LinkIt ONE

Introduction

The LinkIt ONE development board is an open source, high performance board for prototyping Wearables and IoT devices. It's based on the world's leading SoC for Wearables, MediaTek Aster (**MT2502**) combined with high performance Wi-Fi (**MT5931**) and GPS (**MT3332**) chipsets to provide you with access to all the features of MediaTek LinkIt. It also provides similar pin-out features to Arduino boards, making it easy for you to connect to various sensors, peripherals, and Arduino shields.

LinkIt ONE is a co-design product by Seeed Studio and MediaTek. It brings together the parties' knowledge in open hardware and industry leading reference designs for Wearables and IoT devices to create this powerful development board.

Specifications

- Chipset:MT2502A(Aster, ARM7 EJ-STM)
- Clock Speed: 260MHz
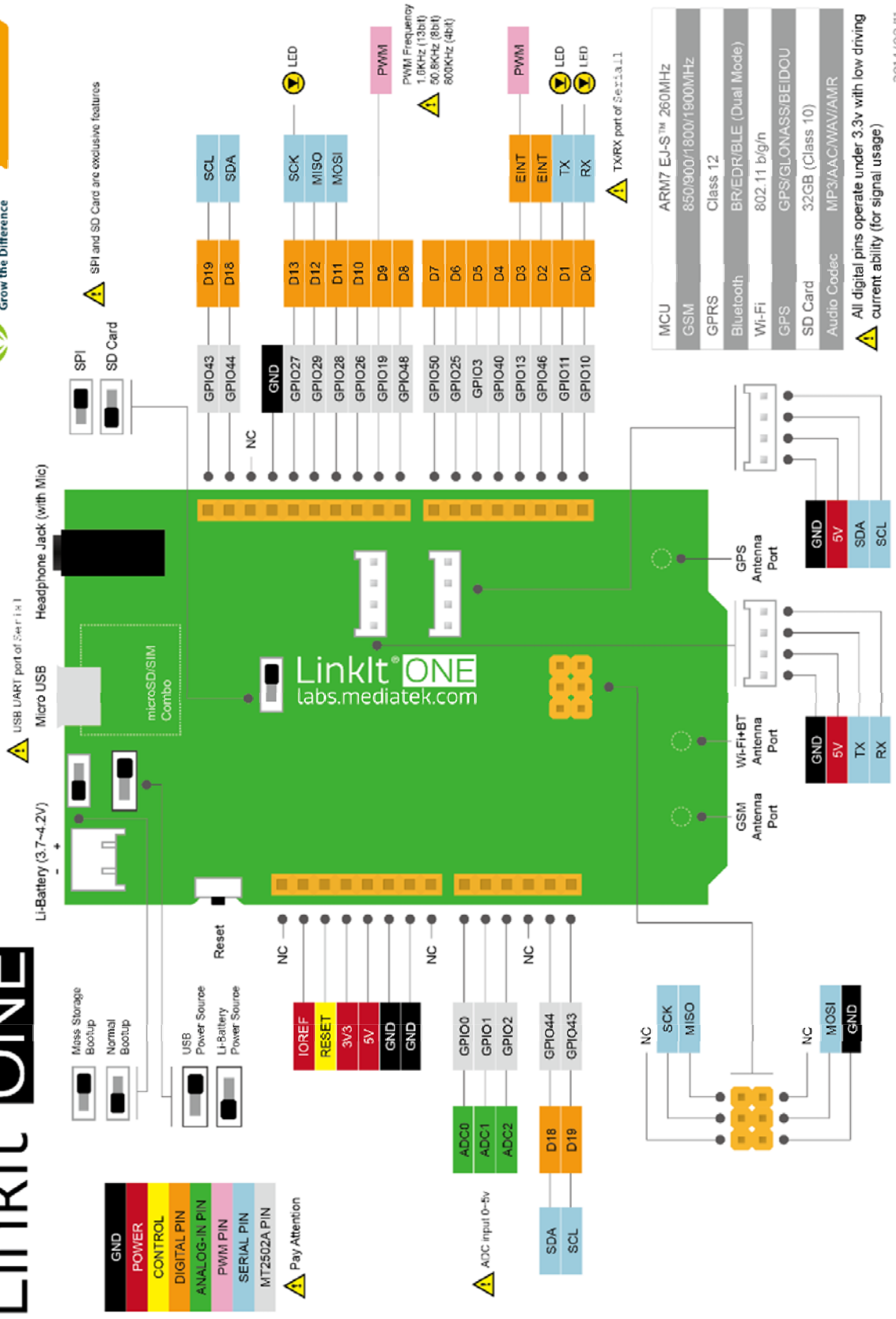- Dimensions: 3.3x2.1 inches
- Flash: 16MB
- RAM: 4MB

