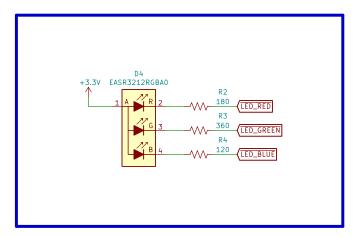
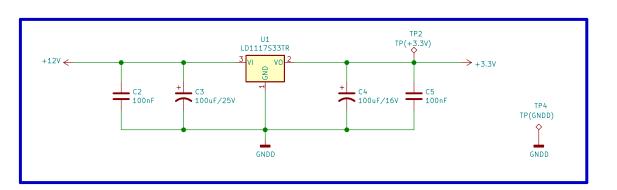


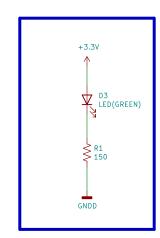
POWER CONNECTOR (+12V)



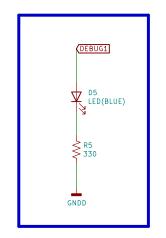
LED (STATUS)



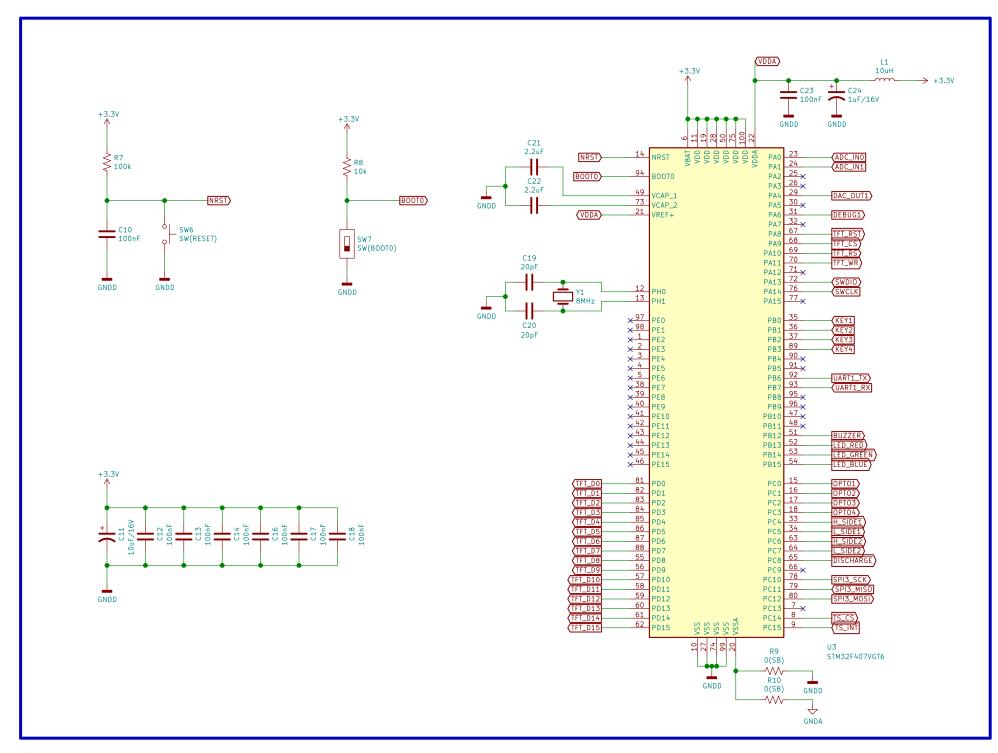
+12V to +3.3V REGULATOR



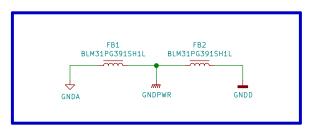
LED (POWER)



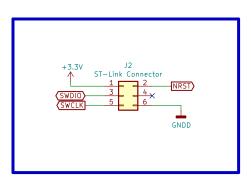
LED (DEBUG)



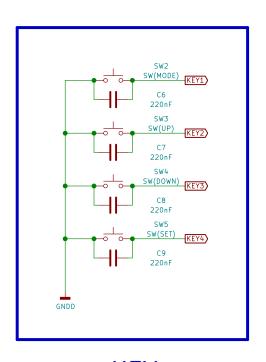
MCU (STM32F407VGT6)



