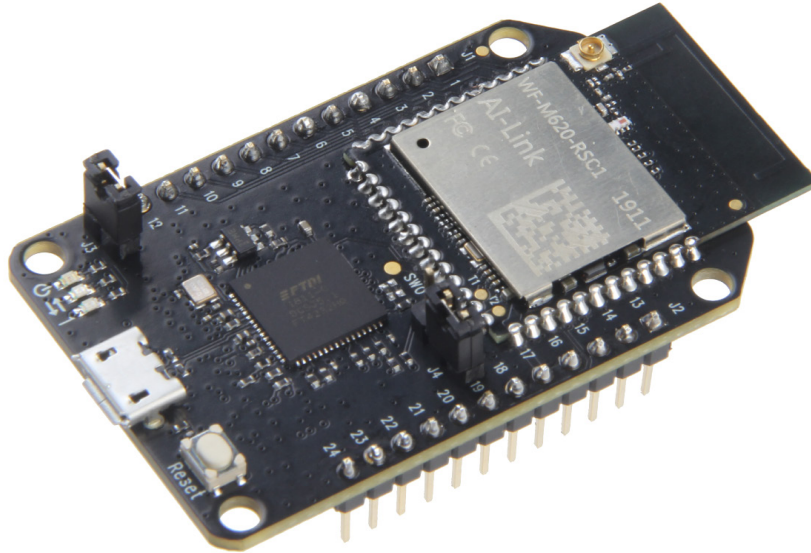


# MT3620 Mini Dev Board



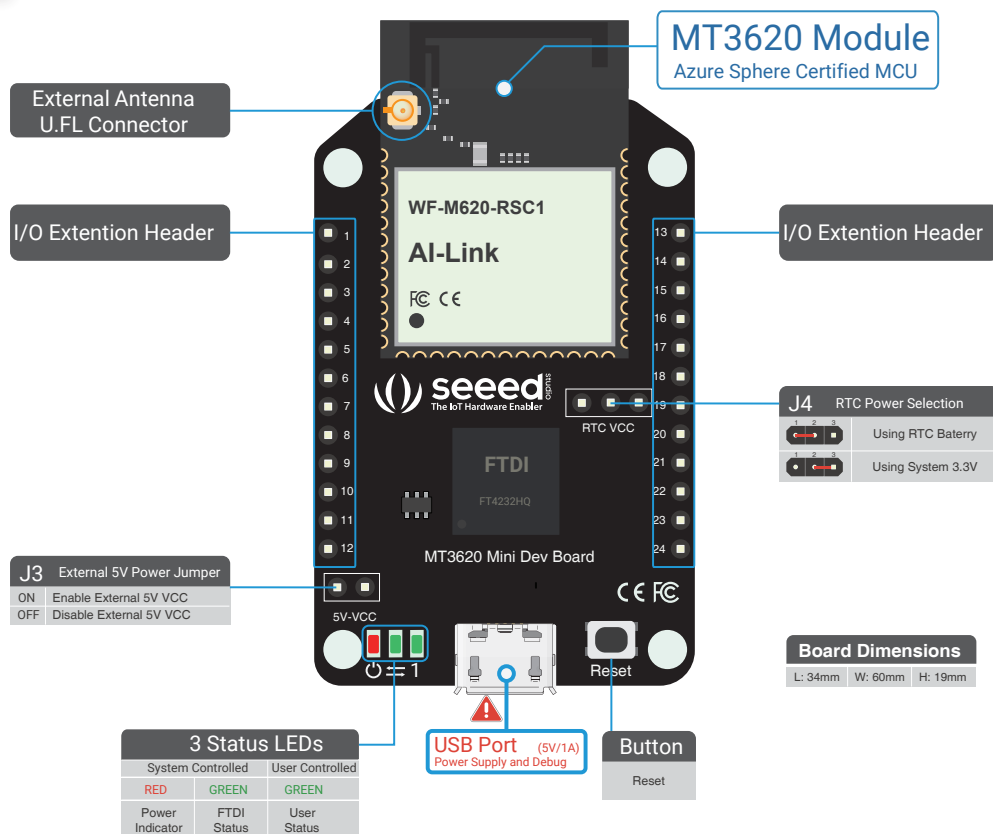
## Overview

MT3620 Mini Dev Board is a lite version of Seeed previous [Azure Sphere MT3620 Development Kit](#). We developed this board to meet the needs of developers who need smaller sizes, are more scalable, and have lower costs. This development board is based on the MT3620 module, which greatly simplifies the difficulty of hardware design. Developers can easily reuse this design into their own projects. The development board uses two single-row pin headers for easy plug-in on other motherboards or expansion boards. Unlike the full-featured Azure Sphere MT3620 Development Kit, this development board optimizes the design by reducing some system hardware peripheral resources, and only provides the necessary hardware resources to developers. In terms of hardware specifications, we only support 2.4G Wi-Fi and reduce I2S and some GPIO ports.

## Features

- Azure Sphere: End-to-end security for IoT devices.
- Wi-Fi 802.11 b/g/n.
- Tri-core microcontroller with on-chip RAM & flash.
- Microsoft Visual Studio development environment.
- Online authentication & updates for device lifetime.
- Expand UART, I2C, SPI, ADC, GPIO resource on pin header.

## Diagram



## Specification

### Hardware

<b>MCU</b> (using MT3620 module)	<b>MT3620</b> <ul style="list-style-type: none"> <li>1 * ARM Cortex A7 core @500MHz, 4MB RAM</li> <li>2 * ARM Cortex M4 core @200MHz, 64KB RAM</li> </ul>
<b>ISU</b>	ISU 0 configured as SPI0 or UART0 or I2C0 ISU 1 configured as SPI1 or UART1 or I2C1 <ul style="list-style-type: none"> <li>I2C runs at up to 1MHz</li> <li>SPI runs at up to 40MHz,</li> <li>UART runs at up to 3Mbps</li> </ul>
<b>Connectivity</b>	802.11 b/g/n Wi-Fi
<b>ADC</b>	3 * 12-bit ADC input I/O
<b>RTC</b>	1 * RTC with CR1220 3V battery holder
<b>USB</b>	1 * Micro USB port for power supply and debugging, 5V/1A
<b>LED</b>	1 * RED LED -> Power 1 * GREEN LED -> FTDI status 1 * GREEN LED -> user controlled (can be configured as Wi-Fi status or other usage)
<b>Button</b>	1 * Reset Button
<b>Operating Temperature</b>	-40~85°C
<b>Dimensions</b>	L:34mm*W:60mm*H:19mm
<b>Certification</b>	CE / FCC / MIC / RoHS

### Software

<b>IDE</b>	Visual Studio
<b>System</b>	Windows 10
<b>Language</b>	C

#### Note:

[2019-03-13]

The current SDK does not support all features of the MT3620 hardware. The following are not yet supported:

- 2 x ARM Cortex-M4 with FPU
- ADC, I2S, and PWM peripheral interfaces

For more product information, please visit: [www.seeed.cc](http://www.seeed.cc) and [www.microsoft.com/en-us/azure-sphere/](http://www.microsoft.com/en-us/azure-sphere/)