

5G/LTE-FDD/LTE-TDD/HSPA+ Module

The EX510 is a new generation of Longsung 5G wireless module, rich of Internet protocols, and industry-standard interfaces and abundant functionalities. It is Multi-Band 5G NR/LTE-FDD/LTE-TDD/HSPA+ module solution in a M.2 type which supports 5G NR up to 4 Gbps data transfer.

It has strong extension capability with rich interfaces including PCIe, UART, USB3.0, GPIO etc. The module provides much flexibility and ease of integration for customer's application.

It is designed for applications that need high throughput data communication in a variety of radio propagation conditions. Due to the unique combination of performance, security and flexibility, this module is ideally suited for many applications.



 5G/LTE-TDD/LTE-FDD	 M2M application	 M.2 Standard Interface
 USB 3.0 Interface	 Linux operating system	 RoHS compliance
 AT Command	 PCIe 3.0 Interface	 Windows XP/Vista/7/8/10 Operating system
 FOTA	 GNSS	 VoNR



EX510

5G NR/LTE Cellular Module

General features:

- Output power:
 - Class 3 (0.25W) for LTE/UMTS
- Control via AT commands
- Supply voltage range: 3.2V- 4.4V
- Dimensions: 52.0×30.0×2.3mm
- GNSS (GPS, GLONASS and BeiDou)
- Sub-6G/LTE-TDD/LTE-FDD/WCDMA
- Operation Temperature
 - 40°C to +85°C
- MSL: 3

Additional features:

- NoVR/VoLTE/CSFB
- AGPS/SUPL2.0
- Dedicated GNSS_L1 and GNSS_L2/L5
- DTMF

Band Configuration:

EX510:

- 5G Band:
 - N1/N2/N3/N5/N7/N8/N12/N20/N25/N28/
N40/N41/N66/N71/N77/N78/N79
- LTE-FDD Band:
 - B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B1
7/B18/B19/B20/B25/B26/B28/B29/B30/B
32/B66/B71
- LTE-TDD Band:
 - B34/B38/B39/B40/B41/B42/B43/B48
- LTE DL 4*4 MIMO:
 - B1/B2/B3/B4/B7/B25/B30/B38/B40/B41/
B42/B43/B48/B66
- UMTS Band: B1/B2/B3/B4/B5/B8

Protocols:

TCP/ UDP/ PPP/ FTP/ HTTP/ HTTPS/
SMTP/ SMTPS/ MMS/ FTPS/ NTP/ PING/
QMI/ SSL/ NITZ/ CMUX/ MQTT

Specifications for data:

- Support Release 15
- Support SA / NSA
- 5G up to 4 Gbps DL, 300M bps UL
- LTE-FDD up to 2.4 Gbps DL, 200 Mbps UL
- LTE-TDD up to 2.4 Gbps DL, 200 Mbps UL
- DC-HSPA+ up to 42.2Mbps DL, 5.76Mbps UL
- Non transparent mode
- FOTA
- NDIS

Interfaces:

- M.2, TYPE 3042-S3-B
- RF connector
- Power supply
- USB 3.0 with SS Gen2
- USB 2.0 high speed
- UICC/SIM/UIM card interface 3 V, 1.8 V
- UART(4-wire)
- PCM
- PCIE
- I2C
- GPIO