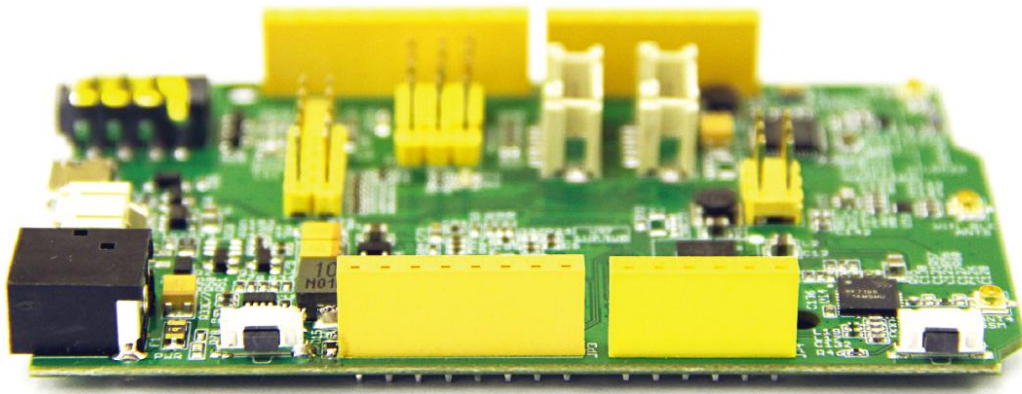


## LinkIt ONE Overview

-The Ultimate Developer Board for Wearable and Internet of Things



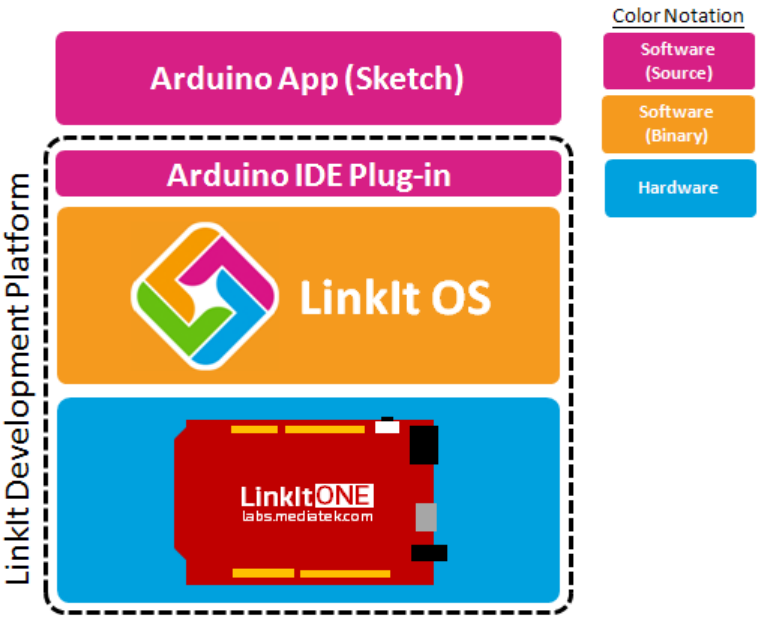
**LinkIt ONE** development board is an open source, high performance board. It is based on the world leading wearable SOC Aster (MT2502) companion with high performance Wi-Fi (MT5931) and GPS (MT3332) chipsets to provide the most feature rich development board. It also provides similar pin-out to Arduino for developer to connect to various sensors, peripherals, Arduino shields existed in market. The LinkIt ONE is a co-design product by Seeed Studio and MediaTek, which leverage both parties' knowledge in open hardware and industry leading reference design of Wearable/IoT product to come out this powerful development board.

