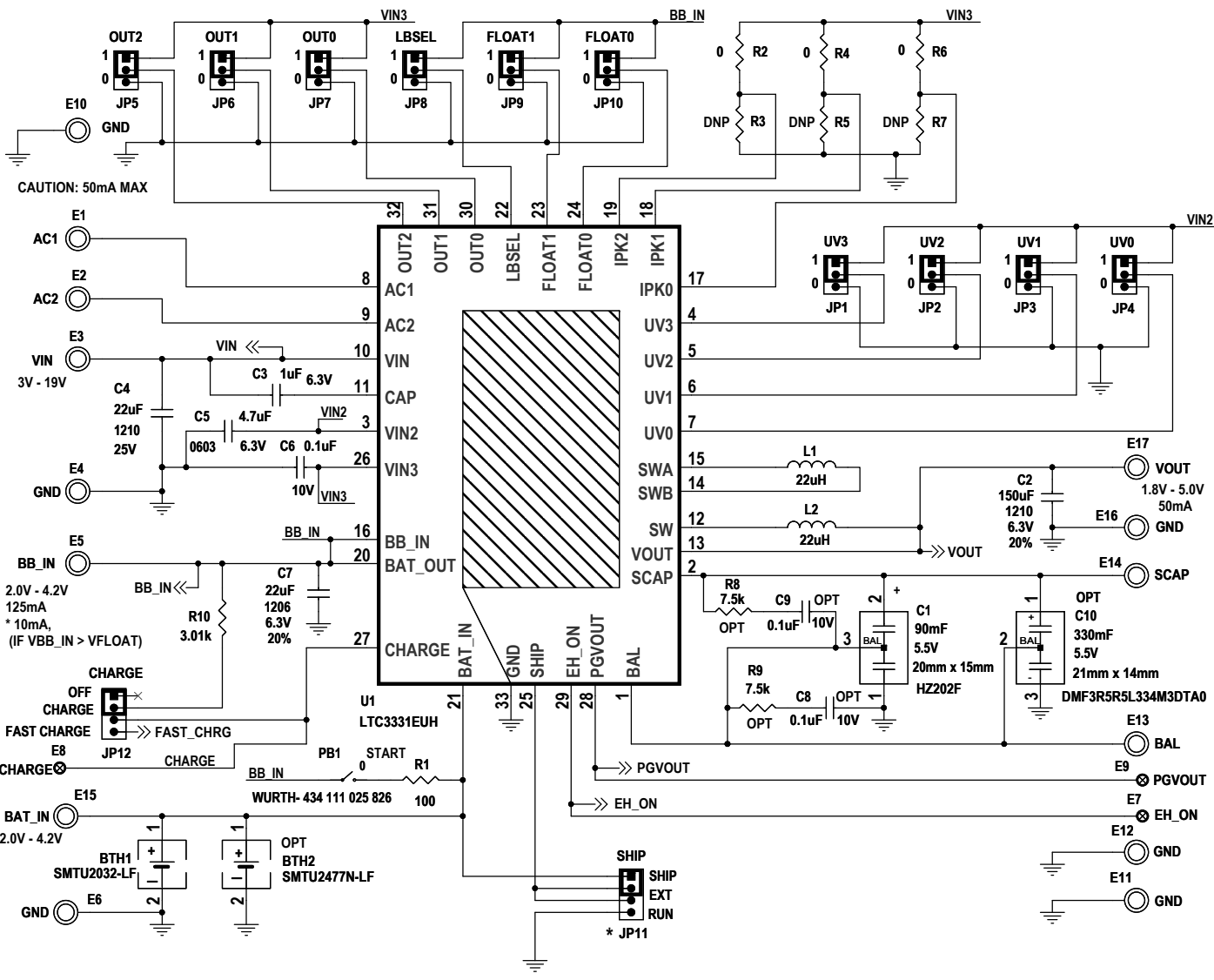


REVISION HISTORY				
ECO	REV	DESCRIPTION	APPROVED	DATE
-	2	PRODUCTION FAB	JD	2-21-14



**FLOAT SELECTION AND BATTERY DISCONNECT THRESHOLDS**

LBSSEL	FLOAT1	FLOAT0	FLOAT	CONNECT	DISCONNECT
0	0	0	3.45V	2.37V	2.04V
0	0	1	4.0V	3.05V	2.70V
0	1	0	4.1V	3.05V	2.70V
0	1	1	4.2V	3.05V	2.70V
1	0	0	3.45V	2.86V	2.51V
1	0	1	4.0V	3.55V	3.20V
1	1	0	4.1V	3.55V	3.20V
1	1	1	4.2V	3.55V	3.20V

**OUTPUT VOLTAGE SELECTION**

OUT2	OUT1	OUT0	VOUT
0	0	0	1.8V
0	0	1	2.5V
0	1	0	2.8V
0	1	1	3.0V
1	0	0	3.3V
1	0	1	3.6V
1	1	0	4.5V
1	1	1	5.0V