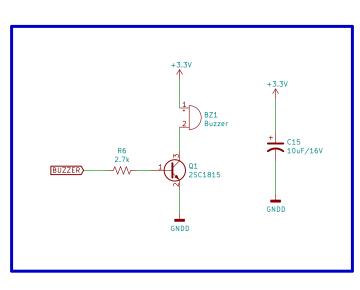
GROUND



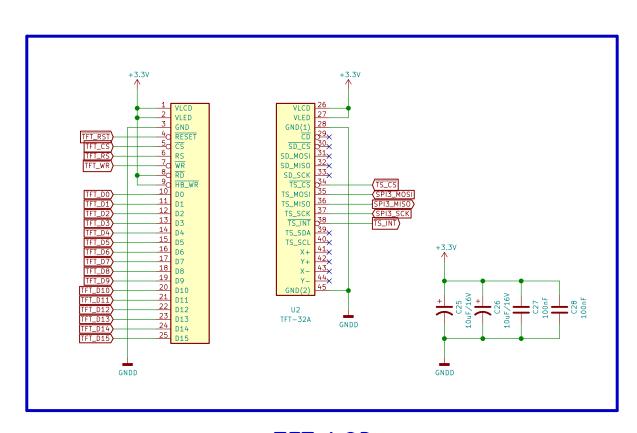
ST-LINK CONNECTOR



KEY

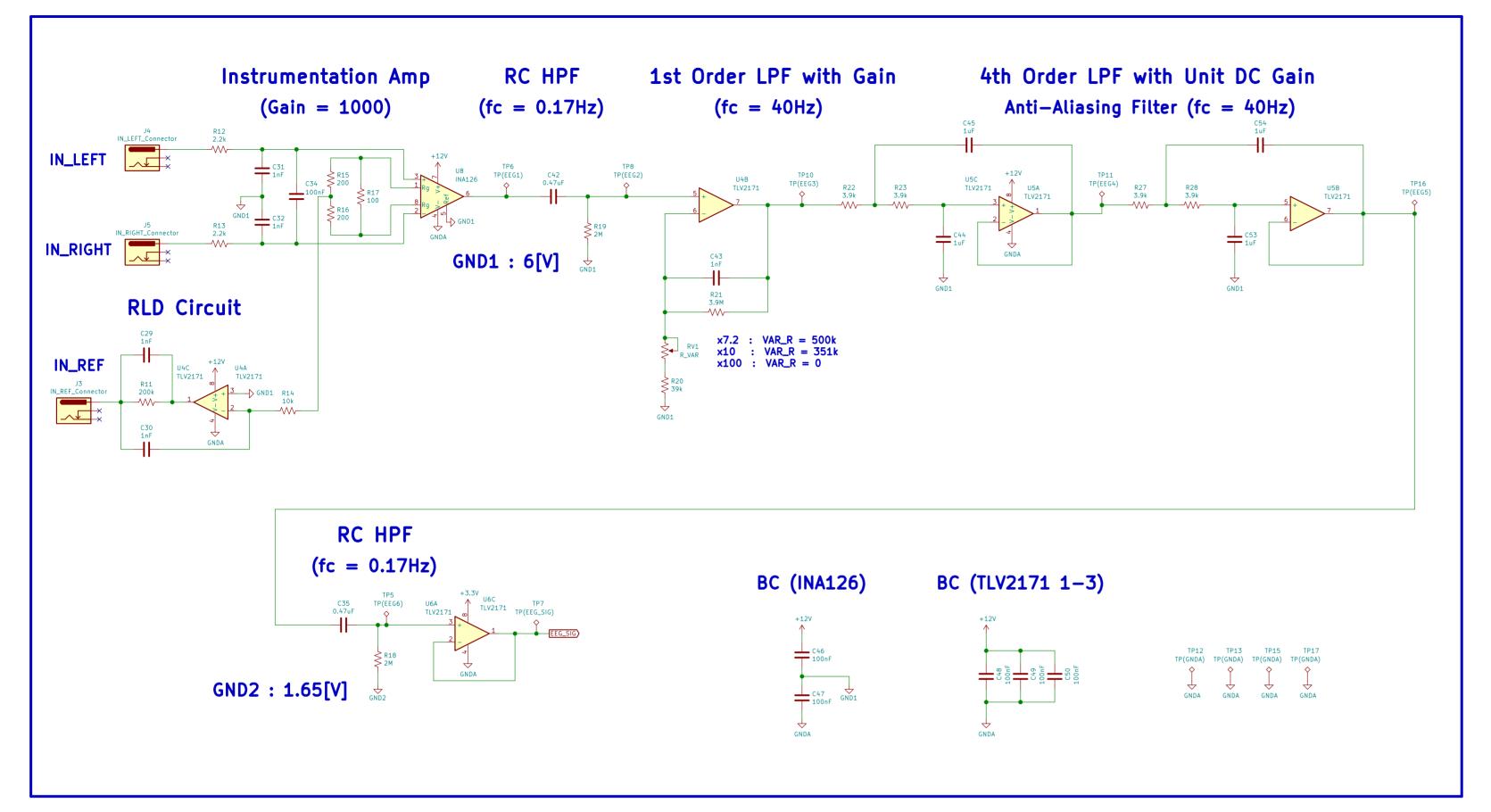


BUZZER

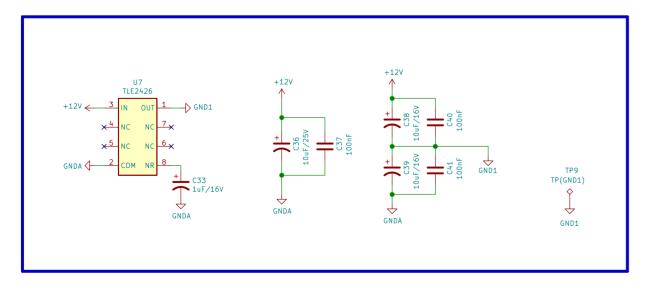


TFT LCD

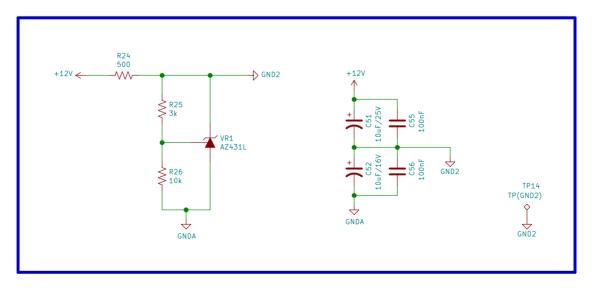
Designed by Gan	ghyeok Lim		
Arkx			
Sheet: /			
File: EEG_Ver1.0A	.sch		
Title: EEG Me	easurement & Brain	Stimulation Syster	n (1/4)
