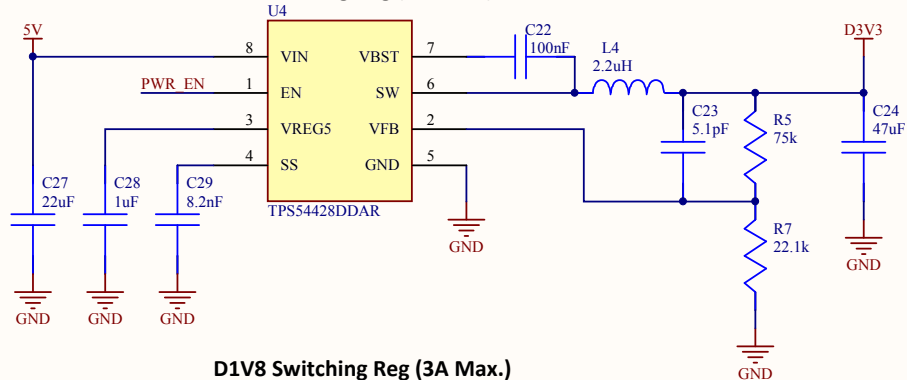
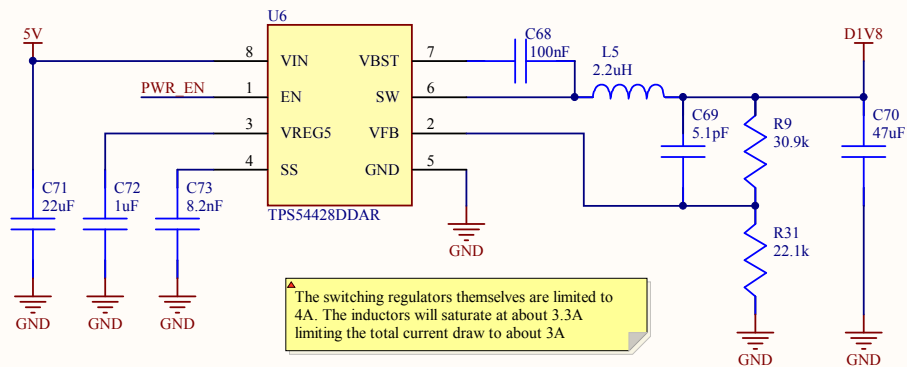


D3V3 Switching Reg (3A Max.)

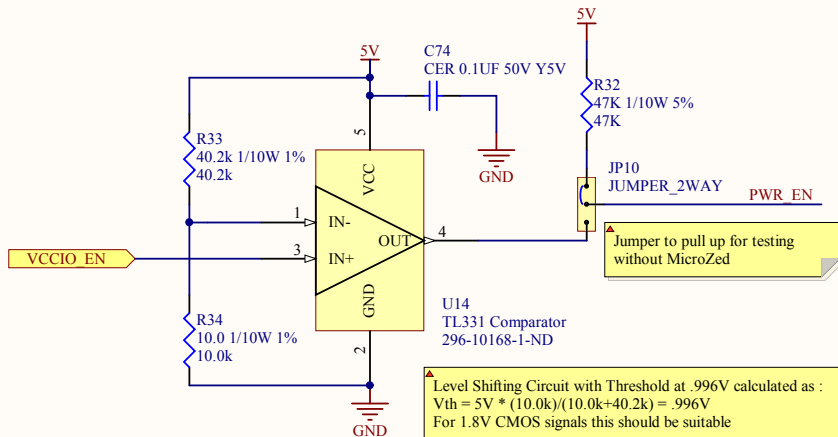


D1V8 Switching Reg (3A Max.)