**UVLO SELECTION**

UV3	UV2	UV1	UV0	UVLO RISING	UVLO FALLING
0	0	0	0	4V	3V
0	0	0	1	5V	4V
0	0	1	0	6V	5V
0	0	1	1	7V	6V
0	1	0	0	8V	7V
0	1	0	1	8V	5V
0	1	1	0	10V	9V
0	1	1	1	10V	5V
1	0	0	0	12V	11V
1	0	0	1	12V	5V
1	0	1	0	14V	13V
1	0	1	1	14V	5V
1	1	0	0	16V	15V
1	1	0	1	16V	5V
1	1	1	0	18V	17V
1	1	1	1	18V	5V

**ILM SELECTION INSTALL**

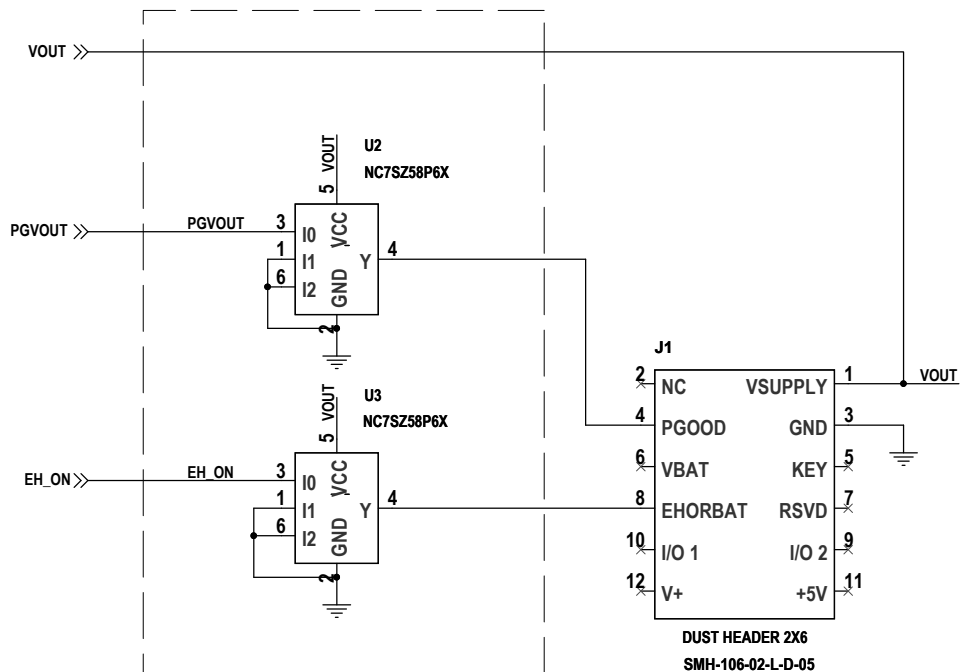
IPK2	IPK1	IPK0	ILIM
R3	R5	R7	5mA
R3	R5	R6	10mA
R3	R4	R7	15mA
R3	R4	R6	25mA
R2	R5	R7	50mA
R2	R5	R6	100mA
R2	R4	R7	150mA
R2	R4	R6	250mA

\* PLACE JP11 IN SHIP POSITION WHEN BOARD IS NOT IN USE.

