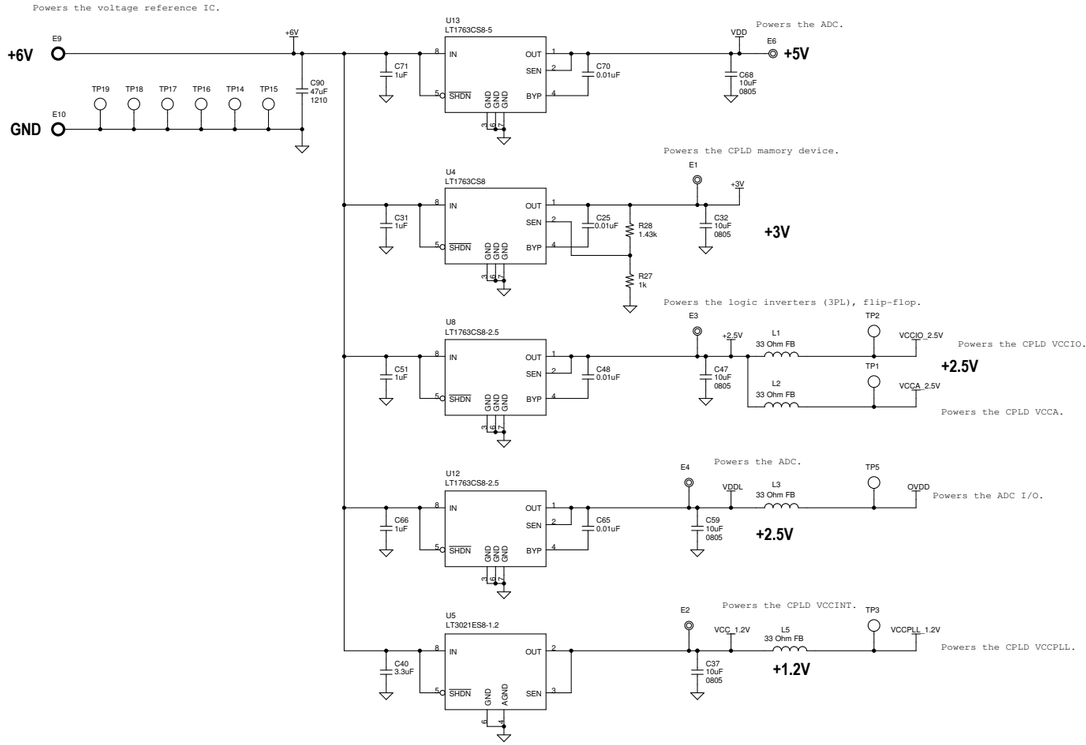
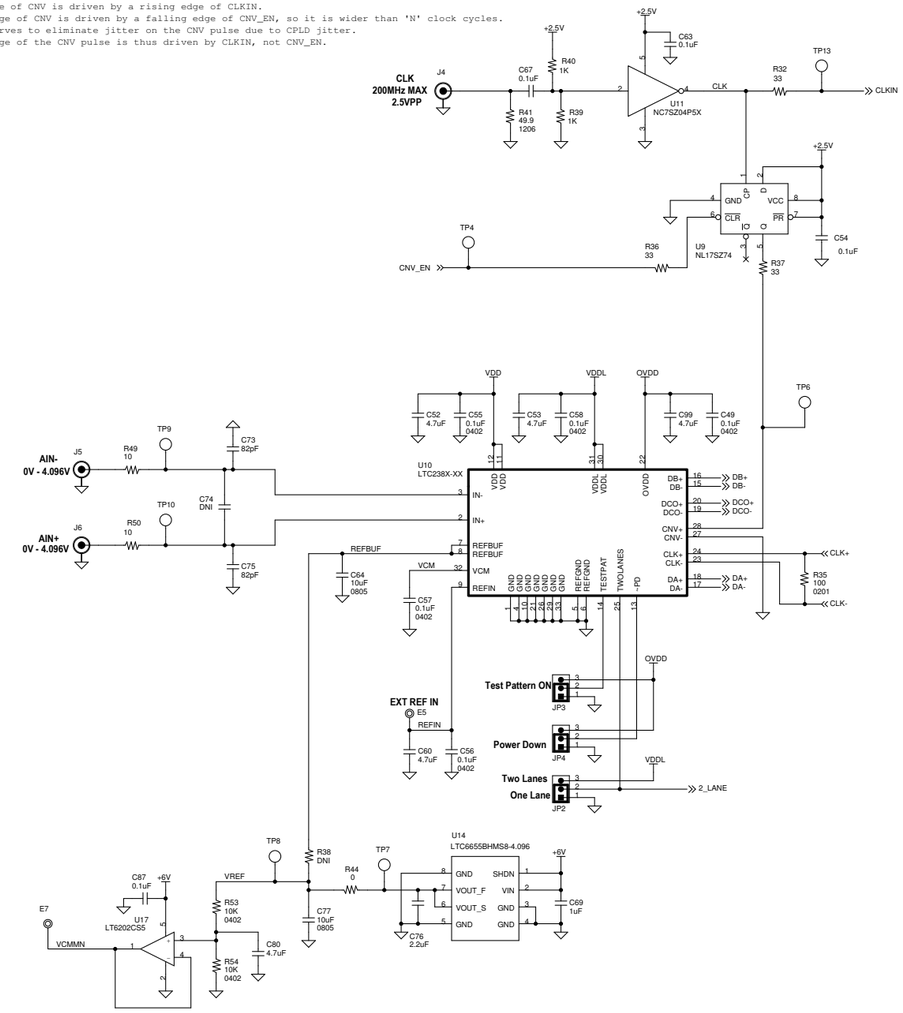
## REVISION HISTORY

