Evelta ADXL335 5V Triple-axis Accelerometer Breakout Analog Out

User Guide

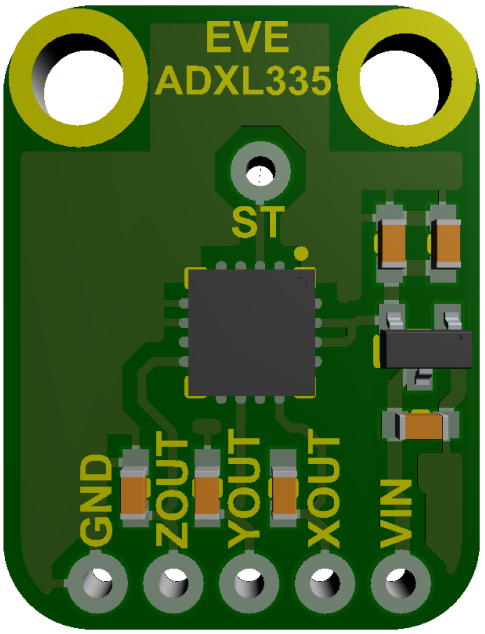
The EVE-ADXL335 is a simple breakout board that allows quick evaluation of the performance of the ADXL335 accelerometer. The ADXL335 is a 3-axis analog-output accelerometer with +-3 g measurement range. The small size 21x16 mm of the breakout board makes it easy to mount the accelerometer to an existing system without the need for additional hardware and with minimal effect on performance of the system and of the accelerometer.

The board measures acceleration with a minimum full-scale range of +-3 g. It can measure the static acceleration of gravity in tilt sensing applications, as well as dynamic acceleration resulting from motion, shock, or vibration.

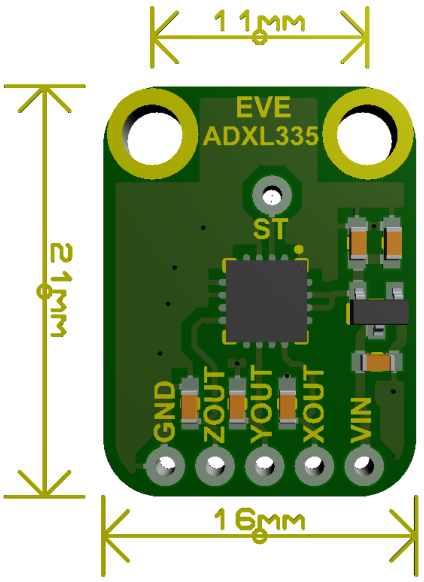
Key Features

- 3-axis sensing
- 10,000 g shock survival
- Low power - 350 uA (typical)
- 5V power supply
- 21x16 mm dimensions