- DC Current Per I/O Pin:1mA
- Analog Pins: 3
- Analog Input: 5V
- UART: Software Serial(Serial) and Hardware Serial(Serial1, D0&D1)
- SD Card: Up to 32G(Class 10)
- Positioning: GPS(MT3332)
- GSM: 850/900/1800/1900 MHz
- GPRS: Class 12
- Wi-Fi: 802.11 b/g/n
- Bluetooth: BR/EDR/BLE(Dual Mode)

Pinout Diagram

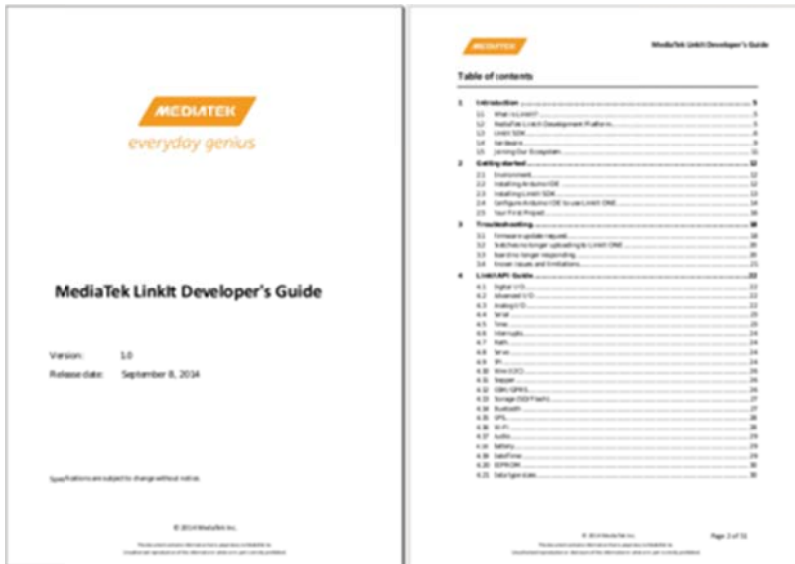## Quick Start Guide

Start with [MediaTek LinkIt Developer's Guide](#) (requires registration)

