

RED bean is a high performance and ultra low power surface mount SDIO radio combining single-stream 11ac Wave2 Wi-Fi and Bluetooth® 5.0 in a very small form factor

RED bean is IEEE 802.11b/g/n/a/ac Wave2 dual-band wireless LAN and Bluetooth 5.0 SDIO 3.0 module optimised for small size and low power consumption.

It is based on Qualcomm QCA9377-3 chipset. Has an integrated dual-band (2.4 and 5 GHz) 1x1 802.11ac Wave2 WiFi (supporting MU-MIMO) and Bluetooth® 5.0 transceivers and combined in to very small form factor (17 x 12 mm with RF connector and 24 x 12mm with integrated antenna).

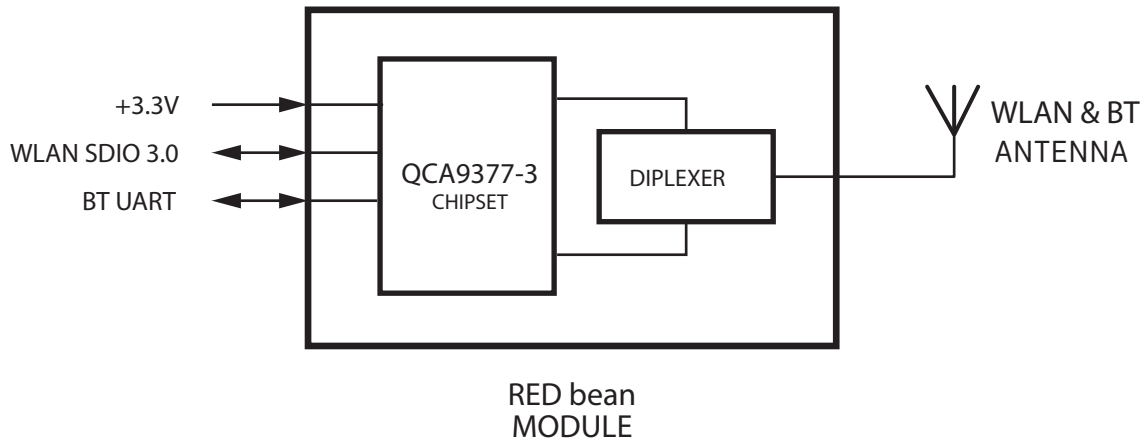
The radio module supports advanced power saving techniques. Bluetooth supports both Class1 and Class2 transmissions and advanced coexistence mechanisms allow it to work seamlessly with Wi-Fi ensuring good quality and high performance.

RED bean software drivers are available for Linux, Windows 10 and Android operating systems.

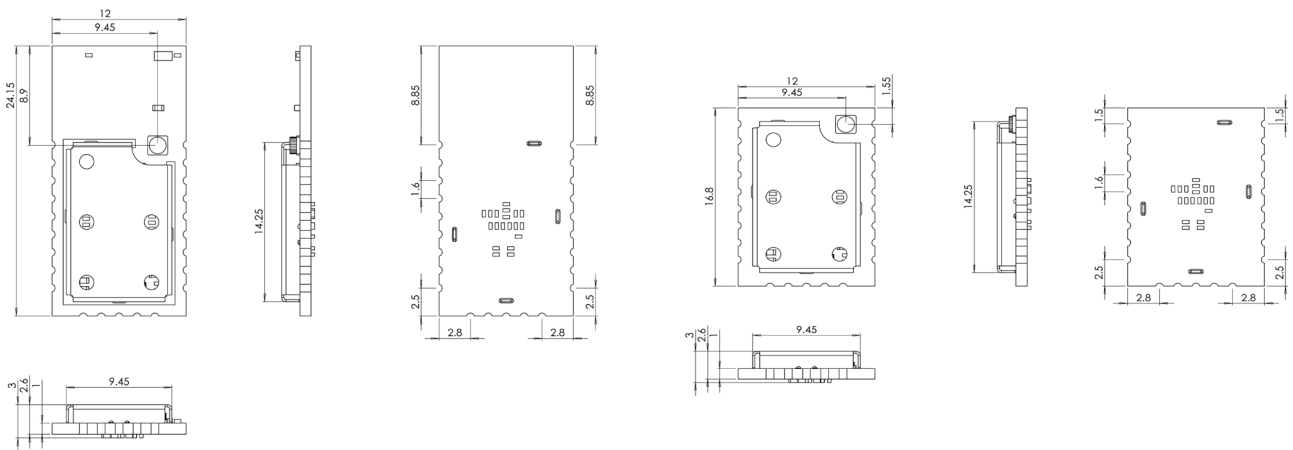
Quick specs

- 802.11a/b/g/n/ac, 2.4 and 5 GHz, 1x1 SISO, 433 Mbps data rate, up to 20 dBm output power
- 20/40/80 MHz channel size support
- MU-MIMO
- Bluetooth v5.0, BLE, ANT+ and backwards compatibility with BT v1.x and BT v2.x + enhanced data rate
- Connectorized (Murata HSC type connector: MM4829-2702RB0) or an integrated dual-band antenna version
- Linux, Windows and Android drivers available
- Based on QCA9377-3 chipset
- Industrial temperature range -40 to +85 C°
- Very small form factor (17 by 12 mm without antenna or 24 by 12 mm with antenna)
- Surface mount, dual-side design
- Available interfaces - Bluetooth UART, WLAN SDIO 3.0

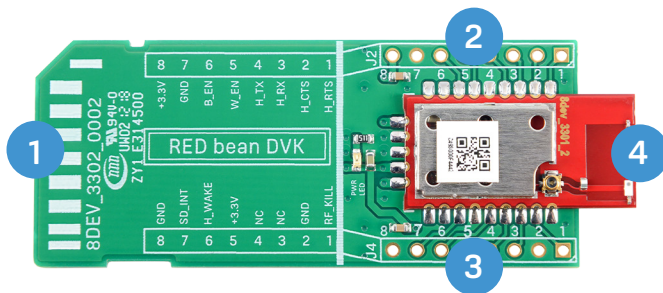
Block diagram



Module dimensions (with antenna/ without antenna)



Development kit



- 1 - SDIO interface (micro SD)
- 2, 3 - Module breakout for accessing HCI UART and other functionality
- 4 - RED bean module

Pinout Information (with antenna/ without antenna)