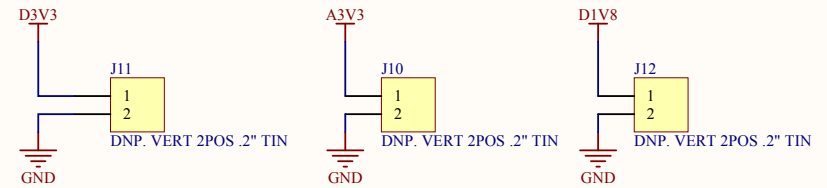


The switching regulators themselves are limited to 4A. The inductors will saturate at about 3.3A limiting the total current draw to about 3A

1.8V to 5V Level Shifter

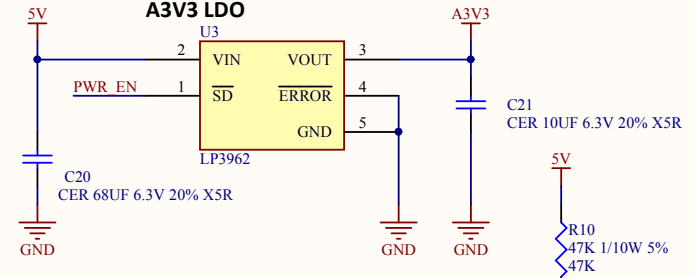


Level Shifting Circuit with Threshold at .996V calculated as :
 $V_{th} = 5V * (10.0k) / (10.0k + 40.2k) = .996V$
 For 1.8V CMOS signals this should be suitable

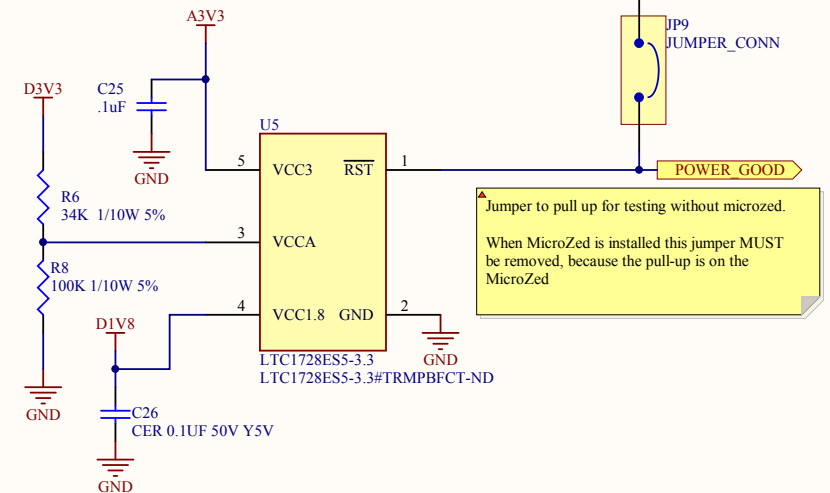


J10, J12, and J11 are fallback methods for bringing in power (DNP). 7A MAX.

A3V3 LDO

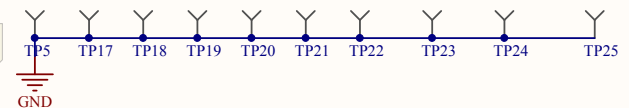


Power Good Generator



Jumper to pull up for testing without microzed.
 When MicroZed is installed this jumper MUST be removed, because the pull-up is on the MicroZed

Testpoint Grounds. Scatter at will.