| ECO | REV | DESCRIPTION | APPROVED | DATE |
|---|---|---|---|---|
| | 0 | PRODUCTION | DOUG S. | 08-26-13 |




| * | ASSY | U10 | BITS | Msps | R33 | R34 |
|---|---|---|---|---|---|---|
| | -A | LTC2387CUH-18 | 18 | 15 | 1K | DNI |
| | -B | LTC2387CUH-16 | 16 | 15 | DNI | 1K |
| | -C | LTC2386CUH-18 | 18 | 10 | 1K | DNI |
| | -D | LTC2386CUH-16 | 16 | 10 | DNI | 1K |
| | -E | LTC2385CUH-18 | 18 | 5 | 1K | DNI |
| | -F | LTC2385CUH-16 | 16 | 5 | DNI | 1K |

This circuit conditions the edges of the CNV pulse as follows:
The rising edge of CNV is driven by a rising edge of CLKIN.
The falling edge of CNV is driven by a falling edge of CNV_EN, so it is wider than 'N' clock cycles.
The circuit serves to eliminate jitter on the CNV pulse due to CPLD jitter.
The rising edge of the CNV pulse is thus driven by CLKIN, not CNV_EN.




## 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. | D. STUETZLE |
| APP ENG. | D. STUETZLE |
| | |
| | |
| | |

SCALE = NONE


LINEAR TECHNOLOGY
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Fax: (408)434-0507

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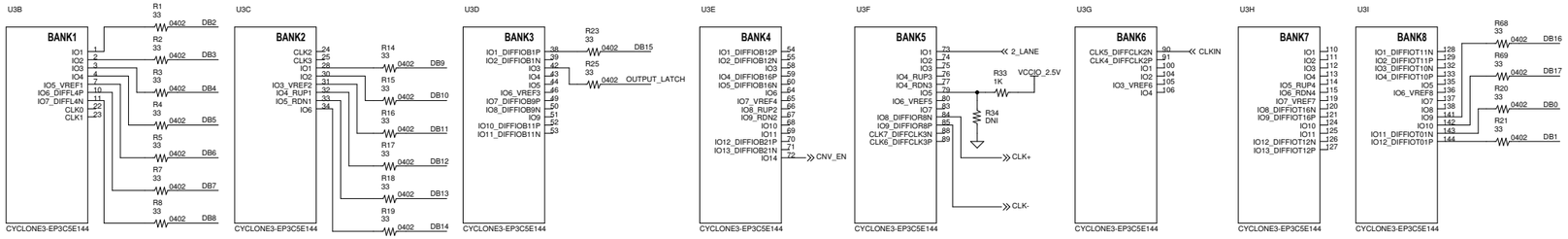
TITLE: SCHEMATIC

