+5V0

+3V0

R1
15 kOhm

R2
15 kOhm

U1

GND

GND

EEG to A1/A2

Active EEG Lead

R6
1350 Ohm

EEG to A1/A2

U2
AD620

Rg
Vs−
Rg
Vs+
Ref
−
+

C3
10 µF

R5
15 kOhm

RV1
2 MOhm

1 MOhm
R10

U4

C1
220 nF

R3
12 Ohm

C2
10 µF

U3

R4
270 kOhm

R7
1 MOhm

D1
3.3V

C4
10 µF

U5
ADS1115IDGS

VDD
ALERT/RDY
AIN0
AIN1
AIN2
AIN3
GND
SCL
SDA
ADDR

RaspberryPiZero
RaspberryPiZero
RaspberryPiZero
RaspberryPiZero

Microcontroller GND

Microcontroller GND

G=2506
Set 1M Pot to 500 kOhm before starting circuit and adjusting
Center signal around 0.128V to Microcontroller GND

Sheet: /
File: EEG_Differential_Into_ADC_For_Full_Scale_Range.kicad_sch

Title: *EEG Circuit*

| Size: A4 | Date: 2025−12−26 | Rev: 8 |
|---|---|---|
| KiCad E.D.A. 9.0.3 | | Id: 1/1 |