ULTRA LOW POWER CONNECTIVITY FOR MPU/MCU DESIGNS

TODAY'S DEMANDING IOT APPLICATIONS REQUIRE MULTI-PROTOCOL WIRELESS CONNECTIVITY, MPU/ MCU SUPPORT, INTEGRATION, LOW POWER CONSUMPTION, AND EXCELLENT RANGE AND COVERAGE. CEL ADDRESSES THESE ISSUES BY OFFERING A SOLUTION THAT INTEGRATES WI-FI AND BLE, OPTIMIZING THE WIRELESS PERFORMANCE FOR CHALLENGING ENVIRONMENTS AND POWER CONSTRAINED APPLICATIONS, TWO ANTENNA OPTIONS, AND PROVIDES DEVELOPMENT TOOLS, RESOURCES, AND SUPPORT TO ASSIST THE DEVELOPER. BELOW ARE HIGHLIGHTS OF CEL'S HIGH-PERFORMING CMP9010.

WIRELESS FEATURES

- Wi-Fi SDIO Interface, BLE UART Interface
- Dual-Band 802.11 a/b/g/n
- Tx: +20 dBm
- Single Stream; 20/40 MHz Channels
- 150 Mbps (MCS7)
- BLE 5.1 and BT Mesh
- Tx: 13.5 dBm max (1M PHY)
- 2 Mbps, Long Range, AoA/AoD
- Advertising Extensions
- LTE Co-Existence
- Low Power Consumption
- Long Range & Broad Coverage
- High Noise Immunity
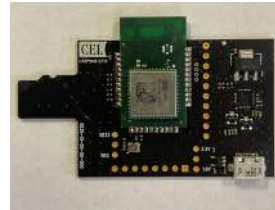- WPA3 Security

ANTENNA OPTIONS

- Integrated Dual-Band PCB Trace
- MHF4 connector

OTHER

- Certifications: FCC/IC/CE
- 16.64 x 27.80 x 3.47 mm
- 0 C to +70 C or -40 C to +85 C Operation
- Castellation Edge Connections to HOST PCB

EVALUATION PLATFORM

- SD Interface Board for Easy Evaluation and Development

HOST DRIVER SOURCE CODE

- Linux/Android for MPU
  - Pre-tested and integrated in NXP's iMX 6/7/8 SDKs, Others MPUs supported
- FreeRTOS for MCU
  - Pre-tested and integrated in NXP's RT1170/1064/1060/1050/1024/1020 SDKs

TOOLS AND SUPPORT

- MCUXpresso IDE
- Hardware Design Guide
- CEL Software Repository

APPLICATIONS

- Healthcare and Medical Devices
- Building Automation
- Retail/POS Terminals
- Smart City
- Smart Home
- IP Cameras
- Connected Tools

California Eastern Laboratories