CMP4010
Wi-Fi + BLE Connectivity for IoT

Feature rich & high performance

- Surfce-mount
- PCB-trace Antenna
- Antenna Connector
- Castellation Edge
- 16.7 x 26.3 mm

Built for high performance and harsh environments, CEL's Hosted or Hostless IoT connectivity module is perfect for applications requiring multiple technologies for local+remote connectivity, a simple method for commissioning Wi-Fi, low power, processing at the edge, running a complete application, data/audio/video applications, and more. Below are some key highlights of this leading-edge solution.

WIRELESS FEATURES
- Single-Band 802.11 b/g/n
  - Tx: +18 dBm
  - Wi-Fi Direct & Soft AP
  - Wake on RF
- BLE 5.0 and BT Mesh
  - Tx: +4.5dBm
  - 2Mbit PHY
  - Co-existence Manager
- Low Power Consumption
- Long Range & Broad Coverage
- High Noise Immunity
- High Throughput

APPLICATON RESOURCES
- Dual-core 32-bit Arm Cortex-M33 & M23 compatible
- 8/2 MB Flash, 4MB PSRAM, 512kB SRAM
- 35 GPIO, USB/UART/SPI/I2C
- RTC, I2S & Audio CODEC
- Cap Touch & Keyscan
- Advanced Security Features

SOFTWARE DEVELOPMENT TOOLS
- HOSTED: AT Command Set
- HOSTLESS: RTOS Support - FreeRTOS, Arm Mbed
- Toolchain Support: IAR, GCC
- AWS/Google Cloud/Azure Certified Platform
- Alexa/Smart Assistant and Homekit Support

NETWORKING SUPPORT:
- APP – HTTP, MQTT, COAP, TLS, SSL
- Internet –IPv4, IPv6
- Transport – TCP, UDP

REFERENCE CODE AVAILABLE
- Wi-Fi Provisioning via BLE
- USB UVC Camera Interface @1280x720 30fps (~3.5MB/s)
- OTA FW Updates
- Fast Connect
- Remote Connectivity

APPLICATIONS
- Connected Home...Lights, switches, outlets, circuit breakers, door cameras, wall displays, appliances, timers
- Safety...CO2, Smoke Detectors
- Residential HVAC...T-STATs, AC units, furnace, sensors
- Security...Locks, keypads, cameras
- C&I Lighting...control adaptors, sensors, switches
- Building Automation...HVAC controllers, VAVs, security devices, shade controls, lighting controls & sensors
- Smart Energy...generators, load switches, power modules

SAMPLING KITS AVAILABLE
DigiKey – CMP4010-EVB
Mouser – CMP4010-EVB

Questions? Call Us
(408) 919-2500
www.cel.com