

An aerial night view of a city with a glowing network overlay. The network consists of numerous blue nodes connected by thin lines, creating a complex web that spans across the cityscape. The city buildings are illuminated with various lights, and the overall scene is dominated by blue and white tones.

QUECTEL

Quectel Products Portfolio Overview

Build a Smarter World



Cellular Modules

5G/4G/3G/2G
NB-IoT/Cat M
Automotive Modules
Smart Modules



Wi-Fi & Bluetooth Modules

Wi-Fi 7/6E/6/5/4
Bluetooth 5.x
Automotive Wi-Fi/Bluetooth



GNSS Modules

Single frequency localization
Multiple frequency localization
High precision positioning
Fusion positioning
Timing



Antenna

Various types of antennas
matched to the module
5G/4G/3G/2G
LPWA
Wi-Fi & Bluetooth
GNSS
V2X

Rich product portfolio, providing the full solution

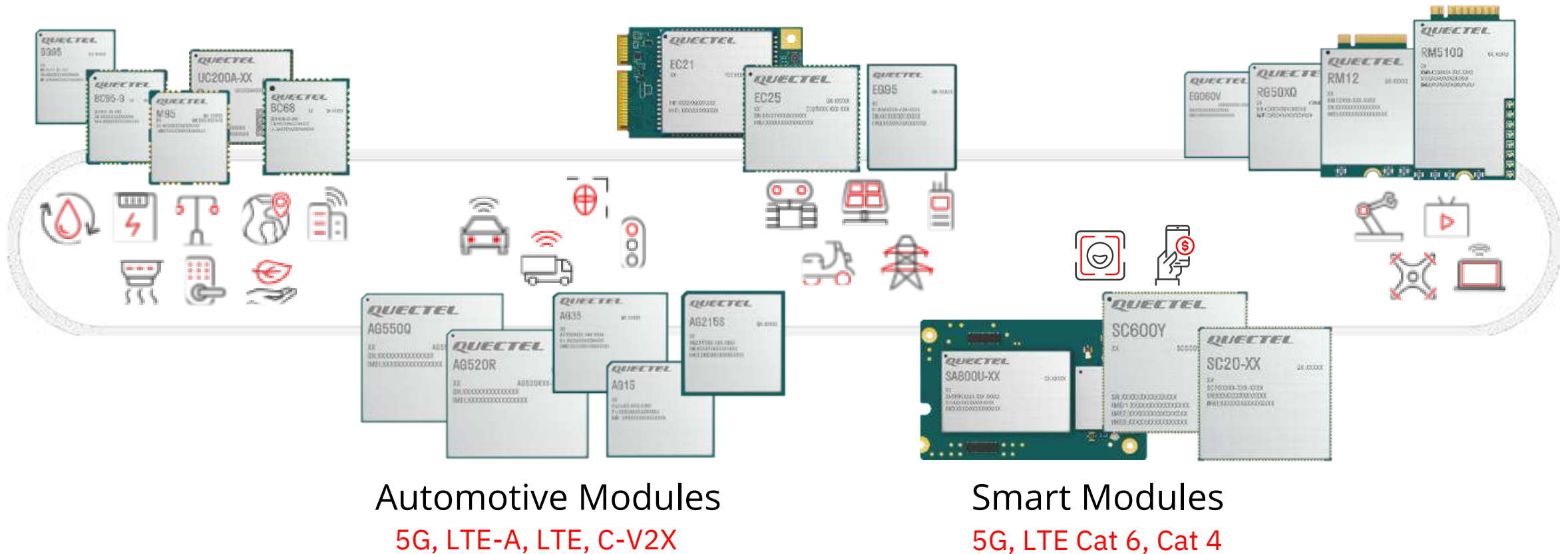
Constant Innovation in Cellular Modules



Narrow Band & Low Speed
NB-IoT, Cat M, 3G, 2G

Middle Speed
LTE (Cat 1 & Cat 4)

