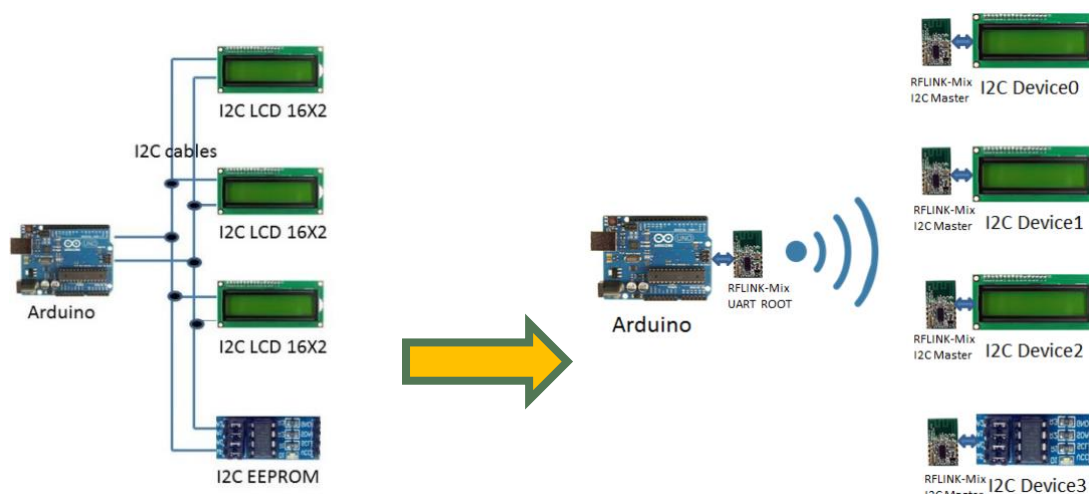


# RFLINK-Mix Wireless UART-to-I2C

Provide heterogeneous device connection  
path

An easy way to make all connections  
wireless



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RFLINK-Mix Wireless UART-to-I2C is an easy-to-use wireless suite that allows users to quickly setup I2C devices. You don't need to connect multiple long cables from I2C port of host to the I2C devices one by one. You only need to connect the UART ROOT of the RFLINK-Mix to the UART interface of main control (Arduino, Raspberry Pi, any other HOST) , and I2C SLAVE devices to the RFLINK-Mix on the I2C Master side, a wireless UART-to-I2C system is ready to go.



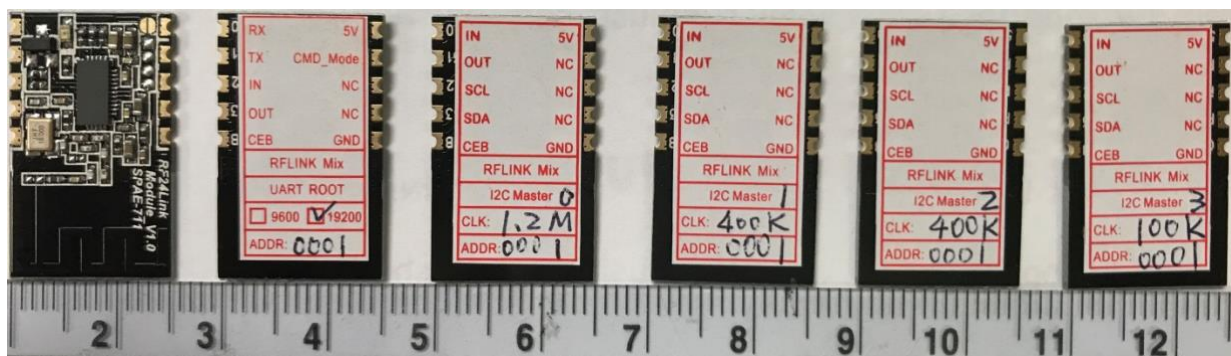
## Module appearance and dimension

The RFLINK-Mix UART-to-I2C module contains one piece of the UART ROOT (left) and up to four pieces The I2C Device side (the RFLINK-Mix I2C module is the Master--the right side of the figure below, numbered 0 ~ 3). The appearance of the two type is the same, but it can be identified via the checkbox of the label on the back .

As shown in the figure below, the leftmost figure is the part side, and the others are the label side

The Group Address of this group of RFLINK-UART ROOT modules is 0001, baud rate 19200.

