

WISE-1530

M2.COM Wi-Fi / BLE IoT Node

NEW



Features

- ARM Cortex-M4 Core Processor RAM 256 KB memory / 1MB Flash
- Integrated with 802.11 b/g/n and Bluetooth 4.1
- Rich interface for sensor and I/O control
- Support wide temperature -20 ~ 70 °C

arm MBED

SRRC  CE FCC 

Introduction

WISE-1530 is a wireless module integrated with ARM Cortex-M4 Processor and Wifi / BLE connectivity. This technology is the best solution for WIFI and BLE combo Applications. For example, we may use BLE to configure device and transfer mass data through wifi connectivity. You may choose the WIFI or BLE to submit your sensor data according to different scenario and purpose, such as the short range with low power consumption or mass data rate to complete the specific task.

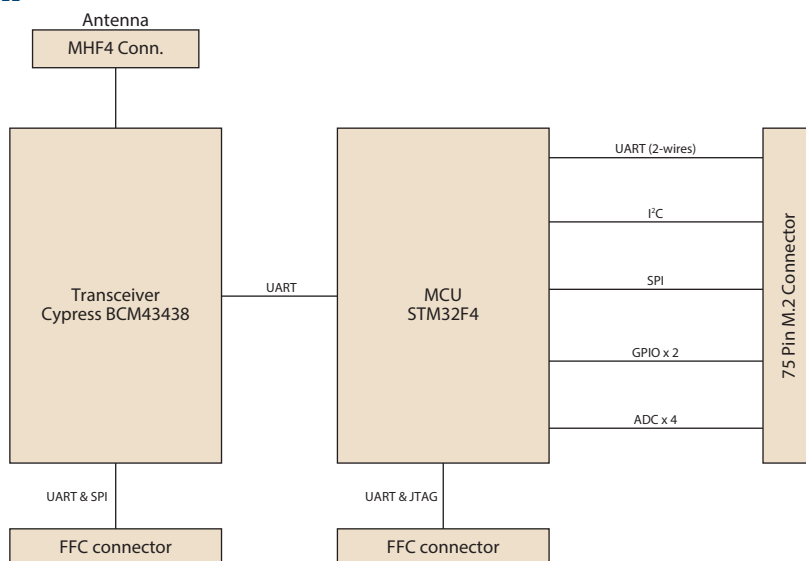
Your sensors or applications with low data rate requirement can be achieved years battery lifetime in short range communication BLE. Advantech WISE-1530 also provides multi-interfaces for sensor and I/O control.

With ThreadX v5.6 microprocessor operating system and add-on software stacks, it's convenient to build the application software or sensor algorithm over the OS. Data can be quickly and easily acquired and transformed into a different format to communicate with WISE-PaaS or other cloud services. Developer can build their application backbone faster and focus on their applications, value-added services.

Specifications

| | | |
|------------------|----------------------|--|
| Processor System | CPU/MCU | STM32F4 ARM® 32-bit Cortex®-M4 CPU 100MHz |
| | RAM | 256 KB |
| | Flash | 1024 KB |
| Form Factor | | M.2 TYPE 2230-D3-E |
| Wireless Network | Standard | IEEE 802.11b/g/n and Bluetooth 4.1 |
| | Frequency Band | 2.4000-2.4840 GHz for Wi-Fi 2.4000-2.4835 GHz for BLE |
| | Channels | 13 |
| | Topology | Star network |
| | Transmit Power | Typ. 14 dBm ± 2 at 802.11b CCK Mode 1M Typ. 12 dBm ± 2 at 802.11g OFDM Mode 54M Typ. 12 dBm ± 2at 802.11n OFDM Mode MCS0 Max 10 dBm ± 2 for BLE |
| | Receiver Sensitivity | Typ. -95 dBm at 1 Mbps Typ. -75 dBm at 54 Mbps Typ. -89 dBm at MCS0 Typ. -89 dBm for BLE |
| | RF Data Rate | Up to 65 Mbps |
| | Function | End node |
| | Antenna connector | MHF4 connector |
| Ethernet | | - |
| Cellular | | - |
| GPS | | - |
| I/O Interface | UART | 1 (2 wire support RTS/CTS) |
| | CANbus | - |
| | I ² C | 1 |
| | I ² S | 1 |
| | GPIO | 2 |
| | PWM | - |
| | SPI | 1 |
| | ADC | 4 |
| | USB | - |

Block Diagram



Specifications Cont.

| | | |
|----------------------|-------------------------|--|
| Programing Port | | 1, UART port 3 |
| Debug Port | | 1 develop and debug with WISE-ED22 (CN1) |
| Watchdog Timer | | - |
| Indicator and Button | LED | - |
| | Button | - |
| | Serial Port | - |
| | Switch | - |
| | SD Socket | - |
| Expansion | USB Port | - |
| | SIM Socket | - |
| Power | Mini PCIe Socket | - |
| | Power Supply Voltage | 3.3V |
| | Power Consumption | TBC |
| Environment | Operational Temperature | -20 ~ 70 °C |
| | Operating Humidity | 5% ~ 95% Relative Humidity, non-condensing |
| Mechanical | Dimensions (W x D) | 22 x 30 mm |
| | Mounting | - |
| | Weight | 3g |
| Operating System | | Mbed OS 5.4/ThreadX v5.6, SDK 4.1.8 |
| Certification | | CE/FCC/IC/TELEC/SRRC/NCC |

Ordering Information

| Part No. | Description |
|--------------------|----------------------------------|
| WISE-1530ITB-SDA10 | WISE-1530 M2.COM WIFI/BLE module |

Optional Accessories

| Part No. | Description |
|-------------------|--|
| WISE-DB1500-01A1E | M2.COM evaluation carrier board |
| 1750008653-01 | Antenna Cable RP-SMA to MHF4 L=200mm |
| 1750007965-01 | Antenna Cable R/P SMA (M) to MHF4, 300mm |
| 1750007965-01 | Antenna Cable R/P SMA (M) to MHF4, 300mm |
| 1700015038 | FPC Cable 10P-0.5mm 7.9cm |
| 9696ED2200E | ASS'Y WISE-ED22 A101-1 M2.COM Daughter |
| 1931000590 | Screw M2.5x5L F/S D=5.3 H=0.8 (1+) ST Ni |
| 1700023619-01 | A cable USB-A 4P(M)/micro USB 5P(M) 1m |
| 1700025876-01 | M cable USB-A 4P(M)/Plug-in 2P-5.0 90CM |



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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.