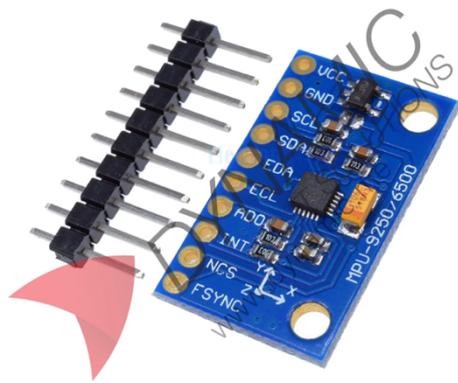


MPU-9250 9 Axis Attitude + Gyro + Accelerator + Magnetometer Sensor



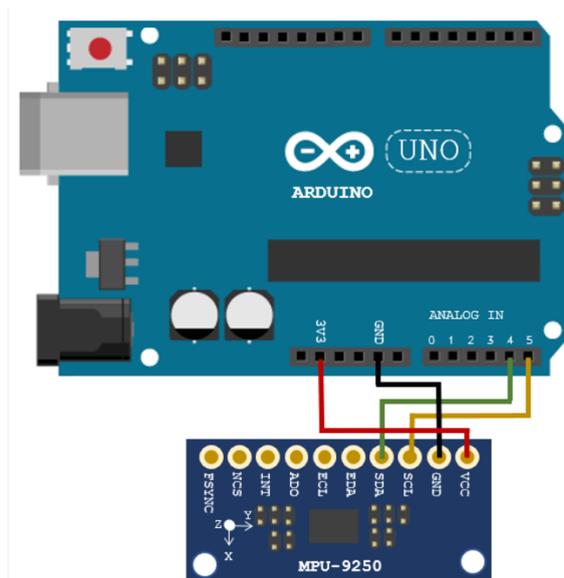
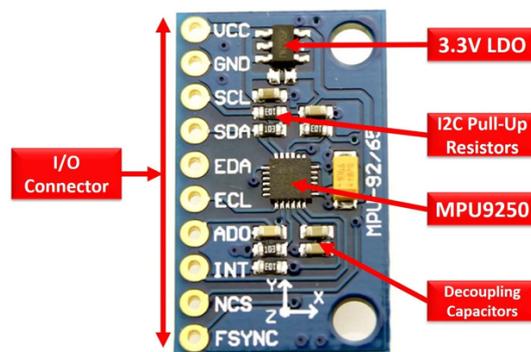
Features:

The MPU-9250 module is a compact 9-axis motion tracking sensor that integrates a 3-axis gyroscope, 3-axis accelerometer, and 3-axis magnetometer, along with an onboard digital motion processor (DMP) and temperature sensor. It includes built-in pull-up and pull-down resistors for simplified interfacing and a 3.3V regulator that enables 5V compatibility. Auxiliary I2C lines (EDA and ECL) are also available for connecting external sensors, making this module ideal for drones, robotics, and navigation systems.

Specifications	
Accelerometer Range	±16 g
Accelerometer Sensitivity	16,384 LSB/g
Gyroscope Range	±2000 °/s
Gyroscope Sensitivity	131 LSB/°/s
Magnetometer Range	±4800 μT
Magnetometer Sensitivity	0.6 μT/LSB
Supply Voltage	4.4–6.5 V (via onboard 3.3V LDO) or direct 3.3 V
Interface	I2C
I2C Address	0x68 (default), 0x69 if ADO is high
Board Dimensions	25.5 mm × 15.4 mm
Mounting Hole Diameter	3 mm
Weight	2.72 g
Use Cases	Drone stabilization, robotics, wearable sensors, AR/VR systems, navigation, motion tracking

Pinouts:

Pin Name	Type	Description
VCC	Power Input	Power input (4.4–6.5 V or direct 3.3 V via jumper)
GND	Power Ground	Common ground
SCL	I2C Clock	I2C clock line (pull-up onboard)
SDA	I2C Data	I2C data line (pull-up onboard)
EDA	I2C Data (Aux)	Auxiliary I2C data for external sensor
ECL	I2C Clock (Aux)	Auxiliary I2C clock for external sensor
ADO	Input	I2C address selection (pull-down onboard)
INT	Output	Interrupt output
NCS	Control	Chip select for SPI (not used in I2C mode)
FSYNC	Input	Frame sync input (pull-down onboard)



Product Pictures:

