

CONNECTORS

The diagram shows a 4-pin header connector labeled J1HDR-M-2.54_1x4. The pins are numbered 1 through 4. Pin 1 is connected to a +3V3 power supply. Pin 2 is connected to a signal line labeled IO21. Pin 3 is connected to a signal line labeled IO22. Pin 4 is connected to a GND (ground) connection.

Temperature Sensor

U3
LM35DZ

1 +VS 2 VOUT 3 GND

+3V3

GND

IO32

The diagram shows a power supply circuit. A +5V input is connected to a 2K resistor (R2) and a capacitor (C3, 10uF). The other end of R2 is connected to the VIN pin of a voltage regulator (U6, AMS1117-3.3). The GND pin of U6 is connected to ground. The VOUT pin of U6 is connected to a +3V3 output, which is also connected to a capacitor (C4, 10uF) to ground. A red LED is connected in series with R2 to the +5V input.

Switch Buttons

The diagram shows an I2C bus with two signal lines, SDA_3V (blue) and SCL_3V (green), and two power lines, +3V3 (red) and IO22 (blue). Pull-up resistors R16, R14, R13, and R15 (all 10k) are connected between the +3V3 line and the SDA_3V, SCL_3V, SDA_3V, and SCL_3V lines respectively. MOSFETs Q4 and Q3 (BSS138) are connected between the +3V3 line and the SDA_3V and SCL_3V lines respectively, with their gates connected to the IO22 and IO21 lines.

MPU Accelerometer

MPU-6050_C24112