Title **dSAU Motherboard - Power**

Size: Letter

Number: 1

Revision: A

Date: 2/13/2014

Time: 1:52:33 AM

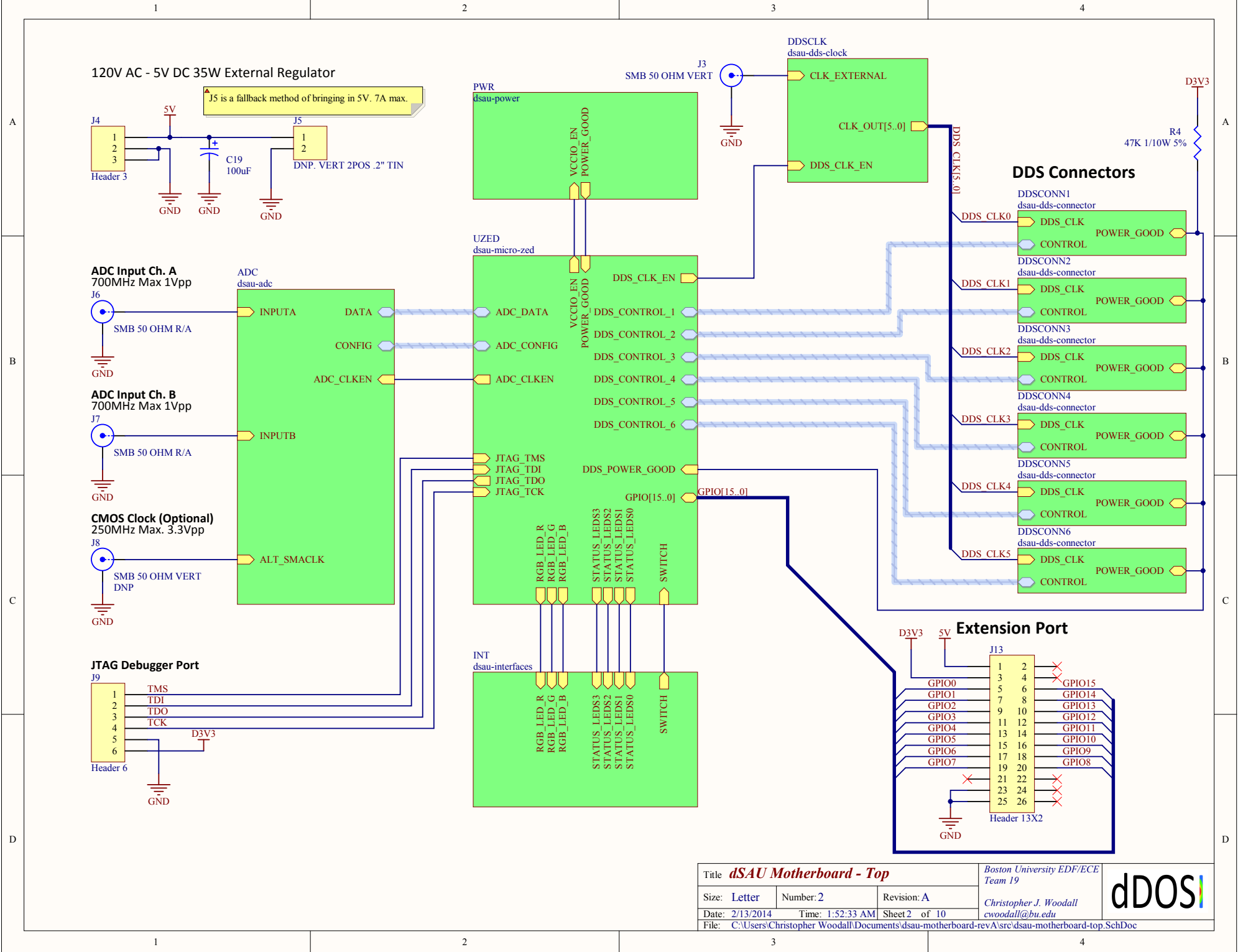
Sheet 1 of 10

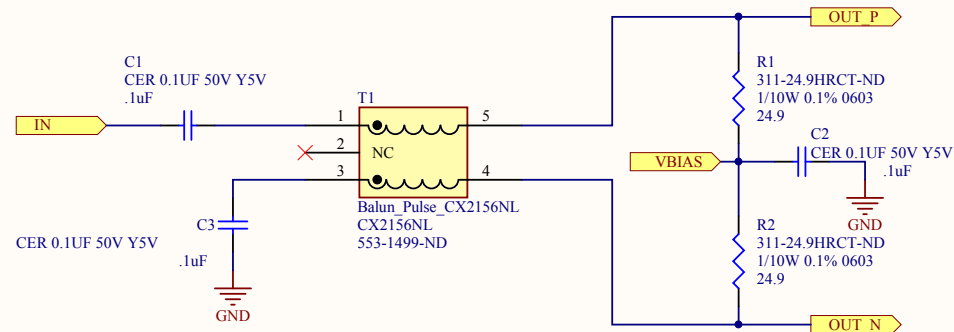
File: C:\Users\Christopher Woodall\Documents\dsau-motherboard-revA\src\dsau-power.SchDoc

