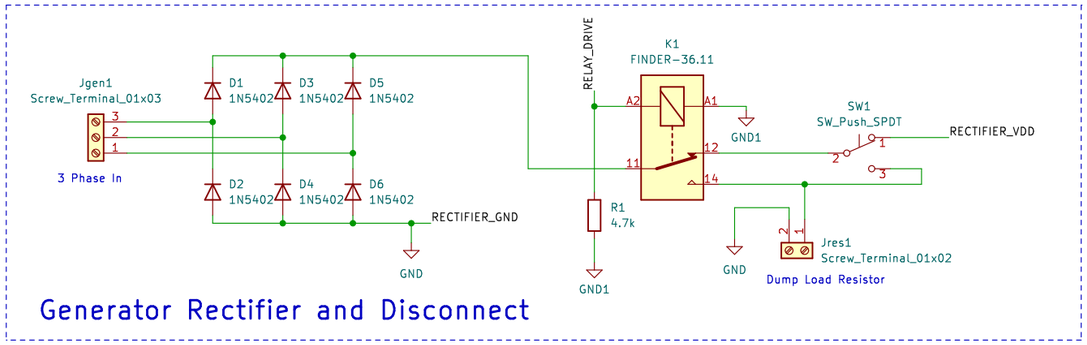
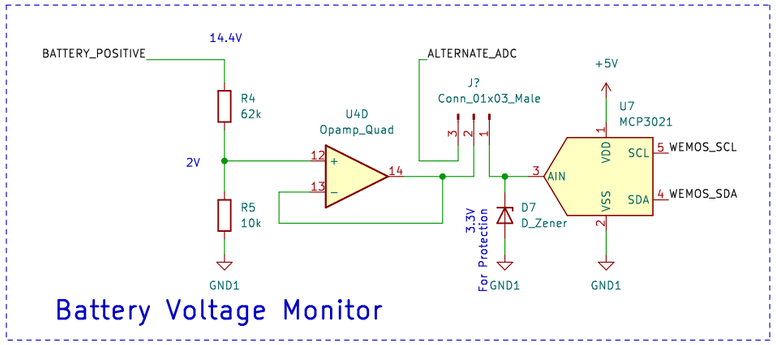
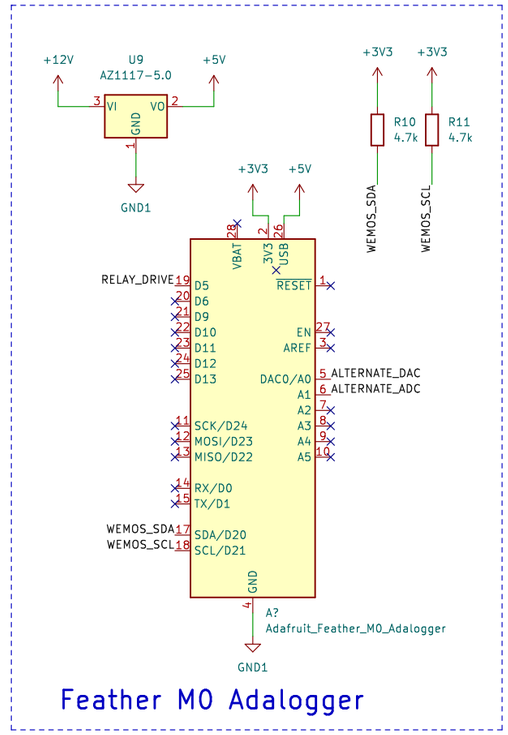