If you had ever used an Arduino, LinkIt ONE will be the easy for you. The same IDE, the same pinout. The difference is LinkIt ONE is uses a much more powerful SoC designed for wearable application.
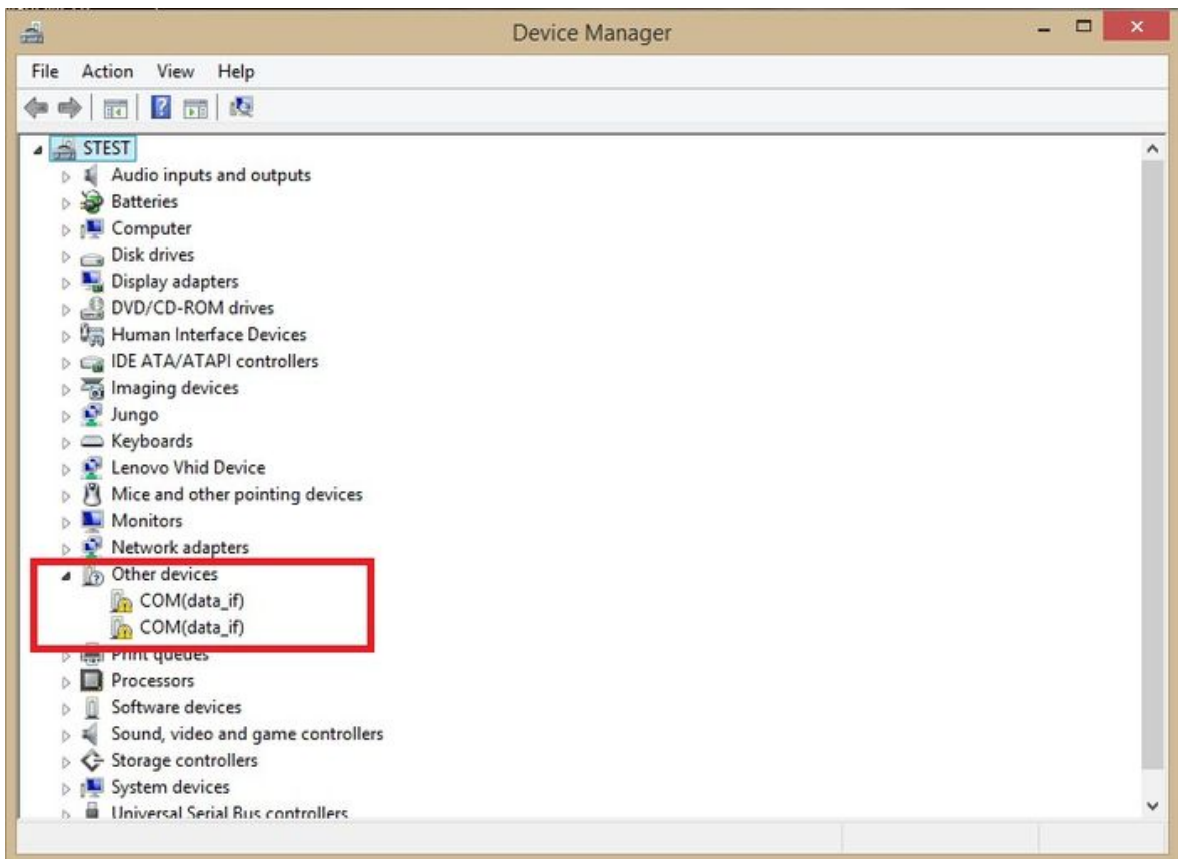
Note: LinkIt ONE IDE supports Windows only. Mac and Linux will be supported in the near future.