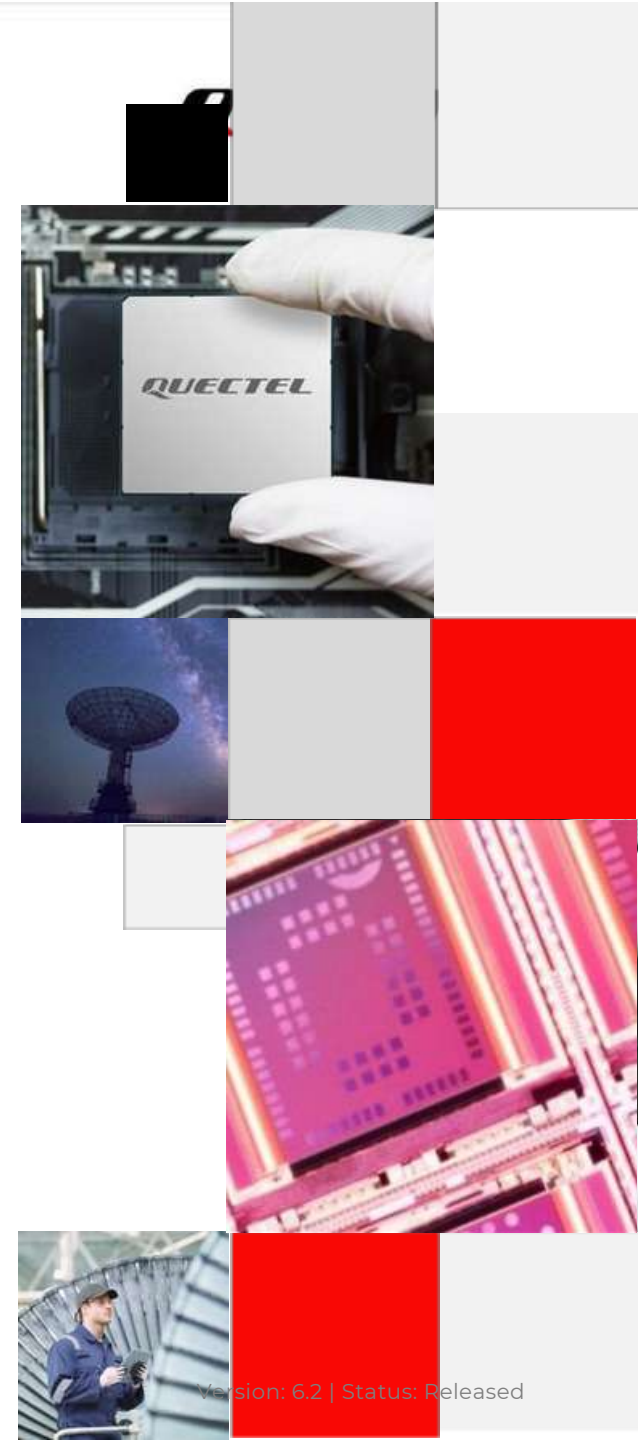
Wide Band & High Speed
5G & LTE-A























- LTE Standard & UMTS Modules
- 5G & LTE-A Modules
- Automotive Modules
- Smart Modules
- LPWA Modules
- GSM/GPRS Modules
- GNSS Modules
- Satellite Modules
- Wi-Fi & Bluetooth & UWB Modules
- Antenna Products

Build a Smarter World













LTE Standard & UMTS Product Portfolio



	EC2x/ EC200x/ EG2x/ UC200ASeries (LCC + LGA)	EG9x/ EG91xx/ EG950ASeries (LGA)	EG800Q Series (LGA)	EM05 Series (M.2)
Cat 4	 <p>EC25 series/ EC20-CE</p> <ul style="list-style-type: none"> • MDM9x07 • 4G + 3G + 2G  <p>EG25-G/ EG25-GL NEW</p> <ul style="list-style-type: none"> • MDM9x07 • 4G + 3G + 2G • Global  <p>EC200A series</p> <ul style="list-style-type: none"> • ASR1803 • 4G + 3G + 2G + GNSS 	 <p>EG95series</p> <ul style="list-style-type: none"> • MDM9x07 • 4G + 3G + 2G  <p>EG950A series</p> <ul style="list-style-type: none"> • ASR1803S • 4G + 3G + GNSS 		 <p>EM05 series</p> <ul style="list-style-type: none"> • MDM9x07 • 4G + 3G + 2G
Cat 1	 <p>EC21 series</p> <ul style="list-style-type: none"> • MDM9x07 • 4G + 3G + 2G  <p>EG21-G/ EG21-GL NEW</p> <ul style="list-style-type: none"> • MDM9x07 • 4G + 3G + 2G • Global  <p>EC200U series</p> <ul style="list-style-type: none"> • UIS8910 • 4G + 2G + GNSS 	 <p>EG91series</p> <ul style="list-style-type: none"> • MDM9x07 • 4G + 3G + 2G  <p>EG912N-EN</p> <ul style="list-style-type: none"> • ASR1603 • 4G + 2G • 29.0 × 25.0 mm • 450 MHz  <p>EG912U-GL</p> <ul style="list-style-type: none"> • UIS8910 • 4G + 2G + GNSS • 29.0 × 25.0 mm • Global 	<p>NEW</p>  <p>EG916Q-GL</p> <ul style="list-style-type: none"> • QCX216 • 4G • GNSS (Optional) • 26.5 × 22.5 mm  <p>EG915Q Series</p> <ul style="list-style-type: none"> • QCX216 • 4G + GNSS (Optional) • 23.6 × 19.9 mm  <p>EG915N series</p> <ul style="list-style-type: none"> • ASR1603 • 4G + 2G + GNSS • 23.6 × 19.9 mm  <p>EG915U series</p> <ul style="list-style-type: none"> • UIS8910 • 4G + 2G • 23.6 × 19.9 mm 	 <p>EG800Q series</p> <ul style="list-style-type: none"> • QCX216 • 4G • 17.7 × 15.8 mm
UMTS	 <p>UC200A-GL</p> <ul style="list-style-type: none"> • ASR1803 • 3G + 2G • Global 			



















5G Module Overview



mmWave	<p>RM510Q</p>  <ul style="list-style-type: none"> • SDX55 • Rel-15 • Up to 800M NR BW 	<p>RG530F RM530N</p>  <ul style="list-style-type: none"> • SDX62/SDX65 • Rel-16 • Up to 1000M NR BW 	<p>RG651E Q1/24 RM551E Q1/24</p>  <ul style="list-style-type: none"> • SDX75 • Rel-17 • Up to 1000M NR BW • 4 x Cortex-A55
	<p>RG50xQ RM50xQ</p>  <ul style="list-style-type: none"> • SDX55/QCX315 • Rel-15 • Up to 200M NR BW 	<p>RG520N RG520F RG525F RM520N RM521F</p>  <ul style="list-style-type: none"> • SDX62/SDX65 • Rel-16 • Up to 300M NR BW 	<p>RG650V RG650E RM550V</p>  <ul style="list-style-type: none"> • SDX72/SDX75 • Rel-17 • Up to 300M NR BW • 4 x Cortex-A55
Sub-6	<p>RG500L RG600L</p>  <ul style="list-style-type: none"> • T750 • Rel-15 • Up to 200M NR BW • 4 x Cortex-A55 	<p>RG620T</p>  <ul style="list-style-type: none"> • T830 • Rel-16 • Up to 300M NR BW • 4 x Cortex-A55 	
	<p>RG500UR RG500U-EA M.2 RG200U (Mini PCIe) RM500U</p>  <ul style="list-style-type: none"> • UDX710 • Rel-15/16 • Up to 100MNR BW 		
RedCap	<p>RG255C (Mini PCIe) RM255C</p>  <ul style="list-style-type: none"> • SDX35 • Rel-17 • 20M NR BW 		

Automotive NAD Portfolio



5G	SA515M (R15)	 AG55xQ Family • 5G/ C-V2X/ 5G + 4G DSDA • DF-GNSS/ DR/ PPE Optional • 4x4 MIMO • PAMiDRFFE	 AG57xQ Family • 5G/ C-V2X/ 5G + 4G DSDA • DF-GNSS/ DR/ PPE Optional • 4x4 MIMO • Discrete RFFE	SA525M SA522M (R16)	 AG59xH Family • SA525M: 5G/ C-V2X (R15) • DF-GNSS/ DR/ PPE/ DSDS Optional • 4x4 MIMO PAMiDRFFE • Up to 21.6K DMIPS	 AG59xE Family • SA522M: 5G/ C-V2X (R15) • DF-GNSS/ DR/ PPE/ DSDS Optional • 4x4 MIMO • Discrete RFFE • Up to 21.6K DMIPS
	MT 2735 (R15)	 AG568N Series • 5G + DSDS • DF-GNSS/ DR/ PPE Optional • 4x4 MIMO • Up to 15K DMIPS	 AG566N Series • 5G + DSDS • DF-GNSS/ DR/ PPE Optional • 4x4 MIMO • Discrete RFFE • Up to 15K DMIPS	MT 2737 (R16)	 AG581A Series Q2/24 • 5G/ DSDA • DF-GNSS/ DR/ PPE Optional • 4x4 MIMO • Up to 22K DMIPS	
Cat 6/ 12	SA415M (R14)	 AG520R Series • LTE-A + C-V2X (R14) • DF-GNSS/ DR/ PPE Optional	 AG521R Series • LTE Cat 12/ Cat 6 • DF-GNSS/ DR/ PPE Optional	 AG529R Series • LTE Cat 6/ Cat 4 D ^{SS} • GNSS/ DR/ PPE Optional	 AG525R-GL • Global Version • LTE Cat 12 • DF-GNSS/ DR/ PPE Optional	
	MT 2731R	 AG519M Series • LTE Cat 6 Intra-Band CA • Only L1 GNSS with AGPS • Integrated Wi-Fi/ Bluetooth • Up to 7K DMIPS ①				
Cat 4	MDM9628	 AG35 Series • Global Certifications • L1 GNSS	RedCap		SDX35 (R17)	 AG53xC Family Q3/24 • RedCap (R17) • L1 +L5 DF-GNSS
C-V2X	MDM9150	 AG15 • C-V2X (R14) • L1 GNSS	SA415M	 AG18 • C-V2X (R14) • L1 +L5 DF-GNSS	Autotalk s SECT ON	 AG190W-GL Q2/24 • C-V2X (R14 & R15) • DSRC
C-V2X AP	SA2150P	 AG215S Series • Dual/ Quad cores • Integrated ECDSA & HSM Optional • Aerolink Integrated				

NAD: Network Access Device DSDA: Dual SIM Dual Active DF-GNSS: Dual-Frequency GNSS DR: Dead Reckoning Qx/YY Estimated Engineering Sample Availability
PPE: Precise Positioning Engine PAMiD: Power Amplifier Module integrated Duplexer RFFE: RFFront End DSDS: Dual SIM Dual Standby
DMIPS: Dhystone MIPS (Million Instructions per Second) DSRC: Dedicated Short-Range Communications
C-V2X: Cellular- Vehicle to Everything RedCap: Reduced Capability

Automotive Smart Module Portfolio



Digital Cockpit Platform



- AG855G**
- SA8155P
 - OS: Android + QNX
 - Package: SiP
 - TOPS: 100K DMIPS



- AG820T**
- UIS7870
 - Octa-core
 - OS: Android 13
 - Features: Domestic platform with high-performance computing power, 6 nm process
 - Computing power: 93K DMIPS

High Level 5G



- AG800D Series**
- QCM6490
 - OS: Android 11/ 12
 - Bluetooth: 5.2
 - Wi-Fi: Dual-band/ 2 ×2 MIMO/ 802.11a/ b/ g/ n/ ac/ ax
 - GNSS: GPS/GLONASS/BDS/NavIC/Galileo/QZSS/SBAS; L1 + L5
 - TOPS: 100K DMIPS
















