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IOT MODULES

A Global Leading Provider of Wireless Communication Modules

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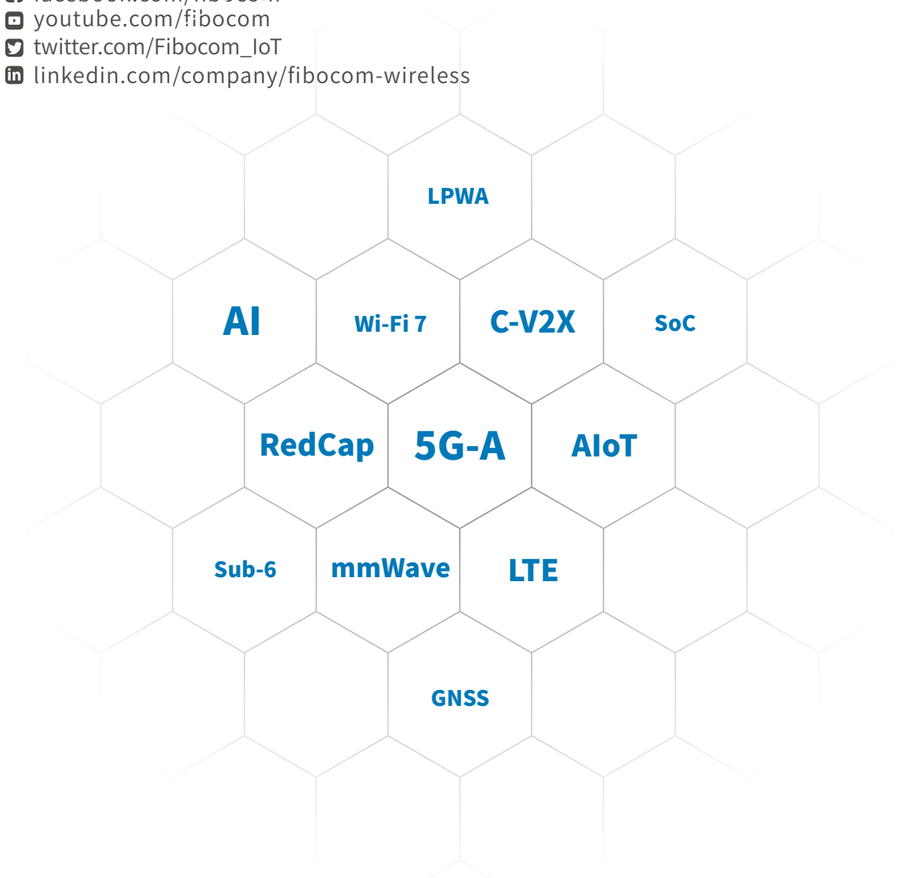
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Accelerate Connectivity, Intelligent Future

Fibocom is a leading global provider of wireless communication modules and solutions as well as the first wireless communication module provider listed on China A-shares stock market (stock code: 300638). Fibocom offers a one-stop solution for industry customers by integrating wireless communication modules and IoT solutions.With over two decades of engagement in M2M and IoT communication technology and extensive expertise, we are capable of bringing reliable, convenient, secure and intelligent connectivity service to every industry, enriching smart life with a perfect wireless experience.

Fibocom’ s product portfolio ranges from cellular modules (5G/4G/3G/2G/LPWA), automotive-grade modules, AI modules, android-smart modules, GNSS modules and antenna service. Together, we aim to empower digital transformation across industries such as ACPC (AlwaysConnected PC), mobile broadband, smart retail, C-V2X, robotics, smart energy, IIoT, smart cities, smart agriculture, smart home, telemedicine, etc.

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IoT

We offer the world's leading wireless communication modules and solutions to empower digital transformation and help industry customers to seize opportunities in the global IoT market.

Vehicle & Transportation

- IVI
- ADAS
- ITS
- DVR
- T-Box
- Intelligent Cockpit
- Fleet Management
- C-V2X

Mobile Broadband

- Indoor/Outdoor CPE
- Home/Enterprise/ Industrial Gateway
- Dongle
- MiFi
- UFi

Smart Security

- IPC
- Drone
- Burglar Control
- PoC
- Smoke Detector
- Access Control
- Police Body-Worn Camera

Always Connected PC

- Mobile Tablet
- AR/VR
- ACPC

Smart Utilities

- Solar PV System
- Smart Meter
- Smart Grid
- Smart Charging Pile
- Smart Inspection
- Smart Energy Storage

Industrial IoT

- Smart Manufacturing
- Flexible Production
- Remote Maintenance
- Smart Warehousing
- Machine Vision
- Handheld PDA
- AGV

Smart Robotics

- Mowing Robot
- Logistic Robot
- Service Robot

Smart Retail

- Contactless Payment
- Vending Machine

Home & Healthcare

- Smart Appliance
- Wearable Device
- Smart Medical Terminal

Fibocom 5G Module Series

Product Name	FM190W-GL	FG190W-NA
Cellular Capability	NR Sub6+mmWave	
Region	Global	North America
Picture		
Basic Features		
Package	M.2	LGA
Dimension (mm)	30.0x52.0x2.3	45.0x52.0x2.75
Sub-6	n1/2/3/5/7/8/12/13/14/18/20/25/26/29/30/34/38/40/41/46/48/53/66/67/68/70/71/75/76/77/78/79/90/91/92/93/94	n2/5/7/12/14/25/26/29/30/38/41/48/66/70/71/77/78
mmWave	n257/258/260/261	n257/258/260/261
LTE FDD	B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/29/30/32/66/70/71/75/76	B2/4/5/7/12/13/14/17/25/26/29/30/66/71
LTE TDD	B34/38/39/40/41/48/46/53	B38/41/42/43/48
WCDMA	B1/2/3/4/5/6/8/9/19	NA
Operation mode	NSA&SA	NSA&SA
Antenna	4	8(mmW)+4/6/8(Sub-6)+1(GNSS)
Power Supply	3.3V ~ 4.4V(Typical 3.8V)	3.3V ~ 4.4V(Typical 3.8V)
Operating Temp.	-40°C ~ +85°C	-40°C ~ +85°C
Key Functions		
NR MIMO	DL 4 x 4 MIMO: All 5G MHB and UHF bands UL 2 x 2 MIMO: n1/25/3/7/66/41/48/77/78/79	DL 4 x 4 MIMO: n2/5/7/12/14/25/26/30/38/41/48/66/70/71/77/78 UL 2 x 2 MIMO: n25/41/48/66/71/77/78
LTE MIMO	DL 4 x 4 MIMO: All 4G MHB and UHF bands	DL 4 x 4 MIMO: B2/4/5/7/12/13/14/17/25/26/30/38/41/42/43/48/66/71
FR1+FR2（Mbps）	10000(DL) / 3380(UL)	10000(DL) / 3380(UL)
NR SA（Mbps）	6180(DL) / 900(UL)	6180(DL) / 900(UL)
NR ENDC（Mbps）	4920(DL) / 555(UL)	4920(DL) / 555(UL)
LTE（Mbps）	2000(DL) / 211(UL)	2000(DL) / 211(UL)
WCDMA（Mbps）	42(DL) / 5.76(UL)	NA
Functions		
Voice	VoLTE & VoNR(Optional)	VoLTE & VoNR(Optional)
SMS	SMS over IP(IMS)	SMS over IP(IMS)
Audio	●	●
FOTA	●	●
OS Drivers	Windows/Linux/Android	Windows/Linux/Android
GNSS	GPS/GLONASS/Galileo/BeiDou/QZSS/NavIC	GPS/GLONASS/Galileo/BeiDou/QZSS/NavIC
Interfaces		
USB	USB3.1/3.0/2.0	USB3.1/3.0/2.0
PCIe	PCIe4.0/3.0	PCIe4.0/3.0
UART	NA	●
SPI	NA	●
GPIO	●	●
I2C	NA	●
SDIO	NA	●
UIM	●	●
I2S	●	●
MIPI	NA	●
RGMII	NA	USXGMII
Certification		
Regulation	*	*
Operator	*	*
Industry	*	*

* =planning /under development

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Product Name	FG190W-EAU	FM180-GL
Cellular Capability	Sub-6+mmWave	Sub-6
Region	Asia/Europe/Australia (excluding China)	Global
Picture		
Basic Features		
Package	LGA	M.2
Dimension (mm)	45.0x52.0x2.75	30.0x52.0x2.3
Sub-6	n1/3/5/7/8/20/26/28/38/40/41/75/76/77/78/71(optional)	n1/2/3/5/7/8/12/13/14/18/20/25/26/28/29/30/34/38/40/41/46/48/53/66/67/68/70/71/75/76/77/78/79/90/91/92/93/94
mmWave	n257/258/260/261	NA
LTE FDD	B1/3/5/7/8/20/28/32/71(optional)	B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/29/30/32/66/70/71/75/76
LTE TDD	B38/40/41/42/43/46(optional)	B34/38/39/40/41/48/46/53
WCDMA	B1/5/8	B1/2/3/4/5/6/8/9/19
Operation mode	NSA&SA	NSA&SA
Antenna	8(mmW) + 4/6/8(Sub-6) + 1(GNSS)	4
Power Supply	3.3V ~ 4.4V(Typical 3.8V)	3.3V ~ 4.4V(Typical 3.8V)
Operating Temp.	-40°C ~ +85°C	-40°C ~ +85°C
Key Functions		
NR MIMO	DL 4x4 MIMO: n1/3/5/7/8/20/26/28/38/40/41/75/76/77/78 UL 2x2 MIMO: n1/3/5/7/8/28/38/40/41/77/78	DL 4x4 MIMO: All 5G MHB and UHF bands UL 2x2 MIMO: n1/25/3/7/66/41/48/77/78/79
LTE MIMO	DL 4x4 MIMO: B1/3/5/7/8/20/28/32/38/40/41/42/43	DL 4x4 MIMO: All 4G MHB and UHF bands
FR1+FR2（Mbps）	10000(DL)/3380(UL)	NA
NR SA（Mbps）	6180(DL)/900(UL)	4120(DL) / 900(UL)
NR ENDC（Mbps）	4920(DL)/555(UL)	4096(DL) / 555(UL)
LTE（Mbps）	2000(DL)/211(UL)	2000(DL)/211(UL)
WCDMA（Mbps）	42(DL)/5.76(UL)	42(DL)/5.76(UL)
Functions		
Voice	VoLTE & VoNR(Optional)	VoLTE & VoNR(Optional)
SMS	SMS over IP(IMS)	SMS over IP(IMS)
Audio	●	●
FOTA	●	●
OS Drivers	Windows/Linux/Android	Windows/Linux/Android
GNSS	GPS/GLONASS/Galileo/BeiDou/QZSS/NavIC	GPS/GLONASS/Galileo/BeiDou/QZSS/NavIC
Interfaces		
USB	USB3.1/3.0/2.0	USB3.1/3.0/2.0
PCIe	PCIe4.0/3.0	PCIe4.0/3.0
UART	●	●
SPI	●	●
GPIO	●	●
I2C	●	●
SDIO	●	●
UIM	●	●
I2S	●	●
MIPI	●	●
RGMII	USXGMII	USXGMII
Certification		
Regulation	★	★
Operator	★	★
Industry	★	★

* =planning /under development

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Fibocom 5G Module Series

Product Name	FG180-NA	FG180-EAU
Cellular Capability	NR Sub6	
Region	North America	Asia/Europe/Australia (excluding China)
Picture		
Basic Features		
Package	LGA	LGA
Dimension (mm)	45.0x48.0x2.75	45.0x48.0x2.75
Sub-6	n2/5/7/12/14/25/26/29/30/38/41/48/66/70/71/77/78	n1/3/5/7/8/20/28/38/40/41/75/76/77/78/71(optional)
mmWave	NA	NA
LTE FDD	B2/4/5/7/12/13/14/17/25/26/29/30/66/71	B1/3/5/7/8/20/26/28/32/71(optional)
LTE TDD	B38/41/42/43/48	B38/40/41/42/43/46(optional)
WCDMA	NA	B1/5/8
Operation mode	NSA&SA	NSA&SA
Antenna	4/6/8(Sub-6)+1(GNSS)	4/6/8(Sub-6)+1(GNSS)
Power Supply	3.3V ~ 4.4V(Typical 3.8V)	3.3V ~ 4.4V(Typical 3.8V)
Operating Temp.	-40°C ~ +85°C	-40°C ~ +85°C
Key Functions		
NR MIMO	DL 4x4 MIMO: n2/5/7/12/14/25/26/30/38/41/48/66/70/71/77/78 UL 2x2 MIMO: n25/41/48/66/71/77/78	DL 4x4 MIMO: n1/3/5/7/8/20/26/28/38/40/41/75/76/77/78 UL 2x2 MIMO: n1/3/5/7/28/38/40/41/77/78
LTE MIMO	DL 4x4 MIMO: B2/4/5/7/12/13/14/17/25/26/30/38/41/42/43/48/66/71	DL 4x4 MIMO: B1/3/5/7/8/20/26/28/32/38/40/41/42/43
NR SA（Mbps）	4120(DL)/900(UL)	4120(DL)/900(UL)
NR ENDC（Mbps）	4096(DL)/555(UL)	4096(DL)/555(UL)
LTE（Mbps）	2000(DL)/211(UL)	2000(DL)/211(UL)
WCDMA（Mbps）	NA	42(DL)/5.76(UL)
Functions		
Voice	VoLTE & VoNR(Optional)	VoLTE & VoNR(Optional)
SMS	SMS over IP(IMS)	SMS over IP(IMS)
Audio	●	●
FOTA	●	●
OS Drivers	Windows/Linux/Android	Windows/Linux/Android
GNSS	GPS/GLONASS/Galileo/BeiDou/QZSS/NavIC	GPS/GLONASS/Galileo/BeiDou/QZSS/NavIC
Interfaces		
USB	USB3.1/3.0/2.0	USB3.1/3.0/2.0
PCIe	PCIe4.0/3.0	PCIe4.0/3.0
UART	●	●
SPI	●	●
GPIO	●	●
I2C	●	●
SDIO	●	●
UIM	●	●
I2S	●	●
MIPI	●	●
RGMII	USXGMII	USXGMII
Certification		
Regulation	★	★
Operator	★	★
Industry	★	★

* =planning /under development

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Product Name	FG170-EAU	FG170-NA
Cellular Capability	NR Sub6	
Region	Asia(excluding China)/Europe/Australia	North America
Picture		
Basic Features		
Package	LGA	LGA
Dimension (mm)	41.0x44.0x2.75	41.0x44.0x2.75
Sub-6	n1/3/5/7/8/20/28/38/40/41/75/76/77/78/79	n2/5/7/12/14/25/30/48/41/70/66/71/77/78
mmWave	NA	NA
LTE FDD	B1/3/5/7/8/20/28/32	B2/4/5/7/12/13/29/30/66/71
LTE TDD	B38/40/41/42/43	B41/48/46(LAA)
WCDMA	B1/5/8	NA
Operation mode	NSA&SA	NSA&SA
Antenna	4/6/8+1(GNSS)	4/6/8+1(GNSS)
Power Supply	3.3V ~ 4.4V(Typical 3.8V)	3.3V ~ 4.4V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C
Key Functions		
NR MIMO	DL 4 x 4MIMO: n1/3/5/7/20/28/38/40/41/75/76/77/78/79 UL 2 x 2MIMO: n41/77/78/79	DL 4 x 4MIMO: n2/5/7/12/14/25/30/41/48/66/70/71/77/78 UL 2 x 2MIMO: n41/77
LTE MIMO	DL 4 x 4MIMO: B1/3/5/7/8/20/28/32/38/40/41/42/43	DL 4 x 4MIMO: B2/4/5/7/12/13/30/41/48/66/71
NR SA（Mbps）	4120(DL) / 900(UL)	4120(DL) / 900(UL)
NR ENDC（Mbps）	4060(DL) / 555(UL)	4060(DL) / 555(UL)
LTE（Mbps）	1600(DL) / 211(UL)	1600(DL) / 211(UL)
WCDMA（Mbps）	42(DL) / 5.76(UL)	NA
Functions		
Voice	VoLTE & VoNR(Optional)	VoLTE & VoNR(Optional)
SMS	SMS over IP(IMS)	SMS over IP(IMS)
Audio	●	●
FOTA	●	●
OS Drivers	Windows/Linux/Android	Windows/Linux/Android
GNSS	GPS/GLONASS/Galileo/BeiDou/QZSS	GPS/GLONASS/Galileo/BeiDou/QZSS
Interfaces		
USB	USB3.1/3.0 & USB2.0	USB3.1/3.0 & USB2.0
PCIe	PCIe4.0	PCIe4.0
UART	●	●
SPI	●	●
GPIO	●	●
I2C	●	●
SDIO	●	●
UIM	●	●
I2S	●	●
MIPI	●	●
RGMII	NA	NA
Certification		
Regulation	CE*/RCM*	FCC*/IC*
Operator	NA	NA
Industry	GCF*	PTCRB*/GCF*

* =planning /under development

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Fibocom 5G Module Series

Product Name	FG160-EAU	FG160-NA
Cellular Capability	NR Sub6	
Region	Asia(excluding China)/Europe/Australia/Brazil	North America
Picture		
Basic Features		
Package	LGA	LGA
Dimension (mm)	41.0x44.0x2.75	41.0x44.0x2.75
Sub-6	FG160-EAU-0x/1x: n1/3/5/7/8/20/28/38/40/41/75/76/77/78/79 FG160-EAU-31: n1/3/7/28/38/40/66/78	n2/5/7/12/14/25/30/48/41/70/66/71/77/78
mmWave	NA	NA
LTE FDD	FG160-EAU-0x/1x: B1/3/5/7/8/20/28/32 FG160-EAU-31: B1/3/5/7/8/28/66	B2/4/5/7/12/13/29/30/66/71
LTE TDD	FG160-EAU-0x/1x: B38/40/41/42/43 FG160-EAU-31: B38/40/42	B41/46(LAA)/48
WCDMA	B1/5/8	NA
Operation mode	NSA&SA	NSA&SA
Antenna	4/6/8+1(GNSS)	4/6/8+1(GNSS)
Power Supply	3.3V ~ 4.4V(Typical 3.8V)	3.3V ~ 4.4V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C
Key Functions		
NR MIMO	DL 4*4MIMO: n1/3/5/7/20/28/38/40/41/66/75/76/77/78/79 UL 2*2MIMO: n41/77/78/79	DL 4 x 4MIMO: n2/5/7/12/14/25/30/41/48/66/70/71/77/78 UL 2 x 2MIMO: n41/77
LTE MIMO	DL 4*4MIMO: B1/3/5/7/8/20/28/32/38/40/41/42/43/66	DL 4 x 4MIMO: B2/4/5/7/12/13/30/41/48/66/71
NR SA（Mbps）	2470(DL) / 900(UL)	2470(DL) / 900(UL)
NR ENDC（Mbps）	3470(DL) / 555(UL)	3470(DL) / 555(UL)
LTE（Mbps）	1600(DL) / 211(UL)	1600(DL) / 211(UL)
WCDMA（Mbps）	42(DL) / 5.76(UL)	NA
Functions		
Voice	VoLTE & VoNR(Optional)	VoLTE & VoNR(Optional)
SMS	SMS over IP(IMS)	SMS over IP(IMS)
Audio	●	●
FOTA	●	●
OS Drivers	Windows/Linux/Android	Windows/Linux/Android
GNSS	GPS/GLONASS/Galileo/BeiDou/QZSS	GPS/GLONASS/Galileo/BeiDou/QZSS
Interfaces		
USB	USB3.1/3.0 & USB2.0	USB3.1/3.0 & USB2.0
PCIe	PCIe4.0	PCIe4.0
UART	●	●
SPI	●	●
GPIO	●	●
I2C	●	●
SDIO	●	●
UIM	●	●
I2S	●	●
MIPI	●	●
RGMII	NA	NA
Certification		
Regulation	CE/RCM/Reach/RoHS/Anatel	FCC/IC*
Operator	NA	NA
Industry	GCF*	PTCRB*/GCF*