Download LinkIt ONE IDE

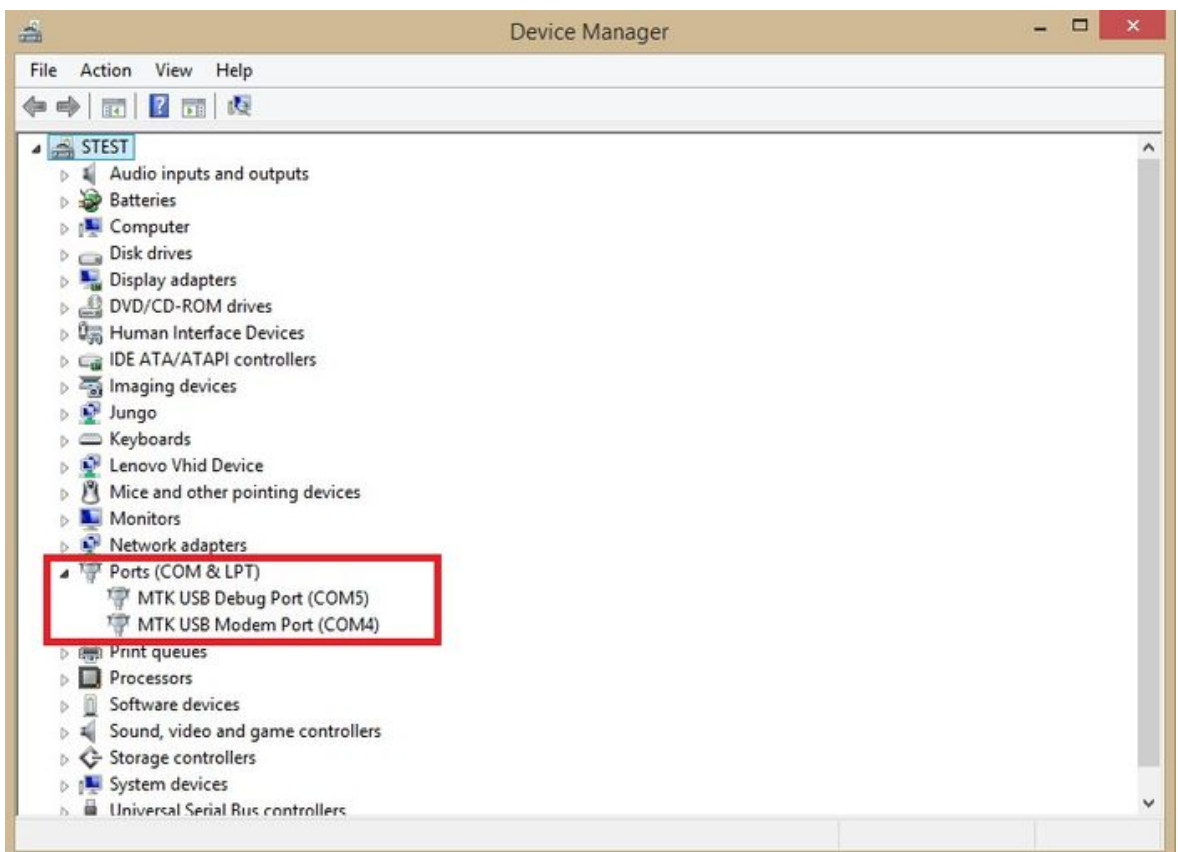First of all, you should download LinkIt ONE IDE, click [here](#).

Install Driver

When first insert LinkIt ONE to your PC, you will find two COM ports that need to be installed driver:

The driver path: **..\LinkIt_ONE_IDE\drivers\mtk**

After installed driver, you can find 2 ports:

