

New Product Introduction

PAN W602 Wi-Fi 6 & Bluetooth® 5.4 Module

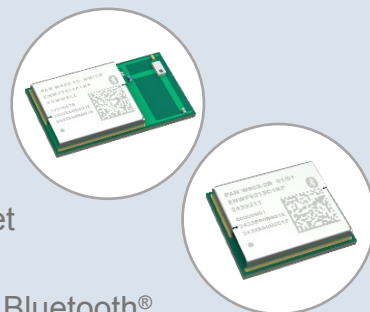
The **PAN W602-1** is a single band 2.4 GHz companion module with integrated Bluetooth® Low Energy (LE) for cost-effective projects and is based on the chipset CC3301 from Texas Instruments.

The **PAN W602-2** is a dual band 2.4 & 5 GHz companion module with integrated Bluetooth® Low Energy (LE) for projects which require more data rates or less interferences and is based on the chipset CC3351 from Texas Instruments.

The companion modules connect via SDIO or SPI for Wi-Fi and HS UART or SPI for Bluetooth to any Linux or FreeRTOS driven host platform to enable seamless wireless communication.

In a compact form factor the module either comes with an integrated chip antenna or the option to connect an external antenna via the bottom pad.

These new Wi-Fi modules are certified in USA (FCC), EUROPE (CE RED), UNITED KINGDOM (UKCA), CANADA (ISED), Additional regional certifications may be available upon interest/request.



Features

- Single & Dual Band (2.4 GHz & 5 GHz) 802.11 A/B/G/N/Ax Wi-Fi
- Bluetooth® 5.4 Low Energy (1M, 2M, LE Coded PHY)
- WPA3 Personal and Enterprise As Station
- Multirole Support: Access Point & Station
- Wi-Fi 6: Target Wake Time (TWT), OFDMA, MUMIMO (Downlink), Basic Service Set Coloring
- Simultaneous Operation of Wi-Fi and Bluetooth®
- IEEE 802.11ax, 1×1 Spatial Stream with Data Rates Up To 86 Mbps (MCS7, 20 MHz Channel Bandwidth)
- Enhanced Security Such as Firmware Authentication and Anti-Rollback Protection
- Support For Host Processors Running a Linux® Operating System

Characteristics

- Integrated Antenna or Bottom Pad Version
- Dimensions [Mm]
 - Bottom Pad: 8.8 X 10.0 X 1.8
 - Integrated Antenna: 8.8 X 15.25 X 1.8
- Host Interface
 - Wi-Fi: SDIO 2.0 (1.8 V)
 - Bluetooth®: High-Speed UART (1.8 V)
- Coexistence: 3-Wire Or 1-Wire PTA For External Coexistence with Additional 2.4-Ghz Radios
- Tx Power Up To +16 DBm
- 20 MHz Channel Bandwidth
- Rx Sensitivity: -96 DBm At IEEE 802.11b 1 Mbps
- Power Supply: 1.8 V (Core And I/O) And 3.3 (PA)
- Wide Temperature Range: -40 °C To +85 °C
- Typical Current Consumption
 - Tx:95 Ma (V1V8) And 167 Ma (V3V3) @ 802.11ax (HE MCS7) 2.4 GHz, Rx: 59 Ma @ 2.4 GHz,
 - Tx:145 Ma (V1V8) And 163 Ma (V3V3) @ 802.11ax (HE MCS7) 5 GHz, Rx:88 Ma @ 5 GHz
- Low Power Mode 330 Ma