Size: User	Date: 2021-04-09		Rev: Ver1.0A
KiCad E.D.A. kic	ad (5.1.7)−1		ld: 1/4
			1.0



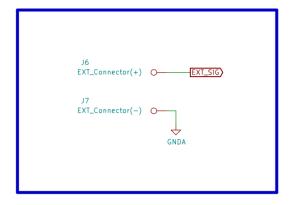
EEG MEASUREMENT CIRCUIT



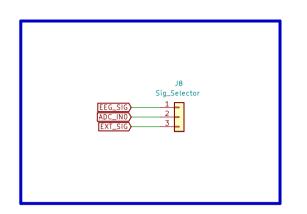
GND REFERENCE (GND1 : 6[V])



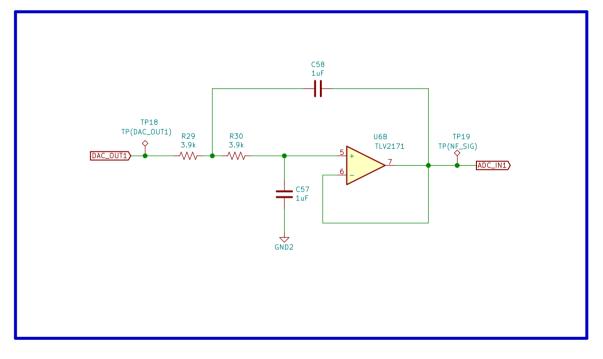
GND REFERENCE (GND2: 1.65[V])



EXTERNAL SIGNAL



ADC_INO INPUT SELECTOR



2th Order LPF with Unit DC Gain Post Filter (fc = 40Hz)

