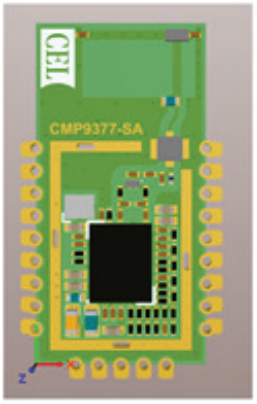
CMP9377: Wi-Fi + BT Module for Connected Platforms

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

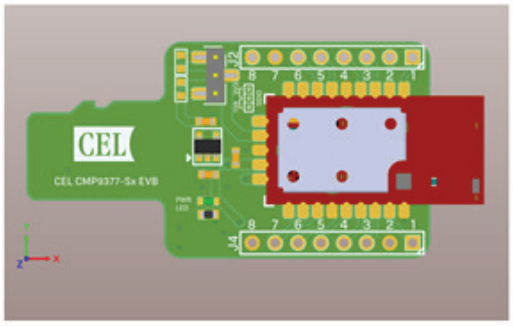
- 802.11 a/b/g/n/ac Wave 2 MU-MIMO
  - Dual-Band Wi-Fi support (2.4 GHz / 5 GHz)
  - Integrated Coexistence Manager
  - Dedicated CPU for WLAN stack
  - 20/40/80 MHz channel support
  - STBC, MU-MIMO, Transmit Beamforming
  - Pout of 20 dBm
- Bluetooth v5.0 Smart Ready
  - Host Control Interface (HCI) 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
- 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
  - Integrated dual-band chip
  - Miniature coax connector for external antenna
- Compact Form Factor
  - 17 x 12 x 3 mm (antenna connector)
  - 24 x 12 x 3 mm (chip antenna)
- Certifications: FCC/IC/CE Pending

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

© California Eastern Laboratories March 2019

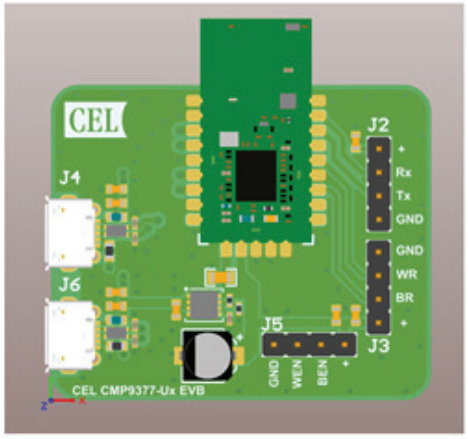
CMP9377: Wi-Fi + BT Module for Connected Platforms



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

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-EVB	Evaluation Board for CMP9377-Sx
CMP9377-U-EVB	Evaluation Board for CMP9377-Ux

CORPORATE OFFICE

Santa Clara, CA

WIRELESS CENTER OF EXCELLENCE

Buffalo Grove, IL

CONTACT US

wirelessmodules@cel.com
www.cel.com
408-919-2618

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.