# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# Gravity: Sensor Kit for Intel Joule SKU:KIT0119



# **INTRODUCTION**

Gravity Sensor Kit for Intel Joule is a plug & play electronics tool kit which gives inventors and IoT developers a quicker and easier experience of prototyping and productizing concepts with the Intel® JouleTM Module.

The Intel® JouleTM Module is a Linux-based SoM (System on a Module) which combines a 64-bit, Quad-Core compute engine with power management services, wireless connectivity, high speed I/O and Intel® RealSense<sup>TM</sup> compatibility powered by Intel® HD Graphics.

To make The Intel® JouleTM Module compatible with more modules and easier to use, we have included the Gravity expansion shield in the kit, which adds following supports to its original carrier board: analog input support, 3.3V / 5V switchable power voltage, standard extended connecters (DFRobot Gravity Series sensors and modules compatible).

14 well-chosen DFRobot Gravity electronic modules inside the package cover IoT scenarios including temperature sensing, motion detecting, gesturing recognizing, power control, etc.. With wireless connectivity supported by Intel® JouleTM Module, all the data is accessible from anywhere around the world.

#### NOTE: Joule compute module and expansion board are NOT included

Check sensors for arduino if you are interested in arduino, and check sensor kit to get more.

## **FEATURES**

• Plug&play electronics toolkit for Intel® Joule™

• Powered by Intel® Joule<sup>™</sup>, a 64-bit, Quad-Core compute module, featuring power management services, wireless connectivity, high speed I/O and Intel® RealSense<sup>™</sup> compatibility

- 14 well-chosen DFRobot Gravity electronic modules with expansion shield; Supports 200+Gravity sensors and actuators
- High quality tool box with adjustable grids for neat storing

### SPECIFICATION

- Gravity expansion shield:
- Digital I/O: 8
- PWM: 4
- Analog I/O: 8 (using onboard chip via I2C)
- SPI: 1 (with 3 chip select pins)
- I2C: 3
- UART: 3
- Power Output: 5V & 3.3V & 1.8V
- Gravity I2C: 1
- Gravity UART: 1
- Module Voltage: 5V or 3.3V
- Gravity Sensor Kit for Intel Joule:
- Dimension: 220mm \* 165mm \* 65 mm/ 86.6 \* 65 \* 25.6 inches

• Weight: 494g

### SHIPPING LIST

- Gravity: IO Expansion Shield for Intel Joule x1
- Analog Ambient Light Sensor x1
- Digital Push Button x1
- Analog Rotation Sensor V2 x1
- Digital Buzzer Module x1
- LM35 Analog Linear Temperature Sensor x1
- Digital Red LED Light Module x1
- Relay Module x1
- 9g micro servo (1.6kg) x1
- Flame sensor x1
- Analog Capacitive Soil Moisture Sensor SEN0193 x1
- PIR(Motion)Sensor v1.0 x1
- Analog Sound Sensor x1
- Digital Capacitive Touch Sensor x1
- Triple Axis Accelerometer MMA7361 x1
- Flat Noodle Micro USB Cable 1.2M x1
- Gravity Digital&Analog Sensor Cable x14