Product Description
The WE866C6-P is a dual-band (2.4 & 5 GHz), 1-stream (1x1) 802.11 ac Wi-Fi and Bluetooth®/Bluetooth® Low Energy module with an extremely small footprint that provides an easy and cost-effective way for manufacturers to add short-range, wireless connectivity to their products. With the integrated LTE-Wi-Fi/Bluetooth® coexistence filter, the product offers a powerful cellular backhaul solution with Telit’s LE910Cx 4G LTE module family. WE866C6-P also provides a high bandwidth Wi-Fi/Bluetooth® transceiver solution for Linux powered IoT systems.

The module supports a low-power, high-speed SDIO 3.0 host interface for Wi-Fi and a UART interface for Bluetooth®/Bluetooth® Low Energy. It also offers an additional PCM interface for Bluetooth®Audio.

The product is an ideal solution for organizations with limited RF (Wi-Fi/Bluetooth®) expertise or for those seeking faster time to market, as it reduces RF engineering time and removes the burden of testing and certification.

Key Benefits
- xE866 Telit form factor, Wi-Fi/Bluetooth® Low Energy bundling device for LE910Cx (4G LTE) module family
- High-bandwidth Wi-Fi/Bluetooth® Low Energy transceiver module for Linux-based IoT system
- Bluetooth® Low Energy 5.0 with low energy support
- Integrated LTE-Wi-Fi/Bluetooth® Low Energy coexistence filter
- Pre-certified for FCC, IC, CE, Wi-Fi Alliance, Bluetooth® SIG
- Single antenna for Wi-Fi and Bluetooth®/Bluetooth® Low Energy
- Industrial-grade temperature range

Target Applications
Transportation/Mobility
- Aftermarket/OEM telematics
- Fleet management
- Asset tracking
- Intelligent transportation
- Car phone
- OBD (onboard diagnostics)

Industrial/Infrastructure
- Condition-based monitoring
- Agriculture
- Video surveillance
- Healthcare equipment monitoring

Commercial/Enterprise
- Commercial building automation
- Patient monitoring
- Home security and automation
- Kiosks, vending, POS

AVAILABLE FOR
- EMEA
- Japan
- North America
- Latin America
- India
- Korea*
- China*
- Australia/New Zealand*
**WE866C6-P**

**Module Wireless Specification**

- Wi-Fi - 802.11 a/b/g/n/ac (2.4 GHz, 5 GHz @ 20/40/80 MHz),
- Bluetooth®/Bluetooth® Low Energy

**Supported Use-Cases**

- LTE-Wi-Fi bundling
- Linux companion

**LTE-Wi-Fi Bundling Architecture**

Hosted (AT commands) hostless

**LTE-Wi-Fi Bundling Supported Modules**

- LE910C4/C1-NF
- LE910C4/C1-EU
- LE910C4/C1-LA
- LE910C4/C1-AP
- LE910C4-CN
- LE910C1-NA/NS

**LTE-Wi-Fi Bundling HotSpot Throughput**

- LE910C1-xx: 10 Mbps (downlink), 5 Mbps (uplink)
- LE910C4-xx: 150 Mbps (downlink), 50 Mbps (uplink)

**LTE - Wi-Fi Bundling Coexistence**

- Integrated LTE-Wi-Fi/Bluetooth® coexistence
- Filter Built-in Wi-Fi/Bluetooth® coexistence

**Linux Companion Throughput**

- 200+ Mbps (over SDIO)

**Wireless Modes**

- Wi-Fi AP (access point - support up to 10 STAs), STA (client), Concurrent mode (AP + AP, AT + STA), BLE central/peripheral

**Host Interface**

- Wi-Fi: SDIO 3.0
- BT: UART
- BT Audio: PCM

**Radio Regulatory Certification**

- FCC, IC, RED, UKCA, Japan (TELEC), Brazil (ANATEL), Perú (MPC)
- India (WPC-ETA) Korea (KC)*, SRRC (China)*, Australia (RCM)*

**Compliance**

- Wi-Fi Alliance, Bluetooth®-SIG

**Antenna Option Dimension**

- 15 mm x 13 mm x 2.2 mm

**Temperature**

- -40 °C to +85 °C (industrial grade)

*Not available in first release*