

1 2 3 4 5

Input Buffer

DC Coupling
H2

IN_CH1

RF1 BNC

SHIELD SIG GND SHIELD

SHIELD SIG GND SHIELD

GND

H1

H6

1

OVER/UNDER VOLTAGE PROTECTION

+3.3V -2.5V

1N4148WS T4 D1

D2 1N4148WS T4

C15
6.2-30pF

C13
47pF

R3
330k

FREQUENCY COMPENSATION

$22\text{pF} * 1\text{M} / 330\text{k} = 67\text{pF}$

BUF_OUT_CH1

INPUT BUFFER

Inverting configuration
1M input resistance

-2.5V GND C5 10uF C3 100nF U1 MCP6002T-I/SN

GND -VSS +INA2 -INA1 OUTA OUTB VDD

GND C4 100nF C6 10uF

+3.3V R4 330k C28 47pF C32 6.2-30pF

-2.5V

R2 1M

C17 22pF

H3

DC Coupling

IN_CH2

GND

GND

GND

GND

GND

2

TITLE:

FScope-250k5-v2

REV: 4

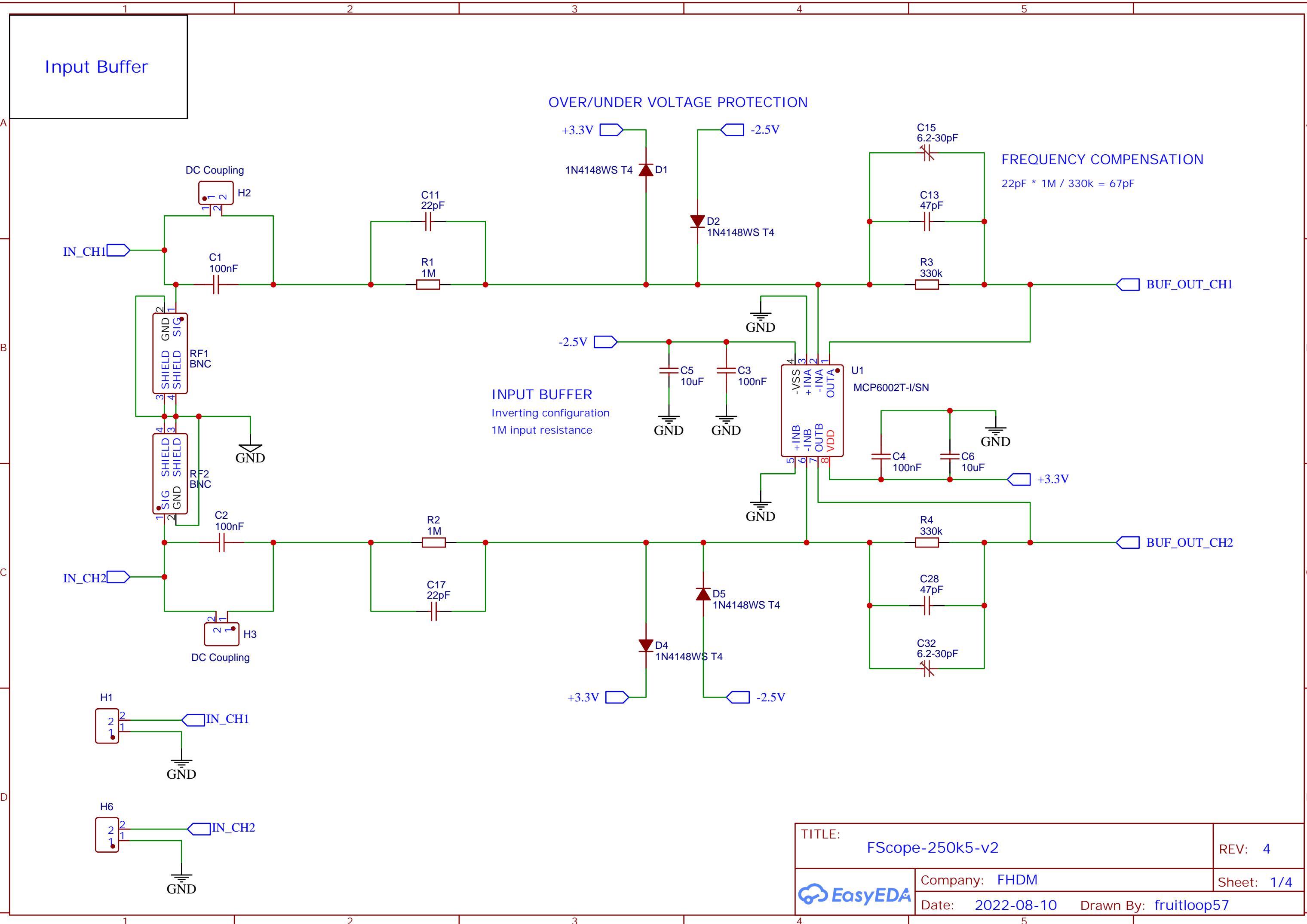
EasyEDA

Company: FHDM

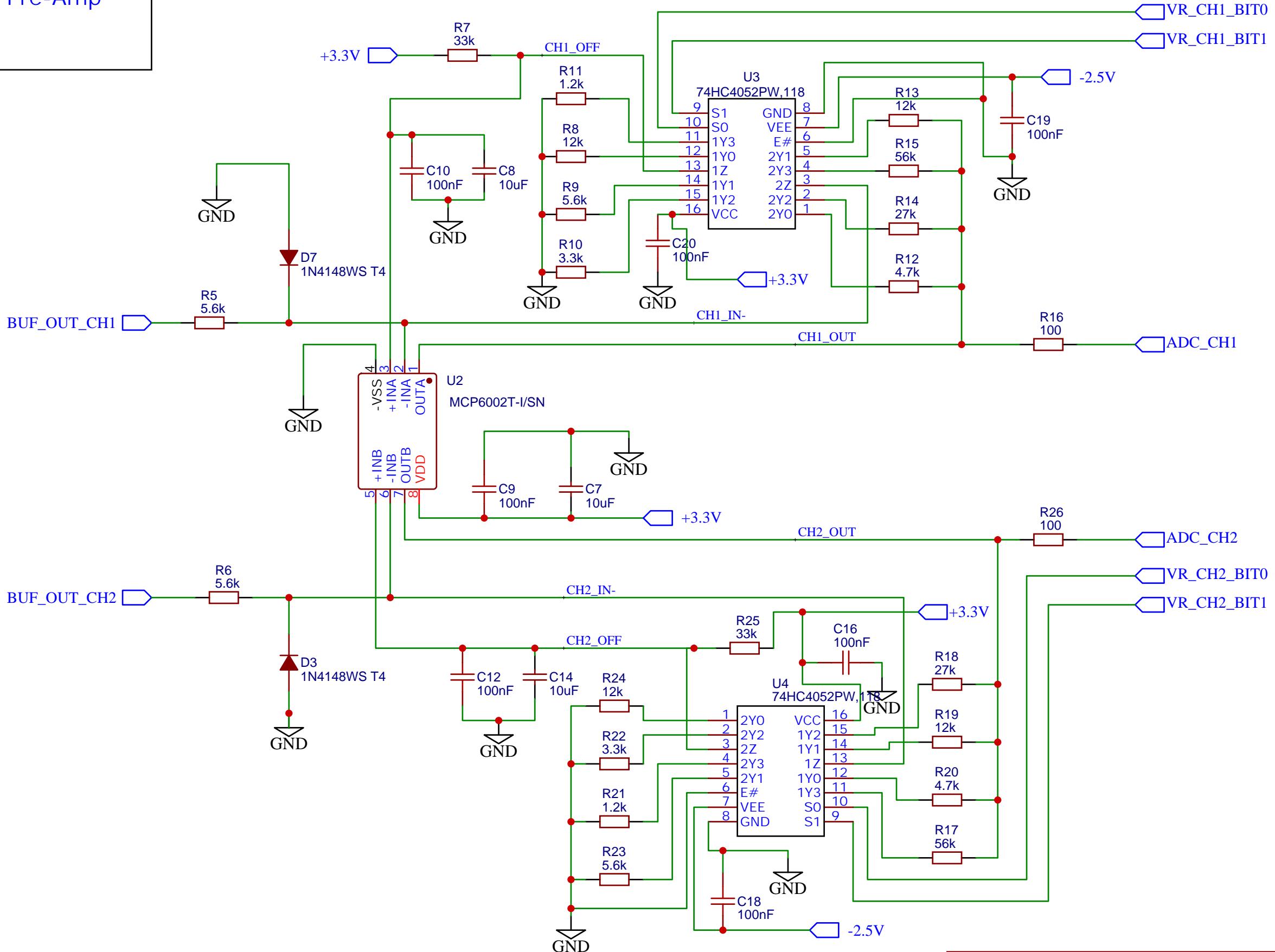
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Date: 2022-08-10

Drawn By: fruitloop57



Pre-Amp



TITLE:

FScope-250k5-v2

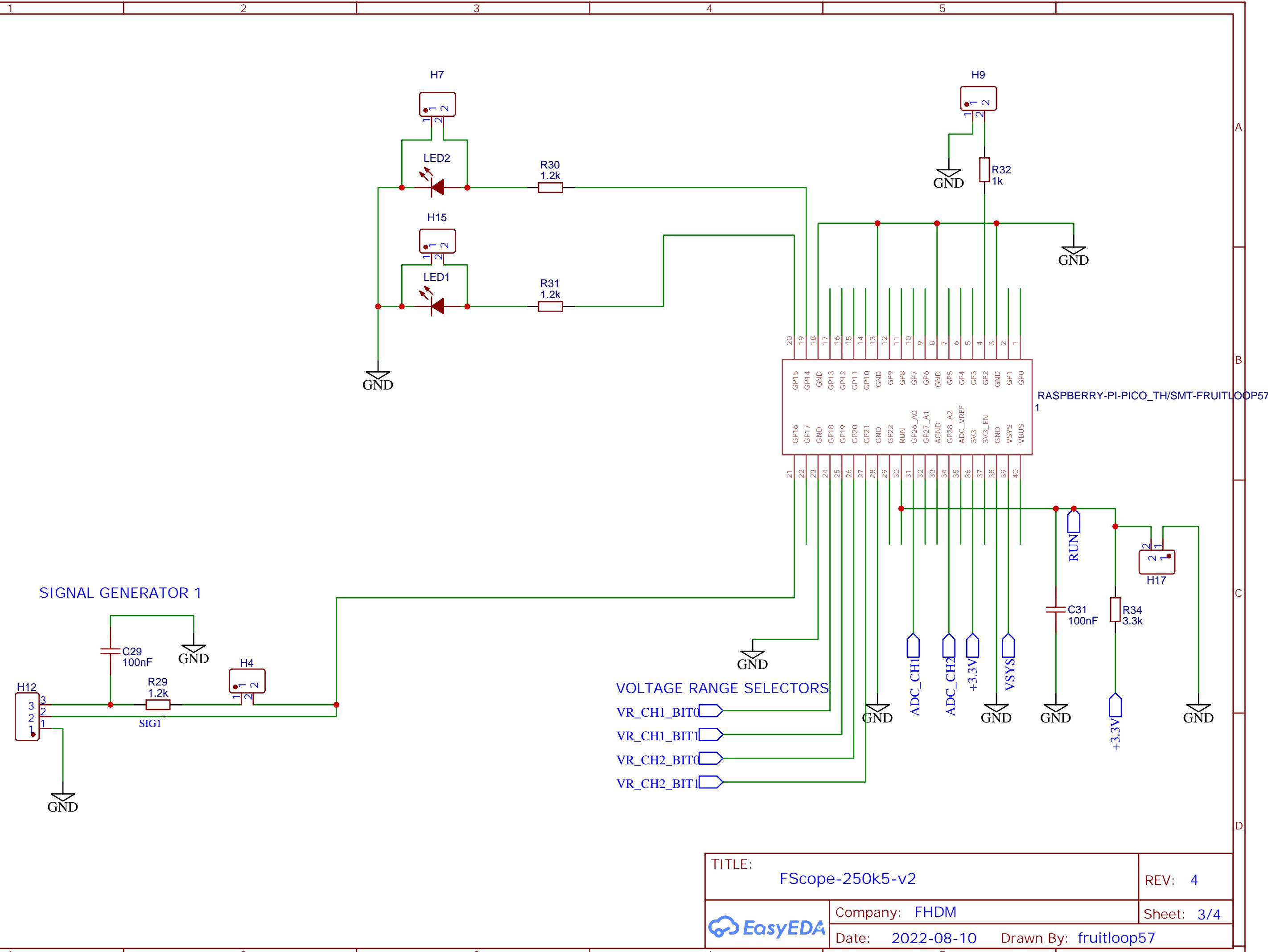
REV: 4

EasyEDA

Company: FHDM

Sheet: 2/4

Date: 2022-08-10 Drawn By: fruitloop57



1

2

3

4

5

NEGATIVE VOLTAGE GENERATOR

A

B

C