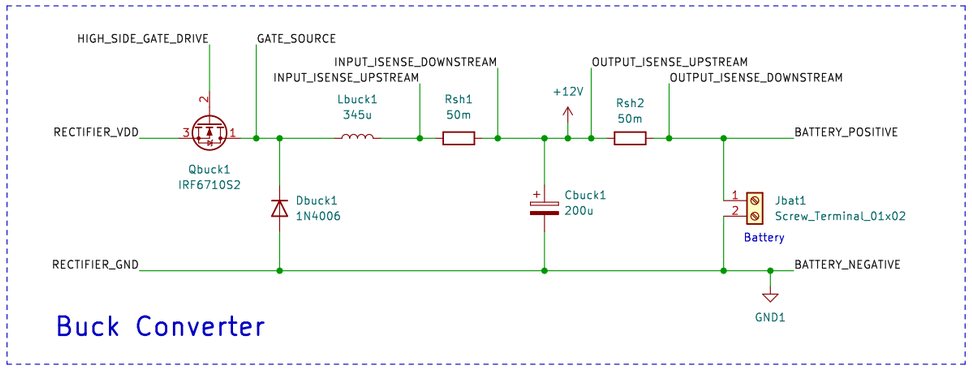
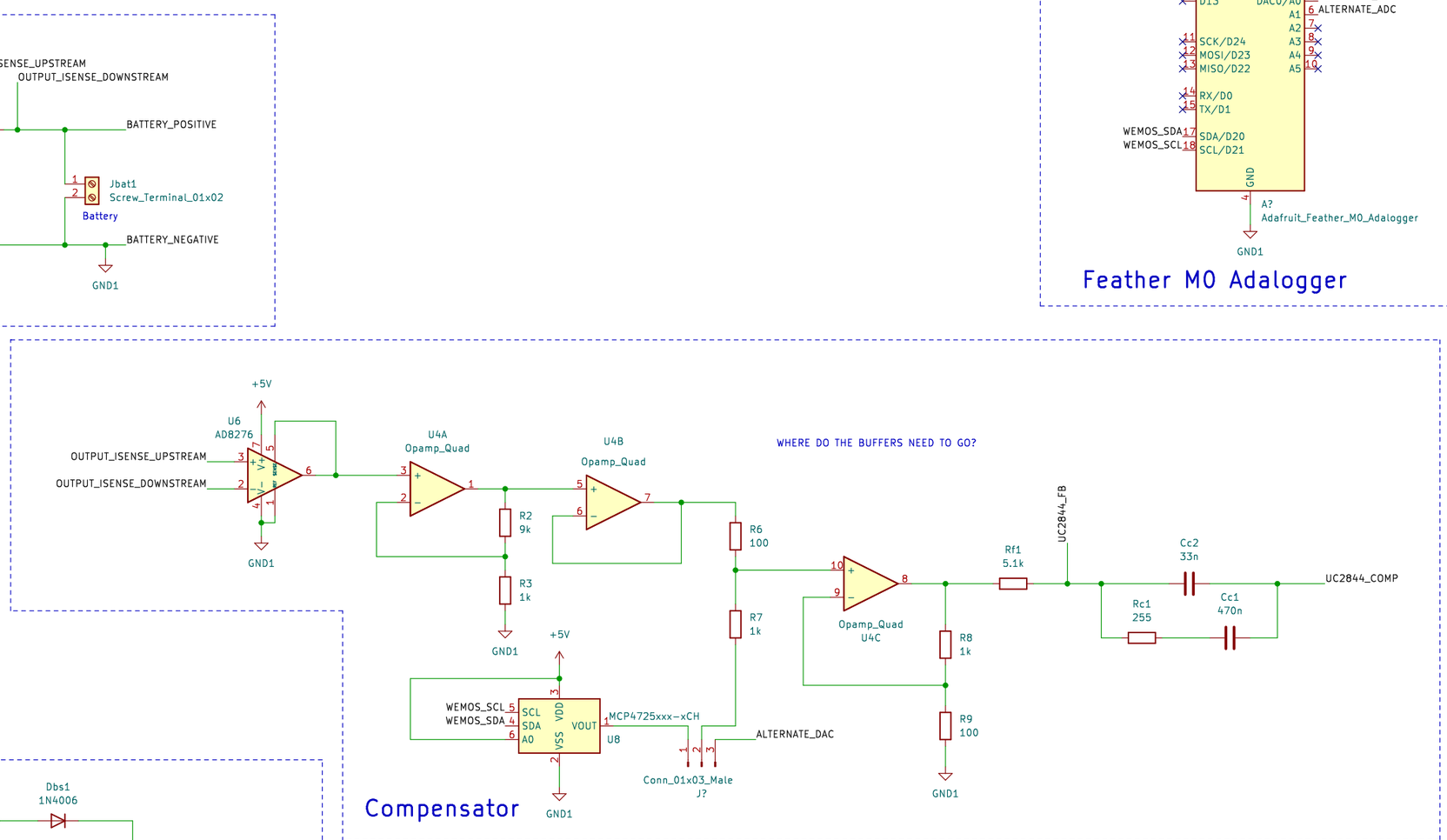
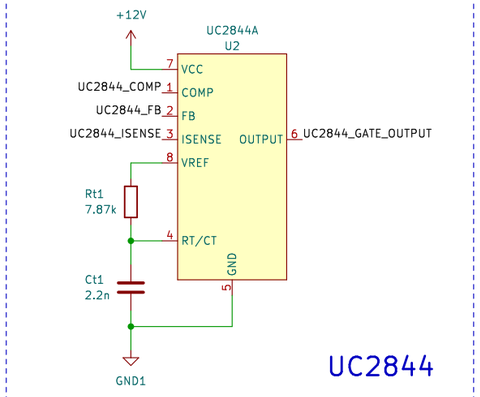

