



Model	XS5G01	XS5G02	XS5G03	XS5G04	XS5G05
Platform	MTK	Qualcomm	MTK	MTK	Qualcomm
Chipset	T750	SDX62/X65	T700-2	T500	SDX62/X65
Form Factor	LGA	M.2	M.2	M.2	LGA
Dimensions	52 × 52 x 3.3 mm	52 x 30 x 3.8 mm	52 x 30 x 2.4 mm	52 x 30 x 2.4 mm	52 × 52 x 3.6 mm

Technologies

3GPP Rel.	R15	R16	R15	R15	R16
5G Freq. Range	Sub-6 GHz	Sub-6 GHz	Sub-6 GHz	Sub-6 GHz	Sub-6 GHz
New NR Support	2NR DL NSA (200MHz)	LB+LB (2 SDR) 2NR UL 8RX (200/300MHz)	2NR DL NSA (120MHz)	FR1 5G SA (100MHz)	LB+LB (2 SDR) 2NR UL 8RX (200/300MHz)
NR Band	n1/2/3/5/7/8/20/25/ 28/30/38/40/41/48/ 66/71/77/78/79	n1/3/5/7/8/20/ 28/38/40/75/76/ 77/78	n1/2/3/5/7/8/20/25/ 28/30/38/40/41/48/ 66/71/77/78/79	n1/2/3/5/7/8/20/25/ 28/30/38/40/41/48/ 66/71/77/78/79	n1/3/5/7/8/20/ 28/38/40/75/76/ 77/78
LTE Band	B1/2/3/4/5/7/8/12/ 13/14/17/18/19/20/ 25/26/28/29/30/32/ 34/38/39/40/41/42/ 43/46/48/66/71	B1/3/5/7/8/20/ 28/32/38/40/41/42	B1/2/3/4/5/7/8/12/1 3/14/17/18/19/20/2 5/26/28/29/30/32/3 4/38/39/40/41/42/4 3/46/48/66/71	B1/2/3/4/5/7/8/12/ 13/14/17/18/19/20/ 25/26/28/29/30/32/ 34/38/39/40/41/42/ 43/46/48/66/71	B1/3/5/7/8/20/ 28/32/38/40/41/42
3G Band	B1/2/4/5/8	B1/5/8	B1/2/4/5/8	B1/2/4/5/8	B1/5/8
GNSS	GPS/GLONASS/B eiDou/Galileo L1 (optional)	GPS/GLONASS/B eiDou(Compass)/ Galileo/QZSS	GPS/GLONASS/B eiDou/Galileo L1 (optional)	GPS/GLONASS/B eiDou/Galileo L1 (optional)	GPS/GLONASS/B eiDou(Compass)/ Galileo/QZSS

Throughput

NR SA	Max. DL 4.2 Gbps Max. UL 1.15 Gbps	2.16 Gbps / 3.6 Gbps 1.15 Gbps/1.15Gbps	Max. DL 2.38 Gbps Max. UL 1.15 Gbps	Max. DL 2 Gbps Max. UL 1.15 Gbps	2.16 Gbps / 3.6 Gbps 1.15 Gbps/1.15Gbps
NR NSA	Max. DL 4.9 Gbps Max. UL 650 Mbps	2.96 Gbps / 4.4 Gbps 650 Mbps/650 Mbps	Max. DL 2.6 Gbps Max. UL 530 Mbps	x	2.96 Gbps / 4.4 Gbps 650 Mbps/650 Mbps
LTE	Max. DL 1.6 Gbps Max. UL 211 Mbps	1.6 Gbps / 2 Gbps 211Mbps/211Mbps	Max. DL 600 Mbps Max. UL 150 Mbps	Max. DL 600 Mbps Max. UL 150 Mbps	1.6 Gbps / 2 Gbps 211Mbps/211Mbps
UMTS	Max. DL 42 Mbps Max. UL 5.76 Mbps	Max. DL 42 Mbps Max. UL 5.76 Mbps	Max. DL 42 Mbps Max. UL 5.76 Mbps	Max. DL 42 Mbps Max. UL 5.76 Mbps	Max. DL 42 Mbps Max. UL 5.76 Mbps



MIT 5G Module



Sub 6GHz



5G DL
4x4 MIMO



Rich Peripheral
Interface



Leading 5G
Technology



Rich Experience
in Cellular

XSquare's Advantage

- R&D center in Taiwan
- Module Production in Taiwan
- 20+ years of experience in cellular
- CPE/ODU/MIFI/M2M/SDWAN solution
- Qualcomm / MTK 5G license
- CE/GCF/NCC/JRF/FCC Cert.
- Leadership Teams



5G promises to bring the reliability, latency, scalability, security, architecture, services, edgeless computing and ubiquitous mobility that is needed for several mission-critical IoT applications as the center of a heterogeneous network environment.