- MTK USB Debug Port used for uploading code
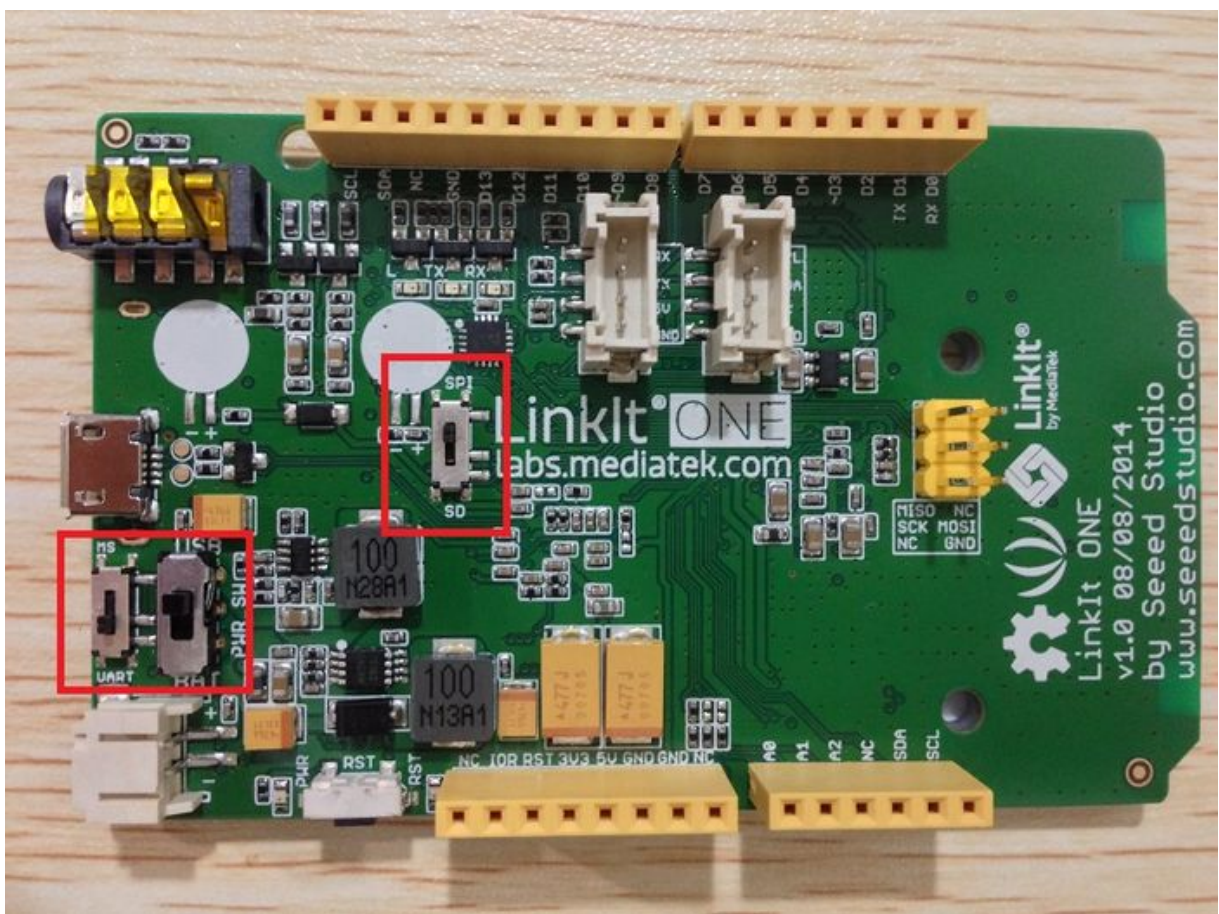- MTK USB Modem Port used for printing message, such as Serial.println()

Uploading Code

Here we will show you a Blink in LinkIt ONE.

First open LinkIt ONE IDE, then Click *File -> Examples -> Basics -> Blink* to open Blink

Then Boards choose LinkIt ONE, Port choose the number of MTK USB Debug Port.

