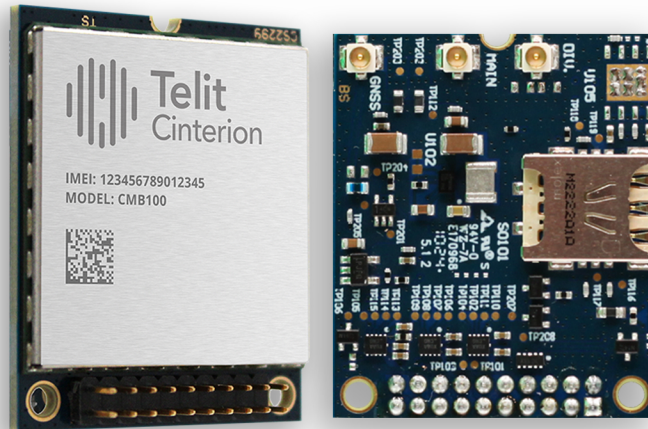# CMB100X0 Series

LTE Cat. 4, Cat.1 bis and Cat. M1

Product Description

The CMB100 series marks Telit's inaugural generation of end-device certified LTE modules. With the CMB100, customers can effortlessly integrate dependable LTE connectivity into their products, thereby reducing:

- Development costs
- Certification expenses
- Risks tied to LTE product development.
- The need for radio changes and associated re-certifications.
- Time to market

Family Concept

- Standard Mini berg connector with 20mm pitch.
- Best-in class 3GPP rel10 platform
- Easy to integrate with peripherals and actuators using USB 2.0 HS, UART and user-definable GPIOs
- Wide range of supported power supply 1.8V*-5.5V
- Battery-friendly 1.8V GPIO
- Included GPIO level translation for 3.3V Systems
- Ideal platform for IoT applications and mobile data and computing devices with ultra-compact design and extended operating temperature range.
- Internet friendly with integrated TCP/IP and UDP/IP stacks
- Over-the-air firmware update
- FCC/IC and RED certified and device certified with major carriers
- 2G/3G Fallback and GNSS for accurate location services

Family Concept

The CMB100 series from Telit Cinterion uses a single mechanical and electrical form factor to support various current and future LTE and 5G technologies. This streamlined, robust design makes it easy for designers to add LTE capabilities to commercial and industrial devices. By eliminating the complexities and challenges of RF design, the CMB100 allows developers to integrate LTE connectivity without needing in-depth knowledge of RF principles and specifications.

IoT Connectivity Ready

The CMB100 family is capable of supporting the extensive suite of Value-Added Services from Telit Cinterion.

- Centralized Device Management:
- Zero-touch onboarding
- Remote provisioning and configuration
- Monitoring and troubleshooting
- Module and device FOTA updates

Edge Logic

- Define and build edge device logic
- Optimize behavior and resource usage
- Set control logic remotely
- Simplify edge life cycle management

Embedded Security

- Embedded security at manufacture
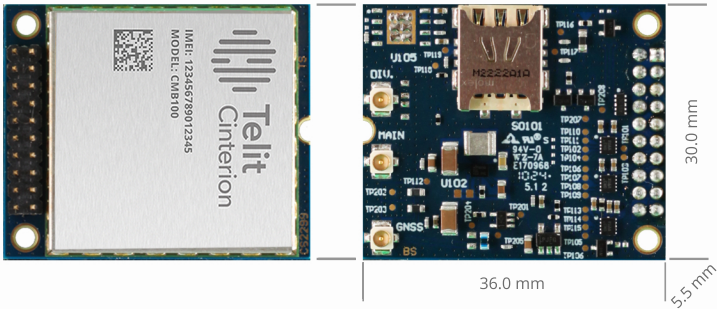- Encrypted device-to-cloud communications

Connectivity and SIM Management

- Simplified service profile and self-care subscription design and management
- Real-time diagnostics and controls for SIM and data plan monitoring and management

Enterprise Integration

- Integrates with third-party business systems
- Delivers data to enterprise applications

AVAILABLE FOR

Worldwide

![Telit Cinterion logo]

CMB100X0 Series

30.0 mm

36.0 mm

5.5 mm

	CMB100A0-WW CAT 4	CMB100B0-WW CAT 1 BIS	CMB100C0-WW CAT M1
Market	Worldwide	Worldwide	Worldwide
4G FDD	B1, B2, B3, B4, B5, B7, B8, B9, B12, B13, B14, B18, B19, B20, B25, B26, B28	B1, B2, B3, B4, B5, B7, B8, B12, B13, B18, B19, B20, B25, B26, B28, B66, B34, B38, B39, B40, B41	B1, B2, B3, B4, B5, B8, B8_US**, B12, B13, B18, B19, B20, B25, B26, B27, B28, B66, B71, B85, B86**
HSPA+1	B1, B2, B4, B5, B6, B8, B19	-	-
2G	-	-	B2, B3, B5, B8
NBIoT	-	-	B1, B2, B3, B4, B5, B8, B12, B13, B18, B19, B20, B25, B26, B28, B66, B71, B85

Product Features

- CMB100X0 FDD Cat.1/CATM1, 3GPP release 10 compliant
- CMB100X0 Cat.4, 3GPP release 10 compliant
- Rx Diversity and MIMO DL 2x2
- Single Rx option
- SMS over IMS
- Built in UDP/TCP/FTP/SMTP stack
- IPv4/IPv6 stack
- Control via AT commands according to 3GPP TS 27.005, 27.007 and Telit Custom AT commands
- SIM application Tool Kit 3GPP TS 51.014
- OMA-DM Telit Software Management
- Simultaneous support of GPS, Glonass, Bei-Dou, Galileo, QZSS

Hardware and Electrical Specifications

- Dimensions 36 x 30 x 5.5 mm (considering the berg, the height is 8.55 mm)
- 20-pin THT interface
- 10 I/O ports (@1.8V), including multifunctional I/Os
- USB 2.0 HS / HSIC
- UART
- 1.8 V / 3V SIM interface
- RF pad, RX Div. & MIMO pad
- Temperature Range Industrial:
  -40°C to +85°C [1]
- REACH and RoHS compliant
- Output power
  - Class 3 (0.2 W, 23 dBm) @ LTE
- Supply voltage range:
  - Nominal: 3.8 VDC
  - Range: 1.8 - 5.5 VDC, 1.8 to 2.5VDC with limitations [2]

Data

LTE Cat. 1 Cat. M1
- Uplink up to 5 Mbps
- Downlink up to 10 Mbps LTE

Cat. 4
- Uplink up to 50 Mbps
- Downlink up to 150 Mbps

DC-HSPA+ 42 Mbps
(supported on the variants with 3G fallback)

Approvals

- FCC/IC (North America)
- RED/GCF (Europe)
- PTCRB
- Verizon
- AT&T

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[1] End product integration of the CMB100 may impact the overall operating temperature range.
[2] 2G Operating voltage range limited to 2.5VDC to 5.5VDC.

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

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