* =planning /under development

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Product Name	FM160-EAU	FM160-NA
Cellular Capability	NR Sub6	
Region	Asia(excluding China)/Europe/Australia	North America
Picture		
Basic Features		
Package	M.2	M.2
Dimension (mm)	30.0 x 52.0 x 2.3	30.0 x 52.0 x 2.3
Sub-6	n1/3/5/7/8/20/28/38/40/41/75/76/77/78	n2/5/12/14/25/30/41/48/66/70/71/77
mmWave	NA	NA
LTE FDD	B1/3/5/7/8/20/28/32	B2/4/5/12/13/29/30/66/71
LTE TDD	B38/40/41/42/43	B41/46(LAA)/48
WCDMA	B1/5/8	NA
Operation mode	NSA & SA	NSA & SA
Antenna	4	4
Power Supply	3.135V ~ 4.4V(Typical 3.8V)	3.135V ~ 4.4V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C
Key Functions		
NR MIMO	DL 4 x 4MIMO: n1/3/5/7/20/28/38/40/41/75/76/77/78 UL 2 x 2MIMO: n41/77/78	DL 4 x 4MIMO: n2/5/12/14/25/30/41/48/66/70/71/77 UL 2 x 2MIMO: n41/77
LTE MIMO	DL 4 x 4MIMO: B1/3/5/7/20/28/32/38/40/41/42/43	DL 4 x 4MIMO: B2/4/5/12/13/30/41/48/66/71
NR SA（Mbps）	2470(DL) / 900(UL)	2470(DL) / 900(UL)
NR ENDC（Mbps）	3470(DL) / 555(UL)	3470(DL) / 555(UL)
LTE（Mbps）	1600(DL) / 211(UL)	1600(DL) / 211(UL)
WCDMA（Mbps）	42(DL) / 5.76(UL)	NA
Functions		
Voice	VoLTE & VoNR	VoLTE & VoNR(Optional)
SMS	SMS over IP(IMS)	SMS over IP(IMS)
Audio	●	●
FOTA	●	●
OS Drivers	Windows/Linux/Android	Windows/Linux/Android
GNSS	GPS/GLONASS/Galileo/BeiDou/QZSS	GPS/GLONASS/Galileo/BeiDou/QZSS
Interfaces		
USB	USB3.1/3.0 & USB2.0	USB3.1/3.0 & USB2.0
PCIe	PCIe4.0	PCIe4.0
UART	NA	NA
SPI	NA	NA
GPIO	●	●
I2C	NA	NA
SDIO	NA	NA
UIM	●	●
I2S	●	●
MIPI	●	●
RGMII	NA	NA
Certification		
Regulation	CE/RCM/Anatel	FCC/IC
Operator	Telstra	AT&T/TMO/Verizon
Industry	GCF	PTCRB/GCF

* =planning /under development

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Fibocom 5G Module Series

Product Name	FM160-PN	FM160-JK
Cellular Capability	NR Sub6	
Region	North America	Japan/South Korea
Picture		
Basic Features		
Package	M.2	M.2
Dimension (mm)	30.0 x 52.0 x 2.3	30.0 x 52.0 x 2.3
Sub-6	n48/78	n1/3/7/8/28/41/77/78/79
mmWave	NA	NA
LTE FDD	NA	B1/3/5/7/8/18/19/26/28
LTE TDD	NA	B39/41/42
WCDMA	NA	NA
Operation mode	NSA & SA	NSA & SA
Antenna	4	4
Power Supply	3.135V ~ 4.4V(Typical 3.8V)	3.135V ~ 4.4V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C
Key Functions		
NR MIMO	DL 4 x 4 MIMO: n48/78 UL 2 x 2 MIMO: n48/78	DL 4 x 4MIMO: n1/3/7/41/77/78/79 UL 2 x 2MIMO: n41/77/78/79
LTE MIMO	NA	DL 4 x 4MIMO: B1/3/7/39/41/42
NR SA（Mbps）	2060(DL)/900(UL)	2470(DL)/900(UL)
NR ENDC（Mbps）	NA	3470(DL)/555(UL)
LTE（Mbps）	NA	1600(DL)/211(UL)
WCDMA（Mbps）	NA	NA
Functions		
Voice	NA	VoLTE & VoNR
SMS	SMS over IP(IMS)	SMS over IP(IMS)
Audio	●	●
FOTA	●	●
OS Drivers	Windows/Linux/Android	Windows/Linux/Android
GNSS	NA	GPS/GLONASS/Galileo/BeiDou/QZSS
Interfaces		
USB	USB3.1/3.0 & USB2.0	USB3.1/3.0 & USB2.0
PCIe	PCIe4.0	PCIe4.0
UART	NA	NA
SPI	NA	NA
GPIO	●	●
I2C	NA	NA
SDIO	NA	NA
UIM	●	●
I2S	●	●
MIPI	●	●
RGMII	NA	NA
Certification		
Regulation	NA	TELEC/JATE/KC
Operator	NA	KDDI/DCM
Industry	NA	NA

* =planning /under development

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Product Name	FG150-AE	
Cellular Capability	NR Sub6	
Region	China	Asia(excluding China)/Europe/Australia
Picture		
Basic Features		
Package	LGA	LGA
Dimension (mm)	44.0 x 41.0 x 2.75	44.0 x 41.0 x 2.75
Sub-6	n1/28/41/77/78/79	n1/3/5/7/8/20/28/38/40/41/77/78/79
mmWave	NA	NA
LTE FDD	B1/2/3/5/7/8	B1/3/5/7/8/18/19/20/28/32
LTE TDD	B34/39/40/41	B38/40/41/42/43
WCDMA	B1/2/5/8	B1/3/5/8/19
Operation mode	NSA & SA	NSA & SA
Antenna	6 +1(GNSS)	6 +1(GNSS)
Power Supply	3.3V ~ 4.4V(Typical 3.8V)	3.3V ~ 4.4V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C
Key Functions		
NR MIMO	DL 4 x 4 MIMO: n1/41/77/78/79 UL 2 x 2 MIMO: n41/77/78/79	DL 4 x 4 MIMO: n1/3/7/38/40/41/77/78/79 UL 2 x 2 MIMO: n41/77/78/79
LTE MIMO	DL 4 x 4 MIMO: B1/2/3/7/34/39/40/41	DL 4 x 4 MIMO: B1/3/7/32/38/40/41/42/43
NR SA（Mbps）	2100(DL)/900(UL)	2100(DL)/900(UL)
NR ENDC（Mbps）	2500(DL)/525(UL)	2500(DL)/600(UL)
LTE（Mbps）	600(DL)/90.4(UL)	1000(DL)/150(UL)
WCDMA（Mbps）	42(DL)/5.76(UL)	42(DL)/5.76(UL)
Functions		
Voice	VoLTE	
SMS	SMS over IP(IMS)	
Audio	●	
FOTA	●	
OS Drivers	Linux/Android	
GNSS	GPS/GLONASS/Galileo/BeiDou/QZSS	
Interfaces		
USB	USB3.1/3.0 & USB2.0	
PCIe	PCIe3.0	
UART	●	
SPI	●	
GPIO	●	
I2C	●	
SDIO	●	
UIM	●	
I2S	●	
MIPI	●	
RGMII	●	
Certification		
Regulation	CCC/SRRC/NAL/RoHs	CE/RCM/RoHs
Operator	CMCC/CTCC/CUCC	DT
Industry	NA	GCF/HF

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Fibocom 5G Module Series

Product Name	FM150-AE	
Cellular Capability	NR Sub6	
Region	China	Asia(excluding China)/Europe/Australia
Picture		
Basic Features		
Package	M.2	M.2
Dimension (mm)	30.0 x 52.0 x 2.3	30.0 x 52.0 x 2.3
Sub-6	n1/28/41/77/78/79	n1/3/5/7/8/20/28/38/40/41/77/78/79
mmWave	NA	NA
LTE FDD	B1/2/3/5/7/8	B1/2/3/5/7/8/18/19/20/28/32
LTE TDD	B34/39/40/41	B34/38/39/40/41/42/43
WCDMA	B1/2/5/8	B1/5/6/8/19
Operation mode	NSA & SA	NSA & SA
Antenna	4	4
Power Supply	3.135V ~ 4.4V(Typical 3.8V)	3.135V ~ 4.4V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C
Key Functions		
NR MIMO	DL 4 x 4 MIMO: n1/41/77/78/79 UL 2 x 2 MIMO: n41/77/78/79	DL 4 x 4 MIMO: n1/3/5/7/8/20/28/38/40/41/77/78/79 UL 2 x 2 MIMO: n41/77/78/79
LTE MIMO	DL 4x 4 MIMO: B1/41	DL 4 x 4 MIMO: B1/2/3/5/7/8/18/19/20/28/32/34/38/39/40/41/42/43
NR SA（Mbps）	2100(DL)/900(UL)	2100(DL)/900(UL)
NR ENDC（Mbps）	2500(DL)/525(UL)	4100(DL) / 555(UL)
LTE（Mbps）	600(DL)/90.4(UL)	2000(DL) / 211(UL)
WCDMA（Mbps）	42(DL)/5.76(UL)	42(DL)/5.76(UL)
Functions		
Voice	VoLTE	
SMS	SMS over IP(IMS)	
Audio	●	
FOTA	●	
OS Drivers	Windows/Linux/Android	
GNSS	GPS/GLONASS/Galileo/BeiDou/QZSS	
Interfaces		
USB	USB3.1/3.0 & USB2.0	
PCIe	PCIe3.0	
UART	NA	
SPI	NA	
GPIO	●	
I2C	NA	
SDIO	NA	
UIM	●	
I2S	●	
MIPI	●	
RGMII	NA	
Certification		
Regulation	CCC/SRRC/NAL/RoHs	CE/RCM/RoHs/JATE/TELEC
Operator	CMCC/CTCC/CUCC	DT/VDF
Industry	NA	GCF/HF

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Product Name	FM150-NA
Cellular Capability	NR Sub6
Region	North America
Picture	
Basic Features	
Package	M.2
Dimension (mm)	30.0 x 52.0 x 2.3
Sub-6	n2/5/7/12/25/41/48/66/71/77/78
mmWave	NA
LTE FDD	B2/4/5/7/12/13/14/17/25/26/29/30/66/71
LTE TDD	B41/42/43/46(LAA)/48(CBRS)
WCDMA	B1/2/4/5/8
Operation mode	NSA & SA
Antenna	4
Power Supply	3.135V ~ 4.4V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C
Key Functions	
NR MIMO	DL 4 x 4 MIMO: n2/7/25/66/41/48/71/77/78
LTE MIMO	DL 4 x 4 MIMO: B2/4/7/25/30/41/42/43/48/66/71
NR SA（Mbps）	2100(DL)/450(UL)
NR ENDC（Mbps）	4100(DL)/555(UL)
LTE（Mbps）	2000(DL)/211(UL)
WCDMA（Mbps）	42(DL)/5.76(UL)
Functions	
Voice	VoLTE
SMS	SMS over IP(IMS)
Audio	●
FOTA	●
OS Drivers	Windows/Linux/Android
GNSS	GPS/GLONASS/Galileo/BeiDou/QZSS
Interfaces	
USB	USB3.1/3.0 & USB2.0
PCIe	PCIe3.0
UART	NA
SPI	NA
GPIO	●
I2C	NA
SDIO	NA
UIM	●
I2S	●
MIPI	●
RGMII	NA
Certification	
Regulation	FCC/IC/RoHs
Operator	TMO/AT&T
Industry	HF/PTCRB

* =planning /under development

Product Name	FG650-EAU	FG650-EAU M.2
Cellular Capability	NR Sub6	
Region	Europe/Middle East/Southeast Asia	
Picture		
Basic Features		
Package	LGA	M.2
Dimension (mm)	44.0 x 41.0 x 2.75	44.0 x 52.0 x 3.6
Sub-6	n1/3/5/7/8/20/28/38/40/41/71/77/78	n1/3/5/7/8/20/28/38/40/41/71/77/78
mmWave	NA	NA
LTE FDD	B1/3/5/7/8/20/28/71	B1/3/5/7/8/20/28/71
LTE TDD	B38/40/41	B38/40/41
WCDMA	B1/5/8	B1/5/8
Operation mode	NSA & SA	NSA & SA
Antenna	6/4 optional	4
Power Supply	3.3V ~ 4.6V(Typical 3.8V)	3.3V ~ 4.6V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C
Key Functions		
NR MIMO	DL 4 x 4 MIMO: n1/3/7/38/40/41/77/78 UL 2 x 2 MIMO: n41/77/78	DL 4 x 4 MIMO: n1/3/7/38/40/41/77/78 UL 2 x 2 MIMO: n41/77/78
LTE MIMO	DL 2 x 2 MIMO: B1/3/5/7/8/20/28/71/38/40/41	DL 2 x 2 MIMO: B1/3/5/7/8/20/28/71/38/40/41
NR SA（Mbps）	2000(DL)/766(UL)	2000(DL)/766(UL)
NR ENDC（Mbps）	2600(DL)/458(UL)	2600(DL)/458(UL)
LTE（Mbps）	600(DL)/150(UL)	600(DL)/150(UL)
WCDMA（Mbps）	42(DL)/11(UL)	42(DL)/11(UL)
Functions		
Voice	VoLTE	VoLTE
SMS	SMS	SMS
Audio	●	●
FOTA	●	●
OS Drivers	Windows/Linux/Android	Windows/Linux/Android
GNSS	NA	NA
Interfaces		
USB	USB3.0 & USB2.0	USB3.0 & USB2.0
PCIe	PCIe2.0	PCIe2.0
UART	●	●
SPI	●	NA
GPIO	●	NA
I2C	●	NA
SDIO	●	NA
UIM	●	●
I2S	●	●
MIPI	●	●
RGMII	NA	NA
Certification		
Regulation	CE/REACH/RoHS	CE
Operator	NA	NA
Industry	NA	NA

* =planning /under development

Product Name	FG650-LA	FG650-LA M.2
Cellular Capability	NR Sub6	
Region	Latin America	
Picture		
Basic Features		
Package	LGA	M.2
Dimension (mm)	44.0 x 41.0 x 2.75	44.0 x 52.0 x 3.6
Sub-6	n1/3/5/7/28/38/40/41/71/77/78/66	n1/3/5/7/28/38/40/41/71/77/78/66
mmWave	NA	NA
LTE FDD	B1/2/3/4/5/7/8/28/66/71	B1/2/3/4/5/7/8/28/66/71
LTE TDD	B38/40/41	B38/40/41
WCDMA	B1/2/3/5/8	B1/2/3/5/8
Operation mode	NSA & SA	NSA & SA
Antenna	6	6
Power Supply	3.3V ~ 4.6V(Typical 3.8V)	3.3V ~ 4.6V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C
Key Functions		
NR MIMO	DL 4 x 4 MIMO: n1/3/7/38/40/41/77/78 UL 2 x 2 MIMO: n41/77/78	DL 4 x 4 MIMO: n1/3/7/38/40/41/77/78 UL 2 x 2 MIMO: n41/77/78
LTE MIMO	DL 2 x 2 MIMO: B1/2/3/4/5/7/8/28/66/71/38/40/41	DL 2 x 2 MIMO: B1/2/3/4/5/7/8/28/66/71/38/40/41
NR SA（Mbps）	2000(DL)/766(UL)	2000(DL)/766(UL)
NR ENDC（Mbps）	2600(DL)/458(UL)	2600(DL)/458(UL)
LTE（Mbps）	600(DL)/150(UL)	600(DL)/150(UL)
WCDMA（Mbps）	42(DL)/11(UL)	42(DL)/11(UL)
Functions		
Voice	VoLTE	VoLTE
SMS	SMS	SMS
Audio	●	●
FOTA	●	●
OS Drivers	Windows/Linux/Android	Windows/Linux/Android
GNSS	NA	NA
Interfaces		
USB	USB3.0 & USB2.0	USB3.0 & USB2.0
PCIe	PCIe2.0	PCIe2.0
UART	●	●
SPI	●	NA
GPIO	●	NA
I2C	●	NA
SDIO	●	NA
UIM	●	●
I2S	●	●
MIPI	●	●
RGMII	NA	NA
Certification		
Regulation	FCC*	FCC*
Operator	NA	NA
Industry	NA	NA

* =planning /under development

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Fibocom 5G Module Series

Product Name	FG370-EAU	FG370-NA
Cellular Capability	NR Sub6	
Region	Asia/Europe/Australia	North America
Picture		
Basic Features		
Package	LGA	LGA
Dimension (mm)	45.0 x 48.0 x 2.75	45.0 x 48.0 x 2.75
Sub-6	n1/3/5/7/8/20/26/28/38/40/41/75/76/77/78/71	n2/5/7/12/14/25/26/29/30/38/41/48/66/70/71/78
mmWave	NA	NA
LTE FDD	B1/3/5/7/8/20/26/28/32/71	B2/4/5/7/12/13/14/17/25/26/29/30/66/71
LTE TDD	B38/40/41/42/43/46(LAA)	B38/41/42/43/48
WCDMA	B1/5/8	NA
Operation mode	NSA & SA	NSA & SA
Antenna	6+1/8+1 (GNSS)	8+1(GNSS)
Power Supply	3.3V ~ 4.4V(Typical 3.8V)	3.3V ~ 4.4V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C
Key Functions		
NR MIMO	DL 4 x 4 MIMO: n1/3/5/7/8/20/26/28/38/40/41/71/75/76/77/78 UL 2 x 2 MIMO: n38/40/41/77/78	DL 4 x 4 MIMO: n2/5*/7/12*/14*/25/26/29*/30/38/41/48/66/70/71/77/78 UL 2 x 2 MIMO: n2/25/38/41/48/66/71/77/78
LTE MIMO	DL 4 x 4 MIMO: B1/3/5/7/8/20/26/28/32/38/40/41/42/43/71	DL 4x4 MIMO: B2/4/5*/7/12*/13*/14*/17*/25/26/29*/30/38/41/42/43/48/66/71
NR SA（Mbps）	7010(DL)/1250(UL)	7010(DL)/1250(UL)
NR ENDC（Mbps）	5670(DL)/730M(UL)	5670(DL)/730M(UL)
LTE（Mbps）	1600(DL)/211(UL)	1600(DL)/211(UL)
WCDMA（Mbps）	42(DL)/11(UL)	NA
Functions		
Voice	VoLTE	VoLTE
SMS	SMS over IP(IMS) & SMS over NAS	SMS over IP(IMS) & SMS over NAS
Audio	●	●
FOTA	●	●
OS Drivers	Linux	Linux
GNSS	GPS/GLONASS/Galileo/BeiDou/QZSS	GPS/GLONASS/Galileo/BeiDou/QZSS
Interfaces		
USB	USB 3.2 Gen2	USB 3.2 Gen2
PCIe	PCIe4.0	PCIe4.0
UART	●	●
SPI	●	●
GPIO	●	●
I2C	●	●
SDIO	●	●
UIM	●	●
I2S	●	●
MIPI	●	●
RGMII	USXGMII	USXGMII
Certification		
Regulation	CE/RCM/RoHS/REACH/HF	FCC
Operator	NA	*
Industry	GCF	PTCRB*/GCF*