Jgen1
Screw_Terminal_01x03
3 Phase In
D1
1N5402
D3
1N5402
D5
1N5402
D2
1N5402
D4
1N5402
D6
1N5402
RECTIFIER_GND
GND
RELAY_DRIVE
K1
FINDER-36.11
A2
A1
12
11
14
GND1
R1
4.7k
GND1
SW1
SW_Push_SPDT
RECTIFIER_VDD
GND
Jres1
Screw_Terminal_01x02
Dump Load Resistor
Generator Rectifier and Disconnect

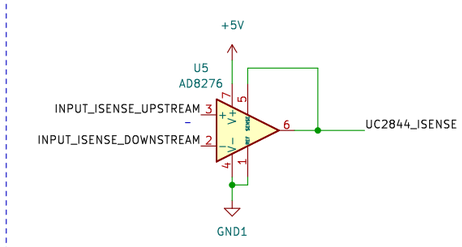

BATTERY_POSITIVE
14.4V
R4
62k
2V
R5
10k
GND1
U4D
Opamp_Quad
12
13
14
ALTERNATE_ADC
J?
Conn_01x03_Male
3.3V
For Protection
D7
D_Zener
GND1
+5V
U7
MCP3021
VDD
AIN
VSS
SCL
SDA
5
WEMOS_SCL
4
WEMOS_SDA
GND1
Battery Voltage Monitor

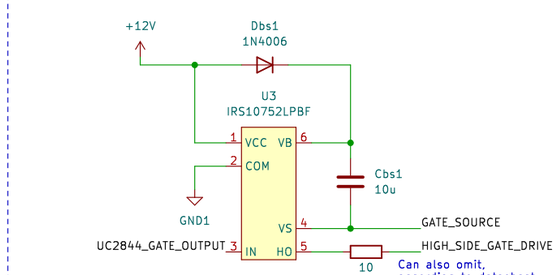

+12V
U9
AZ1117-5.0
+5V
VI
VO
GND
GND1
+3V3
+3V3
R10
4.7k
R11
4.7k
WEMOS_SDA
WEMOS_SCL
+3V3
+5V
VBAT
3V3
USB
RESET
RELAY_DRIVE
19
D5
20
D6
21
D9
22
D10
23
D11
24
D12
25
D13
27
EN
3
AREF
DAC0/A0
5
ALTERNATE_DAC
A1
6
ALTERNATE_ADC
A2
7
A3
8
A4
9
A5
10
SCK/D24
MOSI/D23
MISO/D22
RX/D0
TX/D1
WEMOS_SDA
17
WEMOS_SCL
18
SDA/D20
SCL/D21
GND
4
A?
Adafruit_Feather_M0_Adalogger
GND1
Feather M0 Adalogger

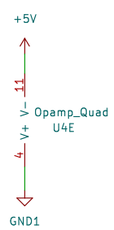

HIGH_SIDE_GATE_DRIVE
GATE_SOURCE
INPUT_ISENSE_DOWNSTREAM
INPUT_ISENSE_UPSTREAM
Lbuck1
345u
Rsh1
50m
+12V
OUTPUT_ISENSE_UPSTREAM
Rsh2
50m
OUTPUT_ISENSE_DOWNSTREAM
RECTIFIER_VDD
BATTERY_POSITIVE
Qbuck1
IRF6710S2
Dbuck1
1N4006
Cbuck1
200u
Jbat1
Screw_Terminal_01x02
Battery
RECTIFIER_GND
BATTERY_NEGATIVE
GND1
Buck Converter


+5V
U6
AD8276
OUTPUT_ISENSE_UPSTREAM
OUTPUT_ISENSE_DOWNSTREAM
GND1
U4A
Opamp_Quad
U4B
Opamp_Quad
WHERE DO THE BUFFERS NEED TO GO?
R2
9k
R3
1k
GND1
R6
100
R7
1k
+5V
WEMOS_SCL
WEMOS_SDA
MCP4725xxx-xCH
U8
ALTERNATE_DAC
Conn_01x03_Male
J?
GND1
Opamp_Quad
U4C
R8
1k
R9
100
GND1
Rf1
5.1k
UC2844_FB
Cc2
33n
Rc1
255
Cc1
470n
UC2844_COMP
Compensator


+12V
UC2844A
U2
VCC
UC2844_COMP
COMP
UC2844_FB
FB
UC2844_ISENSE
ISENSE
OUTPUT
6
UC2844_GATE_OUTPUT
VREF
Rt1
7.87k
RT/CT
Ct1
2.2n
GND
5
GND1
UC2844


+5V
U5
AD8276
INPUT_ISENSE_UPSTREAM
INPUT_ISENSE_DOWNSTREAM
UC2844_ISENSE
GND1
UC2844 Isense Connection


+12V
Dbs1
1N4006
U3
IRS10752LPBF
VCC
VB
COM
Cbs1
10u
GND1
VS
GATE_SOURCE
UC2844_GATE_OUTPUT
IN
HO
HIGH_SIDE_GATE_DRIVE
10
R?
Can also omit, according to datasheet
Bootstrap Gate Driver


+5V
V-
11
Opamp_Quad
U4E
V+
4
GND1