Fibocom FM101

LTE Cat 6 Module for IoT applications

Key Benefits

- High-performance LTE Cat 6 IoT module
- Compliant with 3GPP Release 12 standards, providing better 4G experience
- Support LTE-A/WCDMA multiple network standards
- Standard M.2 form factor with rich interfaces and high reliability
- GNSS receiver available for applications requiring fast and accurate positioning in any environment
- Professional reference design and timely technical support to help customers on product development

30mm

42mm



Release 12

LTE Cat 6



M.2 Package

Optimized power consumption



Digital Audio and VoLTE (Optional)



GNSS

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USB3.0/PCIe



Fibocom Enhanced AT Commands



Professional reference design, evaluation kits Fibocom FM101 is a LTE Cat6 module compliant with 3GPP Release 12. The module FM101 support LTE-TDD, LTE-FDD and WCDMA fallback, delivering maximum downlink rates of 300Mbps and uplink rates of 50Mbps. FM101 module adopts M.2 form factor measuring 30x42x2.3mm.

2.3mm

FM101 also supports multi-constellation GNSS receiver (GPS/ Galileo/ GLONASS/ BeiDou), which provides highperformance positioning and navigation. Meanwhile, it supports a rich set of interfaces including USIM, USB 3.0/2.0, PCIe 2.0, PCM/I2S and UART, allowing much flexibility and ease of integration for customer's application. With multiple Internet protocols and industrystandard interfaces, FM101 can be used in a variety of cellular terminals such as CPE, Industrial router, IPC and ODU.





Fibocom FM101 Series

| LTE Cat 6 | FM101-NA-20 | FM101-EAU-20 | FM101-CG-20 |
|-------------------------|--|---------------------------------|------------------------|
| Region | North America | Europe, Asia Pacific, Australia | CBRS Global |
| Basic Features | | | |
| Package | M.2 | | |
| Dimension (mm) | 30x42x2.2 | | |
| LTE FDD | B2/4/5/7/12/13/14/17/25/26/29/30/66 J1/3/5/7/8/20/28/32 | | |
| lte tdd | B41(194M)/42/43/46/48 | B38/40/41(120M) | B42/43/48 |
| WCDMA | B2/4/5 | B1/3/5/8 | |
| Antenna | 2+1(GNSS) | | |
| Power Supply | 3.135v~4.4v, Typical 3.8V | | |
| Operating Temp. | -30°C - +75°C | | |
| AT Command | 3GPP TS 27.007 and 27.005, Proprietary FIBOCOM AT Commands | | |
| Data Transmission | | | |
| LTE(Mbps) | Max. 300 DL / Max. 50 UL | | |
| WCDMA(Mbps) | Max. 42 DL / Max. 11 UL | | |
| Enhanced Features | | | |
| Voice | Volte | | |
| SMS | SMS over IP(IMS) | | |
| Audio | • | | |
| DFOTA | • | | |
| GNSS | GPS/GLONASS/Galileo/BeiDou | | |
| Software Features | | | |
| Driver | USB: Linux 2.6.38 and later/Windows7&10/Android7.x&8.x&9.x RIL: Android7.x&8.x&9.x NDIS: Windows7&10 ECM: Linux 2.6.38 and later Gobinet: Linux 2.6.38 and later | | |
| MBIM | Windows 10 and later/Linux 3.8 and later QMI WWAN: Linux 3.4 and later | | |
| QMI WWAN | Linux 3.4 and later | | |
| Network Protocol | TCP/UDP/FTP/HTTP/HTTPS/PING/LwM2M/SMS | | |
| Interfaces | | | |
| USB | USB3.0/2.0 | | |
| PCIe | PCIe2.0 | | |
| UART | • | | |
| SPI | • | | |
| GPIO | • | | |
| 12C | • | | |
| SDIO | NA | | |
| JIM | • | | |
| 2S | • | | |
| MIPI | NA | | |
| RGMII | NA | | |
| Certification Approvals | | | |
| Regulation | FCC/IC/TSCA/RoHS/HF | CE/UKCA/RCM/Reach/RoHS/HF | FCC/HF/Reach/RoHS/TSCA |
| Operator | ATT/TMO*/VZW* | | |
| Industry | GCF/PTCRB | GCF | |

* = planning /under development • = support