* =planning /under development

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Product Name	FG360-EAU	FG360-NA
Cellular Capability	NR Sub6	
Region	Asia/Europe/Australia	North America
Picture		
Basic Features		
Package	LGA	LGA
Dimension (mm)	41.0 x 44.0 x 2.75	41.0 x 44.0 x 2.75
Sub-6	FG360-EAU-05/06: n1/3/5/7/8/20/28/38/40/41/77/78/79/71(reserved) FG360-EAU-10: n1/3/5/7/8/20/28/38/41/77/78 FG360-EAU-00: n1/3/5/7/8/20/28/38/40/41/77/78/79 FG360-EAU-15: n1/3/5/7/8/20/28/38/40/41/71/75/77/78 FG360-EAU-16: n1/3/5/7/8/20/28/38/40/41/71/77/78	FG360-NA-00: n2/5/7/12/14/25/30/41/48/66/71/77/78 FG360-NA-05: n25/41/66/71
mmWave	NA	NA
LTE FDD	FG360-EAU-05/06: B1/3/5/7/8/20/28/32/71(reserved) FG360-EAU-10: B1/3/5/7/8/20/28/32 FG360-EAU-00/02: B1/3/5/7/8/18/19/20/26/28/32 FG360-EAU-15/16: B1/3/5/7/8/20/28/32/71	FG360-NA-00: B2/4/5/7/12/13/14/17/25/26/29/30/66/71 FG360-NA-05: B2/4/5/12/66/71
LTE TDD	FG360-EAU-05/06/10: B38/40/41/42/43 FG360-EAU-00/02: B38/40/41/42/43/46(LAA) FG360-EAU-15/16: B38/40/41/42/43	FG360-NA-00: B41/46(LAA)/48(CBRS) FG360-NA-05: B41/46(LAA)
WCDMA	B1/5/8	FG360-NA-00: B2/4/5
Operation mode	NSA & SA	NSA & SA
Antenna	6+1/8+1(GNSS)	6+1/4+1 (GNSS)
Power Supply	3.3V ~ 4.4V(Typical 3.8V)	3.3V ~ 4.4V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C
Key Functions		
NR MIMO	DL 4 x 4 MIMO: n1/3/7/38/40/41/77/78/79 UL 2 x 2 MIMO: n41/77/78/79	DL 4 x 4 MIMO: n2/7/25/30/41/48/66/77/78 UL 2 x 2 MIMO: n41/77/78
LTE MIMO	DL 4×4 MIMO:B1/3/7/32/38/40/41/42/43	DL 4 x 4 MIMO:B2/4/7/25/30/41/48/66
NR SA（Mbps）	4670(DL)/1250(UL)	3740(DL)/1250(UL)
NR ENDC（Mbps）	4470(DL)/730M(UL)	4670(DL)/835M(UL)
LTE（Mbps）	1600(DL)/211(UL)	1600(DL)/211(UL)
WCDMA（Mbps）	42(DL)/11(UL)	42(DL)/11(UL)
Functions		
Voice	VoLTE	VoLTE
SMS	SMS over IP(IMS) & SMS over NAS	SMS over IP(IMS) & SMS over NAS
Audio	●	●
FOTA	●	●
OS Drivers	Linux	Linux
GNSS	GPS/GLONASS/Galileo/BeiDou/QZSS	GPS/GLONASS/Galileo/BeiDou/QZSS
Interfaces		
USB	USB3.1	USB3.1
PCIe	PCIe3.0	PCIe3.0
UART	●	●
SPI	●	●
GPIO	●	●
I2C	●	●
SDIO	●	●
UIM	●	●
I2S	●	●
MIPI	●	●
RGMII	SGMII/HSGMII	SGMII/HSGMII
Certification		
Regulation	CE/RCM/RoHS/REACH/KC	FCC/IC/ RoHS/REACH
Operator	NA	TMO/Verizon/AT&T*
Industry	GCF/HF	PTCRB/GCF/HF

* =planning /under development

Fibocom 5G Module Series

Product Name	FG360-JP	FG360-IN	FG360-MEA
Cellular Capability	NR Sub6		
Region	Japan	India	Middle East/Africa
Picture			
Basic Features			
Package	LGA	LGA	LGA
Dimension (mm)	41.0 x 44.0 x 2.75	41.0 x 44.0 x 2.75	41.0 x 44.0 x 2.75
Sub-6	n3/77/78/79	FG360-IN-00: n28/78 FG360-IN-11: n1/3/5/8/40/78	n1/3/5/7/8/20/28/38/40/41/77/78/ 71(Reserved)
mmWave	NA	NA	NA
LTE FDD	B1/3/19/28	FG360-IN-11: B1/3/5/8	B1/3/5/7/8/20/28/71(Reserved)
LTE TDD	B42	FG360-IN-11: B40	B38/40/41/42/43
WCDMA	B1/5/8	NA	B1/5/8
Operation mode	NSA & SA	NSA & SA	NSA&SA
Antenna	6+1(GNSS)	6+1(GNSS)	6/8
Power Supply	3.3V ~ 4.4V(Typical 3.8V)	3.3V ~ 4.4V(Typical 3.8V)	3.3V ~ 4.4V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C	-30°C ~ +75°C
Key Functions			
NR MIMO	DL 4 x 4 MIMO: n3/77/78/79 UL 2 x 2 MIMO: n77/78/79	DL 4 x 4 MIMO: n1/3/40/78 UL 2 x 2 MIMO: n78	DL 4x4 MIMO: n1/3/7/38/40/41/77/78 UL 2x2 MIMO: n41/77/78
LTE MIMO	DL 4 x 4 MIMO: B1/3/42	DL 4 x 4 MIMO: B1/3/40	DL 4x4 MIMO: B1/3/7/38/40/41/42/43
NR SA（Mbps）	4670(DL)/1250(UL)	4670(DL)/1250(UL)	4670(DL)/1250(UL)
NR ENDC（Mbps）	4470(DL)/730M(UL)	4470(DL)/730M(UL)	4470(DL)/730M(UL)
LTE（Mbps）	1600(DL)/211(UL)	1600(DL)/211(UL)	1600(DL)/211(UL)
WCDMA（Mbps）	42(DL)/11(UL)	NA	NA
Functions			
Voice	VoLTE	VoLTE	VoLTE
SMS	SMS over IP(IMS) & SMS over NAS	SMS over IP(IMS) & SMS over NAS	SMS over IP(IMS) & SMS over NAS
Audio	●	●	●
FOTA	●	●	●
OS Drivers	Linux	Linux	Linux
GNSS	GPS/GLONASS/Galileo/BeiDou/QZSS	GPS/GLONASS/Galileo/BeiDou/QZSS	NA
Interfaces			
USB	USB3.1	USB3.1	USB3.1
PCIe	PCIe3.0	PCIe3.0	PCIe3.0
UART	●	●	●
SPI	●	●	●
GPIO	●	●	●
I2C	●	●	●
SDIO	●	●	●
UIM	●	●	●
I2S	●	●	●
MIPI	●	●	●
RGMII	SGMII/HSGMII	SGMII/HSGMII	SGMII/HSGMII
Certification			
Regulation	JATE/TELEC	★	CE*
Operator	DoCoMo	★	★
Industry	NA	★	★

* =planning /under development

Fibocom 5G Module Series

Product Name	FM350-GL
Cellular Capability	5G NR FR1/LTE Cat 19
Region	Global
Picture	
Basic Features	
Package	M.2
Dimension (mm)	30.0 x 52.0 x 2.3
NR	N1/2/3/5/7/8/20/25/28/30/38/40/41/48/66/71/77/78/79
LTE FDD	B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/29/30/32/66/71
LTE TDD	B34/38/39/40/41/42/43/46/48
WCDMA	B1/2/4/5/8
TD-SCDMA	NA
EVDO	NA
CDMA2000 1X	NA
GSM/GPRS/EDGE	NA
Power Supply	3.135V ~ 4.4V(Typical 3.3V)
Operating Temp.	-10°C ~ +55°C
Key Functions	
FR1(Sub-6)SA Peak(Gbps)	4.67(DL)/1.25(UL)
FR1(Sub-6)NSA Peak(Mbps)	3.74Gbps(DL)/ 835(UL)
LTE FDD (Mbps)	1.6Gps(DL)/ 211(UL)
LTE TDD (Mbps)	1.22Gps(DL)/ 90(UL)
DC-HSPA+(Mbps)	42(DL)/11.5(UL)
HSPA/HSPA+(Mbps)	21(DL)/5.76(UL)
UMTS(Kbps)	384(DL)/384(UL)
TD-SCDMA (Mbps)	NA
EVDO(Mbps)	NA
CDMA2000 1X(kbps)	NA
EDGE(Kbps)	NA
GPRS(Kbps)	NA
Functions	
eSIM	●
Remote SIM	NA
eCALL	NA
OpenCPU	NA
MUX	NA
Jamming Detection	NA
USSD	●
STK	●
LBS	NA
FOTA	NA
OS Drivers	Windows/Chrome/Linux
GNSS	●
MMS	NA
CSD	NA
TTS	NA
SMS	●
Analog Audio	NA
Digital Audio	NA
Voice Code	NA
Audio Play/Record	NA
Protocols	MBIM
Interfaces	
SIM	x2, 3V/1.8V, eSIM on board
USB	USB 2.0 (For debug)/USB 3.1 Gen1 (Reserved)
PCIe	●
UART	Reserved
SPI	NA
ADC	NA
GPIO	I2C(Reserved)
Certification	
Regulation	IC(Canada)/FCC(North America)/CE(Europe)/UKCA(United Kindom)/NCC(Taiwan)/NAL & CCC & SRRC(China)/JATE & TELEC(Japan)/ ANATEL(Brazil)/ENACOM(Argentina)/ACMA(Australia)/TRA(Bahrain)/MOCI(Belarus)/Bocra(Botswana)/TRC(Cambodia)/CRC(Colombia)/ SDPPI(Indonesia)/TRC(Jordan)/KC(Korea)/CITRA(Kuwait)/SIRIM(Malaysia)/TRA(Oman)/MTC(Peru)/NTC(Philippines)/CRA(Qatar)/ FAC&FSB(Russia)/CITC(Saudi Arabia)/IMDA(Singapore)/ICASA(South Africa)/KC(South Korea)/NBTC(Thailand)/NCCIR(Ukraine)/ TRA(U.A.E)/MIC(Vietnam)
Operator	AT&T/Verizon/TMO/Vodafone/DTAG/Telefonica/NTT Docomo/KDDI/Softbank/Telstra/Optus/CMCC/CTC
Industry	GCF/PTCRB/HF/CB/UL

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Fibocom RedCap Module Series

Product Name	FG131-NA	FG332-NA
Cellular Capability	RedCap	LTE Cat.4
Region	North America	North America
Picture		
Basic Features		
Package	LGA	LGA
Dimension (mm)	37.0 x 39.5 x 2.65	29.0 x 32.0 x 2.4
Sub-6	n2/5/7/12/13/14/25/26/30/38/41(194M)/48/66/70/71/77/78	n2/5/7/12/13/14/25/26/30/38/41(194M)/48/66/70/71/77/78
mmWave	NA	NA
LTE FDD	B2/4/5/7/12/13/14/17/25/26/30/66/71	B2/4/5/7/12/13/14/17/25/26/30/66/71
LTE TDD	B38/41/42/43/48	B38/41/42/43/48
WCDMA	NA	NA
Operation mode	NA	NA
Antenna	2+1(GNSS)	2+1(GNSS)
Power Supply	3.3V ~ 4.4V(Typical 3.8V)	3.3V ~ 4.4V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C
Key Functions		
NR MIMO	DL 2 x 2MIMO n2/5/7/12/13/14/25/26/30/38/41(194M)/48/66/70/71/ 77/78	NR MIMO DL 2*2MIMO: n2/5/7/12/13/14/25/26/30/38/41(194M)/48/ 66/70/71/77/78
LTE MIMO	DL 2 x 2MIMO B2/4/5/7/12/13/14/17/25/26/30/38/41/42/43/48/66/71	LTE MIMO DL 2*2MIMO: B2/4/5/7/12/13/14/17/25/26/30/ 38/41/42/ 43/48/66/71
NR SA（Mbps）	220(DL)/120(UL)	227(DL)/ 122(UL)
NR ENDC（Mbps）	NA	NA
LTE（Mbps）	195(DL)/75(UL)	150(DL)/75(UL)
WCDMA（Mbps）	NA	NA
Functions		
Voice	VoLTE	TBD
SMS	SMS	SMS
Audio	●	●
FOTA	●	●
OS Drivers	Linux/Andriod/Windows	Linux/Andriod/Windows
GNSS	GPS/GLONASS/BeiDou/Galileo/QZSS	GPS/GLONASS/BeiDou/Galileo/QZSS
Interfaces		
USB	USB2.0	USB2.0
PCIe	PCIe2.0	PCIe1.0
UART	●	●
SPI	●	●
GPIO	●	●
I2C	NA	NA
SDIO	●	●
UIM	NA	NA
I2S	●	●
MIPI	NA	NA
RGMII	NA	●
Certification		
Regulation	FCC*/ROHS*/REACH*/HF*	PTCRB*/GCF*/IC*/FCC*/RoHs*/HF*/TSCA*
Operator	NA	NA
Industry	NA	NA

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Product Name	FG132-GL	FG132-GL MiniPCIe	FG132-GL M.2
Cellular Capability	RedCap		
Region	Global		
Picture			
Basic Features			
Package	LGA	MiniPCIe	M.2
Dimension (mm)	32.0 x 29.0 x 2.4	51.0 x 30.0 x 3.7	52.0 x 30.0 x 3.2
5G NR SA	N1/2/3/5/7/8/12/13/14/18/20/25/26/28/30/38/40/41/48/66/70/71/77/78	N1/2/3/5/7/8/12/13/14/18/20/25/26/28/30/38/40/41/48/66/70/71/77/78	N1/2/3/5/7/8/12/13/14/18/20/25/26/28/30/38/40/41/48/66/70/71/77/78
LTE Bands	B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/30/34/38/39/40/41/42/43/48/66/71	B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/30/34/38/39/40/41/42/43/48/66/71	B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/30/34/38/39/40/41/42/43/48/66/71
LTE-HPUE	B38/40/41/42/43	B38/40/41/42/43	B38/40/41/42/43
WCDMA	NA	NA	NA
TD-SCDMA	NA	NA	NA
EVDO	NA	NA	NA
CDMA2000 1X	NA	NA	NA
GSM/GPRS/EDGE	NA	NA	NA
Power Supply	3.3V ~ 4.3V (Typical 3.8V)	3.3V ~ 4.3V (Typical 3.8V)	3.3V ~ 4.3V (Typical 3.8V)
Operating Temp.	-35°C ~ +75°C	-35°C ~ +75°C	-35°C ~ +75°C
Extended Temp.	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C
Key Functions			
5G SA Sub-6 (256QAM)	223 (DL)/ 123 (UL)	223 (DL)/ 123 (UL)	223 (DL)/ 123 (UL)
LTE (256QAM)	195 (DL)/ 75 (UL)	195 (DL)/ 75 (UL)	195 (DL)/ 75 (UL)
DC-HSPA+(Mbps)	NA	NA	NA
HSPA/HSPA+(Mbps)	NA	NA	NA
WCDMA(kbps)	NA	NA	NA
TD-SCDMA (Mbps)	NA	NA	NA
EVDO(Mbps)	NA	NA	NA
CDMA2000 1X(kbps)	NA	NA	NA
EDGE(Kbps)	NA	NA	NA
GPRS(Kbps)	NA	NA	NA
Functions			
FOTA	DFOTA	DFOTA	DFOTA
OS Drivers	Linux/Windows/Android	Linux/Windows/Android	Linux/Windows/Android
GNSS	●	●	●
SMS	●	●	●
Voice	●	●	●
Interfaces			
SIM	x 2	x 1	x 2
USB	x 1, USB2.0	x 1, USB2.0	x 1, USB2.0
UART	x 3	x 2	NA
SPI	●	NA	NA
ADC	●	NA	NA
GPIO	●	NA	NA
PCM	●	●	●
I2S	●	NA	NA
I2C	●	●	NA
PCIE	●	NA	●
SGMII	●	NA	NA
Certification			
Regulation	CE/FCC/ROHS/HF/TSCA	CE/FCC/ROHS/HF/TSCA	CE/FCC/ROHS/HF/TSCA
Operator	T-Mobile*/Verizon*/AT&T*	T-Mobile*/Verizon*/AT&T*	T-Mobile*/Verizon*/AT&T*
Industry	GCF*/PTCRB*	GCF*/PTCRB*	GCF*/PTCRB*

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Fibocom RedCap Module Series

Product Name	FG132-NA	FG132-EAU
Cellular Capability	RedCap	
Region	North America	Europe
Picture		
Basic Features		
Package	LGA	LGA
Dimension (mm)	32.0 x 29.0 x 2.4	32.0 x 29.0 x 2.4
5G NR SA	N2/5/7/12/13/14/25/26/30/38/41/48/66/70/71/77/78	N1/3/5/7/8/20/28/38/40/41/71/77/78
LTE Bands	B2/4/5/7/12/13/14/17/25/26/30/38/41/42/43/48/66/71	B1/3/5/7/8/20/28/38/40/41/42/43/71
LTE-HPUE	B38/41/42/43	B38/40/41/42/43
WCDMA	NA	NA
TD-SCDMA	NA	NA
EVDO	NA	NA
CDMA2000 1X	NA	NA
GSM/GPRS/EDGE	NA	NA
Power Supply	3.3V ~ 4.3V (Typical 3.8V)	3.3V ~ 4.3V (Typical 3.8V)
Operating Temp.	-35°C ~ +75°C	-35°C ~ +75°C
Extended Temp.	-40°C ~ +85°C	-40°C ~ +85°C
Key Functions		
5G SA Sub-6 (256QAM)	223 (DL)/ 123 (UL)	223 (DL)/ 123 (UL)
LTE (256QAM)	195 (DL)/ 75 (UL)	195 (DL)/ 75 (UL)
DC-HSPA+(Mbps)	NA	NA
HSPA/HSPA+(Mbps)	NA	NA
WCDMA(kbps)	NA	NA
TD-SCDMA (Mbps)	NA	NA
EVDO(Mbps)	NA	NA
CDMA2000 1X(kbps)	NA	NA
EDGE(Kbps)	NA	NA
GPRS(Kbps)	NA	NA
Functions		
FOTA	DFOTA	DFOTA
OS Drivers	Linux/Windows/Android	Linux/Windows/Android
GNSS	●	●
SMS	●	●
Voice	●	●
Interfaces		
SIM	x 2	x 2
USB	x 1, USB2.0	x 1, USB2.0
UART	x 3	x 3
SPI	●	●
ADC	●	●
GPIO	●	●
PCM	●	●
I2S	●	●
I2C	●	●
PCIE	●	●
SGMII	●	●
Certification		
Regulation	FCC*/ROHS*/HF*/TSCA*	CE*/RoHS*/REACH*
Operator	T-Mobile*/Verizon*/AT&T*	NA
Industry	GCF*/PTCRB*	NA

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Fibocom Wi-Fi Module Series

Product Name	W100-GL	WN300-GL	WN160-GL	WN371-GL	WN372-GL
Wi-Fi Generation	Wi-Fi 5	Wi-Fi 6	Wi-Fi 6E	Wi-Fi 7	Wi-Fi 7
Region	Global				
Picture					
Basic Features					
Chipset	QCA6174	MT7916AN+MT7976DA	QCA2066	MT7991	MT7992
Package	LCC	LGA	LCC	LGA	LGA
Dimension (mm)	15.0 x 13.0 x 1.9	30.0 x 40.0 x 2.75	15.0 x 20.0 x 2.4	45.0 x 48.0x 2.75	45.0 x 48.0x 2.75
WiFi Protocol Version	IEEE 802.11a/b/g/n/ac	IEEE 802.11a/b/g/n/ac/ax	IEEE 802.11a/b/g/n/ac/ax	IEEE 802.11a/b/g/n/ac/ax/be	IEEE 802.11a/b/g/n/ac/ax/be
Bluetooth Standard	BT 5.0	NA	BT 5.3	NA	NA
Bands(Ghz)	2.4/5	2.4/5	2.4/5/6	2.4/5	2.4/5
2.4 GHz Channel Bandwidth(MHz)	20/40	20/40	20/40	20/40	20/40
5/6GHz Channel Bandwidth(MHz)	20/40/80	20/40/80/160	20/40/80/160	20/40/80/160	20/40/80/160
MIMO	2 x 2	2 x 2	2 x 2	2 x 2	4 x 4
DBS/DBDC/DBC/TBTC	DBSC	DBDC	DBDC	DBDC	DBDC
Modulation	1024 QAM	1024 QAM	1024 QAM	4096 QAM	4096 QAM
Power Supply	VCC 3.3V /VIO 1.8V	1V/1.8V/3.3V/5V	VCC 3.3V/ VIO 1.8V	VCC 3.3V /VIO 1.8V	VCC 3.3V /VIO 1.8V
Operating Temp.	-40°C ~ +85°C	-10°C ~ +70°C	0°C ~ +85°C	-10°C ~ +70°C	-10°C ~ +70°C
OS supported	Android /Linux	Android /Linux	Android /Linux	Android /Linux	Android /Linux
Interfaces					
PCIe	●	●	●	●	●
UART	●	NA	●	NA	NA
PCM	●	NA	●	NA	NA
Antenna Interface	WLAN ANT 0, WLAN ANT 1	WLAN ANT 0, WLAN ANT 1, WLAN ANT 2	WLAN ANT 0, WLAN ANT 1	WLAN ANT 0, WLAN ANT 1, WLAN ANT2	WLAN ANT 0, WLAN ANT 1, WLAN ANT 2, WLAN ANT 3, WLAN ANT 4

