

## **Gravity: IO Sensor Shield For Arduino Mega Due**

SKU:DFR0165

Say goodbye to messy cables and clueless pluging/unpluging! This Sensor Shield is a powerful expansion shield for Arduino Mega Due. It is large enough to carry up to 3 Xbee slots, 1 microSD slot and shield headers for most Arduino shields on the market. Besides, we also added a prototyping area for convenience and adaptability for customized projects.

The breakouts for Digital pins are 14 to 53, Analog pins 6 to 15 and PWM pins 2 to 9. All pinout is a Gravity interface which allows plug-play of Gravity series sensors. And standard Arduino UNO pinout is reserved to stack more Arduino Shield. This shield can really be a major communications hub or "Mothership" for your Arduino, robot or IOT projects.

Each Xbee socket is connected to a different pin. Xbee socket 1 is connected to the main Serial port. While Xbee socket 2 to Serial1() and Xbee socket 3 to Serial2() on Arduino IDE.

The board has an integrated voltage regulator for 3.3v, a convenient reset push button topside and the standard on board LED that you can use for testing or debugging.

A external power connector for servos, as in other products of this family. If you need to power a large array of servos, use the screw terminals to connect your power supply and just drive it directly from your Mega.

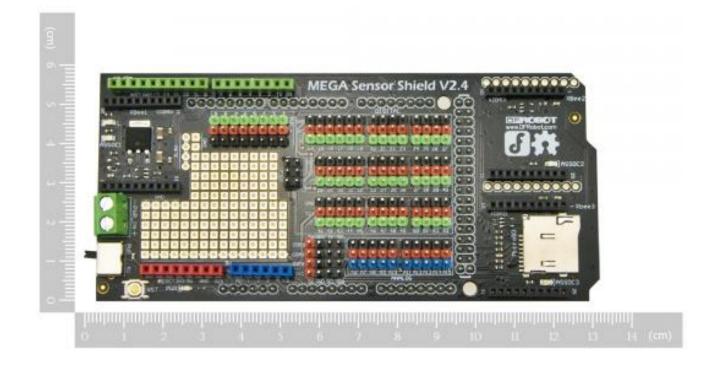
The microSD will be great if you are planning on doing sensor monitoring for research and data gathering for your algorithms, increase your automatic systems performance with accumulated data.

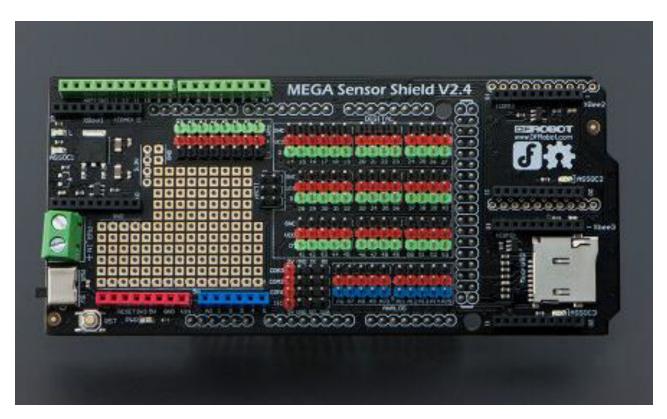
## **SPECIFICATION**

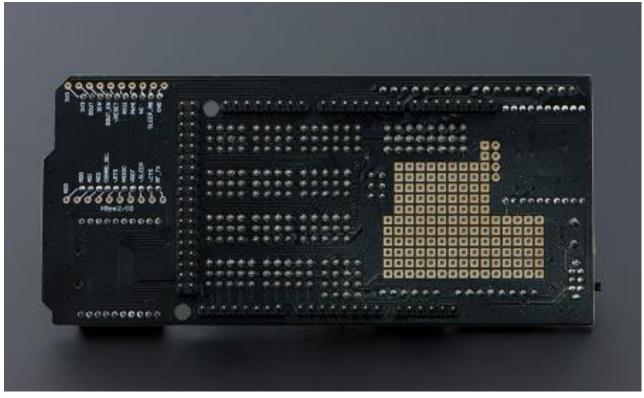
- Compatible with most Arduino shields
- Compatible with Arduino Mega boards / DFRobot megaADK / Arduino megaADK
- Extended TTL connection pins for four Serial ports
- DIP prototyping area makes it easy to add more modules or electronic components
- 3 Xbee slots
- 1 microSD slot
- Power switch between Arduino Mega or external
- Size: 125 x 57 mm(4.92x2.24")

## **DOCUMENTS**

- Wiki
- Schematic V2.4
- Layout
- SVG File (Donated by StephenParry)







https://www.dfrobot.com/product-560.html//4-11-19