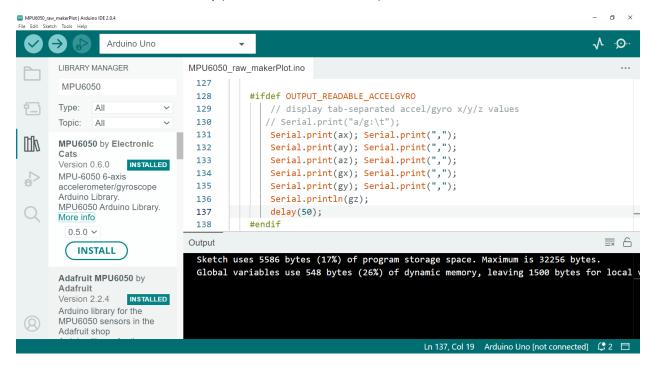
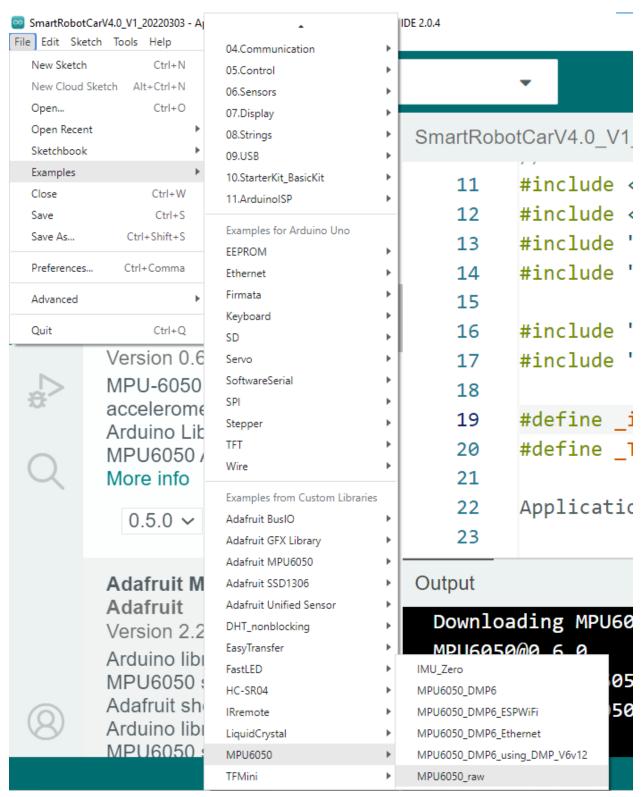
## Testing the MPU 6050 IMU on the Elegoo Robot Car V4

In the Arduino IDE, use the library (click the books on the left) and search for MPU 6050



Install MPU6050 by Electronic Cats

## Once installed, use the Menu File → Examples → MPU6050 → MPU6050\_raw



Upload and open the serial monitor, set baud rate for 38400

You should see a stream of data representing:

Acceleration X, Acceleration Y, Acceleration Z, Gyro X, Gyro Y and Gyro Z

Tilting or moving the car will change the values.

For plotting with MakerPlot-J, change the display code to the following (replace \t with a comma) and add a 50mS Delay. Comment out the first line.

```
// Serial.print("a/g:\t");
Serial.print(ax); Serial.print(",");
Serial.print(ay); Serial.print(",");
Serial.print(az); Serial.print(",");
Serial.print(gx); Serial.print(",");
Serial.print(gy); Serial.print(",");
Serial.println(gz);
delay(50);
```

Upload and close the serial monitor if open.

Open MakerPlot-J, select the first plot choice (4 meters), set the COM port and Baud at bottom left. To better auto-scale, near the bottom, CH2 may be stopped from showing. Click Connect and plot, Move the car around, tilt, note the changes.

