



| Model | XS5G01 | XS5G02 | XS5G03 | XS5G04 | XS5G05 |
|-----------------------|--|--|--|--|--|
| Platform | MTK | Qualcomm | MTK | MTK | Qualcomm |
| Chipset | T750 | SDX62 | T700-2 | T500 | SDX62/X65 |
| Form Factor | LGA | M.2 | M.2 | M.2 | LGA |
| Dimensions | 52 × 52 x 3.3 mm | 42 x 30 x 2.6 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) | (1 SDR) (100MHz) | 2NR DL NSA (120MHz) | FR1 5G SA (100MHz) | LB+LB (2 SDR) (120/200MHz) |
| NR Band | n1/2/3/5/7/8/20/25/ 28/30/38/40/41/48/ 66/71/77/78/79 | n1/3/5/7/8/28/ 38/41/77/78/79 | 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 | B1/3/5/7/8/18/19/ 26/28/38/41/42/ 43/48 | 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 | Max. DL 2.2 Gbps Max. UL 1.25 Gbps | Max. DL 2.38 Gbps Max. UL 1.15 Gbps | Max. DL 2 Gbps Max. UL 1.15 Gbps | 2.2 Gbps / 3.6 Gbps 1.15 Gbps/1.15Gbps |
| NR NSA | Max. DL 4.9 Gbps Max. UL 650 Mbps | Max. DL 3.1 Gbps Max. UL 722 Mbps | Max. DL 2.6 Gbps Max. UL 530 Mbps | x | 3.1 Gbps / 4.4 Gbps 722 Mbps/722 Mbps |
| LTE | Max. DL 1.6 Gbps Max. UL 211 Mbps | Max. DL 800 Mbps Max. UL 200 Mbps | Max. DL 600 Mbps Max. UL 150 Mbps | Max. DL 600 Mbps Max. UL 150 Mbps | 1.6 Gbps / 2 Gbps 200Mbps/200Mbps |
| 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

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








Web GUI

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



CPE

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, 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 / 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

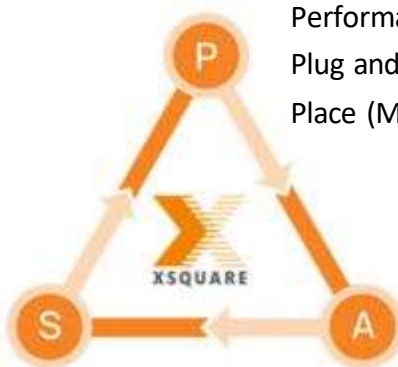
QTI High Performance
Data Card.



XS5G03/04

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

Speed
System (SOM)
Support/Security



Performance
Plug and Play
Place (MIT)

Application
Advance
Available