Medium Level 4G



- AG66xK/ AG600K Series**
- QCM6125
 - xMCP (AG660K); Discrete Automotive Memory (AG600K)
 - OS: Android 10/ 11*/ 13*
 - Bluetooth: 5.0
 - Wi-Fi: Dual-band/ 802.11a/ b/ g/ n/ ac
 - GNSS: GPS/ GLONASS/ BDS/ Galileo/ QZSS/ SBAS
 - TOPS: 58K DMIPS





















Smart Module Portfolio



<p>Premium Level</p>		<p>SG865W</p> <ul style="list-style-type: none"> •QCS8250 •CPU: 8x Kryo585 2.84 GHz •GPU: Adreno 650 •Camera: 64 MP •Video: 4K @ 240 fps/ 8K @ 60 fps •Wi-Fi: 2x2 11ax; Bluetooth 5.1 		<p>SG885G</p> <ul style="list-style-type: none"> •QCS8550 •CPU: 1 + 4^① 3 Kryo™CPU (3.2/ 2.8/ 2.0 GHz) •GPU: Adreno 740 -4K 120 fps UI •Camera: 64 MP •Video: 4K @ 240 fps / 8K @ 60 fps •Wi-Fi: 2.4 & 5 & 6 GHz, Wi-Fi 7; Bluetooth 5.3 		
<p>High Level</p>	<p>SC600T/ SC606T (MSM8953)</p> 	<p>SC66</p> <ul style="list-style-type: none"> •SDM660 •CPU: 4 + 4^① Kryo 260 (2.2/ 1.8 GHz) •GPU: Adreno 512 •Camera: 24 MP •Video: 4K @ 30 fps •Wi-Fi: 2x2 11ac; Bluetooth 5.0 •Modem: LTE Cat 6 •GNSS: L1 	<p>SC668S/ SC696S</p>  <ul style="list-style-type: none"> •QCM6125 •CPU: 4 + 4^① Kryo 260 2.0/ 1.8 GHz •GPU: Adreno 610 •Camera: 24 MP •Video: 4K @ 30 fps •Wi-Fi: 11ac; Bluetooth 5.0 •Modem: LTE Cat 4 •GNSS: L1 	<p>SG560D ^{5G}</p>  <ul style="list-style-type: none"> • QCM6490 ^① CPU: 1 + 3 + 4 Kryo 670 (2.7/ 2.4/ 1.9 GHz) •GPU: Adreno 643 •Camera: 64 MP •Video: 4K30D/ 4K30E •Wi-Fi: 2x2 11ax DBS; Bluetooth 5.2 •Modem: 5G Sub 6/ LTE Cat 18 •GNSS: L1 + L5 		
<p>Medium Level</p>	<p>SC600Y (SDM450)</p> 	<p>SC200K</p>  <ul style="list-style-type: none"> •UIS8581E •CPU: 8x A53 1.6 GHz •GPU: GE8322 •Camera: 16 MP •Video: 1080P @ 60 fps •Wi-Fi: 11ac; Bluetooth 5.0 •Modem: LTE Cat 4 •GNSS: L1 	<p>SC680A/ SC686A</p>  <ul style="list-style-type: none"> •QCM4290 •CPU: 4 + 4^① Kryo 260 (2.0/ 1.8 GHz) •GPU: Adreno 610 •Camera: 25 MP •Video: 1080P @ 60 fps •Wi-Fi: 11ac; Bluetooth 5.1 •Modem: LTE Cat 6 •GNSS: L1 	<p>SG520B ^{5G}</p>  <ul style="list-style-type: none"> •QCM4490 •CPU: 2 + 6^① KryoCPU (2.4/ 2.0 GHz) •GPU: Adreno 613 •Camera: 25 MP •Video: 1080P @ 60fps •Wi-Fi: 2x2 11ax DBS; Bluetooth 5.2 •Modem: 5G Sub 6/ LTE Cat 15 •GNSS: L1 		
<p>Entry Level</p>	<p>SC20 (MSM8909)</p> 	<p>SC200R</p>  <ul style="list-style-type: none"> •QCM2150 •CPU: 4x A53 1.3 GHz •GPU: Adreno 308 •Camera: 13 MP •Video: 1080P @ 30 fps •Wi-Fi: 11n; Bluetooth 4.2 •Modem: LTE Cat 4 •GNSS: L1 	<p>SC200E/ SC206E</p>  <ul style="list-style-type: none"> •QCM2290 •CPU: 4x A53 2.0 GHz •GPU: Adreno 702 •Camera: 25 MP •Video: 1080P @ 30 fps •Wi-Fi: 11ac; Bluetooth 5.0 •Modem: LTE Cat 4 •GNSS: L1 	<p>SC200L</p>  <ul style="list-style-type: none"> •SL8541E •CPU: 4x A53 1.4 GHz •GPU: Mali-T820 •Camera: 8 MP •Video: 1080P @ 30 fps •Wi-Fi: 11ac; Bluetooth 5.0 •Modem: LTE Cat 4 •GNSS: L1 	<p>SG150H</p>  <ul style="list-style-type: none"> •SL8521E •CPU: 2x A53 1.3 GHz •GPU: Mali-T820 •Camera: 5 MP •Video: 720P @ 30 fps •Wi-Fi: 11n; Bluetooth 4.2 •Modem: LTE Cat 4 •GNSS: L1 	<p>SG368Z</p>  <ul style="list-style-type: none"> •RK3568 •CPU: 4x A55 2.0 GHz •GPU: Mali-G52 •Camera: 8 MP •Video: 1080P @ 60 fps •Wi-Fi: 11ac; Bluetooth 4.2