XSquare's 5G modules are used with **M.2** and **LGA** encapsulating technologies, supporting multiple communication interfaces, such as USB3.1/PCIE Gen3/RGMII, and can be used in the fields, such as CPE (Consumer Premises Equipment), video monitoring, industrial gateways, and intelligent vehicle systems.



Module



Web GUI








CPE

XSquare provide high performance and powerful modem, support NR, LTE, 3G. Include certification CE/GCF/NCC/FCC ...

Provide OpenWRT with rich feature and wildly extensible. Include WAN, LAN, WLAN, Firewall, port forwarding, port triggering, USB, IPv6 etc.

Supply 5G CPE bring Flexible and movable, Convenient, Low cost, high performance solution. Share various application EVB.

Model	Photo	Features	Interface
XS5G01		<ul style="list-style-type: none"> MTK T750 SOM, 7nm Quad-core ARM 2.0 GHz Cortex-A55 e.MMC 32Gbit (Max 128Gb) 2CH LPDDR4x 8Gbit (Max 16Gb) 	<ul style="list-style-type: none"> 1x PCM / 4x UART / 2x SIM / 4x I2C (1x I2S) / 4x SPI / HSGMII 2.5G Ethernet MAC x 2 / 1x SDIO 3.0 / 7x ADC GPIOs x 20(Reset / Power / LED) / 1x USB 3.0 / 1x PCIe3.0 2L + 2x PCIe3.0 1L
XS5G02		<ul style="list-style-type: none"> Qualcomm SDX62/X65, 4nm Single-core ARM 1.8 GHz Cortex-A7 4Gb NAND (4-bit) + 4Gb LPDDR4X at 2.13 GHz (Max. 8Gb+8Gb) 	<ul style="list-style-type: none"> M-2 PCI-e : 1x PCIe4.0 1Lan / PCIe3.0 2Lan / 2x SIM (SIM2 optional eSIM) 1x USB 3.1 + 1x USB2.0 (Debug) / 1x I2S(VoLTE) Support WLAN COEX pin
XS5G03		<ul style="list-style-type: none"> MTK T700-2, 7nm Single-core ARM 1.5 GHz Cortex-A55 NAND 4Gbit + LPDDR4x 4Gbit 	<ul style="list-style-type: none"> UART x 1 / SIM x 2/ GPIOs x 3 (Reset - Power - LED) / PCI-e+ USB 3.1
XS5G04		<ul style="list-style-type: none"> MTK T500, 7nm Single-core ARM 1.5 GHz Cortex-A55 NAND 4Gbit + LPDDR4x 4Gbit 	<ul style="list-style-type: none"> UART x 1 / SIM x 2 / GPIOs x 3 (Reset - Power - LED) / PCI-e+ USB 3.1
XS5G05		<ul style="list-style-type: none"> Qualcomm SDX62/X65 SOM, 4nm Build in QPS615(Pcie3.0/USXGMII x2) Single-core ARM 1.8 GHz Cortex-A7 8Gb NAND (4-bit) + 8Gb LPDDR4X at 2.13 GHz (Optional: 4GB e.MMC 5.1 + 8Gb LPDDR4X) 	<ul style="list-style-type: none"> 2x SIM (SIM2 optional eSIM) / 2x I2S (VoLTE) / 2x I2C / 1x SPI / 1x ADC / 3x UART / 20x GPIOs / 1x USB 3.1 / 1x USB2.0 <Pcie3.0 2Lane x 1> <*Optional: PCIe 4.0 1Lane x 1>

Features

- 5G/4G/3G multi-mode module
- Both NSA and SA modes supported
- Worldwide coverage on a single module
- Multi-constellation GNSS receiver available
- Operation temperature: -30 to +70°C





5G & LTE-A Wide Band/High Speed solution

Made in Taiwan and Time to Market.



XS5G01

Powerful Quad-Core
Computing Capability.



XS5G05

High-Efficiency, Low-cost
QTI SOM Solution.



XS5G02

QTI High Performance
Data Card.



XS5G03/04

MTK High Performance Data Card.
Private 5G Low-Cost Best Choice.

