Beginner Kit for Raspberry Pi 2 (Windows10 IoT compatible)
SKU: KIT0103

INTRODUCTION

This is the basic Raspberry Pi 2 Model B development kit designed for Windows 10 IoT. The second generation Raspberry Pi is more powerful than its predecessor, with an ARM Cortex-A7 quad-core CPU. This gives it a lot more exciting capabilities that can be used with this kit.

The IoT beginner kit comes with basic sensor modules such as a push button, LED module, temperature sensor, light sensor, rotation sensor and soil moisture sensor. You can select WiFi module that makes it possible to connect to the Microsoft's "Azure" Cloud service easily where you can upload your sensor data to the database.

After learning how sensors work, you can build simple applications like an indoor temperature alarm or a fire alarm. The relay module even gives you the ability to turn devices on and off remotely in your home, office or garden. You can set up a device to turn on all the lights in your house at a certain time. Why not set up a machine to feed your fish when they are hungry? When your plants are thirsty, have them watered automatically! There are many fun applications for this kit. Experience the magic of Windows 10 IoT!

FEATURES

- Affordable and easy to build IoT system
- Abundant open source sofeware on the Github
- Software development tool bu Visual Studio 2015
- Compatible with hundreds of sensors
- Great sensors expandability

SPECIFICATION

- Raspberry Pi 2 Module B
  - Broadcom BCM2836 900MHz quad-core ARM Cortex-A7 CPU
  - 1GB LPDDR2 SDRAM
  - 4 x USB2.0 Ports
  - Video Out via full size HDMI, 3.5mm A/V Jack or Raw LCD (DSI) interface
  - Audio Out via 3.5mm A/V Jack or Audio over HDMI
  - Audio In via CAMERA interface
  - Storage: micro SD slot
  - 10/100 Ethernet (RJ45)
  - Low-Level Peripherals:
    - 26 x GPIO
    - UART
    - I2C bus
    - SPI bus with two chip selects
    - +3.3V
    - +5V
    - Ground
  - Power Requirements: 600mA up to 1.8A@5V via MicroUSB or GPIO Header
- Arduino Expansion Shield for Raspberry Pi B+
  - Onboard Microcontroller: ATmega32u4
  - Arduino Leonardo Chip
  - Arduino Compatible pin mapping
  - Compatible with All arduino standard shield and sensors
  - System Voltage: 5v
  - Arduino Digital I/O: 20
  - Arduino Analog I/O: 6
  - Raspberry Pi B+ GPIO: 16
  - Raspberry Pi B+ I2C: 1
  - Raspberry Pi B+ ID_I2C: 1
  - Raspberry Pi B+ SPI: 1
  - Raspberry Pi B+ TTL UART: 1

SHIPPING LIST

- Raspberry Pi x 1
- Micro SD Memory Card x 1
- USB Adapter x 1
- Expansion Shield For Raspberry Pi x 1
- Heatsink x 1
- High Speed HDMI Cable (0.75M, Gold Plated) x 1
- Digital Push Button (Blue) x 1
- Digital Blue/Red/Green LED Light Module x 1
- LM35 temperature sensor x 1
- Analog Rotation Sensor V2 x 1
- Ambient light sensor x 1
- Relay Module x 1
- Buzzer module x 1
- Moisture sensor x 1
- Broadcom WIFI Adapter and 2 Port USB Hub for Raspberry Pi (Optional)
- Magnet Micro USB Cable 1.2m (Optional)