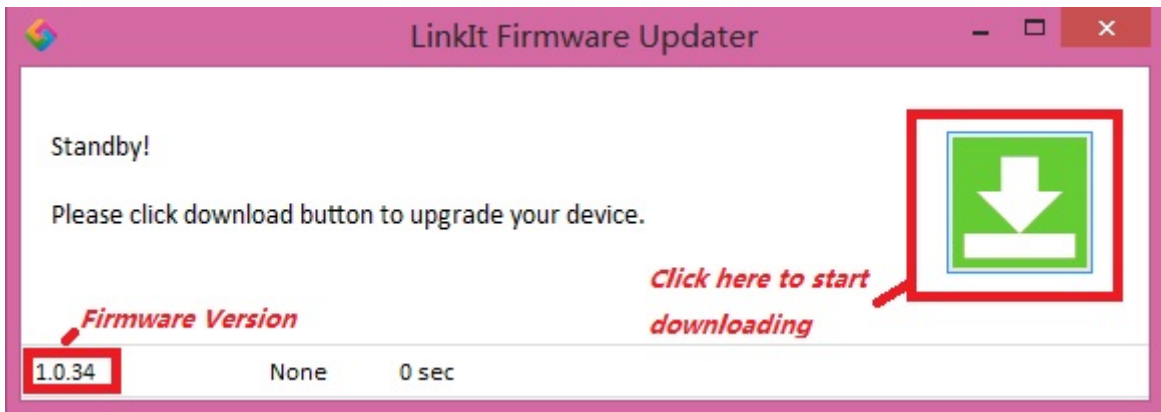Make sure the switch is on the right side before click the Upload button:
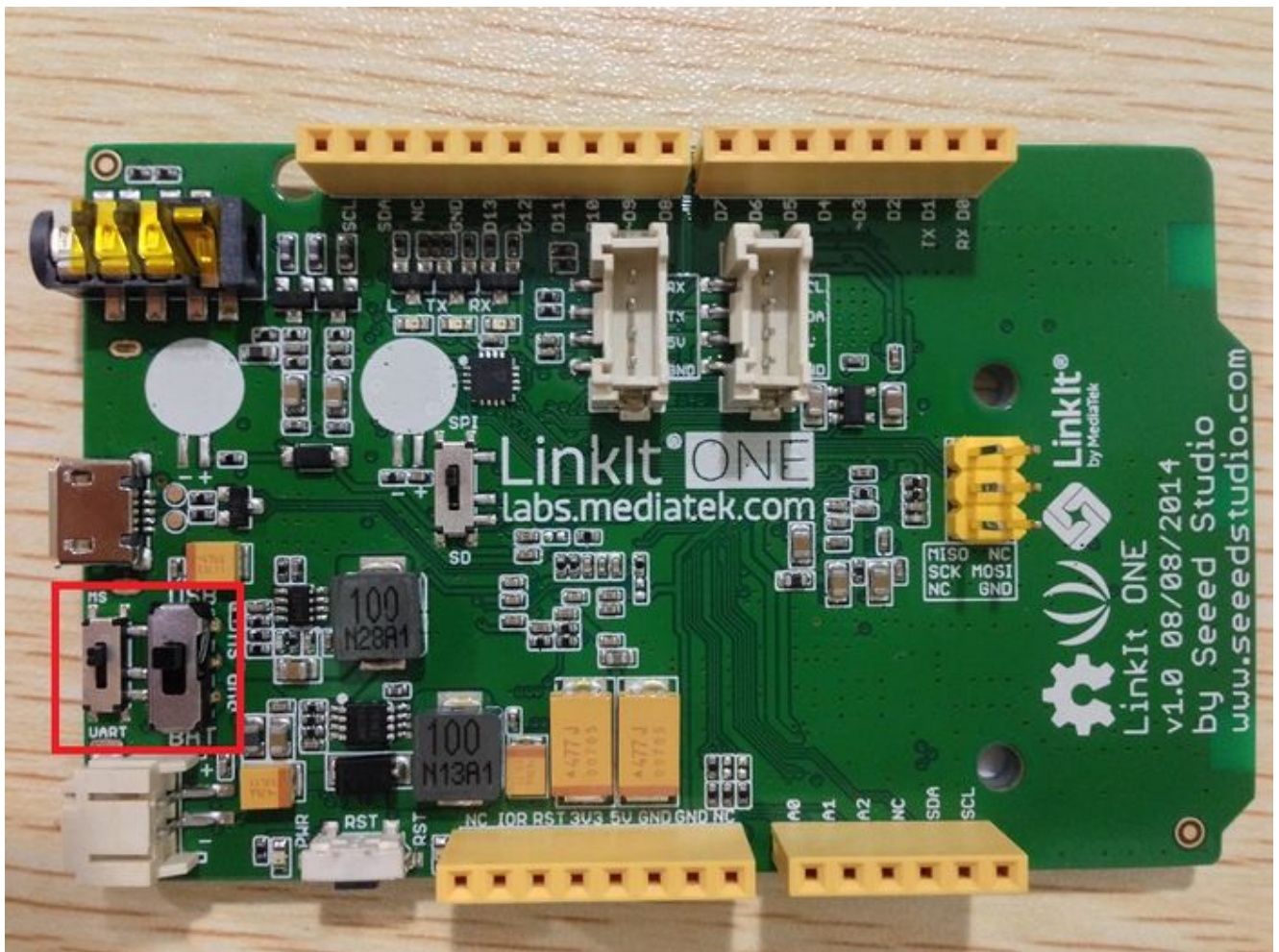

