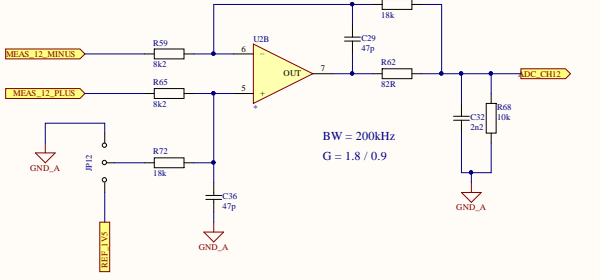
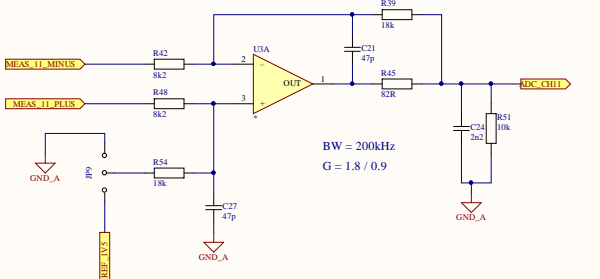
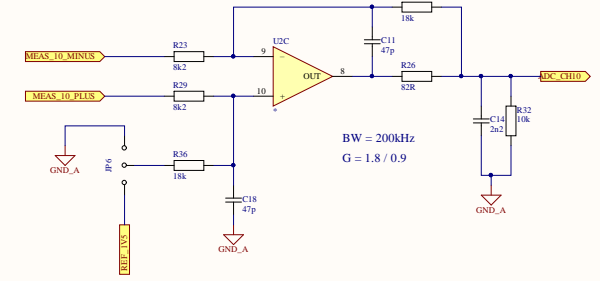
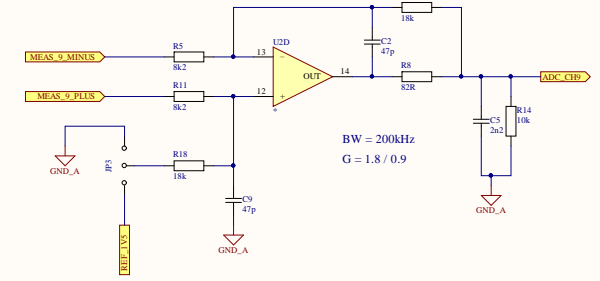
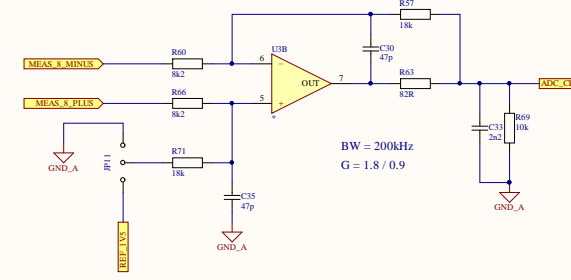
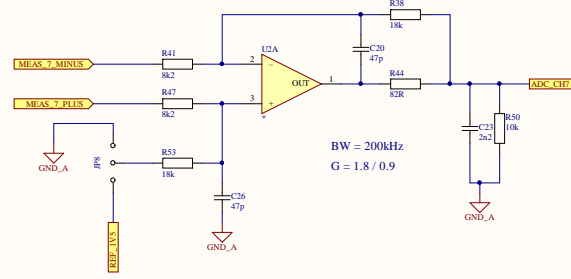
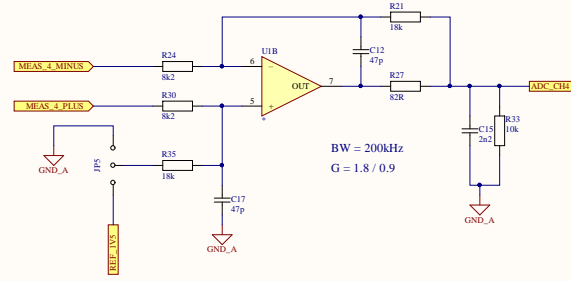
