

# CMP9377: Wi-Fi + BT Module for Connected Platforms

# **Dual-Band 802.11 ac Plus Bluetooth Smart Ready Solution**

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
  - STBC, MU-MIMO, Transmit Beamforming
  - Pout of 20 dBm
- Bluetooth v5.0 Smart Ready
  - Host Control Interface (HCI) for External Bluetooth Stack
  - Supports all standard Bluetooth profiles
  - Pout of 14 dBm (Bluetooth)
  - Pout of 4 dBm (BLE)
- Wireless Coexistence
  - Concurrent Wi-Fi and BLE/15.4
  - Per-Packet Coexistence Manager
- Operating Temp: -40 Deg C to +85 Deg C

#### **HOST DRIVER SUPPORT**

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

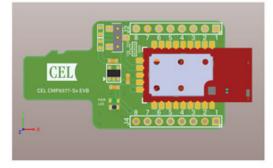
- Power Management Features
  - Single 3.3V Regulated Supply
  - Clock Gating to idle blocks
  - Voltage Scaling
  - Processor Frequency Scaling
  - Multiple WLAN Interface Options
  - SDIO (CMP9377-S)
  - USB v2.0 (CMP9377-U)
- Bluetooth Interface Options
  - UART (CMP9377-S)
  - USB v2.0 (CMP9377-U)
- Antenna Options

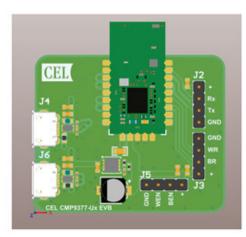
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- Integrated dual-band chip
- Miniature coax connector for external antenna
- Compact Form Factor
  - o 17 x 12 x 3 mm (antenna connector)
  - 24 x 12 x 3 mm (chip antenna)
- Certifications: FCC/IC/CE Pending
- Platform Porting Options
  - Porting Guides available
  - Custom driver development available through Engineering Services contract



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#### **ORDERING INFORMATION**

Part Number	Description
CMP9377-SA	SDIO WLAN Module; Chip Antenna
CMP9377-SC	SDIO WLAN Module; Antenna Connector
CMP9377-UA	USB WLAN Module; Chip Antenna
CMP9377-UC	USB WLAN Module; Antenna Connector
CMP9377-S-	Evaluation Board for CMP9377-Sx
EVB	
CMP9377-U-	Evaluation Board for CMP9377-Ux
EVB	

### **SDIO Module EVALUATION BOARD**

#### PN:CMP9377-S-EVB

- 1. SDIO Interface via Micro SD Card
- 2. UART Bluetooth HCI interface
- 3. Module I/O
- 4. SDIO Module with dual-band antenna

#### **USB Module EVALUATION BOARD**

#### PN:CMP9377-U-EVB

- 1. USB WLAN interface
- 2. USB Bluetooth HCI interface
- 3. Integrated dual-band antenna
- 4. WLAN/BT Off Jumpers
- 5. WLAN/BT On Jumpers
- 6. USB Module

# **CORPORATE OFFICE**

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### **ABOUT CEL**

California Eastern Laboratories (CEL) is a U.S. based company with a 60+ year history of wireless expertise. CEL assists customers in all phases of wireless product development, from concept to production. At our RF labs we can assist customers with certification pre-scans, RF performance analysis and antenna tuning.