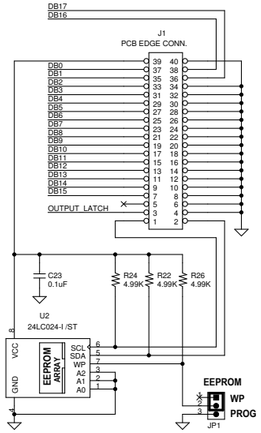
# 18-Bit, 15Msps SAR ADC

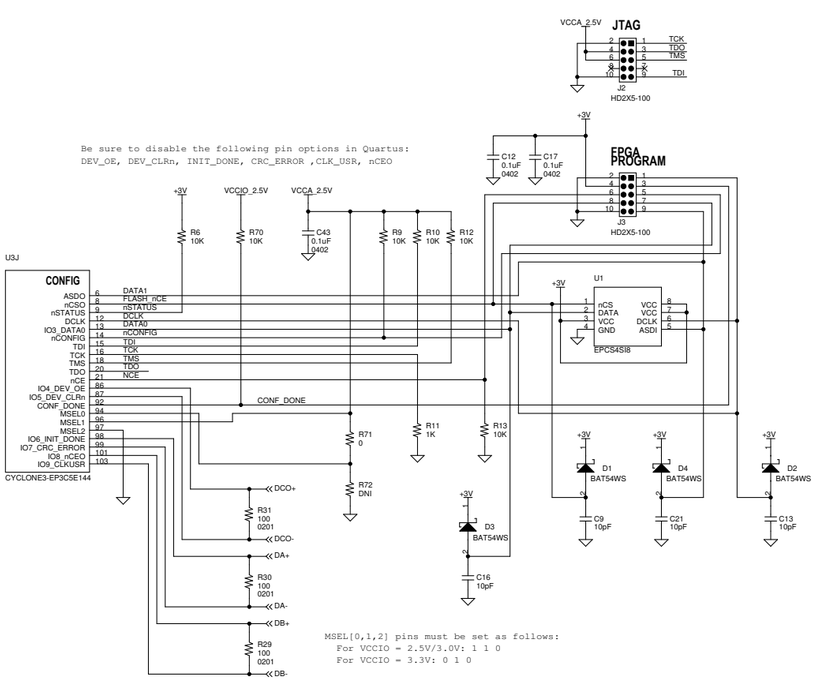
| SIZE | IC NO. | REV. |
|---|---|---|
| B | LTC2387CUH FAMILY<br>DEMO CIRCUIT 2290A | 2 |

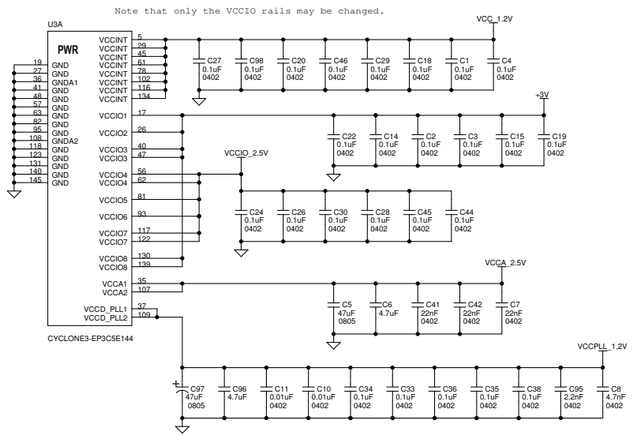
DATE: Wednesday, May 27, 2015 SHEET 1 OF 2

NOTES: UNLESS OTHERWISE SPECIFIED
1. ALL RESISTORS ARE IN OHMS, 0603.
ALL CAPACITORS ARE IN MICROFARADS, 0603

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# 18-Bit, 15Msps SAR ADC

| SIZE | IC NO. | REV. |
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SHEET 2 OF 2