

Operational Description

The device WB15 is a Wi-Fi/Bluetooth Module, it supports 802.11 a/b/g/n/ac2x2 MIMO and Bluetooth 4.2.

The device designated with the following general information and technical Specification as following:

Feature Summary

- NXP i.MX8M Mini CPU
- 1GB LPDDR4 RAM
- 8GB eMMC
- 1 x MIPI DSI
- 1 x MIPI CSI
- Wi-Fi 802.11 a/b/g/n/ac, 2x2 MIMO
- Bluetooth 4.2
- 1 x USB 2.0 OTG
- 1 x USB 2.0 Host
- 1x RGMII interface
- 1 x SD/MMC
- Serial interfaces (2 x I2C, 3 x UART, 1 x SPI, 3 x SAI)
- 9 x GPIOs
- 1x PDM
- 1x SPDIF

Main chipset

- LBEE5XV1VA
- Oscillators internal 32 kHz from crystal

Antenna information:

◎Antenna BT

- Frequency band range: 2400 MHz ~ 2483.5 MHz
- Manufacturer: SHENZHEN SOUTH STAR TECHNOLOGY CO.,LTD .
- Model Name : N14-0808-R0A
- Antenna type: PCB Antenna
- Antenna gain: 2.09 dBi

◎Antenna BT②

- Frequency band range: 2400 MHz ~ 2483.5 MHz
- Manufacturer: INPAQ TECHNOLOGY CO., LTD.
- Model Name : WA-F-LA-01-015
- Antenna type: FPCB Antenna
- Antenna gain: 2.17 dBi

◎Antenna WIFI①

- Manufacturer: SHENZHEN SOUTH STAR TECHNOLOGY CO.,LTD.
- Model Name : N12-5776-R0A
- Antenna type: PCB Antenna
- Frequency band range: 2400 MHz ~ 2483.5 MHz
- [2.4G] Antenna gain: 5.42 dBi
- Frequency band range:5150 MHz ~ 5850 MHz
- [5G] Antenna gain: 5.48 dBi

◎Antenna WIFI②

- Manufacturer: SHENZHEN SOUTH STAR TECHNOLOGY CO.,LTD.
- Model Name : N12-5777-R0A
- Antenna type: PCB Antenna
- Frequency band range: 2400 MHz ~ 2483.5 MHz
- [2.4G] Antenna gain: 5.28 dBi
- Frequency band range: 5150 MHz ~ 5850 MHz
- [5G] Antenna gain: 6.39 dBi

◎Antenna WIFI③

- Manufacturer: INPAQ TECHNOLOGY CO., LTD.
- Model Name : WA-F-LB-03-110
- Antenna type: FPCB Antenna
- Frequency band range: 2400 MHz ~ 2483.5 MHz
- [2.4G] Antenna gain: 2.91 dBi
- Frequency band range: 5150 MHz ~ 5850 MHz
- [5G] Antenna gain: 2.79 dBi

◎Antenna WIFI④

- Manufacturer: INPAQ TECHNOLOGY CO., LTD.
- Model Name : WA-F-LB-02-187
- Antenna type: FPCB Antenna
- Frequency band range: 2400 MHz ~ 2483.5 MHz
- [2.4G] Antenna gain: 2.22 dBi
- Frequency band range: 5150 MHz ~ 5850 MHz
- [5G] Antenna gain: 3.23 dBi

◎Antenna WIFI⑤

- Manufacturer: SHENZHEN SOUTH STAR TECHNOLOGY CO.,LTD.
- Model Name : N12-5776-R0A
- Antenna type: PCB Antenna
- Frequency band range: 2400 MHz ~ 2483.5 MHz
- [2.4G] Antenna gain: 1.81dBi
- Frequency band range: 5150 MHz ~ 5850 MHz
- [5G] Antenna gain: 3.4dBi

Tune up power:

Frequency Band	Frequency/Band (GHz)	Data Rate (Mbps)	MaxTune-up power (dBm)
Bluetooth BR/EDR	2.4	1	11
Bluetooth LE	2.4	1	1
2412-2462	2.4	1	22
5150-5250	5	1	14
5250-5350	5	1	20
5470-5725	5	1	19
5725-5850	5	1	20