

Wi-Fi 5 + BT v5.0 Module for Connected Platforms

Supports Multiple HW/OS Platforms to Deliver Connectivity in HARSH ENVIRONMENTS

Based on Qualcomm's QCA9377, the CMP9377 is a multiprotocol connectivity module delivering the optimal combination of high performance and low power connectivity. The highly integrated module provides dual-band, single stream 802.11 ac plus Bluetooth v5.0. Support for high-speed Wi-Fi connectivity can deliver enriched media experiences for a variety of connected devices while optimized for energy efficiency to extend the usable battery life of portable devices. Offering advanced WLAN/Bluetooth coexistence algorithms, the CMP9377 supports superior rate-over-range throughput and low-latency performance in real-world RF operating conditions.

The integrated CPU manages the Wi-Fi stack to minimize resource requirements on your host platform. The low-level Bluetooth stack runs onboard with a Host Control Interface (HCI) to your host platform running the user-selected Bluetooth stack and profile combination. Support for all Bluetooth profiles and BLE services is integrated.



KEY FEATURES

- 802.11 a/b/g/n/ac Wave 2 MU-MIMO
 - Dual-Band Wi-Fi support (2.4 GHz / 5 GHz)
 - Integrated Coexistence Manager
 - Dedicated CPU for WLAN stack
 - 20/40/80 MHz channel support
 - MU-MIMO, Transmit Beamforming (PCIe only)
 - Pout of 18 dBm
- Bluetooth v5.0 Smart Ready
 - Host Control Interface (HCI)
 - Pout of 8 dBm (Bluetooth)
 - Pout of 4 dBm (BLE)
- Wireless Coexistence
 - Concurrent Wi-Fi and BLE
 - Per-Packet Coexistence Manager
- Power Management Features
 - Single 3.3V Regulated Supply
 - $\circ \quad \text{Clock Gating to idle blocks}$
 - Processor Frequency Scaling

HOST DRIVER SUPPORT

- Source Code available for multiple HW/OS reference platforms:
 - Android
 - Linux
 - Windows

- WLAN Interface Options (Versions not pin compatible)
 - SDIO (CMP9377-Sx)
 - USB v2.0 (CMP9377-Ux)
 - PCIe (CMP9377-P)
- Bluetooth Interface Options
 - UART (CMP9377-Sx)
 - USB (CMP9377-Ux; CMP9377-P)
- Antenna Options
 - Integrated dual-band chip
 - RF Connector (I-PEX MHF4 P/N 20449-001E)
- Compact Form Factor
 - 17 x 12 x 3 mm (CMP9377-SC/UC)
 - 24 x 12 x 3 mm (CMP9377-SA/UA)
 - 30 x 16.5 mm M.2 (CMP9377-P)
- Operating Temperature: -40° C to +85°C
- Certifications
 - FCC
 - IC
 - CE RED
- Platform Porting Options
 - Porting Guides available
 - Custom driver development available through Engineering Services contract

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