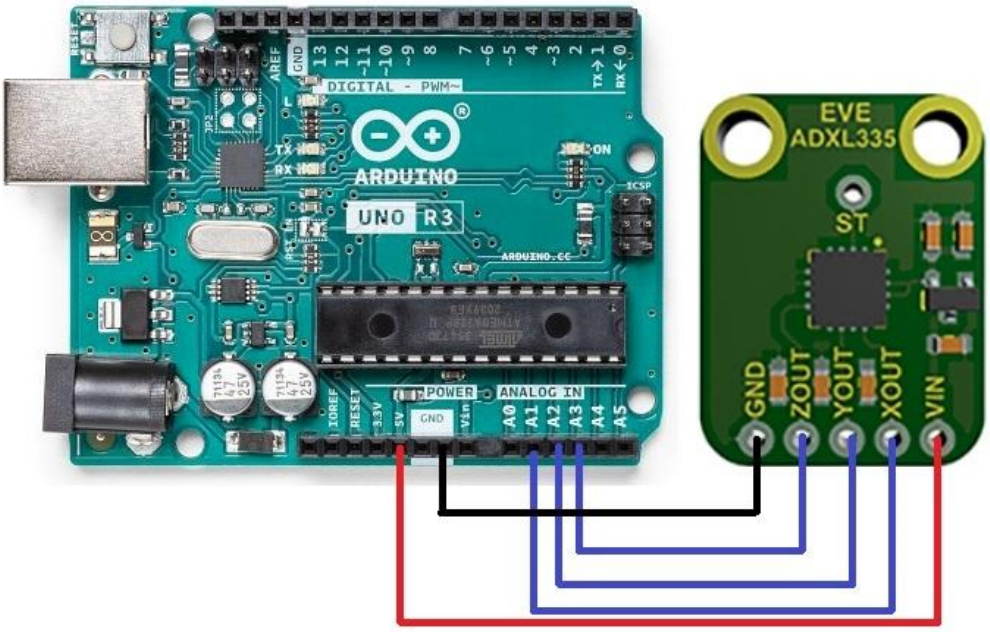
EVE-ADXL335 Board



EVE-ADXL335 Board Dimensions



Arduino Connection Diagram



Arduino Connection

Arduino Pin	EVE-ADXL335 Pin
5V	VIN
GND	GND
A1	XOUT
A2	YOUT
A3	ZOUT

Arduino Code

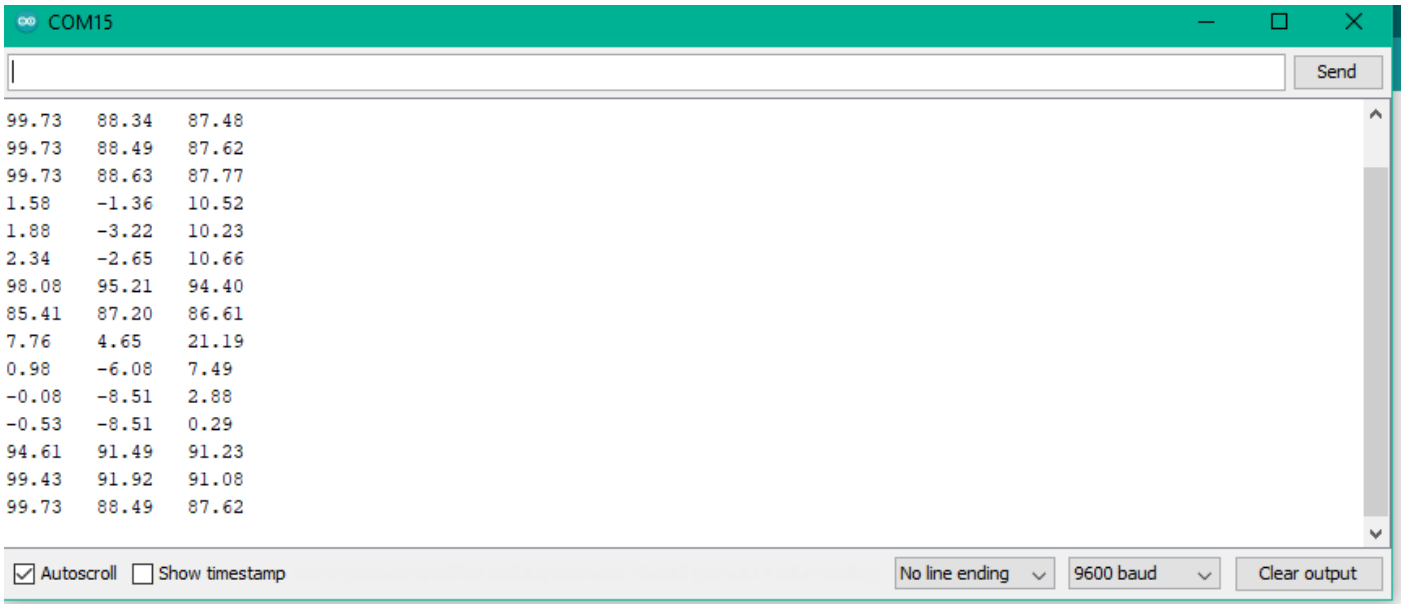
```
const int xaxis = A1; // x-axis of the accelerometer
const int yaxis = A2; // y-axis
const int zaxix = A3; // z-axis

void setup()
{
Serial.begin(9600);
}

void loop()
{
int x = analogRead(xaxis); //read data from x-axis
delay(1); //
int y = analogRead(yaxis); //read data from y-axis
delay(1);
int z = analogRead(zaxix); //read data from z-axis

float zero_G = 512.0; //ADC is 0~1023 the zero g output equal to Vs/2
float scale = 102.3; //ADXL335 Sensitivity is 330mv/g
//330 * 1024/3.3/1000
Serial.print(((float)x - 331.5)/65*9.8); //print x value on serial monitor
Serial.print("\t");
Serial.print(((float)y - 329.5)/68.5*9.8); //print y value on serial monitor
Serial.print("\t");
Serial.print(((float)z - 340)/68*9.8); //print z value on serial monitor
Serial.print("\n");
delay(1000); //wait for 1 second
}
```

Output



Graph Plotter