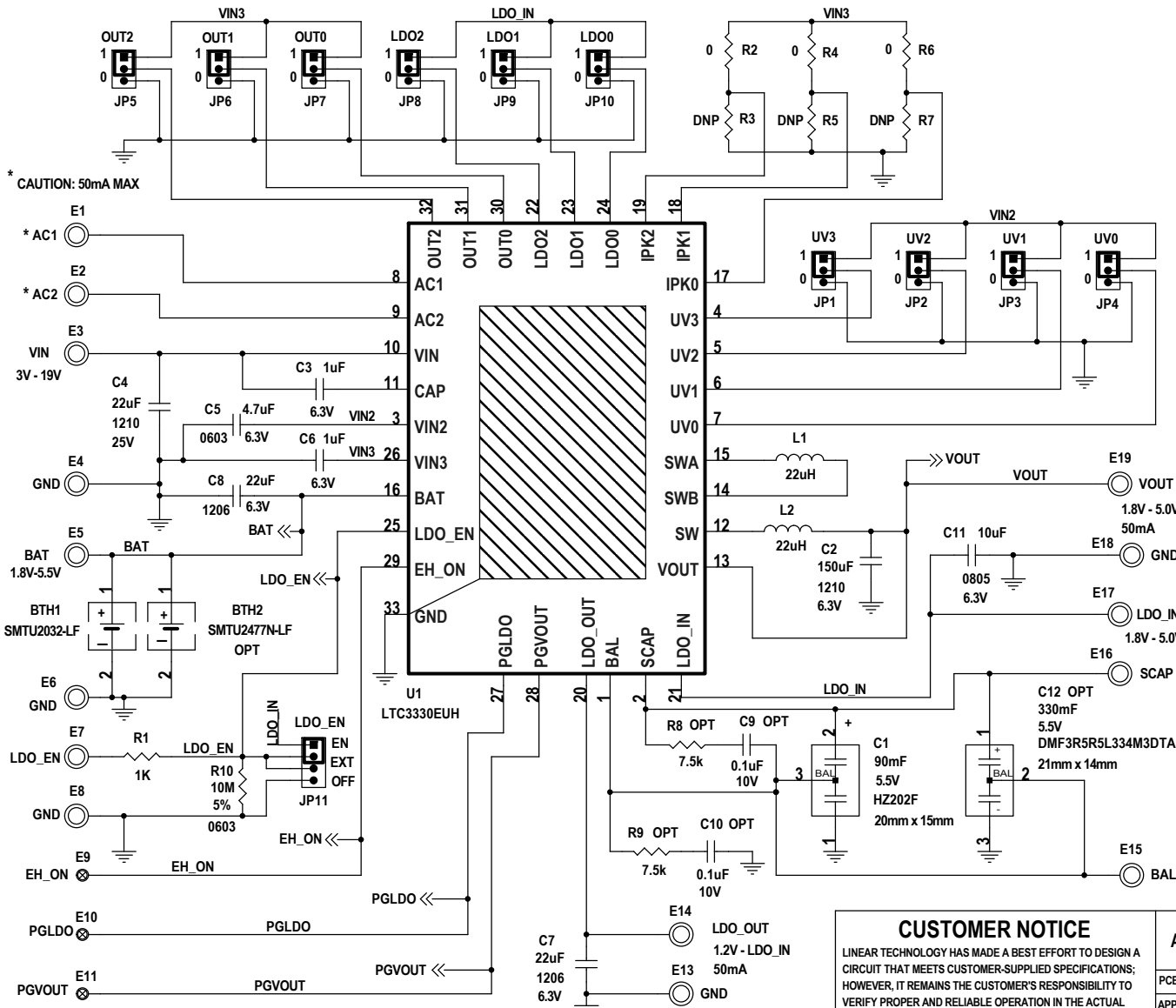


REVISION HISTORY				
ECO	REV	DESCRIPTION	APPROVED	DATE
-	3	PRODUCTION FAB	JD	7-29-13



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

LDO VOLTAGE SELECTION

LDO2	LDO1	LDO 0	LDO_OUT
0	0	0	1.2V
0	0	1	1.5V
0	1	0	1.8V
0	1	1	2.0V
1	0	0	2.5V
1	0	1	3.0V
1	1	0	3.3V
1	1	1	= LDO_IN

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

- NOTES: UNLESS OTHERWISE SPECIFIED**
- ALL RESISTORS ARE IN OHMS, 0402, 1%, 1/16W.
 - ALL CAPACITORS ARE IN MICROFARADS, 0402, 10%, 10V.
 - INSTALL SHUNTS ON JUMPERS 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.

THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS.