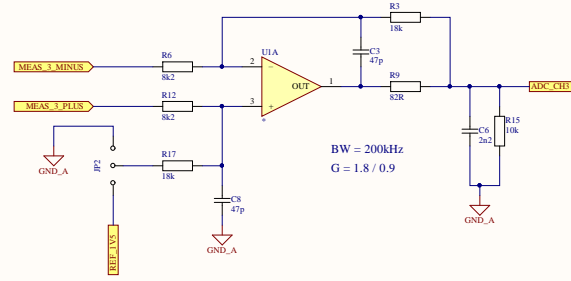
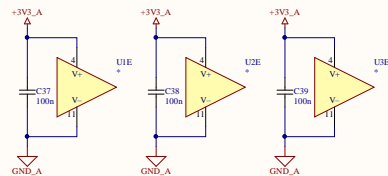
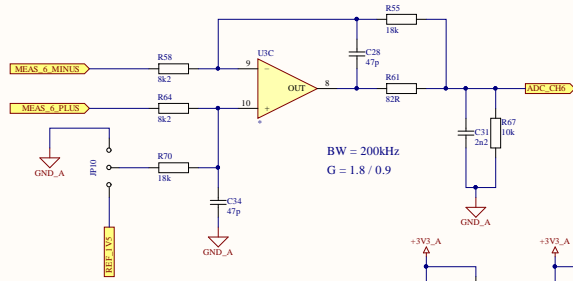
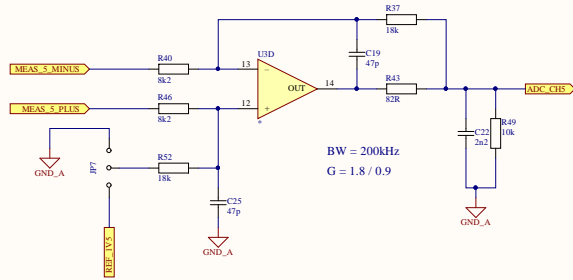
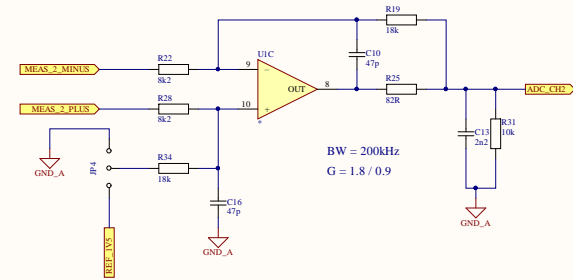
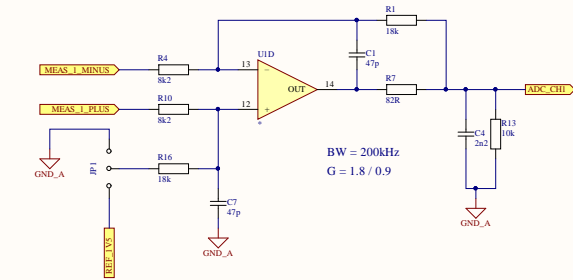