- All-in-one features, including ARM7 EJ-S™, GSM, GPRS, Wi-Fi, Bluetooth BR/EDR/BLE, GPS, Audio codec and SD card connector on a single development board
- Pin-out similar to Arduino UNO, including Digital IO, Analog IO, PWM, I2C, SPI, UART and power supply
- MediaTek provides [LinkIt SDK plug-in for Arudino](#), allows user to develop Sketch in Arduino IDE with compatible APIs
- Open source ([schematic](#), [datasheet](#), [BOM](#)) for you to create your own project by using Seeed Studio's [Fusion PCBA Service](#)

### Main Feature:

- **High-Performance:** 32-bit ARM7EJ-S™ RISC feature-rich procссор ,equipped with Wi-Fi, BLE, GPS, GSM, FM, SD Card connector and lithium battery power management etc.

- **High-Compatibility:** Compatible with [Arduino Uno](#), [Seedstudio](#) Grove interface
- **StrongExtensibility:** Support a variety of sensors, like 3-Axis Digital Accelerometer/Gyro/Compass , Barometer , Vibration motor , Q Touch sensor , Temp & Humi Sensor and etc.
- **Prototyping Services:** provide a path from your great concept to production to distribution with our abundant components & kits and prototyping services



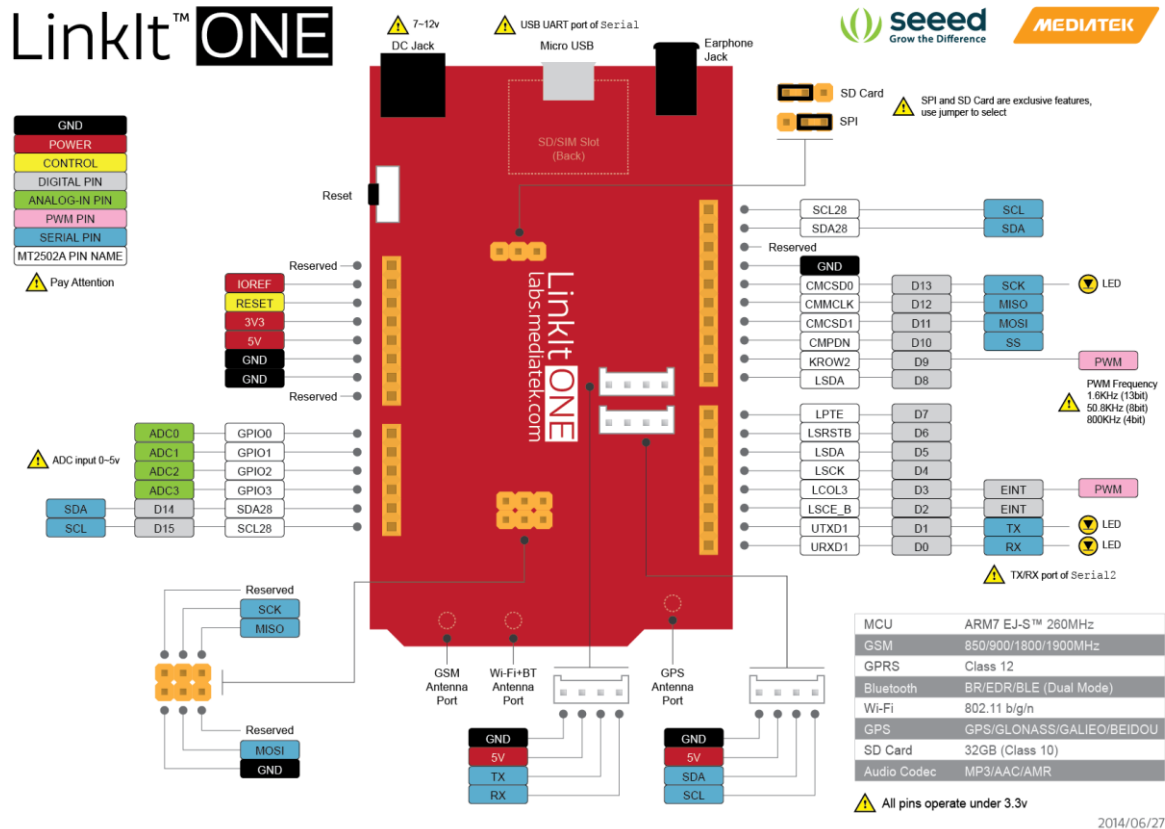
### LinkIt ONE Spec Summary

Category	Feature	Spec
Microcontroller	Chipset	MT2502A (Aster)
	Core	ARM7 EJ-S™
	Clock Speed	260MHz
PCB Size	Dimensions	3.3 x 2.1 inches
Memory	Flash	16MB
	RAM	4MB
Power	DC Jack Input Voltage	7~12V
	DC Current Per I/O Pin	50mA
Digital IO Pins	Pin Count	16
	Voltage	3.3v
Analog Input Pins	Pin Count	4
	Voltage	0~5V