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dDOS



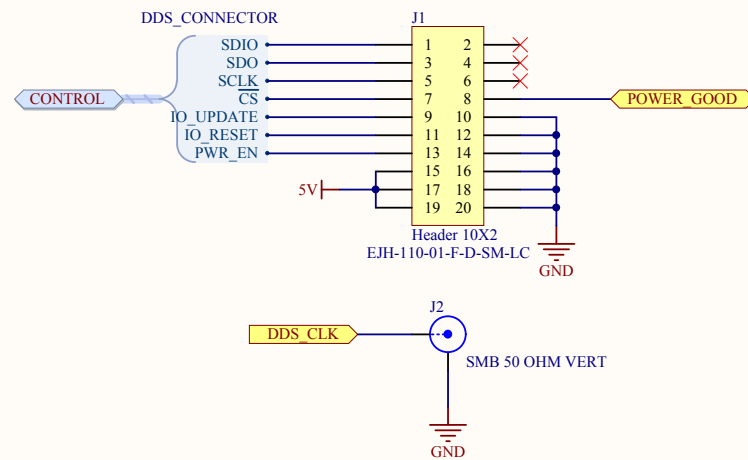


▲ This frontend's main responsibility is converting from an unbalanced 50-Ohm input to a balanced 50-Ohm signal for interactions into the ADC.

This particular configuration is taken from the ADS62P49 datasheet and is expected to rely on the ADC's internal filter with a cutoff of 700MHz.

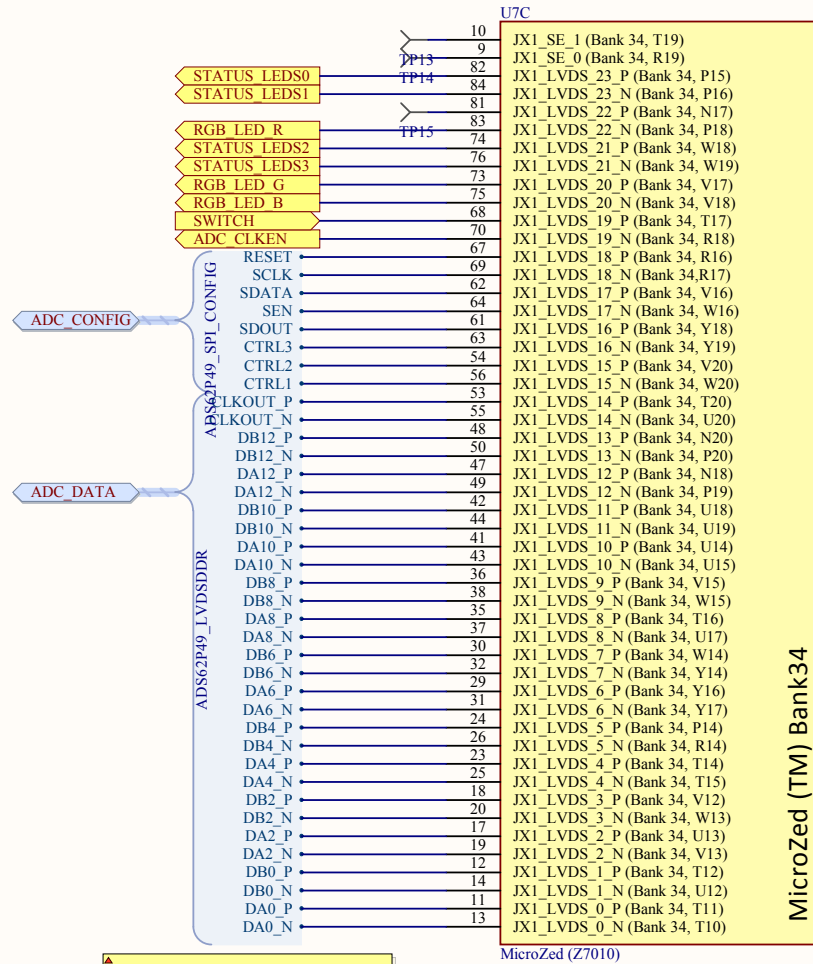
External filters are suggested for best performance.

Standard Connector to Single Channel DDS Board.



BANK34 (1.8V)

▲ BANK34 (1.8V) is used solely for connections to the 1.8V 7bit DDR (time multiplexed) LVDS inputs from the ADS62P49 ADC, and for Control Signals (an SPI port) to and from the ADS62P49.