Cat M Module Portfolio



	BG9xx Series			BG77x Series	BG600L
M DM9205	 <p>BG95-M 1</p> <ul style="list-style-type: none"> •Cat M •Best Cost for Cat M Only •Power Class 5 	 <p>BG95-M 2</p> <ul style="list-style-type: none"> •Cat M/ NB •Cost Efficient •Power Class 5 	 <p>BG95-M3</p> <ul style="list-style-type: none"> •Cat M/ NB/ EGPRS •Mainstream Option • Power Class 5 	 <p>BG77</p> <ul style="list-style-type: none"> •Cat M/ NB •Super Compact Size •Power Class 5 	 <p>BG600L-M3</p> <ul style="list-style-type: none"> •Cat M/ NB/ EGPRS •Compact Tri-Mode Module •Power Class 5
	 <p>BG95-M 4</p> <ul style="list-style-type: none"> •Cat M/ NB •450 MHz (B31/ 72/ 73) •Power Class 5 	 <p>BG95-M 5</p> <ul style="list-style-type: none"> •Cat M/ NB/ EGPRS •Power Class 3 	 <p>BG95-M 6</p> <ul style="list-style-type: none"> •Cat M/ NB •Power Class 3 		
	 <p>BG95-M F</p> <ul style="list-style-type: none"> •Cat M/ NB •Wi-Fi Positioning •Power Class 5 	 <p>BG95-M 8</p> <ul style="list-style-type: none"> •Cat M/ NB/ EGPRS •450 MHz (B31/ 72/ 73) •Power Class 5 	 <p>BG95-M 9</p> <ul style="list-style-type: none"> •Cat M/ NB •450 MHz & 410 MHz •Power Class 3 		
ALT1250	 <p>BG950A-GL</p> <ul style="list-style-type: none"> •Cat M/ NB •Standard Version •Cost Efficient 	 <p>BG951A-GL</p> <ul style="list-style-type: none"> •Cat M/ NB •WWAN& GNSS Concurrency 	 <p>BG952A-GL</p> <ul style="list-style-type: none"> •Cat M/ NB • QuecOpen® 	 <p>BG770A-GL</p> <ul style="list-style-type: none"> •Cat M/ NB •Cost Efficient •Super Compact Size 	
	 <p>BG953A-GL</p> <ul style="list-style-type: none"> •Cat M/ NB • iSIM 	 <p>BG955A-GL</p> <ul style="list-style-type: none"> •Cat M/ NB • GPRS 	 <p>BG772A-GL</p> <ul style="list-style-type: none"> Cat M/ NB • QuecOper® 		 <p>BG773A-GL</p> <ul style="list-style-type: none"> •at M/ NB •iSIM
ALT1350	 <p>BG950S-GL</p> <ul style="list-style-type: none"> •Cat M/ NB •Ultra Low Consumption 				

NB Module Portfolio



	BC6xx Series	BC9xx Series
QCX212	 <p>BC660K-GL <ul style="list-style-type: none"> •NB Only •Super Low Power Consumption •Global Certification •Mainstream Option </p>	 <p>BC950K-GL <ul style="list-style-type: none"> •NB Only •Super Low Power Consumption •Mainstream Option •Compatible design with BC95 </p>
RDA8908A	 <p>BC65 <ul style="list-style-type: none"> •NB Only •Cost Efficient •Standard Voltage (3.2-4.2V) </p>	 <p>BC95-GR <ul style="list-style-type: none"> •NB Only •Low cost •Compatible with BC95/BG95 series </p>
RDA8909B		 <p>BC92 <ul style="list-style-type: none"> • Cat NB + GSM • Standard Voltage (3.4-4.2V) </p>
XY1200S	 <p>BC680Z-EU <ul style="list-style-type: none"> • QuecOper® •Super Low Power Consumption •Support GNSS </p>	









GSM Module Portfolio



	Mxx Module	MCxx Module
MT2503D		 <p>MC60</p> <ul style="list-style-type: none"> • Quad-band • LCC Form Factor • GSM + GNSS + Bluetooth 3.0/ 4.0 • 18.7 × 16.0 × 2.1 mm
MT6261	 <p>M66</p> <ul style="list-style-type: none"> • Quad-band • LCC Form Factor • 17.7 × 15.8 × 2.3 mm  <p>M66 R2.0</p> <ul style="list-style-type: none"> • Quad-band • LCC Form Factor • 17.7 × 15.8 × 2.3 mm 	 <p>M95</p> <ul style="list-style-type: none"> • Quad-band • LCC Form Factor • 23.6 × 19.9 × 2.65 mm
RDA8955L	 <p>M65</p> <ul style="list-style-type: none"> • Quad-band • LCC Form Factor • 17.7 × 15.8 × 2.3 mm 	 <p>M95-R</p> <ul style="list-style-type: none"> • Quad-band • LCC Form Factor • 23.6 × 19.9 × 2.65 mm