Designed by Ganghyeok Lim

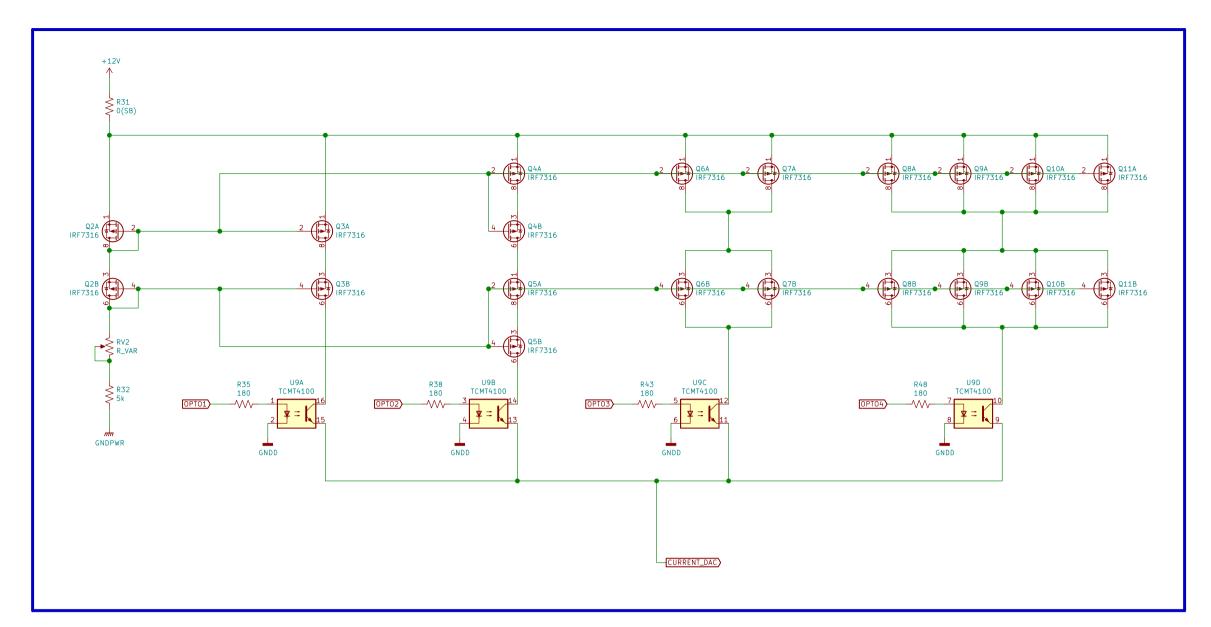
Arkx

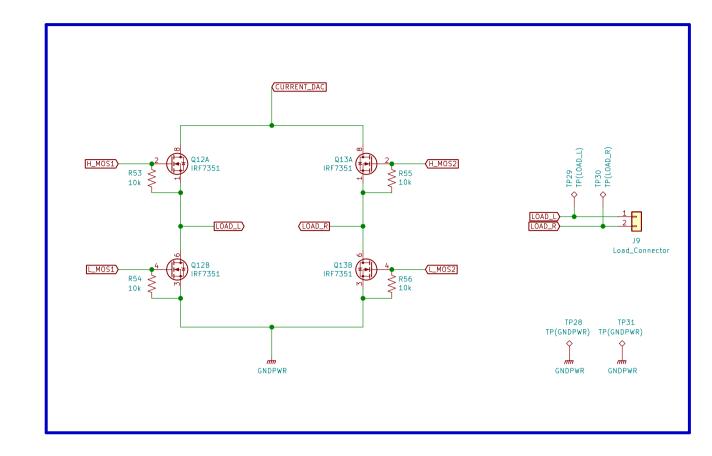
Sheet: /EEG Measurement & Stimulation System (2/4)/
File: file603BAA17.sch

Title: EEG Measurement & Brain Stimulation System (2/4)