PWM Output Pins	Pin Count	2
	Voltage	3.3v
	Frequency (Resolution)	1.6KHz (13bit) 50.8KHz (8bit) 800KHz (4bit) (customizable)
I2C (master only)	Set Count	1 (SDA, SCL)
	Speed	100Kbps, 400Kbps, 3.4Mbps
SPI	Set Count	1 (MOSI, MISO, SCK, SS)
	Speed	104Kbps~26Mbps
UART	Set Count	1 (TX/RX)
	Voltage	3.3v
UART on USB	Set Count	1
Communications	GSM	850/900/1800/1900MHz
	GPRS	Class 12
	Bluetooth	BR/EDR/BLE (Dual Mode)
	Wi-Fi (MT5931)	802.11 b/g/n
Positioning	GPS (MT3332)	GPS/GLONASS/GALIEO/BEIDOU
User Storage	Flash	10MB
	SD Card	Up to 32GB (Class 10)
Executable Size	RAM (Code+RO+RW+ZI+Heap)	2MB

## LinkIt ONE Pin-out Diagram

LinkIt ONE provides pin-out similar to Arduino UNO, the following diagram show detail arrangement and functionality of each pin.



## Getting Started

Please visit <http://www.mediatek.com/en/labs/> to download SDK and get more understanding of LinkIt

### Software Supported

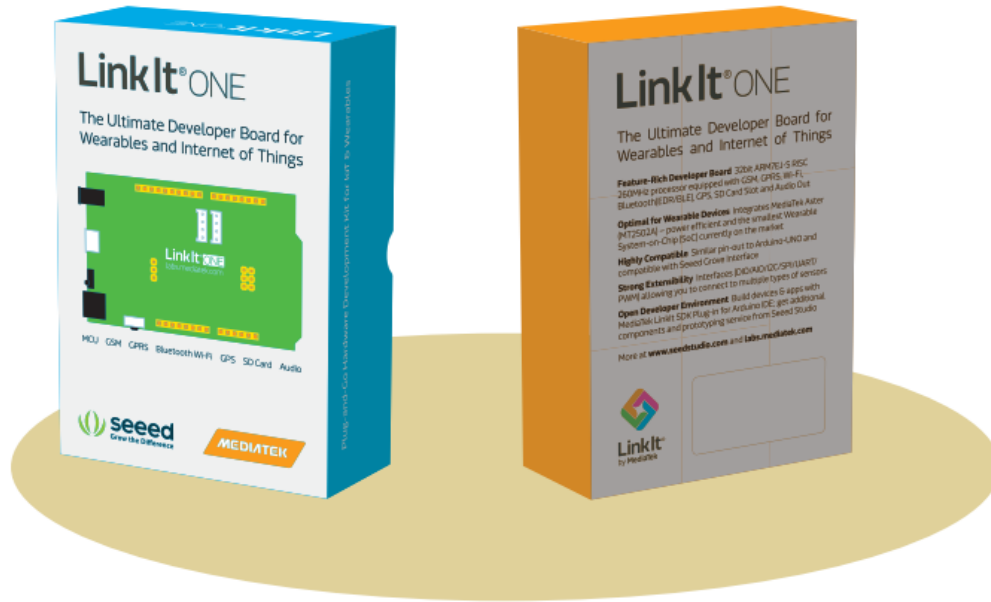
Arduino IDE

### Package included

LinkIt One Board \*1

Antenna \*3

USB Cable (USB Type A to Micro USB)\*1



## Related Products

Grove-Starter kit for LinkIt One