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Fibocom LTE-A Module Series

Product Name	NL952-NA	NL952-EAU
LTE Category	LTE Cat 20	LTE Cat 18
Region	North America	Asia/Europe/Australia
Picture		
Basic Features		
Package	M.2	M.2
Dimension (mm)	30.0 x 52.0 x 2.3	30.0 x 52.0 x 2.3
Sub-6	NA	NA
mmWave	NA	NA
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	B41/46(LAA)/48(CBRS)	B38/40/41/42/43/48(CBRS)
WCDMA	B2/4/5	B1/5/6/8/19
Operation mode	NA	NA
Antenna	4	4
Power Supply	3.3V ~ 4.4V(Typical 3.8V)	3.3V ~ 4.4V(Typical 3.8V)
Operating Temp.	-30°C ~ +70°C	-30°C ~ +70°C
Key Functions		
NR MIMO	NA	NA
LTE MIMO	DL 4 x 4 MIMO: B2/4/7/25/30/41/48/66	DL 4 x 4 MIMO: B1/3/7/32/38/40/41/42
NR SA（Mbps）	NA	NA
NR ENDC（Mbps）	NA	NA
LTE（Mbps）	2000(DL)/150(UL)	1200(DL) / 150(UL)
WCDMA（Mbps）	42(DL) / 5.76(UL)	42(DL) / 5.76(UL)
Functions		
Voice	VoLTE	VoLTE
SMS	●	●
Audio	●	●
FOTA	●	●
OS Drivers	Linux/Android	Linux/Android
GNSS	GPS/GLONASS/Galileo/BeiDou	GPS/GLONASS/Galileo/BeiDou
Interfaces		
USB	USB3.0/2.0	USB3.0/2.0
PCIe	PCIe2.0	PCIe2.0
UART	NA	NA
SPI	NA	NA
GPIO	●	●
I2C	NA	NA
SDIO	NA	NA
UIM	●	●
I2S	●	●
MIPI	●	●
RGMII	NA	NA
Certification		
Regulation	IC/FCC	CE/RCM/RoHs
Operator	AT&T/TMO	NA
Industry	PTCRB/GCF	GCF/HF

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Product Name	FG101-EAU	FG101-NA	FG101-EU
LTE Category	LTE Cat 6/12/13	LTE Cat 6/12	LTE Cat 12
Region	Asia(excluding China)/Europe/Australia	North America	Asia(excluding China)/Europe/Australia
Picture			
Basic Features			
Package	LGA	LGA	LGA
Dimension (mm)	37.0 x 39.5 x 2.8	37.0 x 39.5 x 2.8	37.0 x 39.5 x 2.8
Sub-6	NA	NA	NA
mmWave	NA	NA	NA
LTE FDD	B1/3/5/7/8/20/28/32	B2/4/5/7/12/13/14/17/25/26/29/30/66/71	B1/3/5/7/8/20/28/32
LTE TDD	FG101-EAU-00: B38/40/41(120M) /42/43/48 FG101-EAU-10/20/30: B38/40/41(120M)	B41(194M)/46/48	B38/40/41 /42/43
WCDMA	B1/3/5/8	B2/4/5	B1/3/5/8
Operation mode	NA	NA	NA
Antenna	FG101-EAU-00: 4+1(GNSS) FG101-EAU-10/20/30: 2+1(GNSS)	FG101-NA-00: 4+1(GNSS) FG101-NA-20: 2+1(GNSS)	4+1(GNSS)
Power Supply	3.4V ~ 4.3V(Typical 3.8V)	3.4V~ 4.3V(Typical 3.8V)	3.4V~ 4.3V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C	-30°C ~ +75°C
Key Functions			
NR MIMO	NA	NA	NA
LTE MIMO	FG101-EAU-00: DL 4 x 4 MIMO: B1/3/7/38/40/41/42 FG101-EAU-30: DL 4 x 4 MIMO: B1/3/7/38/40/41	FG101-NA-00: DL 4 x 4 MIMO: B2/4/7/25/30/41/48/66	DL 4 x 4 MIMO: B1/3/7/38/40/41/42
NR SA（Mbps）	NA	NA	NA
NR ENDC（Mbps）	NA	NA	NA
LTE（Mbps）	FG101-EAU-00: 600(DL)/150(UL) FG101-EAU-10: 400(DL)/150(UL) FG101-EAU-20/30: 300(DL)/50(UL)	FG101-NA-00: 600(DL) / 150(UL) FG101-NA-20: 300(DL) / 50(UL)	600(DL) / 150(UL)
WCDMA（Mbps）	42(DL) / 5.7(UL)	42(DL) / 5.7(UL)	42(DL) / 5.7(UL)
Functions			
Voice	VoLTE	VoLTE	VoLTE
SMS	SMS	SMS	SMS
Audio	●	●	●
FOTA	●	●	●
OS Drivers	Linux/Android/Windows	Linux/Android/Windows	Linux/Android/Windows
GNSS	GPS/GLONASS/Galileo/BeiDou	GPS/GLONASS/Galileo/BeiDou	GPS/GLONASS/Galileo/BeiDou
Interfaces			
USB	USB3.0 & USB2.0	USB3.0 & USB2.0	USB3.0 & USB2.0
PCIe	PCIe2.0	PCIe2.0	PCIe2.0
UART	●	●	●
SPI	●	●	●
GPIO	●	●	●
I2C	●	●	●
SDIO	●	●	●
UIM	●	●	●
I2S	●	●	●
MIPI	NA	NA	NA
RGMII	NA	NA	NA
Certification			
Regulation	CE/UKCA/HF/REACH/RoHS	FCC/RoHS/HF/TSCA/Reach	CE*/UKCA*/HF*/Reach*/RoHS*
Operator	NA	AT&T*/VZW*/TMO*	NA
Industry	GCF/RCM	GCF*/PTCRB*	GCF*/RCM*

* =planning /under development

Product Name	FM101R-GL-12	FM101-GL-00
LTE Category	LTE Cat 12	LTE Cat 6
Region	Global	
Picture		
Basic Features		
Package	M.2	
Dimension (mm)	30.0 x 42.0 x 2.3	
NR	NA	
LTE FDD	B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/29/30/32/66/71	B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/29/30/66/71
LTE TDD	B38/39/40/41/42/43/48	
WCDMA	B1/2/4/5/6/8/19	
TD-SCDMA	NA	
EVDO	NA	
CDMA2000 1X	NA	
GSM/GPRS/EDGE	NA	
Power Supply	3.135V~ 4.4V(Typical 3.3V)	
Operating Temp.	-10°C ~ +55°C	
Key Functions		
FR1(Sub-6)SA Peak(Gbps)	NA	NA
FR1(Sub-6)NSA Peak(Mbps)	NA	NA
LTE FDD (Mbps)	600 (DL)/150(UL)	300 (DL)/50(UL)
LTE TDD (Mbps)	460(DL)/90 (UL)	260(DL)/30 (UL)
DC-HSPA+(Mbps)	42(DL)/5.76(UL)	42(DL)/5.76(UL)
HSPA/HSPA+(Mbps)	42(DL)/5.76(UL)	42(DL)/5.76(UL)
UMTS(kbps)	384(DL)/384(UL)	384(DL)/384(UL)
TD-SCDMA (Mbps)	NA	NA
EVDO(Mbps)	NA	NA
CDMA2000 1X(kbps)	NA	NA
EDGE(Kbps)	NA	NA
GPRS(Kbps)	NA	NA
Functions		
eSIM	●	
Remote SIM	NA	
eCALL	NA	
OpenCPU	NA	
MUX	NA	
Jamming Detection	NA	
USSD	●	
STK	●	
LBS	NA	
FOTA	NA	
OS Drivers	Windows/Chrome/Linux	
GNSS	●	
MMS	NA	
CSD	NA	
TTS	NA	
SMS	●	
Analog Audio	NA	
Digital Audio	NA	
Voice Code	NA	
Audio Play/Record	NA	
Protocols	MBIM	
Interfaces		
SIM	X2, 3V/1.8V, eSIM on board	
USB	USB 2.0 /USB 3.0	
PCIe	NA	
UART	Reserved	
SPI	NA	
ADC	NA	
GPIO	I2C(Reserved)	
Certification		
Regulation	IC(Canada)/FCC(North America)/CE(Europe)/UKCA(United Kindom)/NCC(Taiwan)/NAL & CCC & SRRC(China)/JATE & TELEC(Japan)/ANATEL(Brazil)*/ENACOM(Argentina)/ACMA(Australia)/MCIT(Azerbaijan)*/ATT(Bolivia)*TRA(Bahrain)/CRC(Colombia)/ SDPPI(Indonesia)/TRC(Jordan)/KC(Korea)/CITRA(Kuwait)*/ANRT(Morocco)/NCC(Nigeria)/MOC(Lebanon)*/Mexico(IFT)*/PTA(Pakistan)*/SIRIM(Malaysia)/TRA(Oman)/MTC(Peru)/NTC(Philippines)/CRA(Qatar)/CITC(Saudi Arabia)/IMDA(Singapore)/ICASA(South Africa)*/KC(South Korea)*/NBTC(Thailand)/NCCIR(Ukraine)/TRA(U.A.E)/MIC(Vietnam)/URSEC(Uruguay)*/UzStandart(Uzbekistan)*/TRBC(Vanuatu)*/CONATEL(Venezuela)*	
Operator	AT&T/Verizon/TMO/Vodafone/DTAG/Telefonica/NTT Docomo/KDDI/Softbank/Telstra/Optus	
Industry	GCF/PTCRB/HF/CB/UL	

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Fibocom LTE-A Module Series

Product Name	FM101-EAU	FM101-NA	FM101-CG
LTE Category	LTE Cat 6		
Region	Asia(excluding China)/Europe/Australia	North America	North America(CBRS Global)
Picture			
Basic Features			
Package	M.2	M.2	M.2
Dimension (mm)	30.0 x 42.0 x 2.3	30.0 x 42.0 x 2.3	30.0 x 42.0 x 2.3
Sub-6	NA	NA	NA
mmWave	NA	NA	NA
LTE FDD	B1/3/5/7/8/20/28/32	B2/4/5/7/12/13/14/17/25/26/29/30/66/71	NA
LTE TDD	B38/40/41(120M)	B41(194M)/42/43/46/48	B42/43/48(CBRS)
WCDMA	B1/3/5/8	B2/4/5	NA
Operation mode	NA	NA	NA
Antenna	2+1(GNSS)	2+1(GNSS)	2+1(GNSS)
Power Supply	3.135V ~ 4.4V(Typical 3.8V)	3.135V ~ 4.4V(Typical 3.8V)	3.135V ~ 4.4V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C	-30°C ~ +75°C
Key Functions			
NR MIMO	NA	NA	NA
LTE MIMO	NA	NA	NA
NR SA（Mbps）	NA	NA	NA
NR ENDC（Mbps）	NA	NA	NA
LTE（Mbps）	300(DL) / 50(UL)	300(DL) / 50(UL)	260(DL) / 30(UL)
WCDMA（Mbps）	42(DL) / 5.7(UL)	42(DL) / 5.7(UL)	NA
Functions			
Voice	VoLTE	VoLTE	VoLTE
SMS	SMS	SMS	SMS
Audio	●	●	●
FOTA	●	●	●
OS Drivers	Linux/Android/Windows	Linux/Andriod/Windows	Linux/Android/Windows
GNSS	GPS/GLONASS/Galileo/BeiDou	GPS/GLONASS/Galileo/BeiDou	GPS/GLONASS/Galileo/BeiDou
Interfaces			
USB	USB3.0/2.0	USB3.0/2.0	USB3.0/2.0
PCIe	PCIe2.0	PCIe2.0	PCIe2.0
UART	●	●	●
SPI	NA	NA	NA
GPIO	NA	NA	NA
I2S	NA	NA	NA
SDIO	NA	NA	NA
UIM	●	●	●
I2C	NA	NA	NA
MIPI	NA	NA	NA
RGMII	NA	NA	NA
Certification			
Regulation	CE/UKCA/HF/REACH/RoHS	FCC/IC/TSCA/RoHS/HF	RoHS/HF/TSCA/ FCC
Operator	NA	AT&T/VZW/TMO	NA
Industry	GCF/RCM	GCF/PTCRB	NA

* =planning /under development

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Fibocom LTE Module Series

Product Name	NL668-EAU	NL668-EAU MiniPCIe	NL668-EAU M.2
LTE Category	LTE Cat 4		
Region	EMEA/APAC		
Picture			
Basic Features			
Package	LCC+LGA	MiniPCIe	M.2
Dimension (mm)	32.0 x 29.0 x 2.4	51.0 x 30.0 x 3.7	42.0 x 30.0 x 4.4
LTE FDD	B1/3/5/7/8/20/28	B1/3/5/7/8/20/28	B1/3/5/7/8/20/28
LTE TDD	B38/40/41	B38/40/41	B38/40/41
WCDMA	B1/5/8	B1/5/8	B1/5/8
TD-SCDMA	NA	NA	NA
EVDO	NA	NA	NA
CDMA2000 1X	NA	NA	NA
GSM/GPRS/EDGE	850/900/1800MHz	850/900/1800MHz	850/900/1800MHz
Power Supply	3.3V ~ 4.3V (Typical 3.8V)	3.3V ~ 4.3V (Typical 3.8V)	3.15V ~ 4.3V (Typical 3.3V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C	-30°C ~ +75°C
Extended Temp.	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C
Data Transmission			
LTE FDD (Mbps)	150(DL)/50(UL)	150(DL)/50(UL)	150(DL)/50(UL)
LTE TDD (Mbps)	130(DL)/30.5(UL)	130(DL)/30.5(UL)	130(DL)/30.5(UL)
DC-HSPA+(Mbps)	42(DL)/5.76(UL)	42(DL)/5.76(UL)	42(DL)/5.76(UL)
HSPA/HSPA+(Mbps)	NA	NA	NA
WCDMA(Kbps)	384(DL)/384(UL)	384(DL)/384(UL)	384(DL)/384(UL)
TD-SCDMA (Mbps)	NA	NA	NA
EVDO(Mbps)	NA	NA	NA
CDMA2000 1X(Kbps)	NA	NA	NA
EDGE(Kbps)	296(DL)/236.8(UL)	296(DL)/236.8(UL)	296(DL)/236.8(UL)
GPRS(Kbps)	107(DL)/85.6(UL)	107(DL)/85.6(UL)	107(DL)/85.6(UL)
Functions			
eSIM	Optional	Optional	NA
Remote SIM	NA	NA	NA
eCALL	NA	NA	NA
OpenCPU	Optional	Optional	NA
MUX	●	●	●
Jamming Detection	NA	NA	NA
USSD	●	●	●
STK	NA	NA	NA
LBS	●	●	●
FOTA	DFOTA	DFOTA	DFOTA
OS Drivers	Linux/Windows/Android	Linux/Windows/Android	Linux/Windows/Android
GNSS	Optional	Optional	NA
MMS	NA	NA	NA
CSD	●	●	NA
TTS	Optional	Optional	NA
SMS	●	●	●
Analog Audio	NA	NA	NA
Digital Audio	●	●	NA
Voice Code	●	●	NA
Audio Play/Record	●	●	NA
Protocols	TCP(S)/UDP/HTTP(S)/FTP(S)/IPv4/IPv6/SSL/TLS/ MQTT/PING/NTP/FFS/NITZ/PPP/ECM/RNDIS/ GobiNet/QMI_WWAN	TCP(S)/UDP/HTTP(S)/FTP(S)/IPv4/IPv6/SSL/TLS/ MQTT/PING/NTP/FFS/NITZ/PPP/ECM/RNDIS/ GobiNet/QMI_WWAN	TCP(S)/UDP/HTTP(S)/FTP(S)/IPv4/IPv6/SSL/TLS/ MQTT/PING/NTP/FFS/NITZ/PPP/ECM/RNDIS/ GobiNet/QMI_WWAN
Interfaces			
SIM	x 1, 1.8V/3.0V	x 1, 1.8V/3.0V	x 1, 1.8V/3.0V
USB	x 1, USB 2.0	x 1, USB 2.0	x 1, USB2.0
PCIe	NA	NA	NA
UART	x 2	x 2	x 2
SPI	●	NA	NA
ADC	x 2	NA	NA
GPIO	●	NA	NA
SDIO	●	NA	NA
PCM	●	●	●
SGMII	●	NA	NA
Certification			
Regulation	CE/RCM/NCC/ANATEL/RoHS/UKCA/REACH	CE/RCM/NCC/ANATEL/RoHS/UKCA/REACH	CE/RCM/NCC/ANATEL/RoHS/UKCA/REACH
Operator	DT	DT	DT
Industry	HF/GCF	HF/GCF	HF/GCF

* =planning /under development

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Product Name	NL668-EU	NL668-EU MiniPCIe	NL668-AM	NL668-AM MiniPCIe
LTE Category	LTE Cat 4			
Region	Europe		North America	
Picture				
Basic Features				
Package	LCC+LGA	MiniPCIe	LCC+LGA	MiniPCIe
Dimension (mm)	32.0 x 29.0 x 2.4	51.0 x 30.0 x 3.7	32.0 x 29.0 x 2.4	51.0 x 30.0 x 3.7
LTE FDD	B1/3/5/7/8/20	B1/3/5/7/8/20	B2/4/5/12/13/17/66/71	B2/4/5/12/13/17/66/71
LTE TDD	NA	NA	NA	NA
WCDMA	B1/5/8	B1/5/8	B2/4/5	B2/4/5
TD-SCDMA	NA	NA	NA	NA
EVDO	NA	NA	NA	NA
CDMA2000 1X	NA	NA	NA	NA
GSM/GPRS/EDGE	850/900/1800MHz	850/900/1800MHz	NA	NA
Power Supply	3.3V ~ 4.3V (Typical 3.8V)	3.3V ~ 4.3V (Typical 3.8V)	3.3V ~ 4.3V (Typical 3.8V)	3.3V ~ 4.3V (Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C	-30°C ~ +75°C	-30°C ~ +75°C
Extended Temp.	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C
Data Transmission				
LTE FDD (Mbps)	150(DL)/50(UL)	150(DL)/50(UL)	150(DL)/50(UL)	150(DL)/50(UL)
LTE TDD (Mbps)	NA	NA	NA	NA
DC-HSPA+(Mbps)	42(DL)/5.76(UL)	42(DL)/5.76(UL)	42(DL)/5.76(UL)	42(DL)/5.76(UL)
HSPA/HSPA+(Mbps)	NA	NA	NA	NA
WCDMA(Kbps)	384(DL)/384(UL)	384(DL)/384(UL)	384(DL)/384(UL)	384(DL)/384(UL)
TD-SCDMA (Mbps)	NA	NA	NA	NA
EVDO(Mbps)	NA	NA	NA	NA
CDMA2000 1X(Kbps)	NA	NA	NA	NA
EDGE(Kbps)	296(DL)/236.8(UL)	296(DL)/236.8(UL)	NA	NA
GPRS(Kbps)	107(DL)/85.6(UL)	107(DL)/85.6(DL)	NA	NA
Functions				
eSIM	Optional	Optional	Optional	Optional
Remote SIM	NA	NA	NA	NA
eCALL	NA	NA	NA	NA
OpenCPU	Optional	Optional	Optional	Optional
MUX	●	●	●	●
Jamming Detection	NA	NA	NA	NA
USSD	●	●	NA	NA
STK	NA	NA	NA	NA
LBS	●	●	●	●
FOTA	DFOTA	DFOTA	DFOTA	DFOTA
OS Drivers	Linux/Windows/Android	Linux/Windows/Android	Linux/Windows/Android	Linux/Windows/Android
GNSS	Optional	Optional	Optional	Optional
MMS	NA	NA	NA	NA
CSD	●	●	NA	NA
TTS	Optional	Optional	Optional	Optional
SMS	●	●	●	●
Analog Audio	NA	NA	NA	NA
Digital Audio	●	●	●	●
Voice Code	●	●	●	●
Audio Play/Record	●	●	●	●
Protocols	TCP(S)/UDP/HTTP(S)/FTP(S)/IPv4/IPv6/SSL/TLS/MQTT/PING/NTP/FFS/NITZ/PPP/ECM/RNDIS/GobiNet/QMI_WWAN	TCP(S)/UDP/HTTP(S)/FTP(S)/IPv4/IPv6/SSL/TLS/MQTT/PING/NTP/FFS/NITZ/PPP/ECM/RNDIS/GobiNet/QMI_WWAN	TCP(S)/UDP/HTTP(S)/FTP(S)/IPv4/IPv6/SSL/TLS/MQTT/PING/NTP/FFS/NITZ/PPP/ECM/RNDIS/GobiNet/QMI_WWAN	TCP(S)/UDP/HTTP(S)/FTP(S)/IPv4/IPv6/SSL/TLS/MQTT/PING/NTP/FFS/NITZ/PPP/ECM/RNDIS/GobiNet/QMI_WWAN
Interfaces				
SIM	x 1, 1.8V/3.0V	x 1, 1.8V/3.0V	x 1, 1.8V/3.0V	x 1, 1.8V/3.0V
USB	x 1, USB 2.0	x 1, USB 2.0	x 1, USB 2.0	x 1, USB 2.0
PCIe	NA	NA	NA	NA
UART	x 2	x 2	x 2	x 2
SPI	●	NA	●	NA
ADC	x 2	NA	x 2	NA
GPIO	●	NA	●	NA
SDIO	●	NA	●	NA
PCM	●	●	●	●
SGMII	●	NA	●	NA
Certification				
Regulation	CE/RoHS/UKCA/REACH	CE/RoHS/UKCA/REACH	FCC/RoHS/IC	FCC/RoHS/IC
Operator	DT	DT	Verizon/AT&T/T-Mobile	Verizon/AT&T/T-Mobile
Industry	HF	HF	GCF/HF/PTCRB	GCF/HF/PTCRB