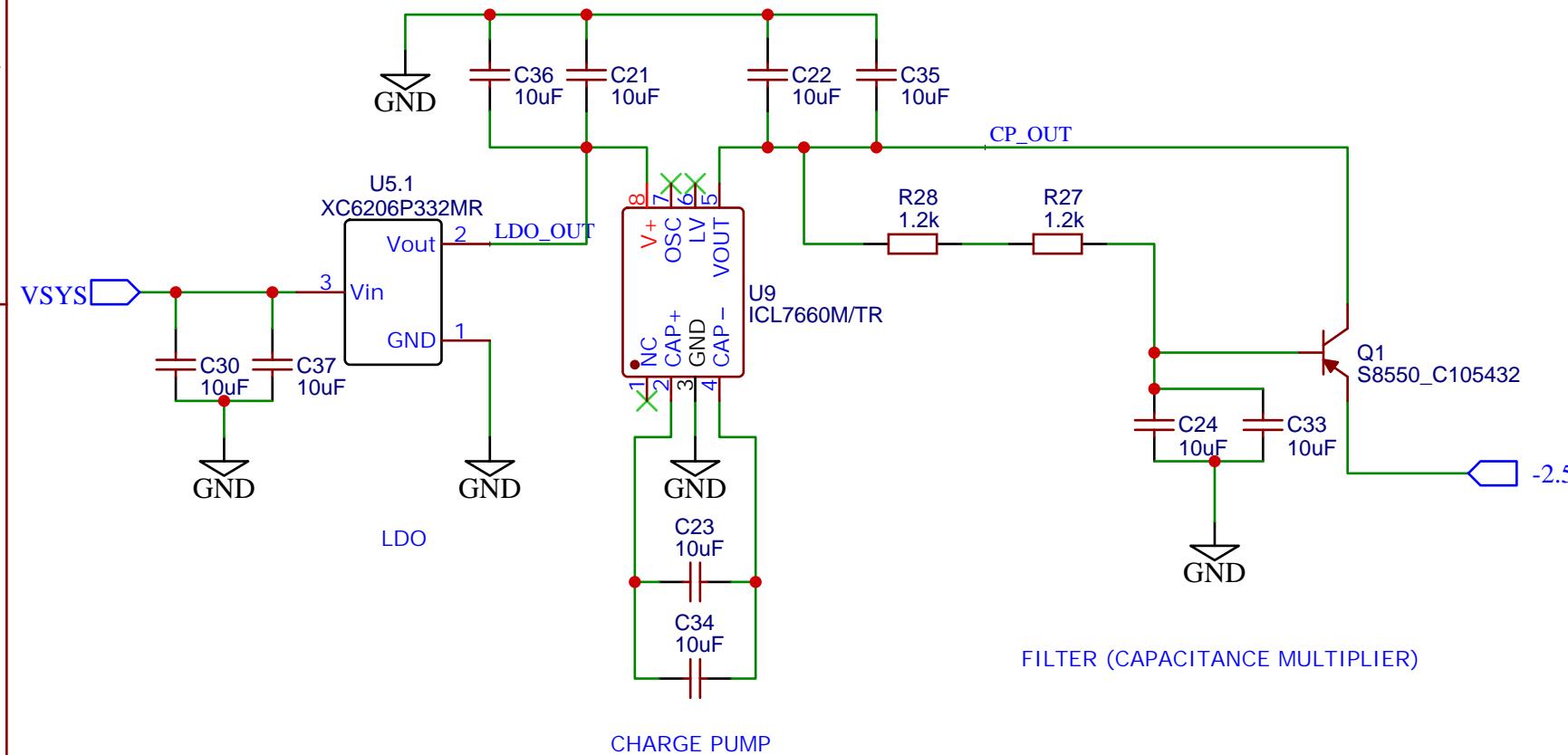
D

A

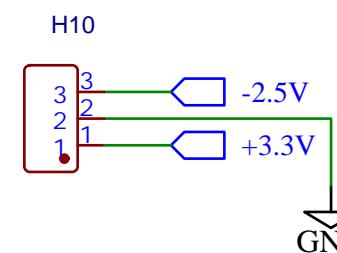
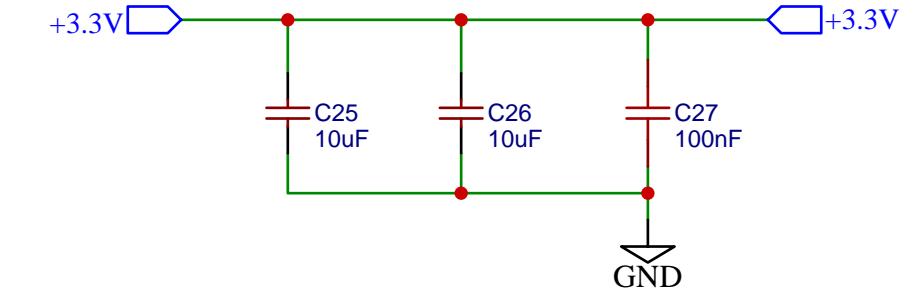
B

C

D



+3.3V RAIL



TITLE:

FScope-250k5-v2

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