CEL

FEATURE RICH & HIGH PERFORMANCE

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.

Surface-mount
PCB Trace Antenna
Antenna Connector
Castellation Edge
16.7 x 26.3mm

NOW SAMPLING KITS @ WWW.CEL.COM

WIRELESS FEATURES

- Single-Band 802.11 b/g/n
- Tx: +18dBm
- 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

APPLICATION RESOURCES

- Dual-core Cortex M4 & M0
- 16Mb 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

REFERENCE CODE AVAILABLE

- Wi-Fi Provisioning via BLE
- USB UVC Camera Interface @1280x720 30fps (~3.5MB/s)
- OTA FW Updates

APPLICATIONS

- Connected Home...Lights, switches, outlets, circuit breakers, door cameras, wall displays, appliances, timers
- Safety...CO2, Smoke Detectors
- Residential HVAC...Thermostats, 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

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