**NOTES: UNLESS OTHERWISE SPECIFIED**

1. ALL RESISTORS ARE IN OHMS, 0402, 1%, 1/16W.
2. ALL CAPACITORS ARE IN MICROFARADS, 0402, 10%, 10V.
3. INSTALL SHUNTS ON JUMPERS AS SHOWN.

<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>	<p><b>APPROVALS</b></p>		<p>1630 McCarthy Blvd. Milpitas, CA 95035 Phone: (408)432-1900 www.linear.com Fax: (408)434-0507 LTC Confidential-For Customer Use Only</p>	
	PCB DES.	NC		<p>TITLE: SCHEMATIC</p> <p><b>NANOPOWER BUCK - BOOST DC / DC</b></p> <p><b>WITH ENERGY HARVESTING BATTERY CHARGER</b></p>
	APP ENG.	JD		
	<p>THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS.</p>			<p>SCALE = NONE</p>
<p>DATE: 2-21-14</p>			<p>SHEET 1 OF 2</p>	

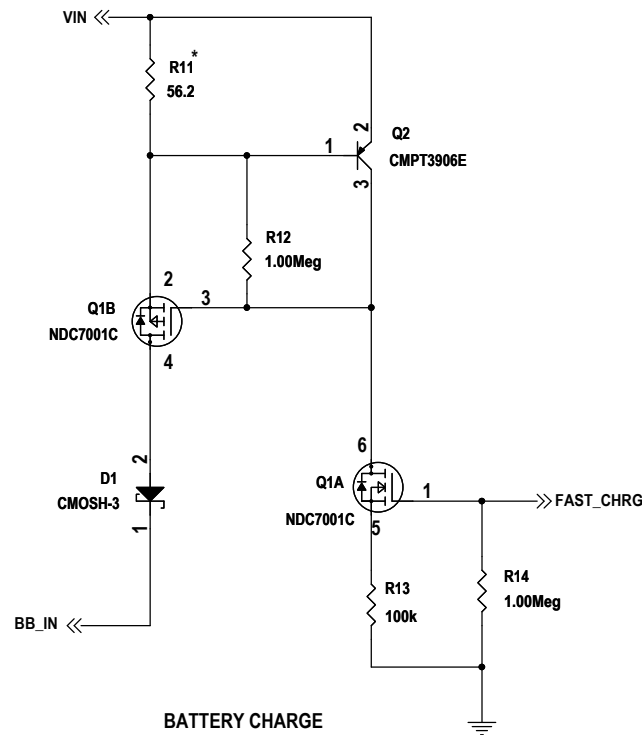


OVERVOLTAGE TOLERANT BUFFERS TRANSLATE THE HIGH PULL-UP VOLTAGES FROM THE LTC3330 TO THE VOUT VOLTAGE DRIVING THE PROCESSOR I/O BUS, WHICH IS VOUT.

U2, U3, U4 FUNCTION TABLE

I2	I1	I0	Y
L	L	L	L
L	L	H	H

$$Y = (\overline{I_0}) \cdot (\overline{I_2}) + (\overline{I_1}) \cdot (I_2)$$



BATTERY CHARGE CURRENT \*

R11	I_CHRG
113	5mA
75.0	7.5mA
56.2	10mA

CUSTOMER NOTICE		APPROVALS		LINEAR TECHNOLOGY			
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		APP ENG.	JD				
		THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS.		SCALE = NONE	DATE: 2 - 21 - 14	SIZE N/A	IC NO. LTC3331EUH DEMO CIRCUIT 2151A
						REV. 2	

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