Firmware Update

We will update the firmware of LinkIt ONE every once in a while. When there's new version, you can update your LinkIt ONE to the latest.
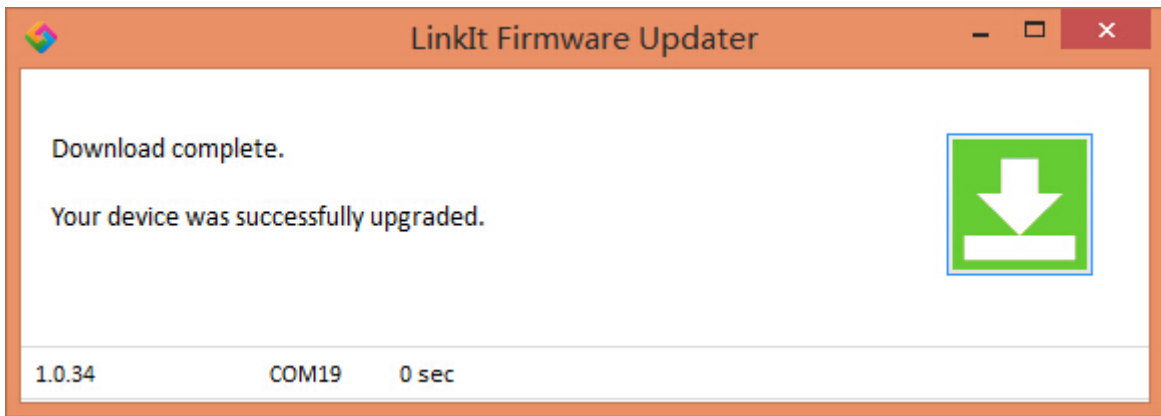
In the path: **\LinkIt_ONE_IDE\hardware\tools\mtk**

You will find a FirmwareUpdater.exe application, double click to open it:

Before you start updating the firmware, make sure the switch is on the right side:

Click the button and then insert you LinkIt ONE to PC, and wait about 1 minutes, the updating is success.
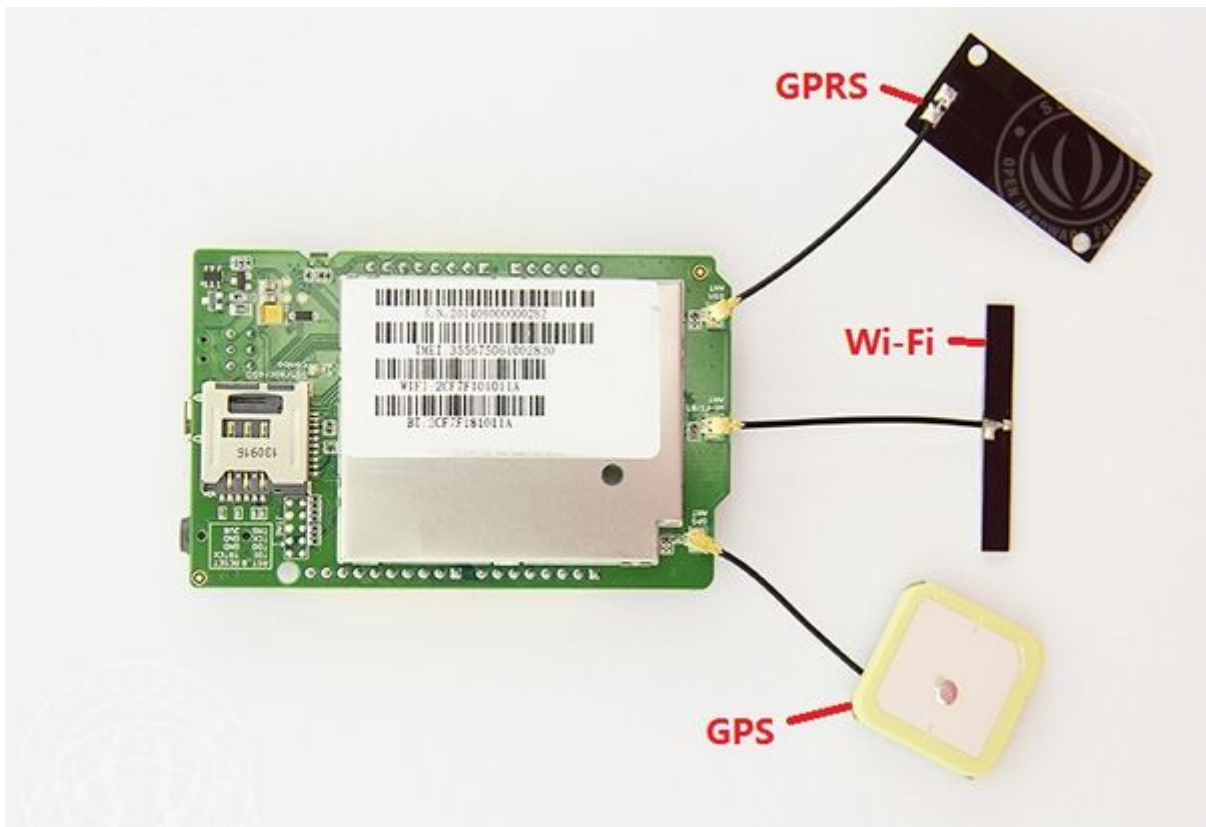
Antenna

You can find 3 antennas with LinkIt ONE, they are used for:

- GSM/GPRS
- Wi-Fi/BT
- GPS

When you use this modules, you should connect to right antenna.

Firmware Version History

Tutorial of Sidekick Basic Kit for LinkIt ONE

The Sidekick Basic Kit for LinkIt ONE is designed to be used with your LinkIt ONE board. This kit will help you quickly get alone well with the platform of LinkIt. It includes many of the most popular accessories for DIY projects : like Breadboard, Jumper wires, Color LEDs, Resistors, Buzzer, etc. All of these coming with its own handy box are easy transport and minimal clutter. It includes a fully guide that will familiarize you with a wide range of electronic components while you create small, simple, and easy-to-assemble circuits. There are 10 different courses outlined that will offer a best way for beginner to be familiar with LinkIt ONE.

- The Basics
- Hello World
- Push Button
- Marquee
- Colorful World
- Analog Interface
- Mini Servo
- Light Sensor
- SMS Control the LED
- Get Temperature with Webpage

Resources

- [LinkIt ONE IDE](#)
- [LinkIt ONE Eagle File](#)
- [Sidekick Base Kit for LinkIt ONE](#)
- [MediaTek_LinkIt_SDK_for_Ardunio_1_0.zip](#)
- [LinkIt_ONE_Hardware_Reference_Design_v1_0](#)
- [【pdf】LinkIt ONE_Pinout Diagram_v1.0](#)
- [【PDF】MediaTek_LinkIt_Developers_Guide_v1_0](#)
- [【pdf】MediaTek_MT2502A_SOC_Data_Sheet_v1_0](#)
- [【pdf】MediaTek_MT5931_Wi-Fi_Data_Sheet_v1_0](#)
- [【pdf】MediaTek_MT3332_GPS_Data_Sheet_v1_0](#)
- [【pdf】LinkIt_ONE_Pinout_Diagram_v1_0](#)

Forum

There is forum of LinkIt ONE: http://www.seeedstudio.com/forum/viewforum.php?f=42

You can find if there's an answer here first.

What's more, share your projects or ideas that made by LinkIt ONE here is also welcome, and maybe you can get some useful suggestion about your idea here.