GNSS DR/ RTK Module Portfolio







	Industrial Grade	Automotive Grade
DR	 <p>LC29H (CA)</p> <ul style="list-style-type: none"> • AG3335 • Industrial • GPS/ GLO/ GAL/ BDS/ QZSS/ SBAS • L1 + L5 • DR 	 <p>L26-DR Series</p> <ul style="list-style-type: none"> • TESEO III • Automotive^① • GPS/ GLO/ GAL/ BDS/ QZSS/ SBAS • L1 • DR
RTK	 <p>LC29H (DA)</p> <ul style="list-style-type: none"> • AG3335 • Industrial • GPS/ GLO/ GAL/ BDS/ QZSS/ SBAS • L1 + L5 • RTK (1 Hz)  <p>LC29H (EA)</p> <ul style="list-style-type: none"> • AG3335 • Industrial • GPS/ GLO/ GAL/ BDS/ QZSS • L1 + L5 • RTK (10 Hz) +Heading (10 Hz) ^②  <p>LC29H (BS)</p> <ul style="list-style-type: none"> • AG3335 • Industrial • GPS/ GLO/ GAL/ BDS/ QZSS • L1 + L5 • Base Station  <p>LC02H (BA)</p> <ul style="list-style-type: none"> • AG3335 • Industrial • GPS/ GLO/ GAL/ BDS/ QZSS/ SBAS • L1 • Orientation Measurement  <p>LG290P (03)</p> <ul style="list-style-type: none"> • Industrial • GPS/ GLO/ GAL/ BDS/ QZSS/ NavIC/ SBAS/ PPP* • Full system and full frequency • RTK (20 Hz) 	 <p>LG69T (AM)</p> <ul style="list-style-type: none"> • TESEO V • Automotive • GPS/ GAL/ BDS/ QZSS • L1 + L5 • RTK + Heading^③

Chipsets and manufacturers: AG3335 –Airoha/TESEO III and TESEO V –STMicroelectronics ①: Some variants of the L26-DR series can be used in industrial applications. ②: Heading function requires two pieces of LC29H (EA) to work together. ③: Heading function requires both LG69T(AM) and LG69T(AP) to work together. *: Under development GLO: GLONASS GAL: Galileo DR: Dead Reckoning RTK: Real-Time Kinematic

Satellite Module Portfolio



	Proprietary	IoT NTN
ORBCOMM	 <p>CC200A-LB</p> <ul style="list-style-type: none"> •Inmarsat GEO satellite L-band •GNSS L1 •37.0 ×38.0 ×3.35 mm 	
MT6825		 <p>CC660D-LS</p> <ul style="list-style-type: none"> •IoT NTN: L-band (255), S-band (256/ 23) •17.7 ×15.8 ×2.0 mm
MDM9205S		 <p>BG95-S5</p> <ul style="list-style-type: none"> •Cat M/ NB/ EGPRS/ NTN •23.6 ×19.9 ×2.2 mm
ALT1250		 <p>BG770A-SN ^①</p> <ul style="list-style-type: none"> •Cat M/ NB/ NTN •Super Compact Size •14.9 ×12.9 ×1.9 mm

Note:

- Proprietary: Terminals must be customized with built-in baseband and RF chips that support these constellations and are serviced by a dedicated operator.

- NTN: Compliance with 3GPP R17 NTN standard protocol.

① Compared with the previous modules of ALT1250, BG770A-SN is based on a totally new chipset which can support NTN.

RF Wi-Fi & Bluetooth Module Portfolio (I)



Wi-Fi 7

2 x 2



FGE573Q

- QCC2073
- 802.11a/b/g/n/ac/ax/be
- 2.4/ 5/ 6 GHz
- Bluetooth 5.3
- PCIe, PCM, UART
- Temp.: -20 °C to +70 °C



FGE576Q

- QCC2076
- 802.11a/b/g/n/ac/ax/be
- 2.4/ 5/ 6 GHz, DBS
- Bluetooth 5.3
- PCIe, PCM, UART
- Temp.: -20°C to +70°C



NCM825

- WCN7851
- 802.11a/b/g/n/ac/ax/be
- 2.4/ 5/ 6 GHz, DBS
- Bluetooth 5.4
- PCIe, PCM/ I2S, USB
- Temp.: -10 °C to +65 °C



NCM825A

- WCN7851
- 802.11a/b/g/n/ac/ax/be
- 2.4/ 5/ 6 GHz, DBS
- Bluetooth 5.4
- PCIe, PCM/ SLIMBus, USB
- Temp.: -10°C to +65°C



NCM865

- WCN7851
- 802.11a/b/g/n/ac/ax/be
- 2.4/ 5/ 6 GHz, HBS
- Bluetooth 5.4
- PCIe, PCM/ I2S, USB
- Temp.: -10°C to +65°C



NCM865A

- WCN7851
- 802.11a/b/g/n/ac/ax/be
- 2.4/ 5/ 6 GHz, HBS
- Bluetooth 5.4
- PCIe, PCM/ SLIMBus, USB
- Temp.: -10°C to +65°C



NCM835

- WCN7851
- 802.11a/b/g/n/ac/ax/be
- 2.4/ 5/ 6 GHz, DBS
- Bluetooth 5.4
- PCIe, PCM/ I2S, USB
- Temp.: -10°C to +65°C

Temp.: Operating temperature range







HBS: High Band Simultaneous

DBS: Dual Band Simultaneous

FEM: Front-End Module












RF Wi-Fi & Bluetooth Module Portfolio (II)





