* =planning /under development

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Fibocom LTE Module Series

Product Name	NL668-LA	NL668-LA MiniPCIe	NL668-JP	NL668-JP MiniPCIe
LTE Category	LTE Cat 4			
Region	Latin America		Japan	
Picture				
Basic Features				
Package	LCC+LGA	MiniPCIe	LCC+LGA	MiniPCIe
Dimension (mm)	32.0 x 29.0 x 2.4	51.0 x 30.0 x 3.7	32.0 x 29.0 x 2.4	51.0 x 30.0 x 3.7
LTE FDD	B1/2/3/4/5/7/8/12/17/28/66	B1/2/3/4/5/7/8/12/17/28/66	B1/3/8/11/18/19/21/26/28	B1/3/8/11/18/19/21/26/28
LTE TDD	B38/40	B38/40	B41	B41
WCDMA	B1/2/3/4/5/8	B1/2/3/4/5/8	B1/6/8/19	B1/6/8/19
TD-SCDMA	NA	NA	NA	NA
EVDO	NA	NA	NA	NA
CDMA2000 1X	NA	NA	NA	NA
GSM/GPRS/EDGE	850/900/1800/1900MHz	850/900/1800/1900MHz	NA	NA
Power Supply	3.3V ~ 4.3V (Typical 3.8V)	3.3V ~ 4.3V (Typical 3.8V)	3.3V ~ 4.3V (Typical 3.8V)	3.3V ~ 4.3V (Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C	-30°C ~ +75°C	-30°C ~ +75°C
Extended Temp.	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C
Data Transmission				
LTE FDD (Mbps)	150(DL)/50(UL)	150(DL)/50(UL)	150(DL)/50(UL)	150(DL)/50(UL)
LTE TDD (Mbps)	130(DL)/30.5(UL)	130(DL)/30.5(UL)	130(DL)/30.5(UL)	130(DL)/30.5(UL)
DC-HSPA+(Mbps)	42(DL)/5.76(UL)	42(DL)/5.76(UL)	42(DL)/5.76(UL)	42(DL)/5.76(UL)
HSPA/HSPA+(Mbps)	NA	NA	NA	NA
WCDMA(Kbps)	384(DL)/384(UL)	384(DL)/384(UL)	384(DL)/384(UL)	384(DL)/384(UL)
TD-SCDMA (Mbps)	NA	NA	NA	NA
EVDO(Mbps)	NA	NA	NA	NA
CDMA2000 1X(Kbps)	NA	NA	NA	NA
EDGE(Kbps)	296(DL)/236.8(UL)	296(DL)/236.8(UL)	NA	NA
GPRS(Kbps)	107(DL)/85.6(UL)	107(DL)/85.6(DL)	NA	NA
Functions				
eSIM	Optional	Optional	Optional	Optional
Remote SIM	NA	NA	NA	NA
eCALL	NA	NA	NA	NA
OpenCPU	Optional	Optional	Optional	Optional
MUX	●	●	●	●
Jamming Detection	NA	NA	NA	NA
USSD	●	●	NA	NA
STK	NA	NA	NA	NA
LBS	●	●	●	●
FOTA	DFOTA	DFOTA	DFOTA	DFOTA
OS Drivers	Linux/Windows/Android	Linux/Windows/Android	Linux/Windows/Android	Linux/Windows/Android
GNSS	Optional	Optional	Optional	Optional
MMS	NA	NA	NA	NA
CSD	NA	NA	NA	NA
TTS	Optional	Optional	Optional	Optional
SMS	●	●	●	●
Analog Audio	NA	NA	NA	NA
Digital Audio	●	●	●	●
Voice Code	●	●	●	●
Audio Play/Record	●	●	●	●
Protocols	TCP(S)/UDP/HTTP(S)/FTP(S)/IPv4/IPv6/SSL/TLS/MQTT/PING/NTP/FFS/NITZ/PPP/ECM/RNDIS/GobiNet/QMI_WWAN	TCP(S)/UDP/HTTP(S)/FTP(S)/IPv4/IPv6/SSL/TLS/MQTT/PING/NTP/FFS/NITZ/PPP/ECM/RNDIS/GobiNet/QMI_WWAN	TCP(S)/UDP/HTTP(S)/FTP(S)/IPv4/IPv6/SSL/TLS/MQTT/PING/NTP/FFS/NITZ/PPP/ECM/RNDIS/GobiNet/QMI_WWAN	TCP(S)/UDP/HTTP(S)/FTP(S)/IPv4/IPv6/SSL/TLS/MQTT/PING/NTP/FFS/NITZ/PPP/ECM/RNDIS/GobiNet/QMI_WWAN
Interfaces				
SIM	x 1, 1.8V/3.0V	x 1, 1.8V/3.0V	x 1, 1.8V/3.0V	x 1, 1.8V/3.0V
USB	x 1, USB 2.0	x 1, USB 2.0	x 1, USB 2.0	x 1, USB 2.0
PCIe	NA	NA	NA	NA
UART	x 2	x 2	x 2	x 2
SPI	●	NA	●	NA
ADC	x 2	NA	x 2	NA
GPIO	●	NA	●	NA
SDIO	●	NA	●	NA
PCM	●	●	●	●
SGMII	●	NA	●	NA
Certification				
Regulation	RoHS/FCC/ANATEL/REACH	RoHS/FCC/ANATEL/REACH	RoHS/JATE/TELEC/REACH	RoHS/JATE/TELEC/REACH
Operator	NA	NA	DOCOMO/Softbank/KDDI	DOCOMO/Softbank/KDDI
Industry	HF	HF	HF	HF

* =planning /under development

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Product Name	L716-LA	L716-LA MiniPCIe
LTE Category	LTE Cat 4	
Region	Latin America	
Picture		
Basic Features		
Package	LCC+LGA	MiniPCIe
Dimension (mm)	32.0 x 29.0 x 2.4	51.0*30.0*3.7
LTE FDD	B1/2/3/4/5/7/8/28/66	B1/2/3/4/5/7/8/28/66
LTE TDD	B38/40	B38/40
WCDMA	B1/2/3/4/5/8	B1/2/3/4/5/8
TD-SCDMA	NA	NA
EVDO	NA	NA
CDMA2000 1X	NA	NA
GSM/GPRS/EDGE	850/900/1800/1900MHz	850/900/1800/1900MHz
Power Supply	3.3V ~ 4.4V (Typical 3.8V)	3.3V ~ 4.4V (Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C
Extended Temp.	-40°C ~ +85°C	-40°C ~ +85°C
Data Transmission		
LTE FDD (Mbps)	150 (DL)/ 50 (UL)	150 (DL)/ 50 (UL)
LTE TDD (Mbps)	130 (DL)/ 30.5 (UL)	130 (DL)/ 30.5 (UL)
DC-HSPA+(Mbps)	42(DL)/ 5.76(UL)	42(DL)/ 5.76(UL)
HSPA/HSPA+(Mbps)	NA	NA
WCDMA(Kbps)	384(DL)/384(UL)	384(DL)/384(UL)
TD-SCDMA (Mbps)	NA	NA
EVDO(Mbps)	NA	NA
CDMA2000 1X(Kbps)	NA	NA
EDGE(Kbps)	236.8(DL)/ 236.8(UL)	236.8(DL)/ 236.8(UL)
GPRS(Kbps)	85.6(DL)/ 85.6(UL)	85.6(DL)/ 85.6(UL)
Functions		
eSIM	Optional	Optional
Remote SIM	NA	NA
eCALL	NA	NA
OpenCPU	Optional	Optional
MUX	●	●
Jamming Detection	NA	NA
USSD	●	●
STK	NA	NA
LBS	NA	NA
FOTA	DFOTA	DFOTA
OS Drivers	Linux/Windows/Android	Linux/Windows/Android
GNSS	NA	NA
MMS	NA	NA
CSD	NA	NA
TTS	Optional	Optional
SMS	●	●
Analog Audio	NA	NA
Digital Audio	●	●
Voice Code	●	●
Audio Play/Record	Optional	Optional
Protocols	TCP(S)/UDP/HTTP(S)/FTP(S)/IPv4/IPv6/SSL/TLS/MQTT/PING/ NTP/FFS/NITZ/PPP/ECM/RNDIS/GobiNet/QMI_WWAN	TCP(S)/UDP/HTTP(S)/FTP(S)/IPv4/IPv6/SSL/TLS/MQTT/PING/ NTP/FFS/NITZ/PPP/ECM/RNDIS/GobiNet/QMI_WWAN
Interfaces		
SIM	x 2, 1.8V/3.0V	x 2, 1.8V/3.0V
USB	x 1, USB 2.0	x 1, USB 2.0
PCIe	NA	NA
UART	x 2	x 2
SPI	●	NA
ADC	x 2	NA
GPIO	●	NA
SDIO	●	NA
PCM	●	●
SGMII	RMII	NA
Certification		
Regulation	RoHS/FCC/ANATEL/CRC	RoHS/FCC/ANATEL/CRC
Operator	NA	NA
Industry	NA	NA

* =planning /under development

Product Name	L716-CN	L716-CN MiniPCIe	L716-EU	L716-EU MiniPCIe
LTE Category	LTE Cat 4			
Region	China/India		EMEA/APAC	
Picture				
Basic Features				
Package	LCC+LGA	MiniPCIe	LCC+LGA	MiniPCIe
Dimension (mm)	32.0 x 29.0 x 2.4	51.0 x 30.0 x 3.7	32.0 x 29.0 x 2.4	51.0 x 30.0 x 3.7
LTE FDD	B1/3/5/8	B1/3/5/8	B1/3/5/7/8/20/28	B1/3/5/7/8/20/28
LTE TDD	B34/38/39/40/41	B34/38/39/40/41	B38/40/41	B38/40/41
WCDMA	B1/5/8	B1/5/8	B1/5/8	B1/5/8
TD-SCDMA	NA	NA	NA	NA
EVDO	NA	NA	NA	NA
CDMA2000 1X	NA	NA	NA	NA
GSM/GPRS/EDGE	900/1800MHz	900/1800MHz	850/900/1800MHz	850/900/1800MHz
Power Supply	3.3V ~ 4.4V (Typical 3.8V)	3.3V ~ 4.4V (Typical 3.8V)	3.3V ~ 4.4V (Typical 3.8V)	3.3V ~ 4.4V (Typical 3.8V)
Operating Temp.	-30°C ~ +75°C	-30°C ~ +75°C	-30°C ~ +75°C	-30°C ~ +75°C
Extended Temp.	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C	-40°C ~ +85°C
Data Transmission				
LTE FDD (Mbps)	150(DL)/50(UL)	150(DL)/50(UL)	150(DL)/50(UL)	150(DL)/50(UL)
LTE TDD (Mbps)	130 (DL)/30.5 (UL)	130 (DL)/30.5 (UL)	130 (DL)/30.5 (UL)	130 (DL)/30.5 (UL)
DC-HSPA+(Mbps)	42(DL)/ 5.76(UL)	42(DL)/ 5.76(UL)	42(DL)/ 5.76(UL)	42(DL)/ 5.76(UL)
HSPA/HSPA+(Mbps)	NA	NA	NA	NA
WCDMA(Kbps)	384(DL)/384(UL)	384(DL)/384(UL)	384(DL)/384(UL)	384(DL)/384(UL)
TD-SCDMA (Mbps)	NA	NA	NA	NA
EVDO(Mbps)	NA	NA	NA	NA
CDMA2000 1X(Kbps)	NA	NA	NA	NA
EDGE(Kbps)	236.8(DL)/236.8(UL)	236.8(DL)/236.8(UL)	236.8(DL)/236.8(UL)	236.8(DL)/236.8(UL)
GPRS(Kbps)	85.6(DL)/85.6(UL)	85.6(DL)/85.6(UL)	85.6(DL)/85.6(UL)	85.6(DL)/85.6(UL)
Functions				
eSIM	Optional	Optional	Optional	Optional
Remote SIM	NA	NA	NA	NA
eCALL	NA	NA	NA	NA
OpenCPU	Optional	Optional	Optional	Optional
MUX	●	●	●	●
Jamming Detection	NA	NA	NA	NA
USSD	●	●	●	●
STK	NA	NA	NA	NA
LBS	NA	NA	NA	NA
FOTA	DFOTA	DFOTA	DFOTA	DFOTA
OS Drivers	Linux/Windows/Android	Linux/Windows/Android	Linux/Windows/Android	Linux/Windows/Android
GNSS	Optional	Optional	NA	NA
MMS	NA	NA	NA	NA
CSD	NA	NA	NA	NA
TTS	Optional	Optional	Optional	Optional
SMS	●	●	●	●
Analog Audio	NA	NA	NA	NA
Digital Audio	●	●	●	●
Voice Code	●	●	●	●
Audio Play/Record	Optional	Optional	Optional	Optional
Protocols	TCP(S)/UDP/HTTP(S)/FTP(S)/ IPv4/IPv6/SSL/TLS/MQTT/ PING/NTP/FFS/NITZ/PPP/ECM/ RNDIS/GobiNet/QMI_WWAN	TCP(S)/UDP/HTTP(S)/FTP(S)/ IPv4/IPv6/SSL/TLS/MQTT/PING/ NTP/FFS/NITZ/PPP/ECM/RNDIS/ GobiNet/QMI_WWAN	TCP(S)/UDP/HTTP(S)/FTP(S)/ IPv4/IPv6/SSL/TLS/MQTT/PING/ NTP/FFS/NITZ/PPP/ECM/RNDIS/ GobiNet/QMI_WWAN	TCP(S)/UDP/HTTP(S)/FTP(S)/IPv4/ IPv6/SSL/TLS/MQTT/PING/NTP/ FFS/NITZ/PPP/ECM/RNDIS/ GobiNet/QMI_WWAN
Interfaces				
SIM	x 2, 1.8V/3.0V	x 2, 1.8V/3.0V	x 2, 1.8V/3.0V	x 2, 1.8V/3.0V
USB	x 1, USB2.0	x 1, USB2.0	x 1, USB2.0	x 1, USB2.0
PCIe	NA	NA	NA	NA
UART	x 2	x 2	x 2	x 2
SPI	●	NA	●	NA
ADC	x 2	NA	x 2	NA
GPIO	●	NA	●	NA
SDIO	●	NA	●	NA
PCM	●	●	●	●
SGMII	RMII	NA	RMII	NA
Certification				
Regulation	RoHS/SRRC/CCC/NAL	RoHS/SRRC/CCC/NAL	RoHS/REACH/CE/UKCA	RoHS/REACH/CE/UKCA
Operator	CMCC/CTCC*	CMCC/CTCC*	NA	NA
Industry	NA	NA	NA	NA

* =planning /under development

Product Name	L610-EU	L610-EU MiniPCIe
LTE Category	LTE Cat 1	
Region	Europe	
Picture		
Basic Features		
Package	LCC+LGA	MiniPCIe
Dimension (mm)	31.0 x 28.0 x 2.35	50.8 x 29.85 x 3.4
LTE FDD	B1/3/7/8/20/28*	B1/3/7/8/20/28*
LTE TDD	NA	NA
WCDMA	NA	NA
TD-SCDMA	NA	NA
EVDO	NA	NA
CDMA2000 1X	NA	NA
GSM/GPRS/EDGE	900/1800MHz	900/1800MHz
Power Supply	3.4V ~ 4.3V (Typical 3.8V)	3.4V ~ 4.3V (Typical 3.8V)
Operating Temp.	-35°C ~ +75°C	-35°C ~ +75°C
Data Transmission		
LTE FDD (Mbps)	10.3(DL)/5.1(UL)	10.3(DL)/5.1(UL)
LTE TDD (Mbps)	NA	NA
DC-HSPA+(Mbps)	NA	NA
HSPA/HSPA+(Mbps)	NA	NA
UMTS(Kbps)	NA	NA
TD-SCDMA (Mbps)	NA	NA
EVDO(Mbps)	NA	NA
CDMA2000 1X(Kbps)	NA	NA
EDGE(Kbps)	NA	NA
GPRS(Kbps)	85.6(DL)/85.6(UL)	85.6(DL)/85.6(UL)
Functions		
WiFi scan	●	●
BlueTooth	●	●
SIM	●	●
eSIM	NA	NA
eCALL	NA	NA
OpenCPU	Optional	NA
MUX	●	●
Dual SIM	NA	NA
Jamming Detection	●	●
USSD	NA	NA
STK	●	NA
LBS	●	●
FOTA	DFOTA	DFOTA
OS Drivers	Linux/Windows/Android	Linux/Windows/Android
GNSS	NA	NA
MMS	NA	NA
CSD	NA	NA
TTS	Optional	Optional
SMS	●	●
Audio	●	●
Voice Code	HR/FR/EFR/AMR/Call display/call forwarding/call holding/ call waiting and multi party call	HR/FR/EFR/AMR/Call display/call forwarding/call holding/ call waiting and multi party call
Audio Play/Record	●	●
Protocols	TCP/UDP(S)/HTTP(S)/FTP(S)/IPV4/IPV6/SSL/MQTT/NTP	TCP/UDP(S)/HTTP(S)/FTP(S)/IPV4/IPV6/SSL/MQTT/NTP
Interfaces		
SIM	x 1, 1.8V/3.0V	x 1, 1.8V/3.0V
USB	x 1, USB2.0	x 1, USB2.0
PCIe	NA	●
UART	x3(Standard Edition) x4(Open Edition)	NA
SPI	●	NA
ADC	X3	NA
GPIO	●	NA
Certification		
Regulation	RoHS/REACH/CE/NCC	RoHS/REACH/CE/NCC
Operator	TEF/DT/VDF	TEF/DT/VDF
Industry	GCF	GCF

