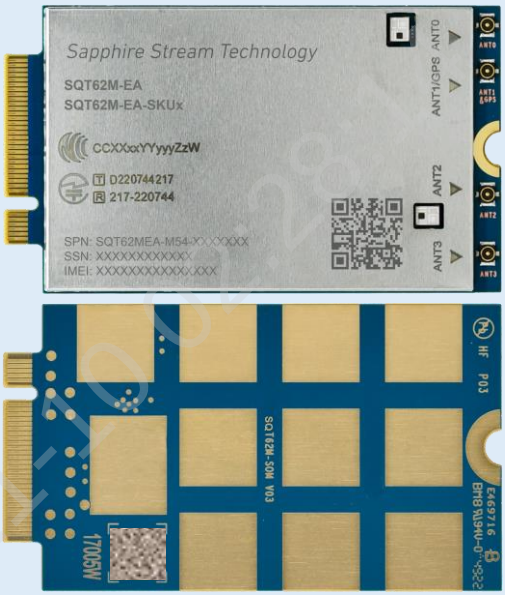
Sapphire Stream Technology



SQT62M-EA Cellular Module

The SST SQT62M-EA cellular module integrates Qualcomm® SDX62 5G Modem-RF system, supports 5G Sub-6 GHz SA and NSA mode, and is backwards compatible with 4G/3G network.
Integrating 4nm process of the SDX62 chipset, SQT62M-EA is 3GPP Release 16 compliant with superior performance and power efficiency. It can help ODM/OEM easily bring fast connected devices to global market and perfectly apply to laptop/personal computers with rich set of Windows OS related/Security features, also CPE/MIFI/Industrial routers, mission-critical applications (ambulance, security, robotics, AR/VR, livestreaming etc.) as well as remote healthtech (surgery, diagnostic, assistance, etc.) devices.

Applications

PC/Laptop

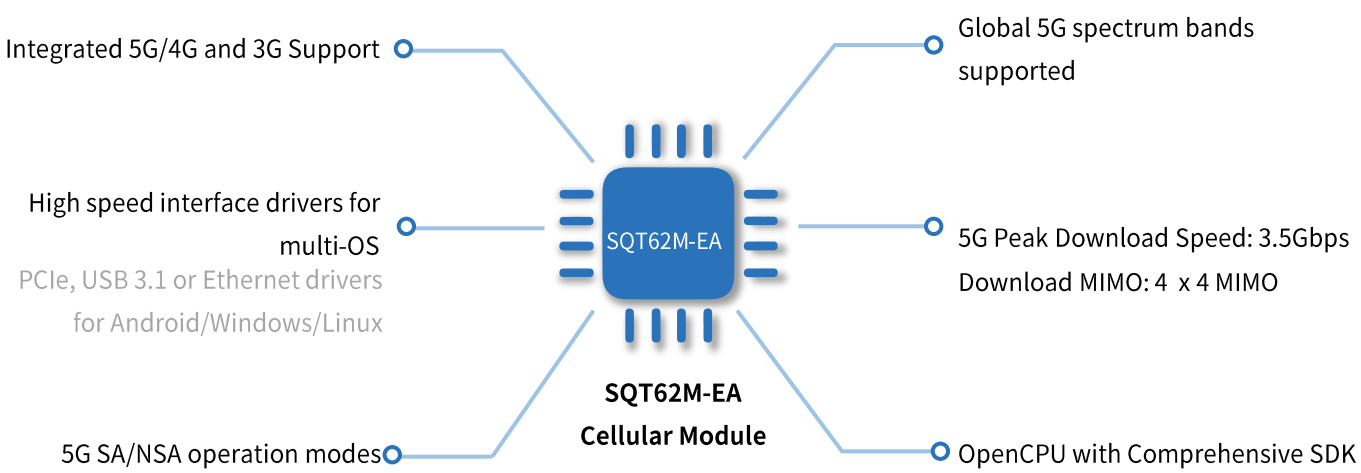
CPE/Router

Automated Guided Vehicle

Robotics

VR/AR

Features



SQT62M-EA Specifications

Item	Description	
SDX62 Chipset	CPU	Arm Cortex-A7 up to 1.8 GHz
	DSP	Qualcomm® Hexagon™ DSP processor at up to 1.5 GHz
	Power Management	PMX65
	RF Transceiver	SDR735
Memory	DRAM/NAND [1]	4Gb LPDDR4 + 4Gb NAND
Air Interface	5G NR	Sub-6GHz: n1/n3/n5/n7/n8/n20/n28/n38/n40/n41/n77/n78/n79
	LTE (DL Cat.19 UL Cat.18)	B1/B3/B5/B7/B8/B18/B19/B20/B26/B28A/B28B/B38/B40/B41/B42/B43
	WCDMA (UMTS/HSDPA/HSPA+)	B1/B5/B6/B8/B19
	GNSS	GPS/BeiDou/GLONASS/Galileo/QZSS, L1/L5 bands supported
Data Rate (Physical Layer)	Peak Download Speed [4]	5G NR [2]: 3.2Gbps DL 4x4 MIMO; LTE:1.56Gbps DL 4x4 MIMO; WCDMA: 42Mbps
	Peak Upload Speed	5G NR [3]: 1.1Gbps UL 2x2 MIMO; LTE:195M UL 1x1 (No MIMO); WCDMA: 5.76Mbps
Connectivity and Peripheral Interface	Antenna Connector [5]	4x sub-6GHz (GNSS multiplexed)
	UIM	1x USIM + 1x eSIM (Optional)
	PCIe/USB	1 x Gen3 1-lane + 1 x USB 3.1 SS/USB 2.0 HS
		1 x Gen3 2-lane + 1 x USB 2.0 HS (optional)*
	I2S	1x I2S/PCM
Form Factor	M.2 Key B	52.0mm × 30.0mm x 2.15mm
Certification	Regulatory & Carrier	CCC*/SRRC*/KC*/JATE/TELEC/CE*/NCC/GCF/LGU+*/KT*/SKT*/
		NTT DOCOMO/Softbank/KDDI/RAKUTEN
Weight	8.15g±0.2g	
Power	Voltage Range	3.135V ~ 4.35V, typ. 3.8V
Temperature Range	Operating [6]	-30°C ~ +75°C
	Extended/Storage [7]	-40°C ~ +85°C
OS Support	Linux, can work with Windows/LU/Android	
3GPP Compliance	5G Rel.16 LTE Rel.16 UMTS Rel. 9	
LTE Category	DL Cat.19 /UL Cat.18	
Dual SIM	DSSA	

[1] Please note that storage devices such as UFS, eMMC, NAND, etc. have a limit to the total amount of data that can be written. Exceeding this limit can cause damage to the storage device.
[2] Peak Download Speed: 3.2Gbps tested combo: DC_3C[4]-7C[2]_n78A[100x4] LTE 12 layers (1.2G) + NR (2G). TDD Duty cycle 95%. This configuration can be set on Lab Test Equipment to test the Max DL capability of UE.
[3] UL MIMO 2x2 supports bands n41, n77, n78 and n79.
[4] [5] For more information, refer to Table 2-20 in Datasheet.
[6] In the operating temperature range, the module complies with 3GPP specifications when equipped with effective thermal dissipation solutions, such as passive or active heatsinks, heat pipes, or vapor chambers.
[7] In the extended temperature range, compliance with 3GPP specifications cannot be guaranteed, even with these thermal solutions. However, once the temperature returns to the operating range, the module will regain compliance.

Sapphire Stream Tec
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