APPROVALS	
PCB DES.	NC
APP ENG.	JD
SCALE = NONE	

LINEAR TECHNOLOGY

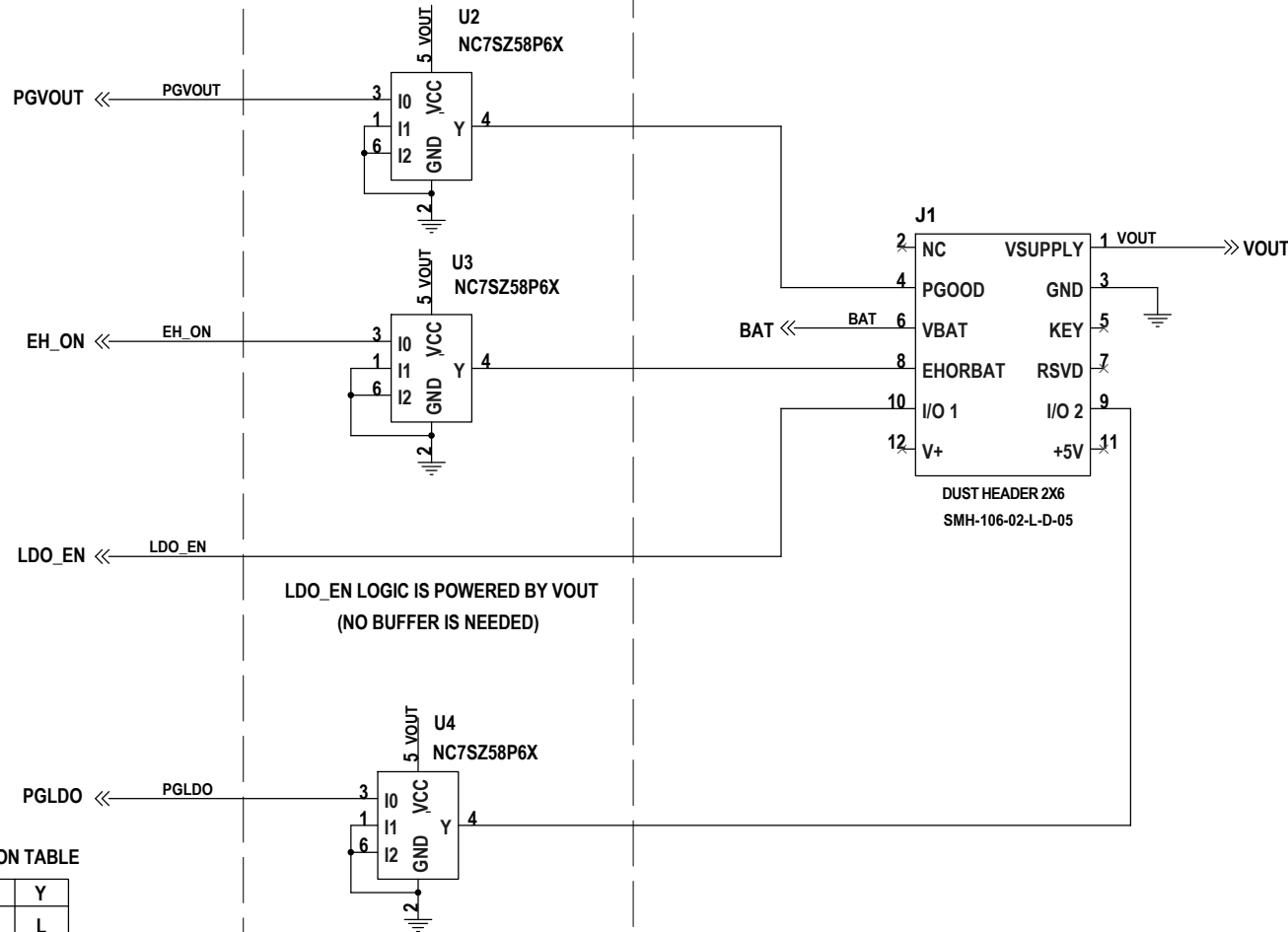
1630 McCarthy Blvd.
Milpitas, CA 95035
Phone: (408)432-1900 www.linear.com
Fax: (408)434-0507
LTC Confidential-For Customer Use Only

TITLE: SCHEMATIC

NANOPOWER BUCK - BOOST DC / DC WITH ENERGY HARVESTING BATTERY LIFE EXTENDER

SIZE	IC NO.	REV.
N/A	LTC3330EUH DEMO CIRCUIT 2048A	3

DATE: 7-29-13 SHEET 1 OF 2



U2, U3, U4 FUNCTION TABLE

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

$$Y = (I_0) \cdot (I_2) + (I_1) \cdot (I_2)$$

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.

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APPROVALS

PCB DES. NC

APP ENG. JD

SCALE = NONE



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TITLE: SCHEMATIC
NANOPOWER BUCK - BOOST DC / DC
WITH ENERGY HARVESTING BATTERY LIFE EXTENDER

SIZE N/A IC NO. LTC3330EUH DEMO CIRCUIT 2048A REV. 3

DATE: 7-29-13 SHEET 2 OF 2