* =planning /under development

Fibocom LTE Module Series

Product Name	L610-LA	L610-LA MiniPCIe	L610-GL
LTE Category	LTE Cat 1		
Region	Latin America		Global
Picture			
Basic Features			
Package	LCC+LGA	MiniPCIe	LCC+LGA
Dimension (mm)	28.0 x 31.0 x 2.35	50.8 x 29.85 x 3.4	31.0 x 28.0 x 2.35
LTE FDD	B1/2/3/4/5/7/8/28/66	B1/2/3/4/5/7/8/28/66	B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28/66
LTE TDD	NA	NA	B38/39/40/41
WCDMA	NA	NA	NA
TD-SCDMA	NA	NA	NA
EVDO	NA	NA	NA
CDMA2000 1X	NA	NA	NA
GSM/GPRS/EDGE	850/900/1800/1900MHZ	850/900/1800/1900MHZ	850/900/1800/1900MHz
Power Supply	3.4V ~ 4.3V (Typical 3.8V)	3.4V ~ 4.3V (Typical 3.8V)	3.4V ~ 4.3V (Typical 3.8V)
Operating Temp.	-35°C ~ +75°C	-35°C ~ +75°C	-35°C ~ +75°C
Data Transmission			
LTE FDD (Mbps)	10.3(DL)/5.1(UL)	10.3(DL)/5.1(UL)	10.3(DL)/5.1(UL)
LTE TDD (Mbps)	NA	NA	9.1(DL)/3.1 (UL)
DC-HSPA+(Mbps)	NA	NA	NA
HSPA/HSPA+(Mbps)	NA	NA	NA
UMTS(Kbps)	NA	NA	NA
TD-SCDMA (Mbps)	NA	NA	NA
EVDO(Mbps)	NA	NA	NA
CDMA2000 1X(Kbps)	NA	NA	NA
EDGE(Kbps)	NA	NA	NA
GPRS(Kbps)	85.6(DL)/85.6(UL)	85.6(DL)/85.6(UL)	85.6(DL)/85.6(UL)
Functions			
WiFi scan	●	●	NA
BlueTooth	●	●	NA
SIM	●	●	●
eSIM	NA	NA	●
eCALL	NA	NA	NA
OpenCPU	Optional	NA	Optional
MUX	●	●	●
Dual SIM	NA	NA	NA
Jamming Detection	●	NA	●
USSD	NA	NA	NA
STK	●	NA	NA
LBS	●	●	●
FOTA	DFOTA	DFOTA	DFOTA
OS Drivers	Linux/Windows/Android	Linux/Windows/Android	Linux/Windows/Android
GNSS	NA	NA	Optional
MMS	NA	NA	NA
CSD	NA	NA	NA
TTS	Optional	Optional	Optional
SMS	●	●	●
Audio	●	●	●
Voice Code	HR/FR/EFR/AMR/Call display/call forwarding/ call holding/call waiting and multi party call	HR/FR/EFR/AMR/Call display/call forwarding/ call holding/call waiting and multi party call	HR/FR/EFR/AMR/Call display/call forwarding/ call holding/call waiting and multi party call
Audio Play/Record	●	●	●
Protocols	TCP/UDP(S)/HTTP(S)/FTP(S)/IPV4/IPV6/SSL/ MQTT/NTP	TCP/UDP(S)/HTTP(S)/FTP(S)/IPV4/IPV6/SSL/ MQTT/NTP	TCP/UDP(S)/HTTP(S)/FTP(S)/IPV4/IPV6/SSL/ MQTT/NTP/NITZ/PPP
Interfaces			
SIM	x 1, 1.8V/3.0V	x 1, 1.8V/3.0V	x 1, 1.8V/3.0V
USB	x 1, USB2.0	x 1, USB2.0	x 1, USB2.0
PCIe	NA	●	NA
UART	x3(Standard Edition) x4(Open Edition)	NA	x3(Standard Edition) x4(Open Edition)
SPI	●	NA	●
ADC	X3	NA	x 3
GPIO	●	NA	●
Certification			
Regulation	RoHS/FCC/Anatel	RoHS/FCC/Anatel	RoHS/Reach/HF*/UKCA*/CE/RCM*/NCC*/ JATE*/TELEC*/FCC*/CCC*/SRRC*/IC*
Operator	NA	NA	NA
Industry	HF	HF	GCF*/PTCRB*

* =planning /under development

Product Name	MC116-NA	MC116-EUL	MG110-JP
LTE Category		LTE Cat 1	
Region	North America	Europe/Latin America	Japan
Picture			
Basic Features			
Package	LCC+LGA	LCC+LGA	LGA
Dimension (mm)	32.0 x 29.0 x 2.4	32.0 x 29.0 x 2.4	24.2 x 26.2 x 2.2
LTE FDD	B2/4/5/12/13/17/66	B1/2/3/4/5/7/8/20/28	B1/3/8/18/19/26
LTE TDD	NA	B38/40/41(120M)	NA
WCDMA	NA	B1/2/5/8	NA
TD-SCDMA	NA	NA	NA
EVDO	NA	NA	NA
CDMA2000 1X	NA	NA	NA
GSM/GPRS/EDGE	NA	850/900/1800/1900MHz	NA
Power Supply	3.3V ~ 4.3V (Typical 3.8V)	3.3V ~ 4.3V (Typical 3.8V)	3.3V ~ 4.3V (Typical 3.8V)
Operating Temp.	-35°C ~ +75°C	-35°C ~ +75°C	-35°C ~ +75°C
Data Transmission			
LTE FDD (Mbps)	10(DL)/5(UL)	10(DL)/5(UL)	10(DL)/5(UL)
LTE TDD (Mbps)	NA	8.2(DL)/3.4(UL)	NA
DC-HSPA+(Mbps)	NA	DC-HSDPA+: 42(DL)	NA
HSPA/HSPA+(Mbps)	NA	5.76(UL)	NA
UMTS(Kbps)	NA	384(DL)/384(UL)	NA
TD-SCDMA (Mbps)	NA	NA	NA
EVDO(Mbps)	NA	NA	NA
CDMA2000 1X(Kbps)	NA	NA	NA
EDGE(Kbps)	NA	296(DL)/236.8(UL)	NA
GPRS(Kbps)	NA	107(DL)/85.6(UL)	NA
Functions			
WiFi scan	NA	NA	NA
BlueTooth	NA	NA	NA
SIM	●	●	●
eSIM	NA	NA	NA
eCALL	NA	NA	NA
OpenCPU	NA	NA	NA
MUX	●	●	●
Dual SIM	NA	NA	NA
Jamming Detection	NA	NA	NA
USSD	●	●	●
STK	NA	NA	NA
LBS	●	●	●
FOTA	DFOTA	DFOTA	DFOTA
OS Drivers	Linux/Windows/Android	Linux/Windows/Android	Linux/Windows/Android
GNSS	●	●	●
MMS	NA	NA	NA
CSD	NA	NA	NA
TTS	NA	NA	NA
SMS	●	●	●
Audio	●	NA	●
Voice Code	NA	NA	NA
Audio Play/Record	●	NA	●
Protocols	TCP/UDP(S)/HTTP(S)/FTP(S)/IPV4/IPV6/SSL/MQTT/LWM2M	TCP/UDP(S)/HTTP(S)/FTP(S)/IPV4/IPV6/SSL/MQTT/LWM2M	HTTP(S)/FTP(S)/TCP(S)/UDP/IPV4/IPV6/NITZ/NTP/SSL/TLS
Interfaces			
SIM	x 1, 1.8V/3.0V	x 1, 1.8V/3.0V	x 1, 1.8V/ 3.0V
USB	x 1, USB2.0	x 1, USB2.0	x 1, USB2.0
PCIe	NA	NA	NA
UART	X2	X2	X2
SPI	●	●	●
ADC	X2	X2	X2
GPIO	●	●	●
Certification			
Regulation	RoHS/FCC/IC	RoHS/REACH/CE/UKCA/Anatel/RCM	RoHS/JATE/TELEC
Operator	AT&T/VZW	Telstra	DOCOMO/KDDI
Industry	GCF/PTCRB	GCF	NA

* =planning /under development

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Fibocom LTE Module Series

Product Name	MC610-GL-20	MC610-EU-20	MC610-LA-20
LTE Category		LTE Cat 1	
Region	Global	Europe	Latin America
Picture			
Basic Features			
Package	LCC+LGA	LCC+LGA	LCC+LGA
Dimension (mm)	26.0 x 24.2 x 2.1	26.0 x 24.2 x 2.1	26.0 x 24.2 x 2.1
LTE FDD	B1/2/3/4/5/7/8/12/13/17/18/19/20/25/26/28/66	B1/3/7/8/20/28	B1/2/3/4/5/7/8/28/66
LTE TDD	B34/38/39/40/41	B38/40/41	B38/40/41
WCDMA	NA	NA	NA
TD-SCDMA	NA	NA	NA
EVDO	NA	NA	NA
CDMA2000 1X	NA	NA	NA
GSM/GPRS/EDGE	850/900/1800/1900MHz	900/1800MHz	850/900/1800/1900MHz
Power Supply	3.4V ~ 4.3V (Typical 3.8V)	3.4V ~ 4.3V (Typical 3.8V)	3.4V ~ 4.3V (Typical 3.8V)
Operating Temp.	-35°C ~ +75°C	-35°C ~ +75°C	-35°C ~ +75°C
Data Transmission			
LTE FDD (Mbps)	10.3(DL)/5.1(UL)	10.3(DL)/5.1(UL)	10.3(DL)/5.1(UL)
LTE TDD (Mbps)	9.1(DL)/3.1 (UL)	9.1(DL)/3.1 (UL)	9.1(DL)/3.1 (UL)
DC-HSPA+(Mbps)	NA	NA	NA
HSPA/HSPA+(Mbps)	NA	NA	NA
UMTS(Kbps)	NA	NA	NA
TD-SCDMA (Mbps)	NA	NA	NA
EVDO(Mbps)	NA	NA	NA
CDMA2000 1X(Kbps)	NA	NA	NA
EDGE(Kbps)	NA	NA	NA
GPRS(Kbps)	85.6(DL)/85.6(UL)	85.6(DL)/85.6(UL)	85.6(DL)/85.6(UL)
Functions			
WiFi scan	NA	NA	NA
BlueTooth	NA	NA	NA
SIM	●	●	●
eSIM	●	NA	NA
eCALL	NA	NA	NA
OpenCPU	NA	NA	NA
MUX	●	●	●
Dual SIM	●	●	●
Jamming Detection	●	●	●
USSD	NA	NA	NA
STK	●	●	●
LBS	●	●	●
FOTA	DFOTA	DFOTA	DFOTA
OS Drivers	Linux/Windows	Linux/Windows	Linux/Windows/Android
GNSS	NA	NA	NA
MMS	NA	NA	NA
CSD	NA	NA	NA
TTS	NA	NA	NA
SMS	NA	NA	NA
Audio	NA	NA	NA
Voice Code	NA	NA	NA
Audio Play/Record	●	●	●
Protocols	TCP(S)/UDP/IPV4/IPV6/HTTP(S)/FTP(S)/NTP/NITZ/MQTT/SSL/TLS/Ping	TCP(S)/UDP/IPV4/IPV6/HTTP(S)/FTP(S)/NTP/NITZ/MQTT/SSL/TLS/Ping	TCP(S)/UDP/IPV4/IPV6/HTTP(S)/FTP(S)/NTP/NITZ/MQTT/SSL/TLS/Ping
Interfaces			
SIM	x 2, 1.8V/3.0V	x 1, 1.8V/3.0V	x 1, 1.8V/3.0V
USB	x 1, USB2.0	x 1, USB2.0	x 1, USB2.0
PCIe	NA	NA	NA
UART	X3	X3	X3
SPI	●	●	●
ADC	X4	X4	X4
GPIO	●	●	●
Certification			
Regulation	RoHS*/Anatel*/FCC*/CE*/CCC*/SRRC*/REACH*	CE*/RoHS*/REACH*	RoHS*/Anatel*/FCC*/REACH*
Operator	NA	NA	NA
Industry	NA	NA	NA

* =planning /under development

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Product Name	MC619-EU	MC610-LA	MC610-EU
LTE Category	LTE Cat 1		
Region	Europe	Latin America	Europe
Picture			
Basic Features			
Package	LCC+LGA	LCC+LGA	LCC+LGA
Dimension (mm)	22.9 x 23.9 x 2.4	26.0 x 24.2 x 2.1	26.0 x 24.2 x 2.1
LTE FDD	B1/3/5/7/8/20/28	B1/2/3/4/5/7/8/28/66	B1/3/7/8/20/28
LTE TDD	B38/40/41	NA	NA
WCDMA	NA	NA	NA
TD-SCDMA	NA	NA	NA
EVDO	NA	NA	NA
CDMA2000 1X	NA	NA	NA
GSM/GPRS/EDGE	900/1800MHz	850/900/1800/1900MHZ	900/1800MHz
Power Supply	3.4V ~ 4.3V (Typical 3.8V)	3.4V ~ 4.3V (Typical 3.8V)	3.4V ~ 4.3V (Typical 3.8V)
Operating Temp.	-35°C ~ +75°C	-35°C ~ +75°C	-35°C ~ +75°C
Data Transmission			
LTE FDD (Mbps)	10.3(DL)/5.1(UL)	10.3(DL)/5.1(UL)	10.3(DL)/5.1(UL)
LTE TDD (Mbps)	9.1(DL)/3.1 (UL)	9.1(DL)/3.1 (UL)	9.1(DL)/3.1 (UL)
DC-HSPA+(Mbps)	NA	NA	NA
HSPA/HSPA+(Mbps)	NA	NA	NA
UMTS(Kbps)	NA	NA	NA
TD-SCDMA (Mbps)	NA	NA	NA
EVDO(Mbps)	NA	NA	NA
CDMA2000 1X(Kbps)	NA	NA	NA
EDGE(Kbps)	NA	NA	NA
GPRS(Kbps)	85.6(DL)/85.6(UL)	85.6(DL)/85.6(UL)	85.6(DL)/85.6(UL)
Functions			
WiFi scan	NA	Optional	Optional
BlueTooth	NA	Optional	Optional
SIM	●	●	●
eSIM	NA	●	●
eCALL	NA	NA	NA
OpenCPU	Optional	Optional	Optional
MUX	●	●	●
Dual SIM	●	NA	NA
Jamming Detection	●	●	●
USSD	NA	NA	NA
STK	●	●	●
LBS	●	●	●
FOTA	DFOTA	DFOTA	DFOTA
OS Drivers	Linux/Windows/Android	Linux/Windows/Android	Linux/Windows/Android
GNSS	NA	●	NA
MMS	NA	NA	NA
CSD	NA	NA	NA
TTS	Optional	Optional	Optional
SMS	●	●	●
Audio	●	●	●
Voice Code	HR/FR/EFR/AMR/Call display/call forwarding/ call holding/call waiting and multi party call	HR/FR/EFR/AMR/Call display/call forwarding/ call holding/call waiting and multi party call	HR/FR/EFR/AMR/Call display/call forwarding/ call holding/call waiting and multi party call
Audio Play/Record	●	●	●
Protocols	TCP/UDP(S)/HTTP(S)/FTP(S)/IPV4/IPV6/SSL/ MQTT/NTP/NITZ/PPP	TCP/UDP(S)/HTTP(S)/FTP(S)/IPV4/IPV6/SSL/ MQTT/NTP/NITZ/PPP	TCP/UDP(S)/HTTP(S)/FTP(S)/IPV4/IPV6/SSL/ MQTT/NTP/NITZ/PPP
Interfaces			
SIM	x 2, 1.8V/3.0V	x 1, 1.8V/3.0V	x 1, 1.8V/3.0V
USB	x 1, USB2.0	x 1, USB2.0	x 1, USB2.0
PCIe	NA	NA	NA
UART	X3	X3	X3
SPI	●	●	●
ADC	X2	X4	X4
GPIO	●	●	●
Certification			
Regulation	CE*/RoHS*	RoHS/Anatel/FCC	CE/RoHS
Operator	NA	NA	NA
Industry	NA	NA	NA

* =planning /under development

Product Name	MC665-EU	MG661-EU	MG661-LA	MG661-KR
LTE Category	LTE Cat 1			
Region	Europe	Europe	Latin America	South Korea
Picture				
Basic Features				
Package	LCC+LGA	LGA	LGA	LGA
Dimension (mm)	22.0x 22.2 x 2.4	17.7 x 15.8 x 2.4	17.7 x 15.8 x 2.4	17.7 x 15.8 x 2.4
LTE FDD	B1/5/3/7/8/20/28	B1/3/5/7/8/20/28	B2/3/4/5/7/8/28/66	B1/3/5/7/8
LTE TDD	B38/40/41	NA	NA	NA
WCDMA	NA	NA	NA	NA
TD-SCDMA	NA	NA	NA	NA
EVDO	NA	NA	NA	NA
CDMA2000 1X	NA	NA	NA	NA
GSM/GPRS/EDGE	NA	NA	NA	NA
Power Supply	3.4V ~ 4.5V (Typical 3.8V)	3.4V ~ 4.5V (Typical 3.8V)	3.4V ~ 4.5V (Typical 3.8V)	3.4V ~ 4.5V (Typical 3.8V)
Operating Temp.	-35°C ~ +75°C	-35°C ~ +75°C	-35°C ~ +75°C	-35°C ~ +75°C
Data Transmission				
LTE FDD (Mbps)	10.3(DL)/5.1(UL)	10.3(DL)/5.1(UL)	10.3(DL)/5.1(UL)	10.3(DL)/5.1(UL)
LTE TDD (Mbps)	9.1(DL)/3.1 (UL)	NA	NA	NA
DC-HSPA+(Mbps)	NA	NA	NA	NA
HSPA/HSPA+(Mbps)	NA	NA	NA	NA
UMTS(Kbps)	NA	NA	NA	NA
TD-SCDMA (Mbps)	NA	NA	NA	NA
EVDO(Mbps)	NA	NA	NA	NA
CDMA2000 1X(Kbps)	NA	NA	NA	NA
EDGE(Kbps)	NA	NA	NA	NA
GPRS(Kbps)	NA	NA	NA	NA
Functions				
WiFi scan	NA	●	●	●
BlueTooth	NA	NA	NA	NA
SIM	●	●	●	●
eSIM	NA	NA	NA	NA
eCALL	NA	NA	NA	NA
OpenCPU	Optional	Optional	Optional	Optional
MUX	●	●	●	●
Dual SIM	NA	●	●	●
Jamming Detection	NA	NA	NA	NA
USSD	Optional	Optional	Optional	Optional
STK	●	●	●	●
LBS	●	●	●	●
FOTA	DFOTA	DFOTA	DFOTA	DFOTA
OS Drivers	Linux/Windows/Android	Linux/Windows/Android	Linux/Windows/Android	Linux/Windows/Android
GNSS	NA	Optional	Optional	Optional
MMS	NA	NA	NA	NA
CSD	NA	NA	NA	NA
TTS	NA	NA	NA	NA
SMS	●	●	●	●
Audio	NA	NA	NA	NA
Voice Code	NA	NA	NA	NA
Audio Play/Record	NA	NA	NA	NA
Protocols	TCP/UDP/HTTP(S)/FTP(S)/ HeartBeat/MQTT/SSL/TLS/ ECLOUD/IPV6	TCP/UDP/HTTP(S)/FTP(S)/ HeartBeat/MQTT/SSL/TLS/IPV6	TCP/UDP/HTTP(S)/FTP(S)/ HeartBeat/MQTT/SSL/TLS/IPV6	TCP/UDP/HTTP(S)/FTP(S)/ HeartBeat/MQTT/SSL/TLS/IPV6
Interfaces				
SIM	x 1, 1.8V/3.0V	x 2, 1.8V/3.0V	x 2, 1.8V/3.0V	x 2, 1.8V/3.0V
USB	x 1, USB2.0	x 1, USB2.0	x 1, USB2.0	x 1, USB2.0
PCIe	NA	NA	NA	NA
UART	x 2	x 2	x 2	x 2
SPI	●	●	●	●
ADC	x 2	x 2	x 2	x 2
GPIO	●	●	●	●
Certification				
Regulation	RoHS/REACH/CE	RoHS/REACH/CE	RoHS/FCC/Anatel	KC
Operator	NA	NA	NA	KT
Industry	NA	NA	NA	NA

