Smart Modules
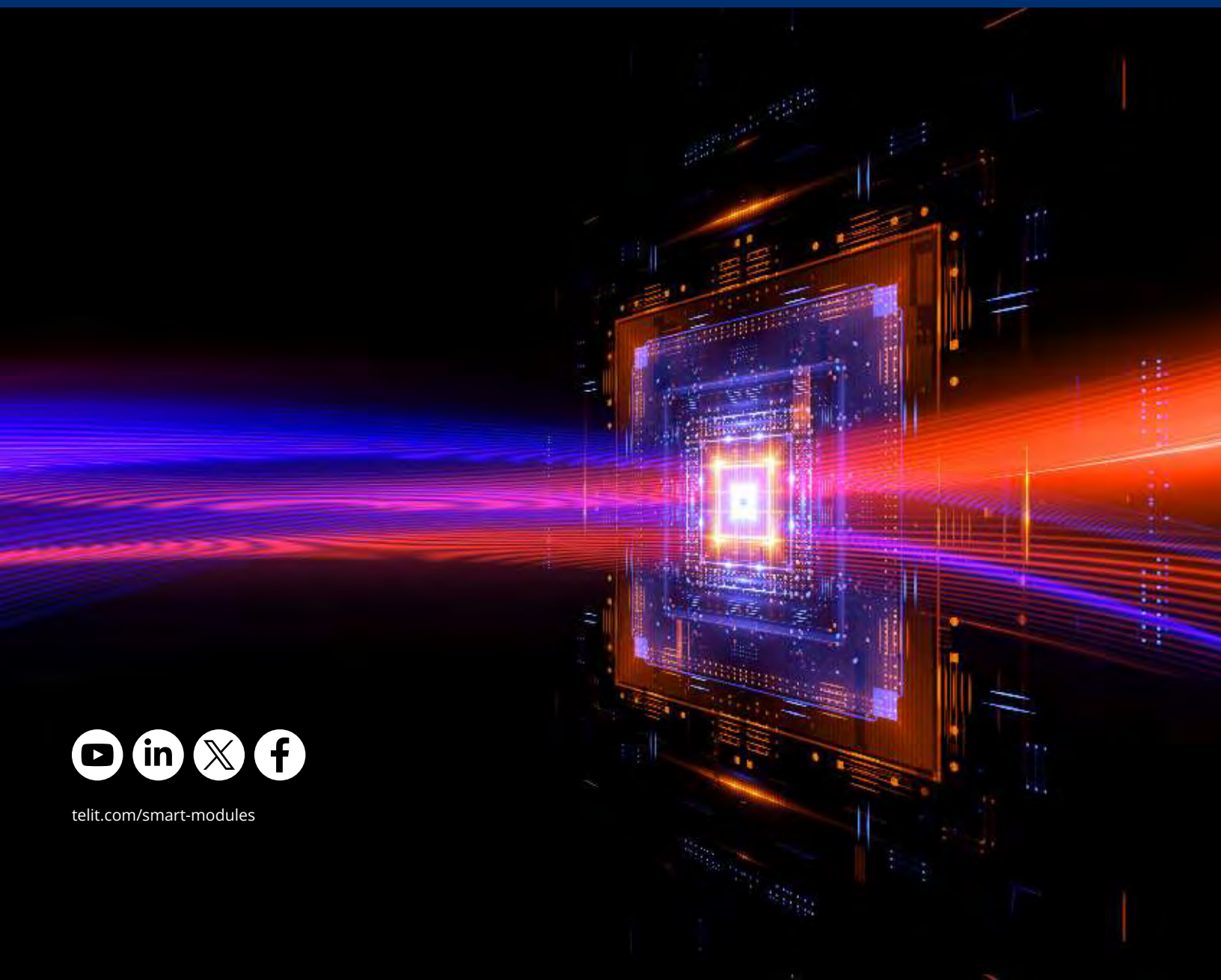
Transforming the Device User Experience

Elevate User Experience for Your Next-Generation IoT Devices

The SE250B4 series of 4G LTE [smart modules with Android™ or Linux](#) empowers manufacturers to design IoT devices with high-end multimedia capabilities. Telit Cinterion's smart modules offer:

- Advanced edge computing
- Graphical processing
- Peripheral management

Smart modules combine multiple components in one product, fully tested and precertified. These components include:

- Processing power
- Cellular connectivity
- Wi-Fi and *Bluetooth*® wireless technology
- Positioning (GNSS)
- Memory (RAM, Flash)
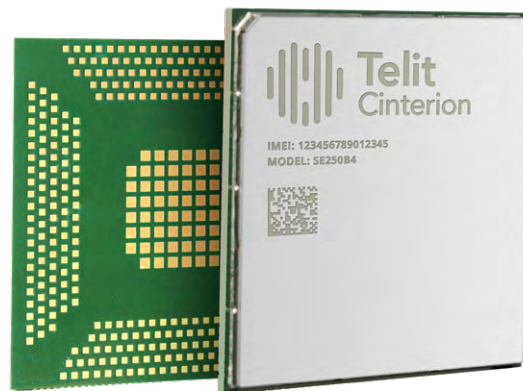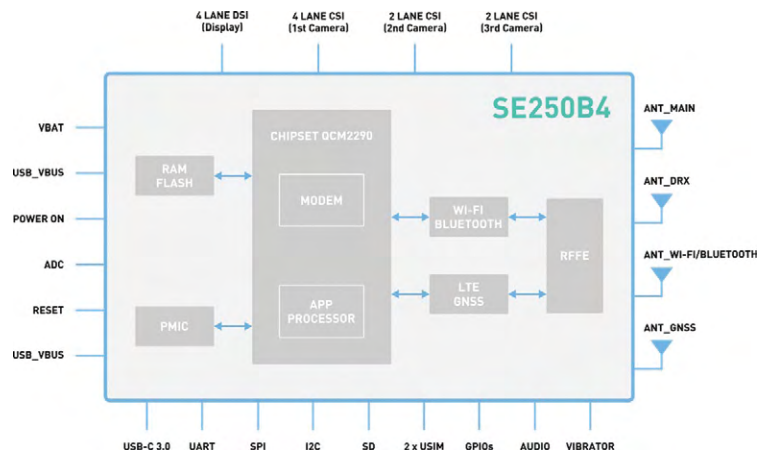- Power management unit

It supports a rich set of peripherals and multimedia devices, such as:

- High-resolution touch displays
- Audio
- Multiple cameras
- Video recording and playback

Smart Module Benefits

Telit Cinterion's smart modules offer many advantages, including:

- **Faster time to market:** You can get ahead of the competition and start earning sooner.
- **Smaller printed circuit board (PCB) surface area:** The reduced size enables you to realize size-constrained products.
- **Reduced bill of materials (BOMs) and total cost of ownership (TCO):** With only one stock-keeping unit and vendor, smart modules simplify development and maintenance.

SE250B4-NA

- North America (AT&T, Verizon, T-Mobile U.S.)
- LTE-FDD: Bands 2, 4, 5, 7, 12, 13, 14 (FirstNet), 17, 25, 26, 66 and 71 (T-Mobile U.S.)
- LTE-TDD: Band 41

SE250B4-EU

- EU, China and other regions
- 2G and 3G fallback
- LTE-FDD: Bands 1, 3, 5, 7, 8, 20, 28
- LTE-TDD: Bands 38, 40, 41
- WCDMA: Bands 1, 5, 8
- GSM/GPRS/EDGE: Bands 3, 8

SE250B4-WE[1]

- Worldwide, Wi-Fi only (non-cellular)

[1] Planning.

Enable Innovation with IoT Smart Modules

Reliable Wireless Connectivity

- LTE Cat 4, multimode 4G/3G/2G cellular radio for WAN coverage
- FDD: 150 Mbps DL, 50 Mbps UL
- TDD: 130 Mbps DL, 35 Mbps UL
- Wi-Fi (802.11a/b/g/n/ac) and Bluetooth Low Energy 5.0 wireless technology
- GNSS (GPS, BeiDou, GLONASS, Galileo)

Native Support for Integrated Peripherals

- High-resolution touch displays and advanced cameras
- Sensors and audio interfaces
- SDIO 3.0, USB 3.1, UART, SPI and I2C interfaces
- Battery charge management
- Vibration motor driver output control

Rich Multimedia Experience

- Android Go 13 and 14[2], 32-bit support for streamlined application development
- 25 MP dual cameras (13 + 13 MP)
- Supports 1080p video recording and playback at 30 FPS
- Four-lane display support, 1.5 Gbps each, HD+ (1680 x 720), 60 FPS
- Three analog audio inputs and three audio outputs

Maximum Application and System Performance

- Qualcomm® QCM2290 quad-core ARM® Cortex®-A53 64-bit processor up to 2.0 GHz
- Built-in Adreno™ 702 GPU up to 845 MHz
- 2 GB RAM, 16 GB Flash
- Two Qualcomm® Hexagon™ QDSP6 v66K
- LGA 41 x 43 x 2.8 mm form factor

[2] Planning.

SE250B4 Smart Module Development Kit

Develop consumer-style IoT devices for advanced user experience and get them to market fast. The SE250B4 smart module development kit provides computing and edge processing power for your IoT application.

This development kit offers:

- LCD and touch screens
- Proximity and ambient light sensors
- Front and rear cameras
- Accelerometer
- Audio, USB and SD card interfaces
- Two SIM card holders
- Power, Reset and Volume buttons
- Battery charger

IoT Smart Module Applications

Retail

- Mobile point-of-sale (mPOS)
- Smart cash registers
- Smart vending machines

Explore Retail Solutions

Public Safety

- Ruggedized tablets and laptops
- Handhelds
- Dash and body cameras
- Mission-critical push-to-talk (MCPTT)

Explore First Responder Solutions

Security

- Smart alarm panels
- Smart surveillance cameras
- Home automation security systems

Explore Smart Security Solutions

Telematics

- Telematics cameras
- Digital video recorders
- In-car video streaming and entertainment systems

Explore Telematics Solutions

Build Advanced Multimedia Solutions with Smart Modules

Discover how our smart modules can empower your IoT solution.

Request a Development Kit