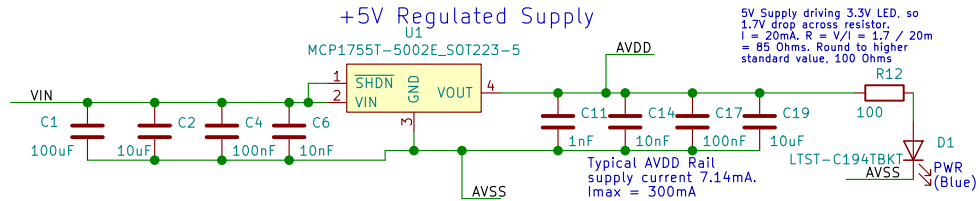
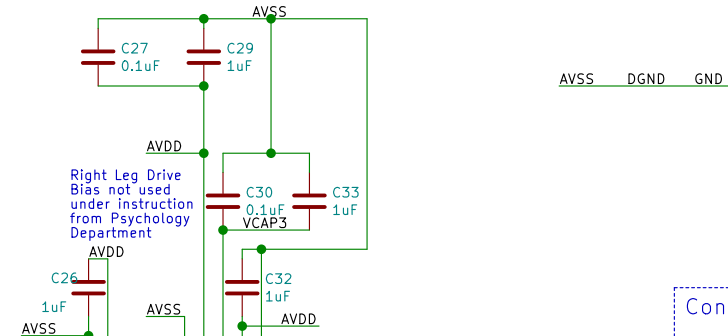
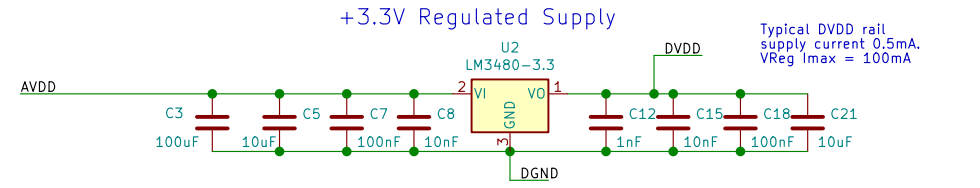


# ADS1299-8 and Support Circuitry

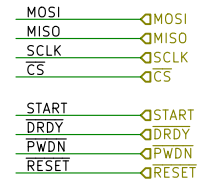
## +5V Regulated Supply



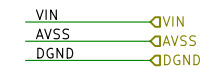
## +3.3V Regulated Supply



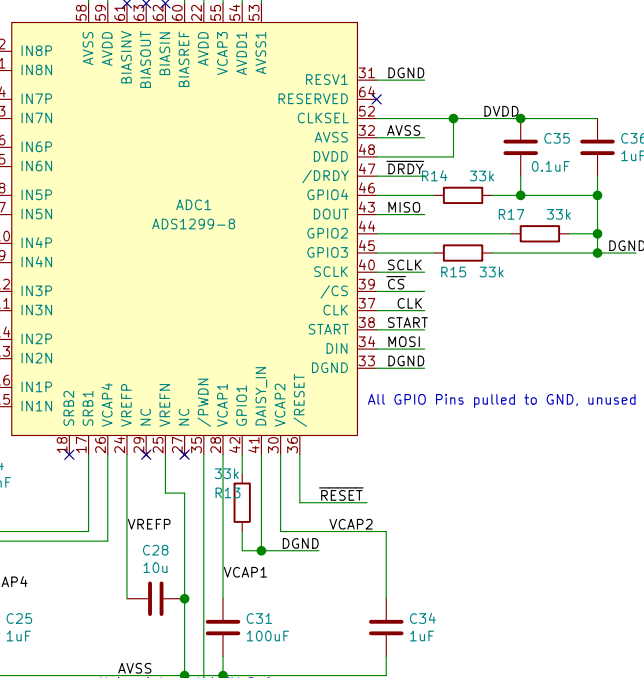
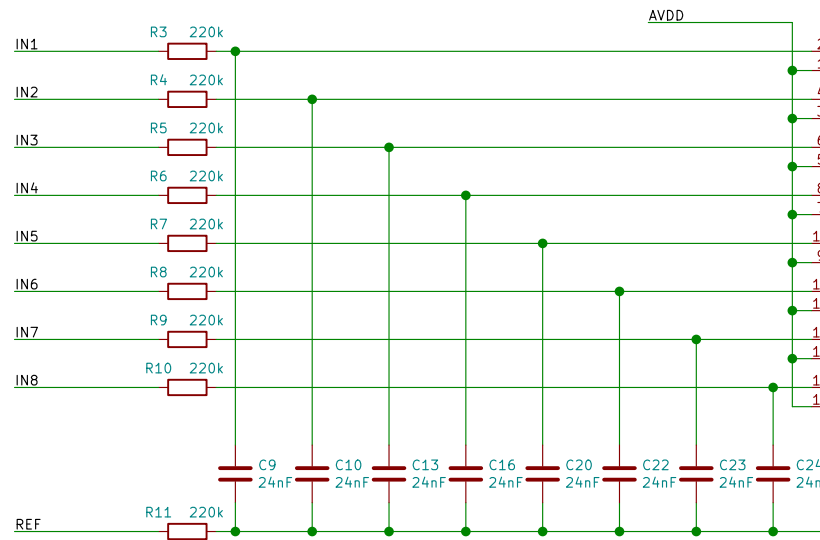
## Control and Data Lines



## Power Connections



VIN	1
GND	2
	3
MOSI	4
PWDN	5
RESET	6
CLK	7
START	8
CS	9
SCLK	10
MISO	11
DRDY	12
DVDD	13
DVDD	14
AVDD	15
VCAP3	16
VCAP4	1
VREFP	2
	3
	4
IN1	5
IN2	6
IN3	7
IN4	8
IN5	9
IN6	10
IN7	11
IN8	12
REF	13
VCAP1	14
VCAP2	15
	16



RC LPF:  $f_c = 1 / (2 * \pi * R * C)$   
 $R = 220k\Omega$   
<https://pdfs.semanticscholar.org/05b6/6348fc1a11726d76eb08dddabfc4cd36f6.pdf>

Lowest Sampling Frequency = 250sps, therefore Nyquist Frequency at 125Hz, but this is still very high for EEG. Will LPF at 30Hz

$$30 = 1 / (2 * \pi * 220k * C)$$

$$C = 1 / (2 * \pi * 220k * 30)$$

$$C = 24.11nF, \text{ approx } 24nF \rightarrow f_c = 30.14Hz$$

Using internal 4.5V Reference, so short VREFN to AVSS

Sheet: /  
 File: DAQ Board.sch

## Title:

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Rev:

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