

The diagram illustrates the pin configuration and external component connections for the MAX7456 (or AT7456) module. The central component is the MAX7456EUI+, a yellow rectangular chip with pins numbered 1 through 29.

**Power Supply Connections:**

- VIN:** Connected to a 100nF capacitor and a 75 ohm resistor. The VIN pin is connected to the 100nF capacitor, and the 75 ohm resistor is connected to the 75 pin.
- GND:** Connected to the 75 pin.
- OSD:** A 5V supply is connected to the 5 pin.

**Clock Connections:**

- XTAL1\_OSD:** Connected to the 1 pin.
- XTAL2\_OSD:** Connected to the 3 pin.
- 27Mhz:** A 27Mhz crystal is connected between the 1 and 3 pins.

**Signal and Control Connections:**

- CS:** Connected to the 8 pin.
- RESET:** Connected to the 19 pin.
- CLKIN:** Connected to the 5 pin.
- SAG:** Connected to the 25 pin.
- SCK:** Connected to the 10 pin.
- MOSI:** Connected to the 9 pin.
- VIN:** Connected to the 22 pin.

**Output and Feedback Connections:**

- HSYNC:** Connected to the 18 pin.
- VSYNC:** Connected to the 17 pin.
- CLKOUT:** Connected to the 7 pin.
- LOS:** Connected to the 11 pin.
- SDOUT:** Connected to the 12 pin.
- VOUT:** Connected to the 26 pin.
- XFB:** Connected to the 6 pin.
- AGND:** Connected to the 20 pin.
- DGND:** Connected to the 4 pin.
- PGND:** Connected to the 23 pin.

**Capacitor Connections:**


- 100nF:** Three 100nF capacitors are connected between the 18, 17, and 11 pins and the 20, 4, and 23 pins, respectively.

## 5V to 3.3V

The diagram shows the XC6206P332MR voltage regulator circuit. The input pin (VI, pin 3) is connected to a 5V source through a 1μF capacitor. The output pin (VO, pin 2) is connected to a 3.3V output through a 1μF capacitor. The ground pin (GND, pin 1) is connected to the common ground. A PWR\_FLAG pin (pin 4) is shown with a connection point but no specific component is detailed.


## JUMPER

power from servo




```
graph LR; 5V[5V] --- 1((1)); 1 --- 2((2)); 2 --- 5VBEC[5V-BEC]
```


## PINS




COMM




PPM




ALE




GPS



FTDI



ELE



THR

The diagram illustrates the wiring of an MPU6050 digital motion sensor. The central component is the MPU-6050 chip, which is connected to a breadboard. Power is provided by a 3.3V regulator with 10nF and 100nF decoupling capacitors. I2C communication is established through SDA (pin 24) and SCL (pin 9) using 4.7K pull-up resistors. The chip is connected to GND (pins 1, 18, 19, 20, 21, 22, 23, 24). The output pins (INT, AUX\_DA, AUX\_CLK, CPOUT, REGOUT) are shown with 2.2nF and 100nF capacitors connected to GND.