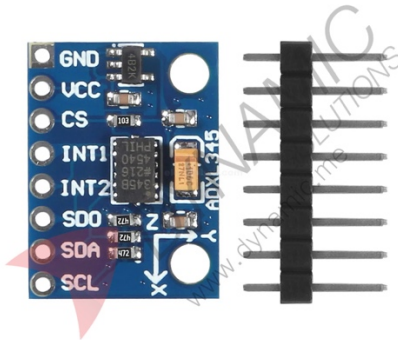


3 Axis Accelerometer IIC / SPI transmission GY-291 ADXL345



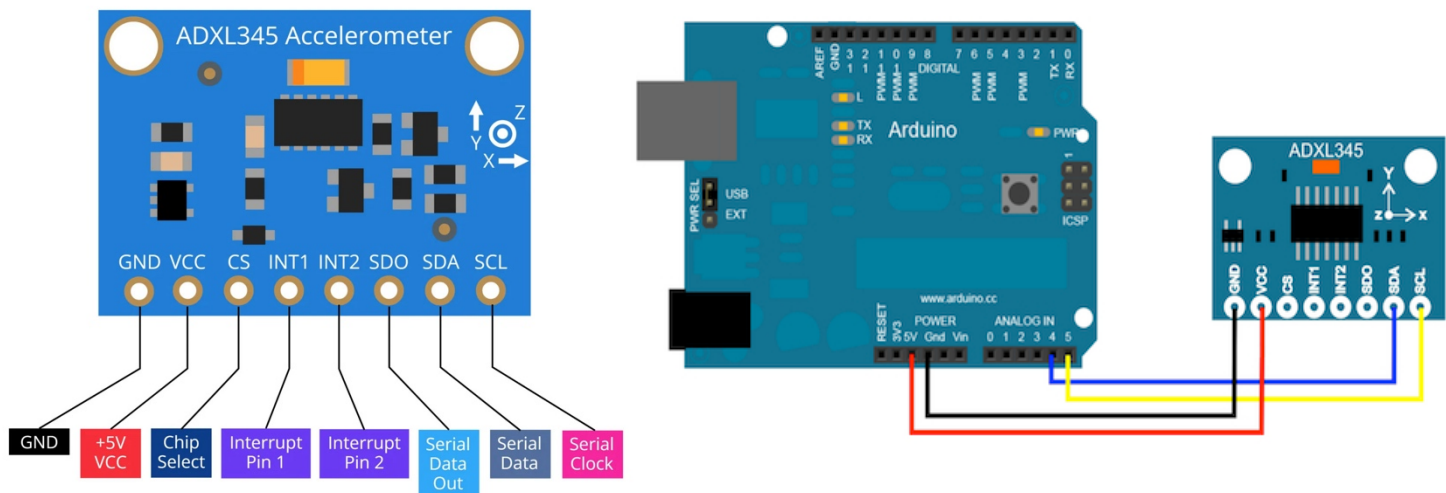
Features:

The GY-291 ADXL345 3-axis accelerometer module delivers high-resolution digital motion sensing with minimal power consumption. It supports I2C and SPI digital communication, programmable full-scale measurement ranges from $\pm 2g$ to $\pm 16g$, and integrated 16-bit ADCs. Low-power modes allow operation at microamp levels, making it ideal for mobile devices, tilt detection, and dynamic motion sensing. The module also provides user-programmable interrupts and wake-on-motion functionality for energy-efficient embedded applications.

Specifications	
Main Chip	ADXL345
Model	GY-291
Power Supply	3–5V
Communication Protocol	I2C / SPI
Measuring Range	$\pm 2g$ / $\pm 4g$ / $\pm 8g$ / $\pm 16g$
Digital Output	16-bit Triple-Axis ADC
Normal Operating Current	450 μ A
Low-Power Measurement Current	23 μ A
Standby Mode Current	0.1 μ A @ 2.5V
Sleep Mode Current	8 μ A
User-Programmable Interrupts	Yes
Wake-On-Motion Interrupt	Yes
Usage	Tilt sensing, motion detection, mobile devices, embedded electronics

Pinouts:

Pin Name	Type	Description
GND	Power	Module ground connection
VCC	Power	Power supply (3V to 6V)
CS	Input	Chip Select for SPI
INT1	Output	Interrupt 1 output
INT2	Output	Interrupt 2 output
SDO	Output	Serial Data Out
SDA	Input/Output	Serial Data (I2C)
SCL	Input	Serial Clock (I2C)



Product Pictures:

