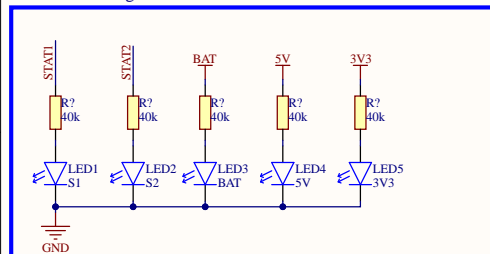


AMS1117 5V to 3.3V Regulator

The diagram shows an AMS1117-3.3 voltage regulator. The input side features a 5V supply connected to the VIN pin via a 10nF capacitor (C8). A 10uF capacitor (C9) is connected between VIN and ground. The regulator's GND pin is connected to ground. The output side shows the VOUT pin connected to a 3V3 output line through a 10nF capacitor (C10). A 100nF capacitor (C11) is connected between VOUT and ground, and a 47uF capacitor (C7) is connected between the output line and ground.

[illegible][illegible][illegible][illegible]

The diagram shows four motor drivers, labeled J3, J5, J8, and J11, connected to a power supply. Each driver has a PWM input, a GND input, and a motor output. The PWM inputs are connected to a common PWM line, and the GND inputs are connected to a common GND line. The motor outputs are connected to a common motor line.

- J3:** PWM3 1, GND, M1
- J5:** PWM2 1, GND, M2
- J8:** PWM3 1, GND, M3
- J11:** PWM4 1, GND, M4

Pin connection diagrams for the ATmega328P microcontroller:

- Top Diagram:** Shows connections for BATT, GND, 5V, VCC, RX1, TX1, RX2, TX2, SWIO, SWCLK, SWO, and Prog. pins. The ATmega328P is a 28-pin microcontroller, and the diagrams show the connections for the 28 pins. The pins are labeled 1 through 28. The connections are: BATT to pin 1, GND to pin 2, 5V to pin 3, VCC to pin 4, RX1 to pin 5, TX1 to pin 6, RX2 to pin 7, TX2 to pin 8, SWIO to pin 9, SWCLK to pin 10, SWO to pin 11, and Prog to pin 12. The diagrams also show the connections for the 28 pins of the ATmega328P.
- Bottom Diagram:** Shows connections for SCLK, MISO, MOSI, and GND pins. The ATmega328P is a 28-pin microcontroller, and the diagrams show the connections for the 28 pins. The pins are labeled 1 through 28. The connections are: SCLK to pin 1, MISO to pin 2, MOSI to pin 3, and GND to pin 4. The diagrams also show the connections for the 28 pins of the ATmega328P.

SX1278 LoRa RF Module

IC8
BME280

3V3
GND

C22 100nF
C23 100nF

VDD VDDIO SDO GND CSB SDI SCK GND

3V3
GND

I2CSDA
I2CSCL

LED1 1 2
2
GND
exLED1

LED2 1 2
2
GND
exLED2

LED3 1 2
2
GND
exLED3

LED4 1 2
2
GND
exLED4

IC10

Pin	Label	Connection
1	VIN	3V3
2	INT	3V3
3	ADR	GND
4	PS0	SCL
5	PS1	SDA
6	RST	BNORST

Adafruit BNO055

The diagram shows the SPI interface between the SX1278 (IC9) and the SX1272 (J19). The SX1278 is connected to the 3V3 supply and ground through capacitors C29 and C30. The SX1278 is also connected to the SX1272 via SPI pins: MOSI, SCLK, and SSX5. The SX1272 is connected to an SMA Antenna through a matching network J19.



Title TARS - Quadcopter Flightcontroller V2			
Size A3	Number Main Controller	Revision REV. A	
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