* =planning /under development

Fibocom LTE Module Series

Product Name	LE270-EU	LE270-LA
LTE Category	LTE Cat 1	
Region	Europe	Latin America
Picture		
Basic Features		
Package	LCC+LGA	LCC+LGA
Dimension (mm)	17.7 x 15.8 x 2.4	17.7 x 15.8 x 2.4
LTE FDD	B1/3/5/7/8/20/28	B2/3/4/5/7/8/28/66
LTE TDD	B38/40/41	B38/40/41
WCDMA	NA	NA
TD-SCDMA	NA	NA
EVDO	NA	NA
CDMA2000 1X	NA	NA
GSM/GPRS/EDGE	NA	NA
Power Supply	3.4V ~ 4.5V (Typical 3.8V)	3.4V ~ 4.5V (Typical 3.8V)
Operating Temp.	-35°C ~ +75°C	-35°C ~ +75°C
Data Transmission		
LTE FDD (Mbps)	10.3(DL)/5.1(UL)	10.3(DL)/5.1(UL)
LTE TDD (Mbps)	9.1(DL)/3.1 (UL)	9.1(DL)/3.1 (UL)
DC-HSPA+(Mbps)	NA	NA
HSPA/HSPA+(Mbps)	NA	NA
UMTS(Kbps)	NA	NA
TD-SCDMA (Mbps)	NA	NA
EVDO(Mbps)	NA	NA
CDMA2000 1X(Kbps)	NA	NA
EDGE(Kbps)	NA	NA
GPRS(Kbps)	NA	NA
Functions		
WiFi scan	NA	NA
BlueTooth	NA	NA
SIM	●	●
eSIM	NA	NA
eCALL	NA	NA
OpenCPU	Optional	Optional
MUX	●	●
Dual SIM	●	●
Jamming Detection	●	●
USSD	NA	NA
STK	●	●
LBS	●	●
FOTA	DFOTA	DFOTA
OS Drivers	Linux/Windows	Linux/Windows
GNSS	NA	NA
MMS	NA	NA
CSD	NA	NA
TTS	Optional	Optional
SMS	NA	NA
Audio	NA	NA
Voice Code	NA	NA
Audio Play/Record	NA	NA
Protocols	TCP/UDP/HTTP/ECM/RNIDS/SSL/TLS/IPV6	TCP/UDP/HTTP/ECM/RNIDS/SSL/TLS/IPV6
Interfaces		
SIM	x 2, 1.8V/ 3.0V	x 2, 1.8V/ 3.0V
USB	x 1, USB2.0	x 1, USB2.0
PCIe	NA	NA
UART	x 2	x 2
SPI	●	●
ADC	x 3	x 3
GPIO	●	●
Certification		
Regulation	RoHS/CE/REACH	RoHS/FCC/Anatel/REACH
Operator	NA	NA
Industry	NA	NA

* =planning /under development

Fibocom LPWA Module Series

Product Name	MA510-GL
LTE Category	LTE Cat M
Region	Global
Picture	
Basic Features	
Package	LCC+LGA
Dimension (mm)	22.2 x 20.2 x 2.1
LTE FDD	Cat M1: B1/2/3/4/5/8/12/13/18/19/20/25/26/27/28/31/66/72/73/85/87/88 Cat NB2: B1/2/3/4/5/8/12/13/18/19/20/25/26/28/31/66/72/73/85/86/87/88
LTE TDD	NA
WCDMA	NA
TD-SCDMA	NA
EVDO	NA
CDMA2000 1X	NA
GSM/GPRS/EDGE	850/900/1800/1900MHz
Power Supply	MA510-GL-00: 3.3V ~ 4.5V(Typical 3.8V) ; MA510-GL-01: 2.65V ~ 4.5V(Typical 3.8V)
Operating Temp.	-30°C ~ +75°C
Data Transmission	
LTE FDD(Kbps)	Cat.M1 Rel.14: 588(DL)/1119(UL); Cat.NB1 Rel.13: 63.4 (DL)/95.1(UL); Cat.NB2 Rel.14: 126.8(DL)/158.5(UL);
LTE TDD (Mbps)	NA
DC-HSPA+(Mbps)	NA
HSPA/HSPA+(Mbps)	NA
UMTS(Kbps)	NA
TD-SCDMA (Mbps)	NA
EVDO(Mbps)	NA
CDMA2000 1X(Kbps)	NA
EDGE(Kbps)	296(DL)/236.8(UL)
GPRS(Kbps)	107(DL)/ 85.6(UL)
Functions	
Wi-Fi	NA
BlueTooth	NA
SIM	●
eSIM	NA
eCALL	NA
OpenCPU	●
MUX	●
Dual SIM	NA
Jamming Detection	●
USSD	NA
STK	NA
LBS	●
FOTA	DFOTA
OS Drivers	Linux/Windows/Android
GNSS	●
MMS	NA
CSD	NA
TTS	NA
SMS	●
Audio	●
Voice Code	HR/FR/EFR/AMR
Audio Play/Record	NA
Protocols	TCP/UDP(S)/HTTP(S)/MQTT/FFS/FTP(S)/IPV6/SSL/TLS/PING/NTP/NITZ/LwM2M/CoAP/Cell ID
Interfaces	
SIM	x 1, 1.8V
USB	USB 2.0
PCIe	NA
UART	x 3
SPI	●
ADC	●
GPIO	●
Certification	
Regulation	RoHS/RCM/NCC/IC/REACH/Anatel/CE/TELEC/JATE/KC
Operator	AT&T/Verizon/KDDI/DT/Vodafone/Telefonica/Telstra/SKT/LGU+/Orange
Industry	HF/GCF/PTCRB

* =planning /under development

Product Name	SC171-GL
Cellular Capability	Smart (NR Sub6)
Region	Global
Picture	
Basic Features	
Package	636 LGA
Processor	Qualcomm® QCM6490 1XGoldP@2.7GHz+ 3XGold@2.4GHz+ 4XSilver@1.95GHz
GPU	Adreno™ 635 GPU
Memory(Default)	4GB LPDDR4X+64GB UFS
Dimensions (mm)	42.5 x 56.5 x 2.85
Frequency	NR :n1/2/3/5/7/8/12/14/20/25/28/30/38/40/41/48/66/71/77/78 LTE:B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/30/32/38/40/41/42/43/48/66/71 WCDMA:B1/2/4/5/6/8/9/19
WIFI	802.11 a/b/g/n/ac/ax, (2X2 MIMO) 2.4G/5G/6G
BT	5.2 BR/EDR/BLE
GNSS	GPS(L1+L5)/GLONASS/BeiDou
OS	Android S
Power Supply	DC 3.5～4.4V
Weight	About 13.5g
Operating Temp.	-30°C ~ +75°C
Storage Temp.	-40°C ~ +85°C
Data Transmission	
5G	5G SA 2T4R 256Q: Max 2.3Gbps(DL)/Max 900Mbps(UL) 5G NSA 1T4R 256Q: Max 2.3Gbps(DL)/Max 550Mbps(UL)
LTE FDD (Mbps)	Max 900(DL)/ 100(UL)
LTE TDD (Mbps)	Max 900(DL)/ 100(UL)
UMTS/HSPA/HSPA+ (Mbps)	HSUPA Max 5.7(UL) HSPA+ Max 42(DL)
TD-SCDMA (Mbps)	NA
CDMA EVDO (Mbps)	NA
EDGE/GPRS(Kbps)	NA
WIFI (Mbps)	AX3000
Video Processing	
Video Encoding	4K@30fps 8-bit: H.264/H.265
Video Decoding	4K@60fps 10-bit: H.264/H.265, VP9
Interfaces	
Hardware Interface	UART/SPI(Mbps): 6 x UART up to 3
	I2C(Kbps): 16 x I2C up to 3.4Mbps
	USB: 1 x USB2.0+1x USB3.1, Support OTG, Support DP over Type-C
	SDIO: 1 x SDIO
	CAM: MIPI_CSIx4，ISPx5 Up to 36M
	GPIO: 33 GPIOs
	Display: 4-lane MIPI_DSI up to FHD+(2520 x 1080)
Audio Interface	Speaker: 1W on 8Ω load in Class-D mode
	Receiver: 1 x Mono, AB
	Mic: 2 x analog microphones
	Handset: Stereo CLASS AB
SIM card Interface	USIM: 2 x SIM card, support dual-SIM dual-standby
Key	Keys: Power on/off /Volume up /Volume down /Reset
Advantages	1、Android S 2、DSI support up to 2520 × 1080@144fps + DP support up to 4K@60 Hz 3、High computation capability，support 4K@60 Hz video recording and playing 4、Support dual USB and WiFi 6 5、Support maximum five-channel camera
Applications	PDA, ADAS, VR, AR, Smart healthcare, Automotive
Certification	
Regulation	FCC*/IC*/CE*/RoHS*/REACH*/HF*/CCC*/SRRC*/TELEC*/JATE*/TSCA*
Operator	NA
Industry	NA

* =planning /under development

Fibocom Smart Module Series

Product Name	SC151-CN	SC151-GL	SC151-W
Cellular Capability	Smart (NR Sub6)		Smart(Wi-Fi)
Region	China	Global	
Picture			
Basic Features			
Package	636LGA		
Processor	Qualcomm® QCM4490 2*A78@2.0GHz + 6*A55@2.0GHz		
GPU	Adreno™ 613 GPU		
Memory(Default)	4GB/6GB LPDDR4X RAM;64GB/128GB UFS		
Dimensions (mm)	42.5x56.5x2.85		
Frequency	Sub-6: n41/78/79(SA&NSA), n1/3/5/8/28(only SA) LTE-FDD: B1/3/5/8 LTE-TDD: B34/38/39/40/41 WCDMA: B1/8	Sub-6: n1/2/3/5/7/8/12/14/20/25/28/30/38/40/41/48/66/71/77/78 LTE: B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/30/32/38/40/41/42/43/48/66/71 WCDMA: B1/2/4/5/6/8/9/19	NA
WIFI	2.4G/5G: Wi-Fi 6E, 802.11 a/b/g/n/ac/ax,(2X2 MIMO)		
BT	BT5.2(BR/EDR/BLE)		
GNSS	GPS(L1+L5)/GLONASS/BeiDou		NA
OS	Android T		
Power Supply	DC 3.5～4.4V		
Weight	9.6±0.1g		
Operating Temp.	-30°C ~ +75°C		
Storage Temp.	-40°C ~ +85°C		
Data Transmission			
5G	2T4R 256Q: Max. 2.3Gbps (DL)/Max. 900Mbps (UL) 1T4R 256Q: Max. 2.3Gbps (DL)/Max. 550Mbps (UL)		NA
LTE FDD (Mbps)	Max 900(DL)/ 100(UL)		NA
LTE TDD (Mbps)	Max 900(DL)/ 100(UL)		NA
UMTS/HSPA/HSPA+ (Mbps)	Max. 42 (DL)/Max. 5.7 (UL)		NA
TD-SCDMA (Mbps)	NA		NA
CDMA EVDO (Mbps)	NA		NA
EDGE/GPRS(Kbps)	NA		NA
WIFI (Mbps)	up to 2.4G		
Video Processing			
Video Encoding	1080@60fps (H.264/H.265)		
Video Decoding	1080@60fps (H.264/H.265, VP9)		
Interfaces			
Hardware Interface	UART/SPI(Mbps): 6 x UART up to 3 Mbps		
	I2C(Kbps): 16 x I2C up to 3.4Mbps		
	USB: 1x USB3.1, Support OTG, Support DP over Type-C		
	SDIO: 1 x SD 3.0		
	CAM: MIPI_CSIx5，ISPx2 Up to 25M		
	GPIO: 33 GPIOs		
	Display: 4-lane MIPI_DSI up to FHD+(2520 x 1080)		
Audio Interface	Speaker: 1W on 8Ω load in Class-D mode		
	Receiver: 1 x Mono, AB		
	Mic: 2 x analog microphones		
	Handset: Stereo CLASS AB		
SIM card Interface	USIM: 2 x SIM card, support dual-SIM dual-standby		
Key	Keys: Power on/off /Volume up /Volume down /Reset		
Advantages	1、Android T 2、5G NR sub-6Ghz, 4 Cameras, 1 Display, WiFi 6 3、Cost-effective 5G module 4、Global promotion planning		
Applications	PDA, Automotive aftermarket		
Certification			
Regulation	RoHS/CCC/SRRC/NAL	CE*/Reach/HF/ROHS/TSCA/FCC*/IC*/TELEC*/JATE*	SRRC/CE*/ROHS*/Reach*/HF*/FCC*/IC*/TSCA*
Operator	NA	NA	NA
Industry	NA	NA	NA

* =planning /under development

Product Name	SC138-EAU	SC138-NA	SC138-CN	SC138-JP	SC138-W
LTE Category	Smart(LTE Cat 4)				Smart(Wi-Fi)
Region	Europe/Asia/Australia/Brazil	North America	China	Japan	Global
Picture					
Basic Features					
Package	148 LCC+ 128 LGA				
Processor	Qualcomm® QCM6125, Quad-core ARM® Cortex™-A73,2.0GHz+Quad-core ARM Cortex™-A53,1.8GHz				
GPU	Adreno 610				
Memory(Default)	2GB/4GB LPDDR4X RAM; 32GB/64GB eMMC&UFS				
Dimensions (mm)	41.0 x 41.0 x 2.8				
Frequency	LTE-FDD:B1/3/5/7/8/20/28 LTE-TDD:B38/40/41 WCDMA:B1/2/5/8 GSM:850/900/1800/1900MHz	LTE-FDD:B2/4/5/7/12/13/14/17/25/26/66/71 LTE-TDD:B41/48 WCDMA:B2/4/5	LTE-FDD:B1/3/5/8 LTE-TDD:B34/38/39/40/41 WCDMA:B1/8 GSM:900/1800MHz	LTE-FDD:B1/3/8/18/19/21/26/28 LTE-TDD:B41 WCDMA:B1/6/8/9/19	NA
WIFI	2.4G+5G, 802.11 a/b/g/n/ac				
BT	BT 5.0				
GNSS	GPS/GLONASS/BeiDou				NA
OS	Android Q/R/S/T				
Power Supply	DC 3.5～4.2V				
Weight	About9.6g				
Operating Temp.	-30°C ~ +75°C				
Storage Temp.	-40°C ~ +85°C				
Data Transmission					
LTE FDD (Mbps)	Max 150(DL)/ 75(UL)				NA
LTE TDD (Mbps)	Max 130(DL)/ 45(UL)				NA
UMTS/HSPA/HSPA+ (Mbps)	HSUPA: Max 5.7(UL) HSPA+: Max 42(DL)				NA
TD-SCDMA (Mbps)	NA				NA
CDMA EVDO (Mbps)	NA				NA
EDGE/GPRS(Kbps)	EDGE: Max 296(DL)/236.8 (UL) GPRS: Max 107(DL)/85.6(UL)				NA
WIFI (Mbps)	up to 433				
Video Processing					
Video Encoding	4K@30fps (H.264, HEVC, VP9)				
Video Decoding	4K@30fps (H.264, HEVC, VP8)				
Interfaces					
Hardware Interface	UART/SPI(Mbps)	3 x UART,up to 4			
	I2C(Kbps)	I2C Up to 3.4Mbps			
	USB	1 x USB2.0/3.1, Support OTG,Support DP over Type-C			
	SDIO	1 x SDIO			
	CAM	Three 4-lane CSIs (4/4/4 or 4/4/2/1) D-PHY 1.2 at 2.5 Gbps per lane or C-PHY 1.0 at 10 Gbps (3.42 Gbps/trio)			
	GPIO	33 GPIOs			
	Display	1 x 4-lane MIPI_DSI; up to (2520x1080)@60fps			
Audio Interface	Speaker	1.5W on 8Ω load in Class-D mode			
	Receiver	1 x Mono, AB			
	Mic	2 x analog microphones			
	Handset	Stereo CLASS AB			
SIM card Interface	USIM	2 x SIM card, support dual-card, dual-standby			
Key	Keys	Power on/off /Volume up /Volume down /Reset			
Advantages		1、Android Q/R/S 2、High computation capability and support 4K video coding 3、Dual LCDs for independent display DSI (2520x1080@60fps+1920x1080@60fps over DP)			
Applications		Smart Cash Register,Security Monitoring, High-end Police or Law Enforcement Equipment, Telematics, Hand-held sets			
Certification					
Regulation		RoHS/CE/HF/REACH	FCC/IC/RoHS	RoHS/CCC/HF/SRRC	RoHS/JATE/TELEC	RoHS/CE/HF/JATE/TELEC
Operator		NA	AT&T*	NA	NA	NA
Industry		GCF	PTCRB	NA	NA	NA

* =planning /under development

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Product Name	SC228-GL	SC228-W	SC208-GL	SC208-W
LTE Category	Smart (LTE Cat4)	Smart (Wi-Fi)	Smart (LTE Cat4)	Smart (Wi-Fi)
Region	Global			
Picture				
Basic Features				
Package	148 LCC+ 128 LGA		148 LCC+ 128 LGA	
Processor	Qualcomm® SM6225 4*A73@2.4GHz + 4*A53 @1.9GHz		Qualcomm® SM6115, Quad-core ARM Cortex™-A73, 1.6GHz+Quad-core ARM Cortex™-A53，1.8GHz	
GPU	Adreno 610		Adreno 610	
Memory(Default)	4GB/8GB LPDDR4X RAM;64GB/128GB UFS		4GB/6GB/8BG LPDDR4X RAM; 64GB/128GB UFS	
Dimensions (mm)	41.0x41.0x2.8			
Frequency	LTE-FDD: B1/2/3/4/5/7/8/12/13/14/17/18/19/20/25/26/28/66/71 LTE-TDD: B34/38/39/40/41 WCDMA: B1/2/4/5/6/8/9/19 GSM: 850/900/1800/1900	NA	LTE-FDD: B1/2/3/4/5/7/8/12/13/17/18/19/20/25/26/28/66/71 LTE-TDD: B34/38/39/40/41 WCDMA: B1/2/4/5/6/8/9/19 GSM: 850/900/1800/1900MHz	NA
WIFI	2.4G+5G, 802.11 a/b/g/n/ac			
BT	BT5.0 (BR/EDR+BLE)			
GNSS	GPS/GLONASS/BeiDou/ Galileo/QZSS	NA	GPS/GLONASS/BeiDou/ Galileo/QZSS	NA
OS	Android 14			
Power Supply	DC 3.5～4.4V			
Weight	9.6±0.1g			
Operating Temp.	-30°C ~ +75°C			
Storage Temp.	-40°C ~ +85°C			
Data Transmission				
5G	NA	NA	NA	NA
LTE FDD (Mbps)	Max 150(DL)/ 75(UL)	NA	Max 150(DL)/ 75(UL)	NA
LTE TDD (Mbps)	Max 130(DL)/ 45(UL)	NA	Max 130(DL)/ 45(UL)	NA
WCDMA (Mbps)	HSUPA: Max 11(UL)/ HSPA+: Max 42(DL)	NA	HSUPA: Max 11(UL)/ HSPA+: Max 42(DL)	NA
TD-SCDMA (Mbps)	NA	NA	NA	NA
CDMA2000 1X/EVDO (Mbps)	NA	NA	NA	NA
EDGE/GPRS(Kbps)	EDGE: Max 296(DL)/ 236.8 (UL); GPRS: Max 107(DL)/ 85.6(UL)	NA	EDGE: Max 296(DL)/ 236.8 (UL) GPRS: Max 107(DL)/ 85.6(UL)	NA
WIFI (Mbps)	up to 433			
Video Processing				
Video Encoding	1080p60 8-bit HEVC/H.264/H.265			
Video Decoding	1080p60 8-bit HEVC/H.264/H.265/VP9			
Interfaces				
Hardware Interface	UART/SPI(Mbps)	3 x UART Up to 4 Mbps		
	I2C(Kbps)	6 x I2C Up to 3.4Mbps		
	USB	1 x USB2.0/3.1, Support OTG, Support DP over Type-C		
	SDIO	1 x SD 3.0		
	CAM	MIPI_CSI1 4lane x 3(up to 25Mp)		
	GPIO	33 GPIOs		
	Display	4-lane MIPI_DSI up to FHD+(2520 x 1080)		
Audio Interface	Speaker	1W on 8Ω load in Class-D mode		
	Receiver	1 x Mono, AB		
	Mic	2 x analog microphones		
	Handset	Stereo CLASS AB		
SIM card Interface	USIM	2 x SIM card, support dual-SIM dual-standby		
Key	Keys	Power on/off /Volume up / Volume down /Reset		
Advantages		1、Android 14 2、Global promotion planning		
Applications		Carplay, Hand-held sets, Smart Home, Smart City and Smart Industries		
Certification				
Regulation	RoHS*/CCC*/SRRC*/NAL*/CE*/FCC*/TSCA*/JATE*/TELEC*	SRRC*/CE*/ROHS*/Reach*/HF*/FCC*/IC*/TSCA*	FCC*/IC*/CE*/RoHS*/REACH*/HF*/CCC*/NAL*/SRRC*/TSCA*/TELEC*/JATE*	SRRC*/CE*/ROHS*/Reach*/HF*/FCC*/IC*/TSCA*
Operator	NA	NA	NA	NA
Industry	NA	NA	NA	NA

