



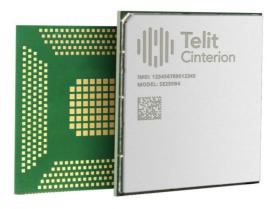






SF250B4

LTE Cat 4 150/50 Wi-Fi 802.11 a/b/g/n/ac Bluetooth® Low Energy 5.0



Product Description

The SE250B4 is Telit's second generation of smart modules with Android and Linux that supports LTE Cat 4, Wi-Fi and Bluetooth® connectivity, and an embedded GNSS receiver in one package Powered by the Qualcomm® QCM2290 quad-core ARM® Cortex®-A53 64-bit processor with built-in Adreno™ 702 GPU, the SE250B4 module is ideal for industrial and consumer applications requiring high data rates, multimedia functions and edge computing capabilities. It provides interfaces to easily connect to displays, cameras and various sensors and come with high-performance application processing and graphical processing power to boost the next generation of smart IoT devices requiring multimedia capabilities. Android allows easy, flexible and streamlined application development and opens access to the biggest software ecosystem for enhanced innovation. It also supports Linux (Yocto).

A rich set of interfaces, including but not limited to LCM, camera, touch screen, microphone, headset, speaker, SDIO 3.0, USB 3.1, UART, SPI and I2C, make these modules perfect for a wide range of IoT applications. These use cases include:

- · Mobile point-of-sale (mPOS), smart cash registers and vending machines
- · Smart alarm panels
- · Security surveillance cameras and home automation security systems
- · Smart home gateways
- Smart robots
- Industrial personal digital assistants (PDA)
- · Handled PCs and tablets
- · Police and law enforcement equipment
- · Telematics cameras
- Digital video recorders (DVR)
- In-car video streaming and entertainment systems SE250B4 delivers maximum data rates of up to 150 Mbps downlink and 50 Mbps uplink over the LTE network and support Wi-Fi communication in compliance with IEEE 802.11a/b/g/n/ac standards and Bluetooth® Low Energy 5.0.

It also embeds a multi-constellation and highsensitivity GNSS (GPS, BeiDou, GLONASS and Galileo) receiver for precise positioning. The compact LGA 41 x 43 mm form factor allows easy integration in portable devices. With the functionality and integrated resources in these compact modules, developers can easily and quickly develop user-friendly, touch-screen-equipped, IoTenabled devices.

Key Benefits

- Pre-certified processing power, rich multimedia experience and reliable wireless connectivity in one package for fast time to market
- · Android, for easy application development, and Linux
- Exceptional application and system performance based on Qualcomm® QCM2290 quad-core A53 @2.0 GHz 64-bit processor
- · Enhanced mobile rendering APIs for image and video applications via Adreno 702 GPU
- Powered by two Qualcomm Hexagon™ QDSP6
- Dual Cameras 25MP (13+13 MP)
- Supports recording and playback of 1080p video at 30 FPS
- Multi-mode 4G/3G/2G cellular radio for widearea network coverage
- · Wi-Fi and Bluetooth® connectivity for shortrange communications
- · Onboard multi-constellation GNSS positioning receiver

Variants

The SE250B4 includes three variants:

- The SE250B4-NA for North America offers wide band support, including AT&T Band 14 and T-Mobile U.S.* specifical Bands 66 and 71.
- The SE250B4-EU for Europe and other regions includes support for Band 28 and fallback to legacy 3G and 2G technologies.
- The SE250B4-WE: World-wide, Wi-Fi only (non Cellular).

AVAILABLE FOR

North America

Europe

World Wide (non cellular)











SE250B4

| | SE250B4-NA | SE250B4-EU | SE250B4-WE |
|---------------|---|-----------------------------|--|
| Market | North America (AT&T, Verizon, T-Mobile U.S.*) | EU, China and other regions | World-wide, Wi-Fi only (non-cellular) |
| LTE-FDD | Bands 2, 4, 5, 7, 12, 13, 14, 17, 25, 26, 66, 71 | Bands 1, 3, 5, 7, 8, 20, 28 | - |
| LTE-TDD | Band 41 | Bands 38, 40, 41 | - |
| WCDMA | - | Bands 1, 5, 8 | - |
| GSM/GPRS/Edge | | Bands 3, 8 | - |

Product Features

- LTE-FDD Cat 4
- Rx diversity and MIMO DL 2 x 2
- Single Rx option
- VoLTE support
- Wi-Fi IEEE 802.11a/b/g/n/ac
- Bluetooth® Low Energy 5.0
- · Simultaneous support of GPS, GLONASS, BeiDou and Galileo
- Android Go 13/14* 32 bit
- · Linux (Yocto)

Hardware and Electrical Specifications

- Dimensions: 41 x 43mm
- LGA 408 pads + 60 thermal pads
- USB 3.1
- UART
- SPI
- 12C
- LCM
- · Camera 2x4-lane CSI
- · Touch screen
- Microphone
- Headset
- Speaker
- SDIO 3.0
- · Battery charge management
- GPIOs
- RTC
- 2x 1.8 V/3 V SIM (UIM) interfaces with dual-SIM dual-standby (DSDS) support
- · Cellular main antenna and Rx diversity antenna pads, GNSS antenna pad
- Temperature range: -30°C to+75° C
- · REACH and RoHS compliant
- Output power
 - Class 3 (0.2 W, 23 dBm) @ LTE
- · Supply voltage range:
 - Nominal: 3.8 V dc
 - Range: 3.5-4.4 V dc

Data Throughput

LTE Cat 4

- Uplink up to 50 Mbps (FDD) and 30 Mbps (TDD)
- Downlink up to 150 Mbps (FDD) and 130 Mbps (TDD)

Approvals

- FCC, IC, GCF, PTCRB, CP65, BT-SIG, WFA (SE250B4-NA)
- · RED, GCF, RoHS, REACH, BT-SIG, WFA (SE250B4-EU)
- BT-SIG, WFA (SE250B4-WE)
- · AT&T, Verizon. Others in planning (SE250B4-NA)

QUESTIONS? VISIT WWW.TELIT.COM/CONTACT-US