Wi-Fi 6E	2 × 2	 <p>FC65E</p> <ul style="list-style-type: none"> • QCA2065 • 802.11a/b/g/n/ac/ax • Bluetooth 5.2 • PCIe, UART, PCM • Temp.: -30°C to +75 °C 	 <p>FC66E Series</p> <ul style="list-style-type: none"> • QCA2066 • 802.11a/b/g/n/ac/ax • 2.4/ 5/ 6 GHz, DBS • Bluetooth 5.2 • PCIe, UART, PCM • Temp.: -30°C to +75 °C 	
Wi-Fi 6	2 × 2	 <p>FC62E</p> <ul style="list-style-type: none"> • QCA2062 • 802.11a/b/g/n/ac/ax • 2.4/ 5 GHz • Bluetooth 5.2 • PCIe, UART, PCM • Temp.: -30°C to +75 °C 	 <p>FC64E Series</p> <ul style="list-style-type: none"> • QCA2064 • 802.11a/b/g/n/ac/ax • 2.4/ 5 GHz, DBS • Bluetooth 5.2 • PCIe, UART, PCM • Temp.: -30°C to +75 °C 	 <p>FC06E</p> <ul style="list-style-type: none"> • QCA2064 • 802.11a/b/g/n/ac/ax • 2.4/ 5 GHz, DBS • Bluetooth 5.2 • PCIe, UART, PCM • Temp.: -30°C to +75 °C
Wi-Fi 6	1 × 1	 <p>FGS060N</p> <ul style="list-style-type: none"> • IW612 • 802.11a/b/g/n/ac/ax • 802.15.4 • 2.4/ 5 GHz • Bluetooth 5.2 • SDIO, UART, SPI • Temp.: -40°C to +85 °C 		

RF Wi-Fi & Bluetooth Module Portfolio (III)






Wi-Fi 5	2 × 2	 <p>FC80A</p> <ul style="list-style-type: none"> • CYW54591 • 802.11a/b/g/n/ac • 2.4/ 5 GHz, DBDC • Bluetooth 5.1 • SDIO, UART, PCM • Temp.: -40°C to +85 °C 	 <p>FCS850R Series</p> <ul style="list-style-type: none"> • RTL8822CS-VS-CG • 802.11a/b/g/n/ac • 2.4/ 5 GHz • Bluetooth 5.0 • SDIO, UART, PCM • Temp.: -20°C to +70 °C 		
	1 × 1	 <p>FC20/ FC21</p> <ul style="list-style-type: none"> • QCA1023 • 802.11a/b/g/n/ac • 2.4/ 5 GHz • Bluetooth 5.0 • SDIO, UART, PCM • Temp.: -40°C to +85 °C 	 <p>FC900E</p> <ul style="list-style-type: none"> • QCA1023 • 802.11a/b/g/n/ac • 2.4/ 5 GHz • Bluetooth 5.0 • SDIO, UART, PCM • Temp.: -40°C to +85 °C 	 <p>FC905A</p> <ul style="list-style-type: none"> • CYW43455 • 802.11a/b/g/n/ac • 2.4/ 5 GHz • Bluetooth 5.0 • SDIO, UART, PCM • Temp.: -30°C to +85 °C 	 <p>FCS950R</p> <ul style="list-style-type: none"> • RTL8821CS-CG/RTL8821CS-VI-CG • 802.11a/b/g/n/ac • 2.4/ 5 GHz • Bluetooth 4.2 • SDIO, UART, PCM • Temp.: -20°C to +70°C/ -40°C to +85°C (optional)
Wi-Fi 4	1 × 1	 <p>FC30R</p> <ul style="list-style-type: none"> • RTL8189EM-VI-CG • 802.11b/g/n • 2.4 GHz • Wi-Fi only • SDIO • Temp.: -30°C to +85 °C 	 <p>FC909A</p> <ul style="list-style-type: none"> • CYW43439 • 802.11b/g/n • 2.4 GHz • Bluetooth 5.2 • SDIO, UART, PCM • Temp.: -30°C to +85°C 		
		 <p>FCS940R</p> <ul style="list-style-type: none"> • RTL8723DS • 802.11b/g/n • 2.4 GHz • Bluetooth 5.0 • SDIO, UART, PCM • Temp.: -20°C to +80 °C 	 <p>FCS945R</p> <ul style="list-style-type: none"> • RTL8733BS-CG/RTL8733BS-VI-CG • 802.11a/b/g/n • 2.4/ 5 GHz • Bluetooth 5.2 • SDIO, UART, PCM • Temp.: -20°C to +70°C/ -40°C to +85°C (optional) 	 <p>FCU741R</p> <ul style="list-style-type: none"> • RTL8731BU-CG • 802.11a/b/g/n • 2.4/ 5 GHz • Wi-Fi only • USB • Temp.: -20°C to +70 °C 	

Automotive Wi-Fi & Bluetooth & UWB Module Portfolio (I)