▲ Routing the LVDS data signals such that Channel A comes to Odd pins and channel B comes to Even pins will make routing easier.

NOTE: Exact pin assignments may change during routing. Stay vigilant

Title **dSAU Motherboard - uZed BANK34**

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Size: Letter

Number: 7

Revision: A

Date: 2/13/2014

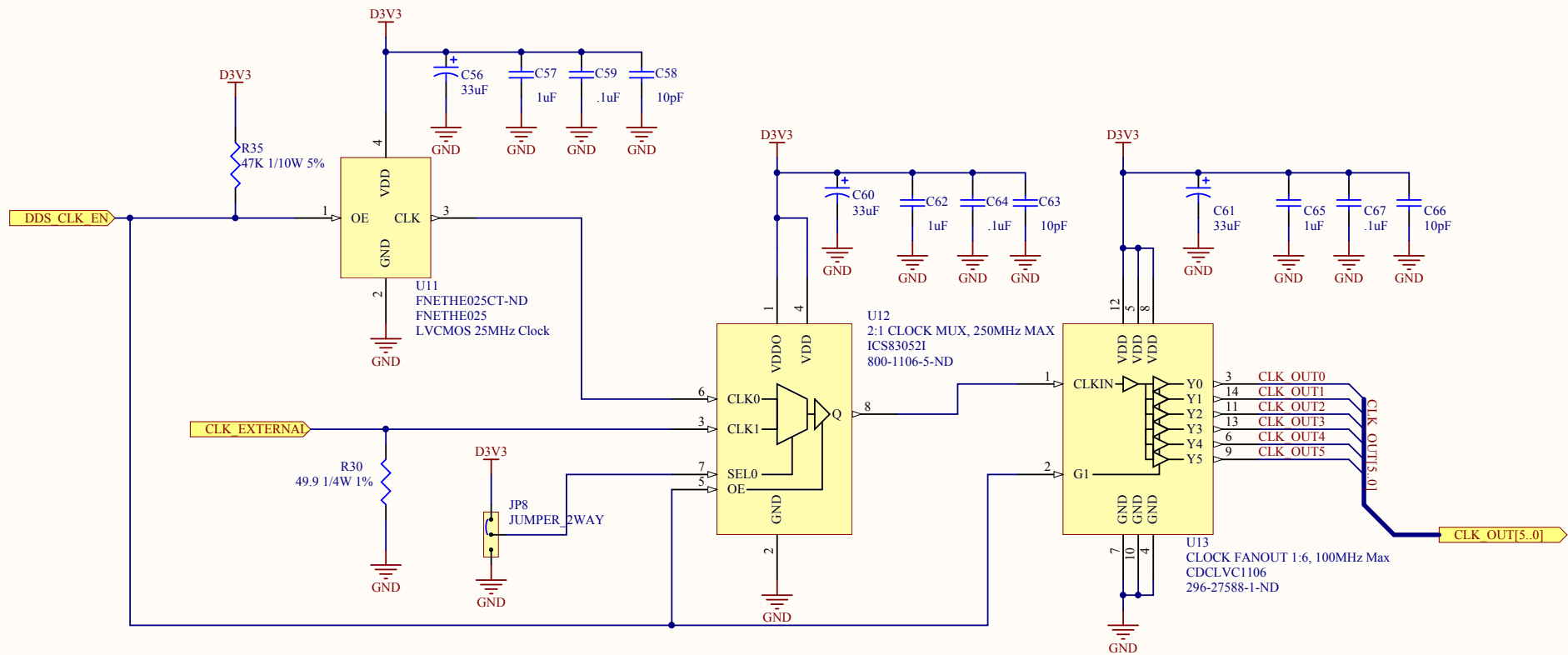
Time: 1:52:33 AM

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dDOS

File: C:\Users\Christopher Woodall\Documents\dsau-motherboard-revA\src\dsau-micro-zed-bank34.SchDoc



Title **dSAU Motherboard - DDS Clock Gen.**

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Size: Letter

Number: 10

Revision: A

Date: 2/13/2014

Time: 1:52:33 AM Sheet 10 of 10

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