

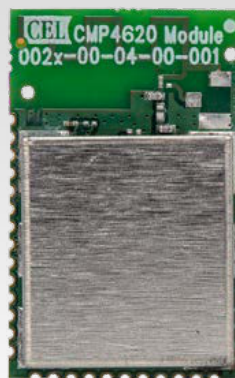


CMP4620

Hostless Wi-Fi 6 + Bluetooth LE 5.2

Wi-Fi + BT Mesh for Industrial IoT

Inquiry



- 2.4 GHz Wi-Fi 6 + BT 5.2
- Dual-Core Up To 400 MHz
- RISC-V and ARM Compatible
- Wi-Fi 6 Target Wake Time
- Bluetooth Scatternet
- Bluetooth SIG Mesh

OVERVIEW

Designed for next generation Wi-Fi IoT devices, the CMP4620 provides the latest in Wi-Fi 6 performance and features, as well as BLE 5.2 with Scatternet and SIG Mesh. It comes equipped with a Dual-Core MCU. The first core is an ARM processor compatible with Cortex-M55 instructions. The second is a RISC-V instruction compatible core. Both cores are 32 bit and can run at speeds up to 400 MHz. Ensure protection with the CMP4620's variety of security features including TrustZone-M, ECDSA/ECDH public key encryption, HUK key derivation mechanism, and much more. The CMP4620 comes with access to CEL's software repository which contains example source code, quick start guides, and other resources for easy and seamless integration.

WIRELESS FEATURES

- **Single-Band 802.11 b/g/n/ax**
 - ▶ Tx: Up to +20 dBm
 - ▶ TWT, OFDMA, UL LDPC, DL STBC
 - ▶ SISO
- **BLE 5.2**
 - ▶ Scatternet (Concurrent Central & Peripheral Mode)
 - ▶ Flooding-Mode and Scatter-Mode SIG Mesh
 - ▶ AoA and AoD
 - ▶ BLE LR Coded PHY

SECURITY

- Secure Boot (M55)
- TrustZone-M
- TRNG
- Hardware crypto engines
- ECDSA engine

APPLICATION RESOURCES

- **Dual-Core MCU**
 - ▶ KM4 – 32-bit, ARM Cortex-M55 Compatible Processor
 - ▶ KR4 – 32-bit, RISC-V Compatible Processor
- **Memory**
 - ▶ 8 MB Flash
 - ▶ 256 + 512 KB SRAM
 - ▶ 4 MB PSRAM
- **Audio**
 - ▶ 128 KB VAD buffer
 - ▶ 2x I2S, PDM, 4 Channel DMIC
- **Peripherals & Interfaces**
 - ▶ 2x I2C, 5x UART, 2x SPI
 - ▶ 8x PWM, SWD, 18x GPIO
 - ▶ 9 Channel Cap-Touch
 - ▶ 6 Channel ADC

MECHANICAL

- Dimensions: 16.7 x 26.3 mm
- On-Board Antenna
- Antenna Connector
- -20°C to +85°C Operation

APPLICATIONS

- Home IoT and Building Automation
- Security or Lighting Systems
- Smart Appliances
- Audio, HMI, Medical

Questions? Call Us
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