CMP4612
Hostless Wi-Fi 6 + BLE 5.4 + 802.15.4 for IoT

Feature rich and high performance

- Dual-Band Wi-Fi
- Cortex-M33
- Advanced Security
- Industrial Temp.
- FCC/IC Certified

Designed for multi-protocol applications, the CMP4612 offers Wi-Fi 6, BT5.4, and 802.15.4 technologies to utilize in your application. Included are a rich set of application resources like, an ARM-Cortex-M33, up to 16MB Flash, 1.2MB SRAM, numerous interfaces including USB, SDIO, and ethernet, as well as a variety of peripherals such as an ADC/DAC, PWMs, and LCD Interface. The CMP4612 also provides some of the most advanced security features, including NXP's EdgeLock, Trusted execution environment, TRNG, and more. The solution is compact and includes either an integrated antenna or connector.

WIRELESS FEATURES
- Dual-Band 802.11 a/b/g/n/ac/ax
  - SISO
  - Tx: +20dBm, Wi-Fi extended range
  - TWT, Low-power idle, standby, and sleep modes
- BLE 5.4
  - Isochronous channels support including LE audio
  - Tx: +15.0dBm
  - BLE 2Mbps and LR Coded PHY
  - I2S and PCM audio interface
- 802.15.4 Thread/MATTER
  - Operate as Matter Controller or Thread Border Router

SECURITY
- NXP EdgeLock Assurance and 2GO Trust Provisioning
- Trusted executon environment
- Hardware root of trust
- Hardware crypto accelerators
- TRNG
- Physical Unclonable Function
- Secure boot, software update and debug

OS AND APPLICATION RESOURCES
- FreeRTOS
- 260MHz ARM Cortex-M33 w/TrustZone-M
- Memory
  - 1.2MB SRAM
  - 8MB Flash (16MB option)
  - External PSRAM interface
- Interfaces
  - 5 x configurable universal serial interfaces
  - SPI/I2C/I2S/UART
  - SDIO 3.0
  - High speed USB 2.0
  - IEEE 1588 RMII/Fast Ethernet interface
  - QVGA (320 x240) LCD
  - 16-bit ADC and 10-bit DAC
  - 32-bit general purpose timers/PWM
  - 4 x digital microphone support

MECHANICAL
- Dimensions: 16.7 x 27.2
- PCB Mount: Castellation Edge + LGA
- On-board Antenna
- MFH4 Connector
- Operating Temp: -40 to +85 Deg C

APPLICATIONS
- Connected Home
- HVAC
- Security
- Appliances
- Lighting
- Building Automation
- Smart Energy

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