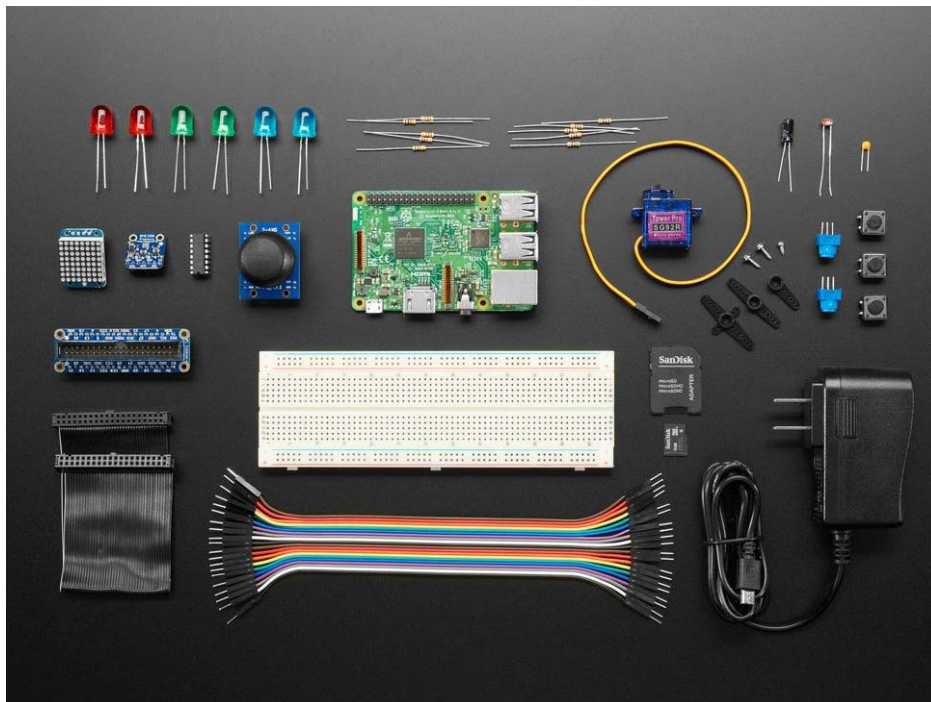# ARM–based IoT Kit for Cloud IoT Core – w/ Raspberry Pi 3 PRODUCT ID: 3594

Description

The Arm-based Internet of Things Pack for Raspberry Pi 3 is another great addition to our family of IoT packs. If you want to start using your Raspberry Pi as an IoT-enabled device, then this kit is for you.

You might not know it, but Arm-based chips are *everywhere*. From mobile devices to supercomputer, from medical instruments to agricultural sensors, and from base stations to servers; Arm technologies each 80% of the global population. With more than 100 billion Arm-based chips around the world and an ecosystem of over 1,100 partners, who better to help you on your next IoT journey? We've put together this pack in tandem with Arm to bring a unique IoT experience into your home!

This pack contains:

- o 2-Axis Joystick - add analog input to your project! Contains two independent 10K potentiometers (one per axis) for reporting the joystick's position, with wiring options for voltage or resistance outputs.
- o Micro servo - classic little servo that can rotate approximately 180 degrees (90 in each direction). Use any servo code, hardware, or library to control!
- o Full-Size Breadboard - In the past, we've used the half-size breadboard for a lot of Pi projects - but no longer! WIth 40 pins to break out, you're going to need some space - and that's why we're including a full-size breadboard in this pack.
- o Premium Male/Male Jumper Wires - 20 x 6" (150mm) - These jumper wires are great for making wire harness or jumpering between headers on PCBs. We include the longer ones so they work well with the full-size breadboard.
- o Assembled Pi Cobbler Plus - Breakout Cable - This is the soldered together version of our popular Pi Cobbler Plus Kit. Comes with a breakout board that's perfect for cobbling prototypes as well as a 40-pin GPIO cable for your Pi's pins.
- o 5V 2A Switching Power Supply w/ 6' MicroUSB Cable - The 5V 2A power adapter is the perfect choice for powering your Raspberry Pi B+ with 2 Amps of current output, and an extra long cord.
- o Assembled Adafruit BME280 Temperature & Humidity sensor - The assembled version of an Adafruit Instant Classic. This breakout board has a powerful BME280 sensor from Bosh that's good for environmental, temperature, and barometric pressure sensing. This version comes with headers already soldered on.
- o Assembled Adafruit Mini 8x8 LED Yellow-Green Matrix w/I2C Backpack - The assembled version of our yellow-green 8x8 matrix and backpack combination. Fully tested and ultra bright!
- o MCP3008 - 8 Channel 10-Bit ADC With SPI Interface - Easy to use, SPI enabled chip that's perfect for adding 8 channels of 10-bit analog input to your microcontroller or microcomputer project.
- o 8GB MicroSD Card with NOOBS 2.0 - installed with the latest version of Raspbian.
- o Raspberry Pi 3 - Model B - ARMv8 with 1G RAM
- o Electronic components:
  - 1x Photo Cell
  - 2x Breadboard Trim Potentiometer
  - 5x 10K 5% 1/4W Resistor
  - 5x 560 ohm 5% 1/4W Resistor
  - 2x Diffused 10mm Blue LED
  - 1x Electrolytic Capacitor - 1.0uF
  - 1x Ceramic Capacitor - 0.1uF
  - 2x Diffused 10mm Red LED
  - 2x Diffused 10mm Green LED
  - 3x 12mm Tactile Switches

Note: This kit includes a Raspberry Pi 3 Model B!