

The schematic diagram illustrates the electrical connections between an ESP8266 SMT Module (labeled U2) and an MMA8451QR1 IMU (labeled U3).

ESP8266 SMT Module (U2) Connections:

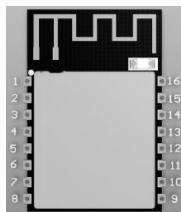
- VCC (Pin 8):** Connected to a +3.3V supply through a 10µF capacitor (C5).
- GND (Pin 9):** Connected to ground.
- EN (Pin 3):** Connected to a +3.3V supply through a 4.7k resistor (R3).
- RST (Pin 1):** Connected to a +3.3V supply through a 4.7k resistor (R4).
- IO0 (Pin 12):** Labeled PROG.
- TXD0 (Pin 16):** Labeled TX.
- RXD0 (Pin 15):** Labeled RX.
- IO14 (SCL) (Pin 5):** Connected to the SCL pin of the IMU through a 4.7k resistor (R1).
- IO2 (SDA) (Pin 11):** Connected to the SDA pin of the IMU through a 4.7k resistor (R2).
- IO16 (Pin 4):** Connected to the INT1 pin of the IMU.
- IO15 (Pin 10):** Connected to ground.

MMA8451QR1 IMU (U3) Connections:

- VDD (Pin 14):** Connected to a +3.3V supply.
- VDDIO (Pin 1):** Connected to a +3.3V supply.
- BYP (Pin 2):** Connected to ground.
- SCL (Pin 4):** Connected to the SCL pin of the IMU through a 4.7k resistor (R1).
- SDA (Pin 6):** Connected to the SDA pin of the IMU through a 4.7k resistor (R2).
- INT1 (Pin 11):** Connected to the INT1 pin of the IMU.
- GND (Pins 5, 12, 10):** Connected to ground.

Capacitors:

- C5: 10µF, connected to VCC.
- C6: 0.1µF, connected to VDD.
- C7: 0.1µF, connected to VDDIO.
- C8: 10µF, connected to VDD.



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