	Wi-Fi 5 & Bluetooth	Wi-Fi 6 & Bluetooth	Wi-Fi 6E & Bluetooth	Wi-Fi 7 & Bluetooth		
Premium Level	 AF51Y •QCA6595 •802.11a/ b/ g/ n/ ac •2.4/ 5 GHz, DBS •2 ×2 + 1 ×1 •Bluetooth 5.2	 AF61Y •QCA6595 •802.11a/ b/ g/ n/ ac •2.4/ 5 GHz, DBS •2 ×2 + 1 ×1 •Bluetooth 5.2	 AF50T •QCA6696 •802.11a/ b/ g/ n/ ac/ ax •2.4/ 5 GHz, DBS •2 ×2 + 2 ×2 MIMO •Bluetooth 5.2	 AF67E •QCA6688AQ •802.11a/ b/ g/ n/ ac/ ax •2.4/ 5 GHz, DBS •2 ×2 + 2 ×2 MIMO •Bluetooth 5.3, LE Audio	 AF68E •QCA6698AQ •802.11a/ b/ g/ n/ ac/ ax •2.4/ 5/ 6 GHz, DBS •2 ×2 + 2 ×2 MIMO •Bluetooth 5.3, LE Audio	 AF79S Planning •QCA6797AQ •802.11a/ b/ g/ n/ ac/ ax/ be •2.4/ 5/ 6 GHz, HBS •2 ×2 + 2 ×2 MIMO •Bluetooth 5.3, LE Audio
	 AF63R Planning •CYW89459 •802.11a/ b/ g/ n/ ac •2.4/ 5 GHz, DBS •1 ×1 + 1 ×1 •Bluetooth 5.2	 AF66T •QCA6696 •802.11a/ b/ g/ n/ ac/ ax •2.4/ 5 GHz, DBS •2 ×2 + 2 ×2 MIMO •Bluetooth 5.2	 AF62N •QCA60985 •802.11a/ b/ g/ n/ ac/ ax •2.4/ 5 GHz, DBS •2 ×2 + 2 ×2 •Bluetooth 5.3	 AF78S Q2/24 •QCA6787AQ •802.11a/ b/ g/ n/ ac/ ax/ be •2.4/ 5/ 6 GHz, DBS •2 ×2 + 2 ×2 MIMO •Bluetooth 5.3, LE Audio	 AF72M Q2/24 •MT7927 •802.11a/ b/ g/ n/ ac/ ax/ be •2.4/ 5/ 6 GHz, DBS •2 ×2 + 2 ×2 MIMO •Bluetooth 5.3, LE Audio	
Medium Level	 AF31G •QCA6574A •802.11a/ b/ g/ n/ ac •2.4/ 5 GHz •2 ×2 MIMO •Bluetooth 5.0	 AF55C •CYW88570D •802.11a/ b/ g/ n/ ac/ ax •2.4/ 5 GHz •2 ×2 MIMO •Bluetooth 5.2, LE Audio	 AF56C •CYW89570D •802.11a/ b/ g/ n/ ac/ ax •2.4/ 5 GHz •2 ×2 MIMO •Bluetooth 5.2, LE Audio	 AF65E Planning •QCA6678AQ •802.11a/ b/ g/ n/ ac/ ax •2.4/ 5/ 6 GHz •2 ×2 MIMO •Bluetooth 5.3, LE Audio		
Entry Level	 AF20 •QCA6564A •802.11a/ b/ g/ n/ ac •2.4/ 5 GHz •1 ×1 SISO •Bluetooth 5.0	 AF22 •CYW88373 •802.11a/ b/ g/ n/ ac •2.4/ 5 GHz •1 ×1 SISO •Bluetooth 5.2				
	 AF19 (Industrial Grade) •CY4373E •802.11a/ b/ g/ n/ ac •2.4/ 5 GHz •1 ×1 SISO •Bluetooth 5.0					

QX/YY Estimated Engineering Sample Availability

Automotive Wi-Fi & Bluetooth & UWB Module Portfolio (II)

Bluetooth Only Module	 <p>AH20C •CYW89072 •2.4 GHz •Bluetooth 5.2 •Host Based Bluetooth</p>
	 <p>AH10x Planning •CC2642 •2.4 GHz •Bluetooth 5.2 •Standalone BLE</p>
UWB Module	 <p>AU30Q •DW3300Q •Channels 5 & 9 •SS-TWR, DS-TWR, TDoA, PDoA •Host Based UWB</p>

UWB:UltraWideBand
TDoA:TimeDifferenceofArrival

SS-TWR:Single-Sided Two-WayRanging

DS-TWR:Double-Sided Two-WayRanging
PDoA: PhaseDifferenceofArrival

Antenna Product Options

Based on the overall design scheme of Quectel modules, we provide a full range of customer services with complete 5G/ 4G, GNSS, Wi-Fi, V2X, LoRa and other external and embedded antenna combinations with different mounting type.



Terminal Mount

Typical form factor for routers, DTU and other IoT devices



Screw Mount

Highly integrated solution with reliable RF & mechanical performance



Magnetic Mount

Most flexible form factor; easy and fast for mounting; stable performance



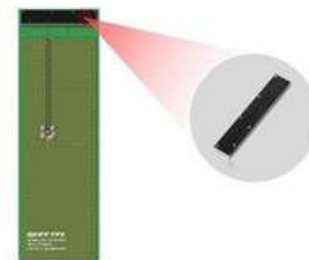
Bracket Mount

Internally integrated to devices; normally adopted by customized designs



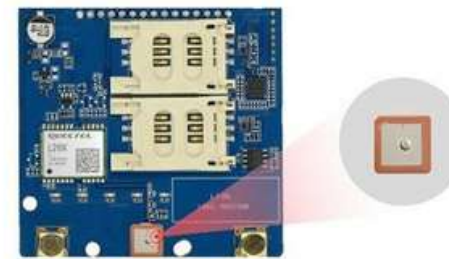
Adhesive mount

Directly stick to the housing and other non-metal surfaces



SMD

Widely used with cellular, Wi-Fi and GNSS products; simplifies assembly process



Pin Mount

Typically used by GNSS ceramic patch antennas



LDS Antenna

Customized design; suitable for 3D surface