Size: User | Date: 2021-04-09 | Rev: Ver1.0A

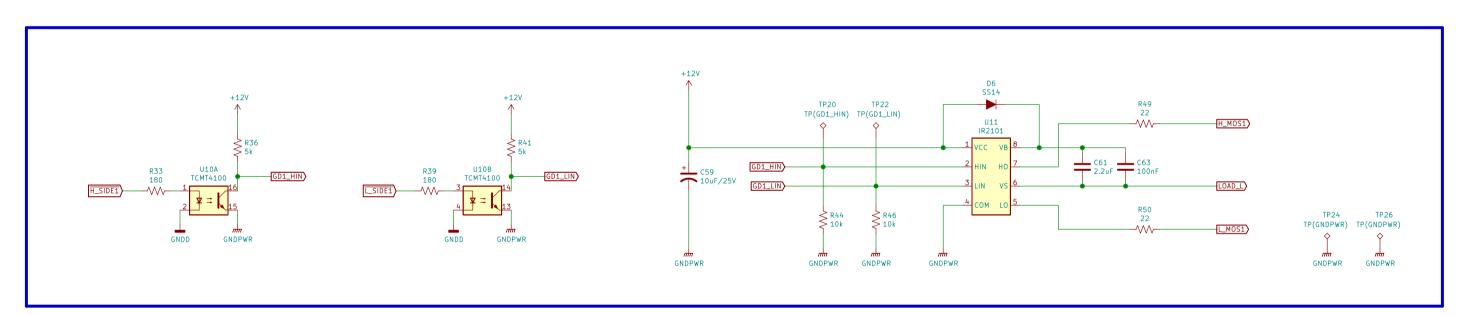
KiCad E.D.A. kicad (5.1.7)-1 | Id: 2/4





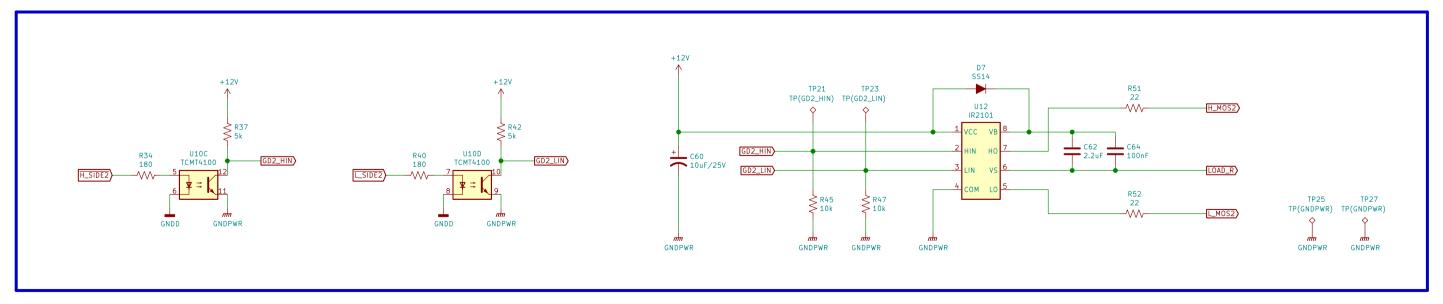
BI-PHASIC BIPOLAR CURRENT DRIVER

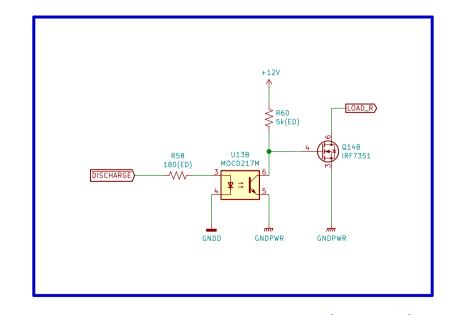
CURRENT STEERING DAC



BIPOLAR PULSE SHAPING GATE DRIVER (LEFT)

PASSIVE DISCHARGE (LEFT)

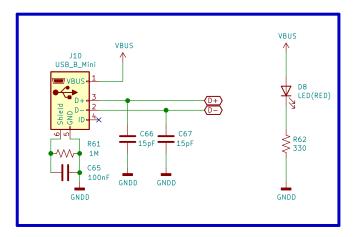




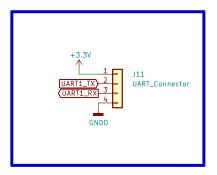
BIPOLAR PULSE SHAPING GATE DRIVER (RIGHT)

PASSIVE DISCHARGE (RIGHT)

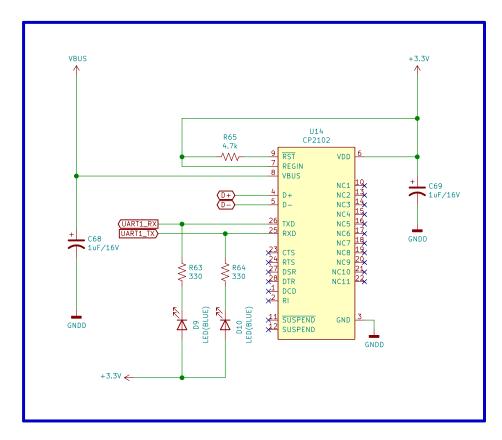
Designed by Ga	nghyeok Lim			
Arkx				
Sheet: /EEG Me	asurement & Stimulatio	n System (3/4)/		
File: file609452	93.sch			
Title: EEG N	leasurement & Bra	ain Stimulation	System	(3/4)
Size: User	Date: 2021-04-09			Rev: Ver1.0A
KiCad E.D.A. ki	cad (5.1.7)-1			ld: 3/4
		10		



USB-B MINI CONNECTOR



UART CONNECTOR



USB to UART BRIDGE

Designed by Gar	nahveok Lim			
Arkx				
Sheet: /EEG Me File: file61D3EB		ulation System (4/4)/		
Title: EEG M	leasurement &	Brain Stimulatio	n System	(4/4)
Size: A4	Date: 2021-04	-09		Rev: Ver1.0A
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