

The schematic diagram illustrates the battery voltage measurement circuit. It features an MP1605GTF-Z DC-DC converter (U2) with VIN connected to a 3V3 EN pin and VOUT connected to a 3V3 pin. The input voltage (VIN) is 2.3V-5.5V, and the output voltage (VOUT) is 0.5V * (1 + 200/44.2) = 3.314V. The current (Iout) is Max 2A. The circuit also includes a 3V3 voltage regulator (U1) and a BAT_ADC module. The 3V3 voltage regulator has a 100kF capacitor (C4) on its input and a 100nF capacitor (C7) on its output. The BAT_ADC module has a 100kF capacitor (C9) on its input and a 100nF capacitor (C10) on its output. The circuit also shows a 3V3 voltage regulator and a BAT_ADC module.

[illegible]

3V3

NC/10K
R35

0R
R37

GND

EXIO0 4
EXIO2 5
EXIO3 6
EXIO4 7
GND 8

U4

A0 1
A1 2
A2 3
A3 4
P0 5
P1 6
P2 7
P3 8
GND 9

VCC 16
SCL 15
SCL 14
SCL 13
SCL 12
SCL 11
SCL 10
SCL 9
SCL 8

EXIO SDA 16
EXIO SDA 15
EXIO SCL 14
EXIO SCL 13
EXIO SCL 12
EXIO SCL 11
EXIO SCL 10
EXIO SCL 9
EXIO SCL 8

3V3

GND

CH 1
100nF

R38 10K

TC9A54PWR

EXIO SDA SDA
EXIO SCL SCL

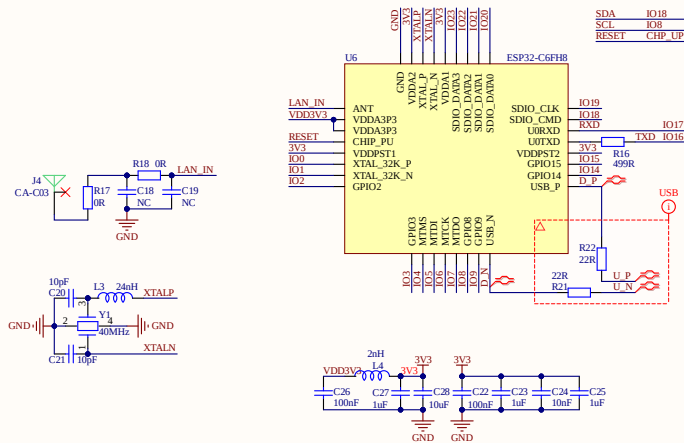
U3 QMIB659C

Pin	Signal
1	GND
2	IMU_SDA
3	IMU_SCL
4	3V3
5	IMU_INT1
6	IMU_INT2
7	SDO/SAO
8	SDA
9	SCL
10	CS
11	INT1
12	INT2
13	VDD
14	VO DIO
15	VDD
16	GND
17	SDO
18	SCL
19	NC
20	NC
21	NC
22	3V3

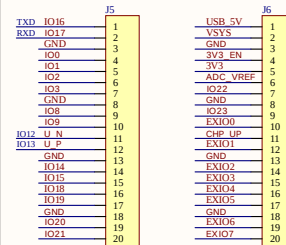
3V3
GND

100nF
C15
C16
100nF

Pin	Signal
1	IMU_SDA
2	IMU_SCL
3	SDA
4	SDO
5	IMU_INT1
6	IMU_INT2
7	EXIO0
8	EXIO1

[illegible]

GPIO_OUT



GPIO	LCD	SD Card	IMU	UART	I2C	KEY_IO	Other
IO0							BAT_ADC
IO1						IO1	
IO2							IO2
IO3	RGB_IO						IO3
IO4	LCD_DIN	SD_MOSI					IO4
IO5	LCD_CLK	SD_CLK					IO5
IO6	LCD_DC						IO6
IO7	LCD_CS						IO7
IO8			IMU_SCL		SCL		IO8
IO9						BOOT0	IO9
IO12							IO12
IO13							IO13
IO14	LCD_RST						IO14
IO15	LCD_BL						IO15
IO16				U0TX			IO16
IO17				U0RX			IO17
IO18			IMU_SDA		SDA		IO18
IO19		SD_MISO					IO19
IO20		SD_CS					IO20
IO21							IO21
IO22							IO22
IO23							IO23
RESET						RESET	
EXIO0			IMU_INT1				EXIO0
EXIO1			IMU_INT2				EXIO1
EXIO2							EXIO2
EXIO3							EXIO3
EXIO4							EXIO4
EXIO5							EXIO5
EXIO6							EXIO6
EXIO7							EXIO7

[illegible]