Fibocom FG101

LTE Cat 6/12 Module for IoT applications

Key Benefits

- High-performance LTE Cat 6/12 IoT module
- Compliant with 3GPP Release 12 standards, providing better 4G experience
- Support LTE-A/WCDMA multiple network standards
- 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



Release 12



LTE Cat 6/12



LGA Package



Optimized power consumption



Digital Audio and VoLTE (Optional)



GNSS



USB3.0 /PCle



Fibocom Enhanced AT Commands



Professional reference design, evaluation kits

Fibocom FG101 is a LTE Cat6/12 module featuring 3GPP Release 12 capabilities. The module adopts LGA form factor measuring 37x39.5x2.8mm. FG101 can also support LTE-TDD, LTE-FDD and WCDMA fallback.

FG101 supports multi-constellation GNSS receiver (GPS/Galileo/ GLONASS/ BeiDou), which provides high-performance positioning and navigation. Meanwhile, it supports a rich set of interfaces including USIM, USB 3.0/2.0, PCIe 2.0, PCM and UART, allowing much flexibility and ease of integration for customer's application. With multiple Internet protocols and industry-standard interfaces, FG101 can be used in a variety of cellular terminals such as CPE, Industrial router, IPC and ODU.





LTE Cat 6	FG101-NA-20	FG101-EAU-20	FG101-EAU-30
Region Basic Features	North America	Europe, Asia Pacific, Australia	Europe, Asia Pacific, Australia
Package	LGA		
Dimension (mm)	37x39.5x2.8		
	P2 // /5 /7 /42 /42 /42 /42 /25 /26 /20 /20		
LTE FDD	/66/71	B1/3/5/7/8/18/19/20/28/32	B1/3/5/7/8/18/19/20/28/32
LTE TDD	B41(194M)/46/48	B38/40/41(120M)	B38/40/41(120M)
WCDMA	B2/4/5	B1/3/5/8	B1/3/5/8
Antenna	2+1(GNSS)		
Power Supply	3.3v~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			
_TE(Mbps)	Max. 300 DL / Max. 50 UL		
WCDMA(Mbps)	Max. 42 DL / Max. 11 UL		
Inhanced Features			
Voice	VoLTE		
SMS	SMS over IP(IMS)		
Audio	•		
DFOTA	•		
SNSS	GPS/GLONASS/Galileo/BeiDou		
oftware 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 QMI WWAN: Linux 3.4 and later	and later	
QMI WWAN	Linux 3.4 and later		
Network Protocol	TCP/UDP/FTP/HTTPS/PING/LwM2M/SMS		
nterfaces			
JSB	USB3.0/2.0		
PCle	PCle2.0		
JART	•		
SPI	•		
GPIO	•		
2C	•		
SDIO	•		
MIL	•		
PCM	•		
MIPI	NA		
RGMII	NA		
Certification Approvals			
Regulation	IC*/FCC*/RoHS*/HF*	CE/UKCA/RCM/Reach/RoHS/HF	RoHS/HF/Reach/CE*/UKCA*/RCM
Operator	ATT*/VZW*/TMO*		DT*/VDF*/Telefonica*/Telstra*
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^{* =} planning /under development • = support



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LTE Cat 12	FG101-NA-00	FG101-EAU-00	
Region	North America	Europe, Asia Pacific, Australia	
Basic Features			
Package	LGA		
Dimension (mm)	37x39.5x2.8		
LTE FDD	B2/4/5/7/12/13/14/17/25/26/29/30/66/71	B1/3/5/7/8/18/19/20/28/32	
LTE TDD	B41(194M)/46/48	B38/40/41(120M)/42/43/48	
WCDMA	B2/4/5	B1/3/5/6/8/19	
Antenna	4+1(GNSS)		
Power Supply	3.4v~4.3v, 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. 600Mbps(DL)/Max.150Mbps(UL)		
WCDMA(Mbps)	Max.42 Mbps(DL)/Max.5.76Mbps(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		
МВІМ	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/HTTPS/PING/LwM2M/SMS		
Interfaces			
USB	USB3.0/2.0		
PCle	PCle2.0		
UART	•		
SPI	•		
GPIO	•		
12C	•		
SDIO	•		
UIM	•		
PCM	•		
MIPI	NA		
RGMII	NA		
Certification Approvals			
Regulation	FCC*/IC*/TSCA*/RoHS*/HF*	CE/UKCA/Reach/RoHS/HF/RCM	
Operator	ATT*/VZW*/TMO*	DT*/VDF*/Telefonica*/Telstra*	
Industry	GCF*/PTCRB*	GCF	

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