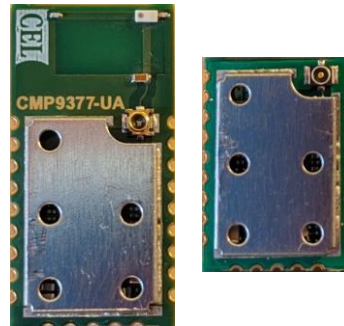# Wi-Fi 5 + BT v5.0 Module for Connected Platforms

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

Based on Qualcomm's QCA9377, the CMP9377 is a multi-protocol 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
  - Clock Gating to idle blocks
  - Processor Frequency Scaling

- 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

HOST DRIVER SUPPORT

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

- Platform Porting Options
  - Porting Guides available
  - Custom driver development available through Engineering Services contract