* =planning /under development

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Product Name	SU806-CN	SU806-EAU	SU806-LA	SU806-W
LTE Category	Smart(LTE Cat 4)			Smart(Wi-Fi)
Region	China	Europe/Asia/Australia/Brazil	Latin America	Global
Picture				
Basic Features				
Package	146 LCC+ 116 LGA			
Processor	UNISOC® SL8541E, ARM® Cortex™-A53 Quad-core up to 1.4GHz			
GPU	Mali T820			
Memory(Default)	1GB/2GB LPDDR3 RAM;8GB/16GB eMMC Flash			
Dimensions (mm)	40.5 x 40.5 x 2.85			
Frequency	LTE-FDD:B1/3/5/8 LTE-TDD:B34/38/39/40/41 WCDMA:B1/8 GSM/GPRS/EDGE:900/1800MHz	LTE-FDD:B1/3/5/7/8/20/28 LTE-TDD:B38/40/41 (2535～2655MHz) WCDMA:B1/2/5/8 GSM:850/900/1800/1900MHz	LTE-FDD: B2/3/4/5/7/17(12)/28 LTE-TDD: B40/41 WCMDA: B2/4/5/8 GSM: 850/900/1800/1900	NA
WIFI	2.4G, 802.11 b/g/n			
BT	BT4.2 (BR/EDR+BLE)			
GNSS	GPS/BeiDou			NA
OS	Android Q/S			
Power Supply	DC 3.5～4.2V			
Weight	About9.5g			
Operating Temp.	-20°C ~ +65°C			
Storage Temp.	-45°C ~ +90°C			
Data Transmission				
LTE FDD (Mbps)	Max 150(DL)/ 50(UL)			NA
LTE TDD (Mbps)	Max 130(DL)/ 30(UL)			NA
UMTS/HSPA/HSPA+ (Mbps)	HSUPA Max 11(UL) HSDPA Max 21(DL)			NA
TD-SCDMA (Mbps)	NA			NA
CDMA EVDO (Mbps)	NA			NA
EDGE/GPRS(Kbps)	EDGE:Max 296(DL)/ 236.8 (UL) GPRS:Max 107(DL)/ 85.6(UL)			NA
WIFI (Mbps)	up to 72.2			NA
Video Processing				
Video Encoding	1080p@30fps(H.264, MPEG4, H.263)			
Video Decoding	1080p@30fps(H.264, MPEG4, H.263, VP8)			
Interfaces				
Hardware Interface	UART/SPI(Mbps)	3 x UART Up to 3		
	I2C(Kbps)	4 x I2C Up to 3.4Mbps		
	USB	1 x USB2.0 support OTG		
	SDIO	1 x SD3.0		
	CAM	MIPI_CSI1 4lane x 1(up to 13Mp) MIPI_CSI0 4lane x 1(up to 8Mp)		
	GPIO	28 GPIOs		
	Display	1 x 4-lane MIPI_DSI; up to (1440x720)@60fps		
Audio Interface	Speaker	1 x Mono, differential 1W CLASS-D		
	Receiver	1 x Mono, AB		
	Mic	2 x analog microphones		
	Handset	Stereo CLASS AB		
SIM card Interface	USIM	2 x SIM card, support dual-card, dual-standby		
Key	Keys	Power on/off /Volume up /Volume down /Reset		
Advantages		1、Android Q 2、Cost-effective smart module		
Applications		POS, Smart Cash Register, Security Monitoring, Body Worn Camera		
Certification				
Regulation	CCC/RoHS/SRRC	RoHS/CE/FCC/Anatel	FCC/Anatel/RoHS	SRRC*
Operator	NA	NA	NA	NA
Industry	NA	NA	NA	NA

* =planning /under development

Product Name	SC636-EAU*	SC636-CN*	SC636-LA*	SC636-W*
LTE Category	Smart (LTE Cat 4)			Smart (Wi-Fi)
Region	Europe/Southeast Asia	China	Latin America	Global
Picture				
Basic Features				
Package	146 LCC+116 LGA			
Processor	UNISOC® UIS7861 2*A75 @1.6GHz + 6*A55 @1.6GHz			
GPU	G57 1Core			
Memory(Default)	1GB/2GB/3GB/4GB LPDDR4X; 8GB/16GB/32G/64GB eMMC			
Dimensions (mm)	40.5 x 40.5 x 2.8			
Frequency	FDD LTE: B1/3/5/7/8/20/28 TDD LTE: B38/40/41 WCDMA: B1/5/8 GSM: 900/1800	FDD LTE: B1/3/5/8 TDD LTE: B34/38/39/40/41 WCDMA: B1/8 GSM: 900/1800	FDD LTE: B2/3/4/5/7/28 TDD LTE: B38/41 WCMDA: B2/4/5 GSM: 850/1800/1900	NA
WIFI	2.4G+5G, 802.11a/b/g/n/ac			
BT	BT5.0 BR/EDR/BLE			
GNSS	GPS/GLONASS/Beidou			NA
OS	Android 12/14*			
Power Supply	DC 3.5～4.4V			
Weight	About 9.2g			
Operating Temp.	-30°C ~ +75°C			
Storage Temp.	-40°C ~ +85°C			
Data Transmission				
LTE FDD (Mbps)	Max 150Mbps(DL)/50Mbps(UL)			NA
LTE TDD (Mbps)	Max 130Mbps(DL)/30Mbps(UL)			NA
UMTS/HSPA/HSPA+ (Mbps)	HSUPA: Max 11(UL) HSPA+: Max 42(DL)			NA
TD-SCDMA (Mbps)	NA			NA
CDMA EVDO (Mbps)	NA			NA
EDGE/GPRS(Kbps)	EDGE: Max 296Kbps(DL)/236.8Kbps (UL) GPRS: Max 107Kbps(DL)/85.6Kbps(UL)			NA
WIFI (Mbps)	up to 433			
Video Processing				
Video Encoding	1080p60/2K30 (H.265/H.264)			
Video Decoding	1080p60/2K30 (H.265/H.264/VP8/VP9)			
Interfaces				
Hardware Interface	UART/SPI(Mbps)	4 x UART, up to 4Mbps		
	I2C(Kbps)	7 x I2C, up to 3.4Mbps		
	USB	1 x USB 2.0 Type-C,Micro USB support OTG		
	SDIO	1 x SD 3.0		
	CAM	MIPI_CSI 2 x 4-lane + 1 x 1lane (up to 24MP)		
	GPIO	36 GPIOs		
	Display	4-lane MIPI_DSI up to 2520*1080		
Audio Interface	Speaker	1W on 8Ω load in Class-D mode		
	Receiver	1 x Mono, AB		
	Mic	2 x analog microphones		
	Handset	Stereo CLASS AB		
SIM card Interface	USIM	2 x SIM card,support dual-SIM dual-standby		
Key	Keys	Power on/off /Volume up /Volume down /Reset		
Advantages		1、Android 12 2、Cost-effective smart module		
Applications		POS, PDA, Smart Home, Smart City and Smart Industries		
Certification				
Regulation	CE*/RoHS*/Reach*/HF*	CCC*/RoHS*/SRRC*	FCC*/RoHS*/Anatel*	RoHS*/SRRC*/CE*/Reach*/HF*
Operator	NA	NA	NA	NA
Industry	NA	NA	NA	NA

* =planning /under development

Product Name	SS808-EAU	SS808-CN	SS808-NA	SS808-JP*	SS808-W
LTE Category	Smart(LTE Cat 4)				Smart(Wi-Fi)
Region	Europe/Asia/Australia/Brazil	China	North America	Japan	Global
Picture					
Basic Features					
Package	148 LCC+ 84 LGA				
Processor	Qualcomm® SDM450, ARM® Cortex™-A53 8-core 64-bit CPU up to 1.8GHz, one quad with 512 KB L2 cache, one quad with 512 KB L2 cache				
GPU	Adreno506				
Memory(Default)	2GB/4GB LPDDR3 RAM; 16GB/64GB eMMC Flash				
Dimensions (mm)	41.0 x 41.0 x 2.8				
Frequency	LTE-FDD: B1/3/5/7/8/20/28 LTE-TDD: B38/40/41 WCDMA: B1/2/5/8 GSM: 850/900/1800/1900MHz	LTE-FDD: B1/3/5/8 LTE-TDD: B34/38/39/40/41 WCDMA: B1/8 GSM: 900/1800MHz	LTE-FDD: B2/4/5/7/12/13/25/26/66 LTE-TDD: B41 WCDMA: B2/4/5	LTE-FDD: B1/3/6/8/9/18/19/21/26/28 LTE-TDD: B41 WCDMA: B1/6/8/9/19	NA
WIFI	2.4G+5G, 802.11a/b/g/n/ac				
BT	BT4.2 (BR/EDR+BLE)				
GNSS	GPS/GLONASS/BeiDou				NA
OS	Android P				
Power Supply	3.5V ~ 4.2V				
Weight	About10.3g				
Operating Temp.	-30°C ~ +75°C				
Storage Temp.	-40°C ~ +85°C				
Data Transmission					
LTE FDD (Mbps)	Max 150(DL)/50(UL)				NA
LTE TDD (Mbps)	Max 130(DL)/30(UL)				NA
UMTS/HSPA/HSPA+ (Mbps)	HSUPA Max 5.76(UL) HSPA+ Max 42(DL)				NA
TD-SCDMA (Mbps)	Max 4.2(DL)/2.2 (UL)				NA
CDMA EVDO (Mbps)	Max 3.1(DL)/1.8(UL)				NA
EDGE/GPRS(Kbps)	EDGE:Max 296(DL)/236.8(UL) GPRS:Max 107(DL)/85.6(UL)				NA
WIFI (Mbps)	up to 433				up to 433
Video Processing					
Video Encoding	1080p@60fps (H.264/H.265/VP8)				
Video Decoding	1080p@60fps(H.264/H.265/VP8/VP9)				
Interfaces					
Hardware Interface	UART/SPI(Mbps)	3 x UART Up to 4; SPI Up to 50			
	I2C(Kbps)	Up to 400; for TP/Camera/Sensor			
	USB	1 x USB2.0 high-speed interface,support USB OTG(Require 5V power supply)			
	SDIO	Support SD3.0 protocol; Support 4 bit SD card			
	CAM	MIPI_CSI 4 lane x 2(Up to 2.1G) MIPI_CSI 4 lane x 1(Up to 21Mp)			
	GPIO	21 GPIOs			
	Display	2 x 4-lane MIPI_DSI; up to (1920x1200)@60fps			
Audio Interface	Speaker	1 x Mono, differential 1W CLASS-D			
	Receiver	1 x Mono, AB			
	Mic	2 x analog microphones			
	Handset	1x Stereo, single-ended output			
SIM card Interface	USIM	2 x SIM card, support dual-card, dual-standby			
Key	Keys	Power on/off/Volume up/Volume down/Reset			
Advantages	1、Octa-core A53 processor with up to 1.8GHz CPU Clock Speed 2、Support dual-LCD application				
Applications	Smart Cash Register, Security Monitoring, Mobile POS terminal, Mobile computing, ECR, IVI, New Retailing				
Certification					
Regulation	CE/Anatel*/RCM/NCC*	RoHS/CCC/SRRC	RoHS/FCC/IC	JATE*/TELEC*	CE*
Operator	Telstra/VDF	NA	AT&T/Verizon*	DCM*/KDDI*/Softbank*	NA
Industry	GCF	NA	PTCRB	NA	NA

* =planning /under development

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Product Name	SC126-EAU	SC126-CN	SC126-NA	SC126-JP	SC126-W
LTE Category	Smart(LTE Cat 4)				Smart(Wi-Fi)
Region	Europe/Asia/Australia/Brazil	China	North America	Japan	Global
Picture					
Basic Features					
Package	146 LCC+ 116 LGA				
Processor	Qualcomm® QCM2290, ARM® Cortex-A53 Quad-core 64-bit CPU up to 2.0GHz				
GPU	Adreno 702				
Memory(Default)	1GB/2GB/4GB LPDDR4X RAM; 8GB/16GB/32GB/64GB eMMC Flash				
Dimensions (mm)	40.5 x 40.5 x 2.8				
Frequency	LTE-FDD:B1/2/3/4/5/7/8/20/28 LTE-TDD:B38/40/41 WCDMA:B1/2/3/5/8 GSM:850/900/1800/1900	LTE-FDD: B1/3/5/8 LTE-TDD: B34/38/39/40/41 WCDMA: B1/8 GSM: 900/1800MHz	LTE-FDD: B2/4/5/7/12/13/17/25/26/66/71 LTE-TDD: B41	LTE-FDD:B1/3/6/8/9/18/19/21/26/28 LTE-TDD:B41 WCDMA:B1/6/8/9/19	NA
WIFI	2.4G+5G, 802.11a/b/g/n/ac				
BT	BT5.0 (BR/EDR+BLE)				
GNSS	GPS/GLONASS/BeiDou/Galileo/QZSS/SBAS				NA
OS	Android S/T				
Power Supply	DC 3.5V~4.4V				
Weight	About10.4g				
Operating Temp.	-25°C ~ +75°C				
Storage Temp.	-40°C ~ +85°C				
Data Transmission					
LTE FDD (Mbps)	Max 150(DL)/50(UL)				NA
LTE TDD (Mbps)	Max 130(DL)/30(UL)				NA
UMTS/HSPA/HSPA+ (Mbps)	HSUPA Max 11(UL) HSPA+ Max 42(DL)				NA
TD-SCDMA (Mbps)	Max 4.2(DL)/ 2.2 (UL)				NA
CDMA EVDO (Mbps)	Max 3.1(DL)/Max 1.8(UL)				NA
EDGE/GPRS(Kbps)	EDGE:Max 296(DL)/ 236.8(UL) GPRS:Max 107(DL)/ 85.6(UL)				NA
WIFI (Mbps)	up to 433				up to 433
Video Processing					
Video Encoding	1080p30 8-bit HEVC (H.265)				
Video Decoding	1080p30 8-bit HEVC (H.265), VP9				
Interfaces					
Hardware Interface	UART/SPI(Mbps)	3 x UART Up to 4; SPI Up to 50			
	I2C(Kbps)	Up to 400 for TP/Camera/Sensor			
	USB	1 x USB 2.0/3.1 support OTG(external 5V power supply)			
	SDIO	Support SD3.0 protocol; support 4 bit SD card			
	CAM	2 x MIPI_CSI(4/4 or 4/2/1), ISPx2(13MP+13MP or 25MP)			
	GPIO	21 GPIOs			
	Display	1 x 4-lane MIPI_DSI up to 1680x720@60fps			
Audio Interface	Speaker	1 x Mono, differential 1W CLASS-D			
	Receiver	1 x Mono, AB			
	Mic	2 x analog microphones			
	Handset	1x Stereo, single-ended output			
SIM card Interface	USIM	2 x SIM card, support dual-card, dual-standby			
Key	Keys	Power on/off/Volume up/Volume down/Reset			
Advantages	1、Android S with a long life cycle 2、Global version planning 3、Support FHD display				
Applications	Mobile POS terminal, Intelligent Robot, Smart Home, Smart City and Smart Industries				
Certification					
Regulation	CE/RoHS/REACH/HF/RCM/CCC/FC/Anatel*/Singapore_IMDA	CCC/SRRC/NAL/RoHS	FCC/RoHS/IC/REACH/HF/TSCA	TELEC/RoHS/JATE	IC*/FCC*/CE*/RoHS*/REACH*/TSCA
Operator	NA	NA	AT&T*/T-Mobile*/Verizon*	Docomo*	NA
Industry	GCF	NA	PTCRB	NA	NA

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Fibocom Smart Module Series

Product Name	SQ808-EAU	SQ808-CN	SQ808-NA	SQ808-JP	SQ808-W
LTE Category	Smart(LTE Cat 4)				Smart(Wi-Fi)
Region	Europe/Asia/Australia/Brazil	China	North America	Japan	Global
Picture					
Basic Features					
Package	148 LCC+84 LGA				
Processor	Qualcomm® QCM2150, ARM® Cortex-A53 Quad-core 64-bit CPU up to 1.3GHz				
GPU	Adreno 308				
Memory(Default)	1GB/2GB LPDDR3 RAM; 8GB/16GB eMMC Flash				
Dimensions (mm)	41.0 x 41.0 x 2.8				
Frequency	LTE-FDD: B1/3/5/7/8 /20/28 LTE-TDD: B38/40/41 WCDMA: B1/2/5/8 GSM: 850/900/1800/ 1900MHz	LTE-FDD: B1/3/5/8 LTE-TDD: B34/38/39 /40/41 WCDMA: B1/8 GSM: 900/1800MHz	LTE-FDD: B2/4/5/7/12/13 /17/25/26/66 LTE-TDD: B41 WCDMA: B1/2/4/5/8 GSM: 850/900/1900MHz	LTE-FDD: B1/3/6/8/9/18/ 19/21/26/28 LTE-TDD: B41 WCDMA: B1/6/8/9/19	NA
WIFI	2.4G+5G, 802.11a/b/g/n/ac				
BT	BT4.2 (BR/EDR+BLE)				
GNSS	GPS/GLONASS/BeiDou				NA
OS	Android Q				
Power Supply	DC 3.5V ~ 4.2V				
Weight	About10.4g				
Operating Temp.	-25°C ~ +75°C				
Storage Temp.	-40°C ~ +85°C				
Data Transmission					
LTE FDD (Mbps)	Max 150(DL)/50(UL)				NA
LTE TDD (Mbps)	Max 130(DL)/30(UL)				NA
UMTS/HSPA/HSPA+ (Mbps)	HSUPA Max 5.76(UL) HSPA+ Max 42(DL)				NA
TD-SCDMA (Mbps)	Max 4.2(DL)/2.2 (UL)				NA
CDMA EVDO (Mbps)	Max 3.1(DL)/Max 1.8(UL)				NA
EDGE/GPRS(Kbps)	EDGE: Max 296(DL)/236.8(UL) GPRS: Max 107(DL)/85.6(UL)				NA
WIFI (Mbps)	up to 433				
Video Processing					
Video Encoding	1080p@30fps (H.264)				
Video Decoding	1080p@30fps (H.264, HEVC, VP8)				
Interfaces					
Hardware Interface	UART/SPI(Mbps)	3 x UART Up to 4; SPI Up to 50			
	I2C(Kbps)	Up to 400 for TP/Camera/Sensor			
	USB	1 x USB2.0 high-speed interface,support USB OTG(external 5V power supply)			
	SDIO	Support SD3.0 protocol; Support 4 bit SD card			
	CAM	MIPI_CSI 4 lane x 2, Up to 2.1G; MIPI_CSI0 4 lane x 1 connect 1 main camera, up to 13MP MIPI_CSI1 4 lane x 1 connect 1/2 vice camera			
	GPIO	21 GPIOs			
	Display	1 x 4-lane MIPI_DSI; up to 1440x720@60fps			
Audio Interface	Speaker	1 x Mono, differential 1W CLASS-D			
	Receiver	1 x Mono, AB			
	Mic	2 x analog microphones			
	Handset	1 x Stereo, single-ended output			
SIM card Interface	USIM	2 x SIM card, support dual-card dual-standby			
Key	Keys	Power on/off/Volume up/Volume down/Reset			
Advantages		1、Android Q 2、Global Cert. 3、Support FHD display			
Applications		Mobile POS terminal, Intelligent Robot, Smart Home, Smart City and Smart Industries			
Certification					
Regulation		CE/RoHS/REACH/POPs/ NCC/KC/Anatel/HF	CCC/RoHS/HF	FCC/RoHS/IC/ISED/ NOM/HF	MIC/RoHS/TELEC/JATE/ HF	CE*
Operator		Telstra	NA	AT&T/Bell/T-Mobile/ Verizon/Telus/Rogers/ Telcel	Softbank/KDDI*/ Docomo	NA
Industry		GCF	NA	PTCRB	NA	NA

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