Differential to single end conversion



MEZZANINE-BOARD.PrjPcb

AD_0.SchDoc

Revision : SchematicRevisionSheet * of *

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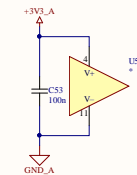
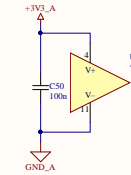
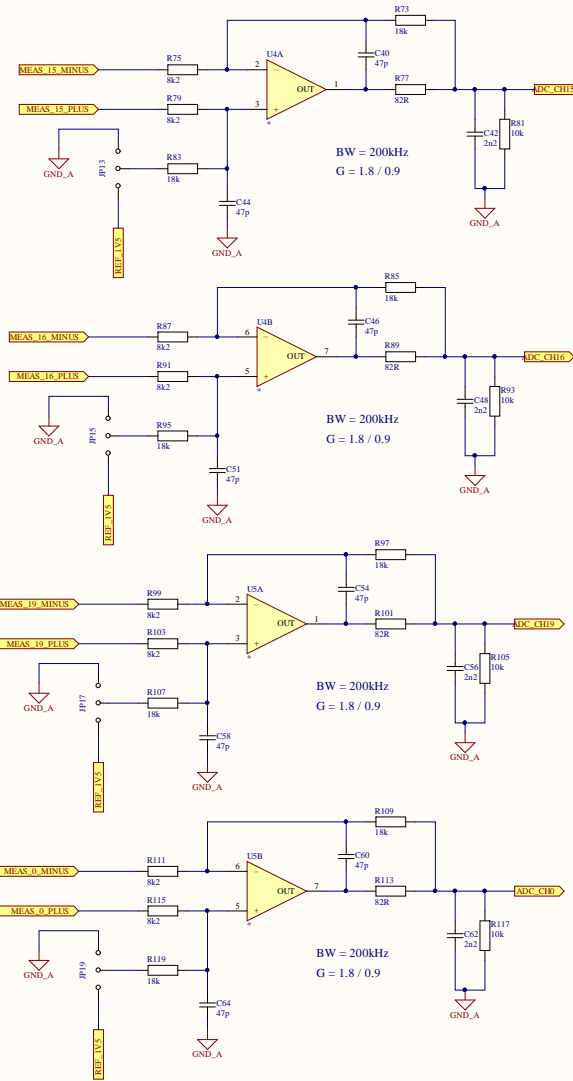
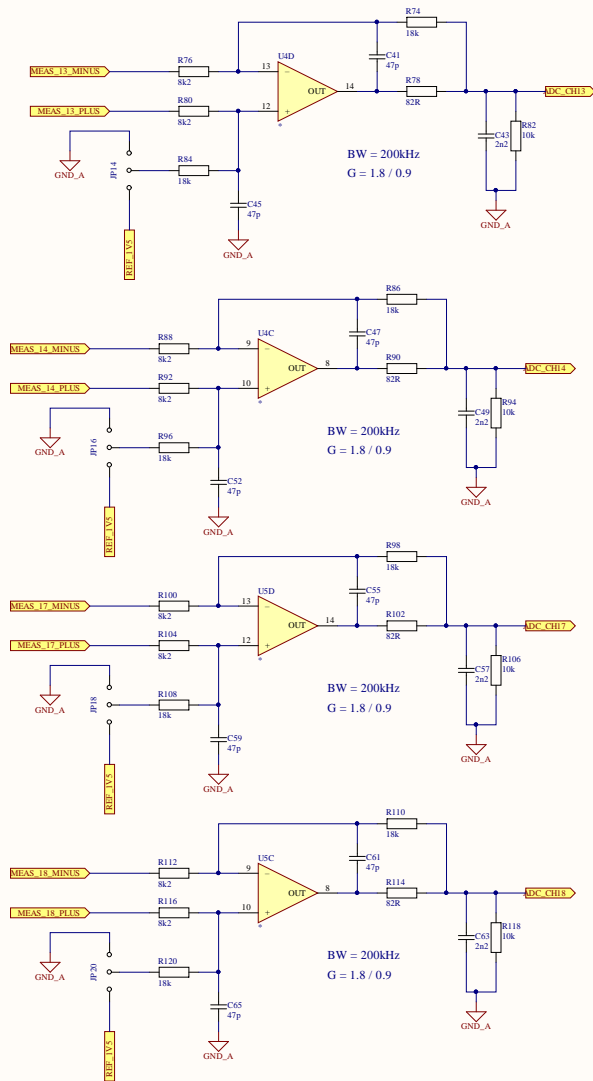
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Date : SchematicDate



Design by : SchematicDesigner

Differential to single end conversion



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AD_1.SchDoc

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Design by : SchematicDesigner

