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# Radxa Wireless Module A8

an M.2 Module supporting WiFi6 and BT5.2

Revision 1.0

2023-05-10



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# 1 Revision Control Table

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Version	Date	Changes from previous version
1.0	10/05/2023	Update information

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## 2 Introduction

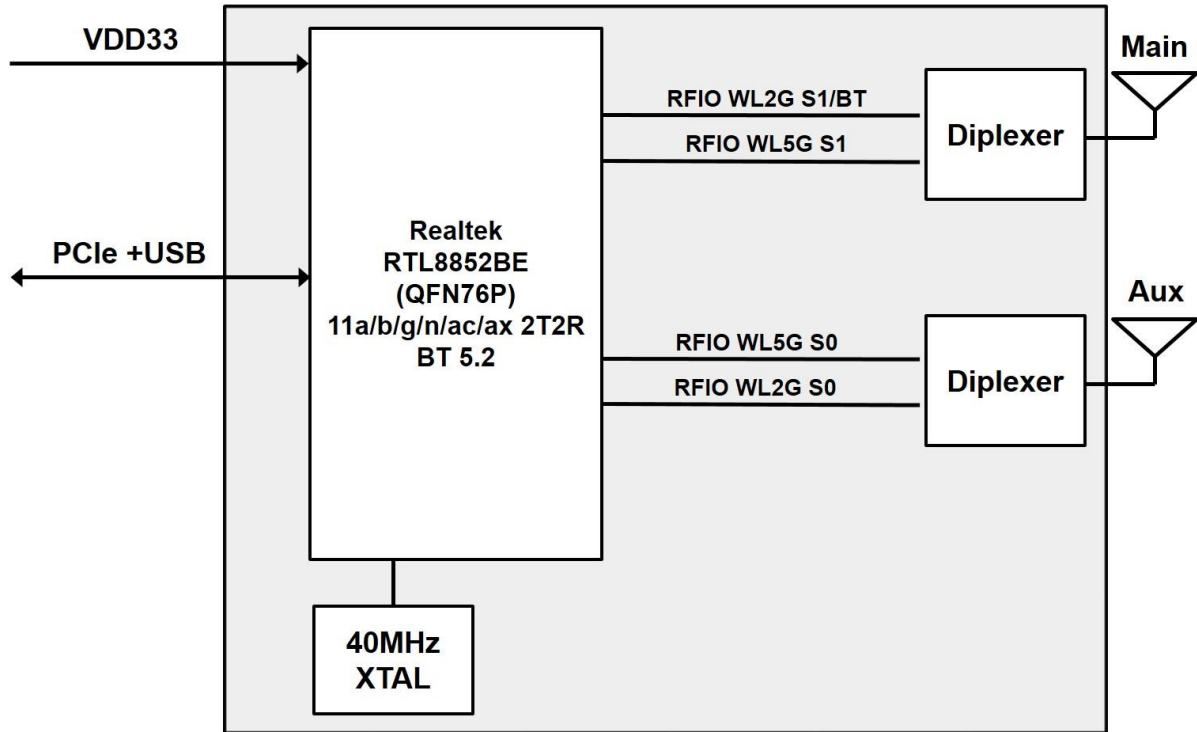


Radxa Wireless Module A8 is a standard M.2 2230 Wireless Module based on Realtek RTL8852BE, a highly integrated single-chip that support 2-stream 802.11ax solutions with multi-user MIMO (Multiple-Input, Multiple-Output) with Wireless LAN (WLAN) PCI Express network interface controller with integrated Bluetooth 5 USB interface controller. It combines a WLAN MAC, a 2T2R capable WLAN baseband, and RF in a single chip.

### 3 Features

- IEEE 802.11a/b/g/n/ac/ax compatible WLAN
- Support Bluetooth 5 system (BT 5.2 Logo Compliant)
- Complete 802.11n MIMO solution for 2.4GHz and 5GHz band
- Maximum PHY data rate up to 286.8 Mbps using 20MHz bandwidth, 573.5Mbps using 40MHz bandwidth, and 1201Mbps using 80MHz bandwidth
- Backward compatible with 802.11a/b/g devices while operating at 802.11n data rates
- Backward compatible with 802.11a/n/ac devices while operating at 802.11ax data rates
- Compliance with Windows operating system host-implemented FIPS 140-2 security requirements
- Support 20/40/80MHz 5GHz
- supports WLAN-Bluetooth coexistence
- supports low power Bluetooth
- Support Bluetooth 5 system (BT 5.2 Logo Compliant)
- Compatible with Bluetooth v2.1+EDR

### 4 Block Diagram

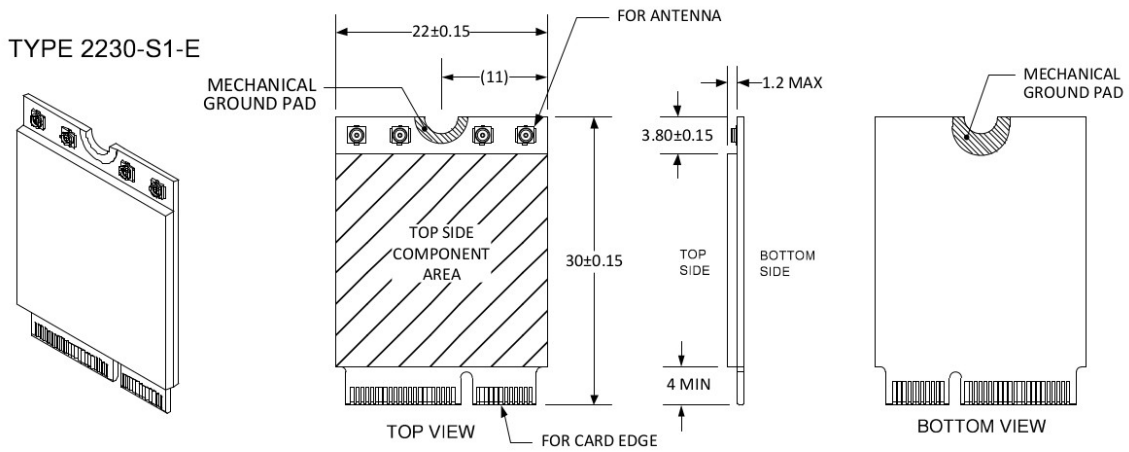


### 5 Specifications

Features	Description
Name	Radxa Wireless Module A8
Product Description	IEEE 802.11a/b/g/n/ac/ax Wireless LAN 2T2R and Bluetooth 5.2 Combo Module (M.2 2230)
Chipset	RTL8852BE
Host Interface	Wi-Fi: PCIe BT: USB
Dimension	22mm x 30mm x 2.25mm
Form Factor	M.2 2230 E Key
Antenna	I-PEX MHF4 Connector Receptacle (20449) ANT1(Main): WiFi/Bluetooth TX/RX ANT2(AUX): WiFi TX/RX

Features	Description
Operating Temperature	0 to +70°C
Weight	3g

## 6 Dimensions



## 7 Compatible Single Board Computers

- Radxa ROCK 3A
- Radxa ROCK 5B

## 8 Availability

Radxa guarantees availability of the Radxa Wireless Module A8 until at least September 2029.

### 9 Support

For support, please see the support documentation section of the [Radxa website](#) website and post questions on the [Radxa Forum](#).