RFLINK I2C Device is Device 0 (CLK 1.4M), Device 1 (CLK 400K), Device 2 (CLK 400K), Device 3 (CLK 100K). , group address is 0001, Clock can be selected at the time of purchase



## Module characteristics

1. **Operating voltage:** 3.3~5.5V
2. **RF Frequency:** 2400MHz~2480MHz.
3. **Power** consumption: 24 mA@ +5dBm at TX mode and 23mA at RX mode.
4. **Transmit power:** +5dBm
5. **Transmission distance:** about 80 to 100m in the open space
6. **Baud Rate(UART ROOT):** 9,600bps or 19,200bps



7. **Clock(I2C MASTER)** : 1.2M/750K/400K/200K/100K/50K/25K/12.5K. (Default 400K)
8. **Dimension** : 25 mm x 15 mm x 2 mm (LxWxH)
9. Supports **1-to-1 or 1-to-multiple (up to four) transfers, and** is used in command mode when **used 1-to-multiple Command choose which device to transmit with.** .

## Pin pin definition

### UART ROOT



**GND**→ Ground

**+5V**→ 5V voltage input

**The TX**→ corresponds to the RX of the motherboard UART

**The RX**→ corresponds to the TX of the motherboard UART

**THE CEB**→ This CEB should connect to the ground (GND), then the module will be power-on and can be used as a power-saving control function.

**OUT**→ Output pin of IO Port (On/Off export)

**IN**→ Input pin of the IO Port (On/Off receive).

### I2C DEVICE



**GND**→ Ground

**+5V**→ 5V voltage input

**The SCL**→ corresponds to the SCL (Serial Clock Line serial clock) of the I2C Slave device

**The SDA**→ corresponds to the SDA (Serial Data Line Serial Data Line) to the I2C Slave device

**THE CEB**→ This CEB should connect to the ground (GND), then the module will be power-on and can be used as a power-saving control function.

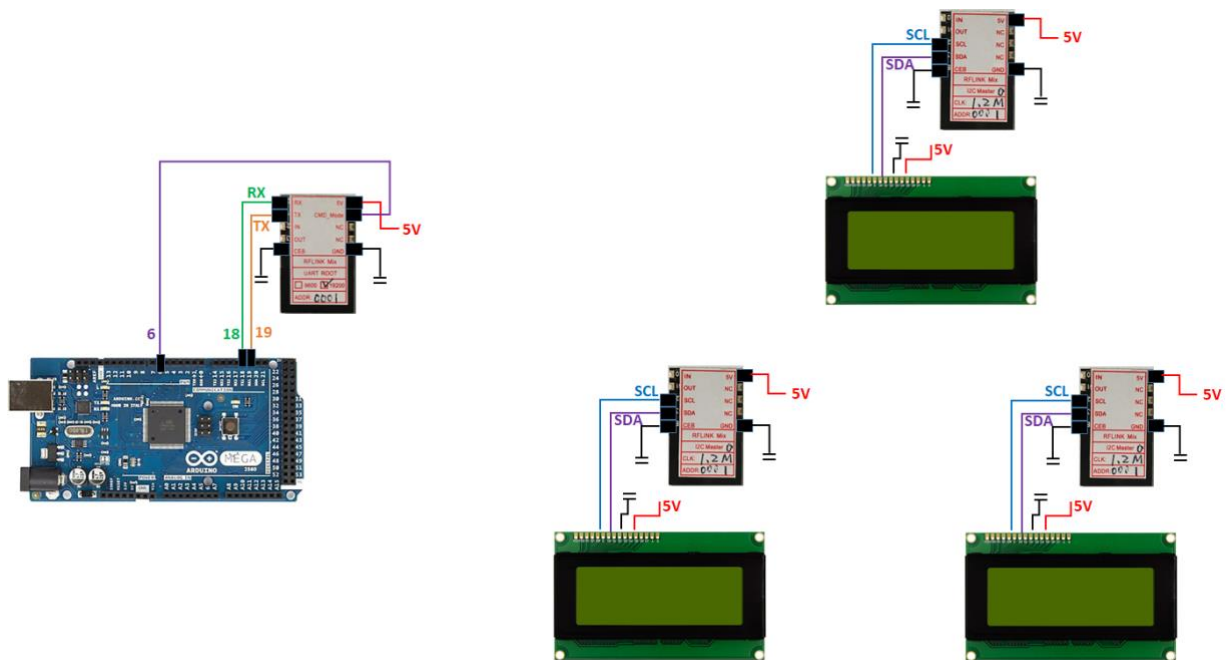
**OUT**→ Output pin of IO Port (On/Off export)

**CMD\_Mode** → ROOT for command mode startup pin, active low

**IN** → Input pin of the IO Port (On/Off receive).

## How to use

This module supports the Liquid Crystal I2C LCD module, which controls multiple sets of LCDs through the UART communication interface.



You can download this RFLINK-Mix UART-to-I2C usage example at the official website <http://www.sunplusit.com/TW/Shop/IoT/Document>.