The schematic diagram illustrates the ADC module, featuring 20 channels of ADS7886SBDCKT ADCs. The channels are organized into three main groups, each with its own power supply and ground connections. The channels are labeled as follows:

- Group 1 (Left):** ADC_CH1_CS, ADC_CH1, ADC_CH2_CS, ADC_CH2, ADC_CH3_CS, ADC_CH3, ADC_CH4_CS, ADC_CH4, ADC_CH5_CS, ADC_CH5, ADC_CH6_CS, ADC_CH6, ADC_CH7_CS, ADC_CH7, ADC_CH8_CS, ADC_CH8, ADC_CH9_CS, ADC_CH9.
- Group 2 (Middle):** ADC_CH10_CS, ADC_CH10, ADC_CH11_CS, ADC_CH11, ADC_CH12_CS, ADC_CH12, ADC_CH13_CS, ADC_CH13, ADC_CH14_CS, ADC_CH14, ADC_CH15_CS, ADC_CH15.
- Group 3 (Right):** ADC_CH16_CS, ADC_CH16, ADC_CH17_CS, ADC_CH17, ADC_CH18_CS, ADC_CH18, ADC_CH19_CS, ADC_CH19, ADC_CH20_CS, ADC_CH20.

The power supply connections are as follows:

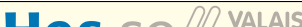

- 3VREF:** Connected to the VDD pin of each ADC.
- GND_A:** Connected to the GND pin of each ADC.

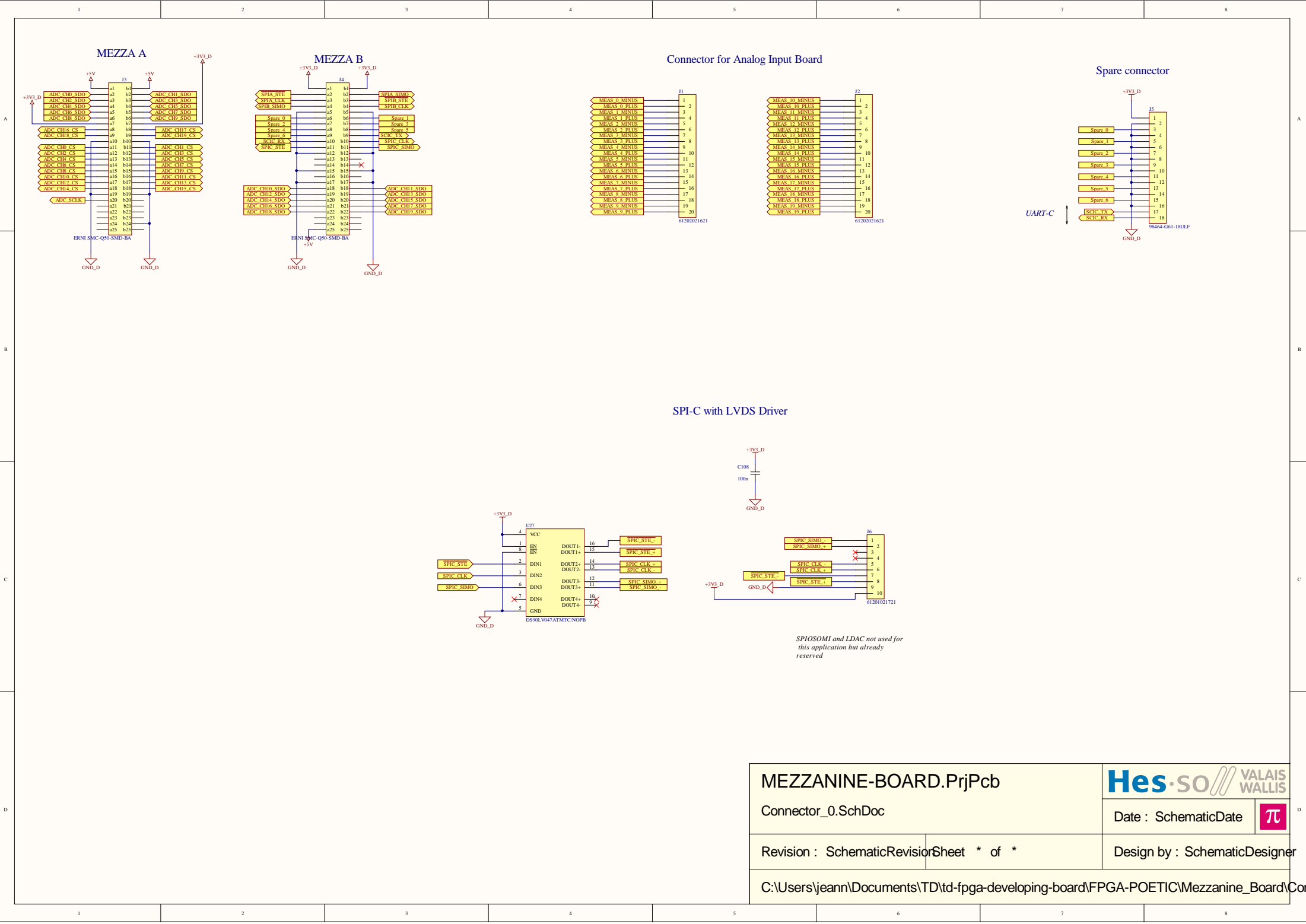
The signal lines are connected as follows:

- SCK:** Connected to the SCLK pin of each ADC.
- SDO:** Connected to the SDO pin of each ADC.

A common ground connection is shown at the bottom, labeled **GND_A**. A capacitor network is shown at the bottom, labeled **10nF - 1uF per ADC**.

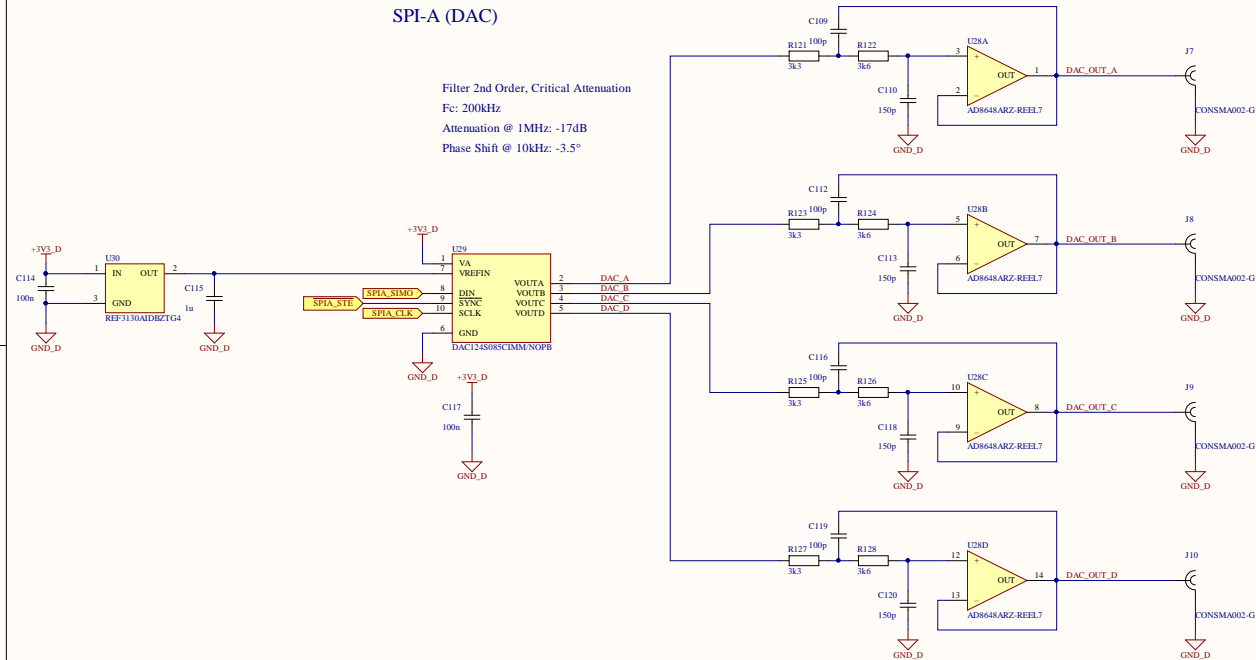
10nF - 1uF per ADC

MEZZANINE-BOARD.PrjPcb			
AD_3.SchDoc		Date : SchematicDate	
Revision : SchematicRevision	Sheet * of *	Design by : SchematicDesigner	
