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



Rel	ease	12

LTE Cat 6/12



LGA Package



Optimized power consumption

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Digital Audio and VoLTE (Optional)

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.

37mm

2.8mm

39.5mm

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.

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USB3.0 /PCle

GNSS



Fibocom Enhanced AT Commands



Professional reference design, evaluation kits





Fibocom FG101 Series

LTE Cat 6	FG101-NA-20	FG101-EAU-20	FG101-EAU-30	
Region	North America	Europe, Asia Pacific, Australia	Europe, Asia Pacific, Australia	
Basic Features		בטוספר, אזומ דמכווור, אטגנומוומ		
Package	LGA			
Dimension (mm)	37x39.5x2.8			
LTE FDD	B2/4/5/7/12/13/14/17/25/26/29/3	⁰ B1/3/5/7/8/18/19/20/28/32	B1/3/5/7/8/18/19/20/28/32	
	/66/71			
	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	Y 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& RIL: Android7.x&8.x&9.x NDIS: Windows7&10 ECM: Linux 2.6.38 and later Gobinet: Linux 2.6.38 and later	10/Android7.x&8.x&9.x		
MBIM	Windows 10 and later/Linux 3.8 and late QMI WWAN: Linux 3.4 and later	er		
QMI WWAN	Linux 3.4 and later			
Network Protocol	TCP/UDP/FTP/HTTP/HTTPS/PING/Lv	wM2M/SMS		
nterfaces				
JSB	USB3.0/2.0			
PCIe	PCIe2.0			
JART	•			
SPI	•			
GPIO	•			
2C	•			
SDIO	•			
MIL	•			
PCM	•			
MIPI	NA			
	NA			
RGMII				
Certification Approvals	IC*/FCC*/RoHS*/HF*	CE/UKCA/RCM/Reach/RoHS/HF	RoHS/HF/Reach/CE*/UKCA*/RCM	
RGMII Certification Approvals Regulation Operator		CE/UKCA/RCM/Reach/RoHS/HF	RoHS/HF/Reach/CE*/UKCA*/RCM DT*/VDF*/Telefonica*/Telstra*	

* = planning /under development • = support



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	-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)	Max. 600Mbps(DL)/Max.150Mbps(UL)		
WCDMA(Mbps)	Max.42 Mbps(DL)/Max.5.76Mbps(UL)	Max.42 Mbps(DL)/Max.5.76Mbps(UL)		
Enhanced Features				
Voice	Volte	VoLTE		
SMS	SMS over IP(IMS)	SMS over IP(IMS)		
Audio	•			
DFOTA	•			
GNSS	GPS/GLONASS/Galileo/BeiDou			
Software Features				
Driver	USB: Linux 2.6.38 and later/Windows7&10/Android7 RIL: Android7.x&8.x&9.x NDIS: Windows7&10 ECM: Linux 2.6.38 and later Gobinet: Linux 2.6.38 and later	NDIS: Windows7&10 ECM: 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			
PCle	PCIe2.0	PCle2.0		
UART	•	•		
SPI	•			
GPIO	•			
12C	•	•		
SDIO	•	•		
UIM	•			
PCM	•			
MIPI	NA	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		

* = planning /under development • = support