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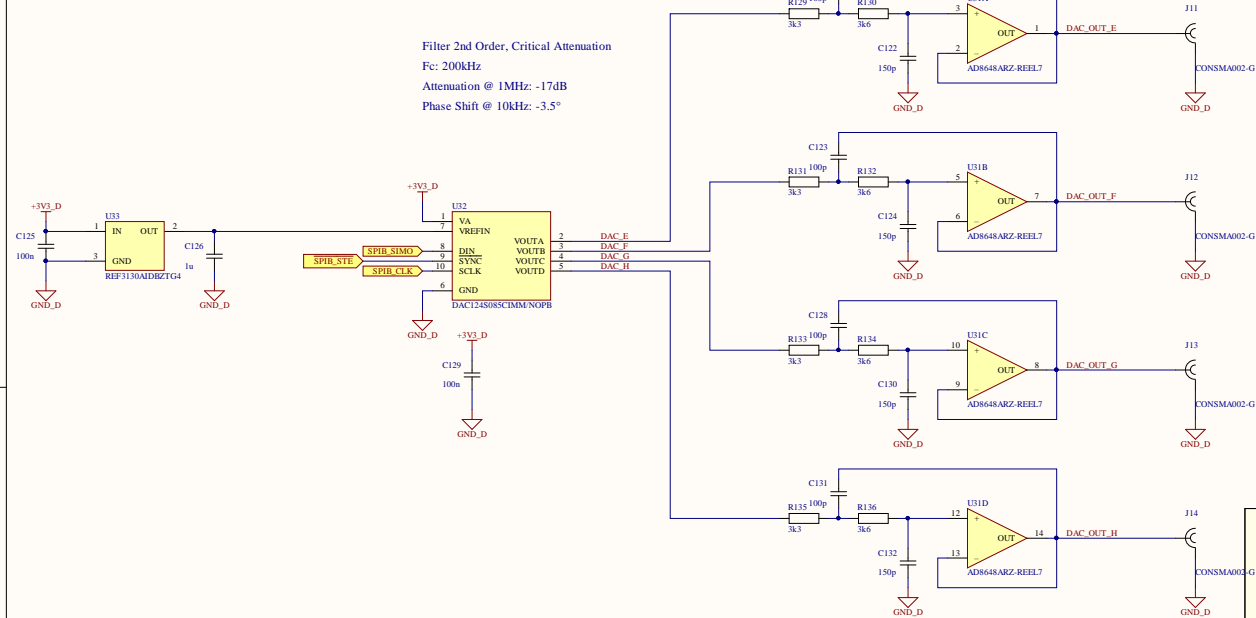
SPI-A (DAC)

Filter 2nd Order, Critical Attenuation
Fc: 200kHz
Attenuation @ 1MHz: -17dB
Phase Shift @ 10kHz: -3.5°



SPI-B (DAC)

Filter 2nd Order, Critical Attenuation
Fc: 200kHz
Attenuation @ 1MHz: -17dB
Phase Shift @ 10kHz: -3.5°



MEZZANINE-BOARD.PrjPcb

DAC_0.SchDoc

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Date : SchematicDate



Design by : SchematicDesigner

