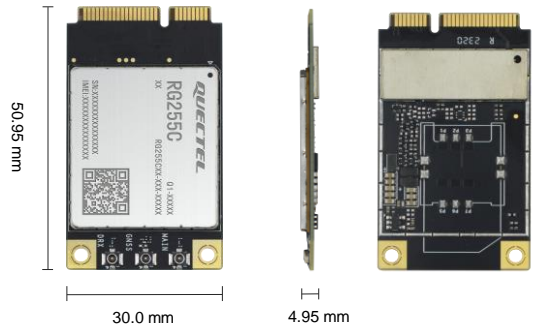


Quectel RG255C-GL Mini PCIe

5G RedCap Sub-6 GHz Mini PCIe Module



Quectel RG255C-GL Mini PCIe is a 5G RedCap module adopting standard PCI Express® Mini Card form factor (Mini PCIe). Adopting the 3GPP Rel-17 RedCap technology, the module supports 5G LAN*/ Slicing/ URLLC, etc., with a theoretical peak data rate of 223 Mbps in the downlink and 123 Mbps in the uplink. The module supports LTE Cat 4 and 5G Sub-6 SA modes, and is backward compatible with 3GPP Rel-15 and Rel-16 networks. The module can meet customers' different application demands for medium speed, large capacity, low latency, high reliability, etc.

RG255C-GL Mini PCIe module supports Qualcomm® IZat™ location technology Gen 9VT (GPS, GLONASS, NavIC, BDS and Galileo). The integrated GNSS receiver greatly simplifies product design and provides quicker, more accurate and more dependable positioning capability.

A rich set of Internet protocols, industry-standard interfaces (USB 2.0, PCM, UART, etc.) and abundant functionalities (USB drivers for Windows 8.1/ 10/ 11, Linux and Android) extend the applicability of the module to a wide range of RedCap applications.



Key Features

- ✓ Worldwide 5G/ 4G coverage
- ✓ 5G SA mode, 5G LAN*/ URLLC/ Slicing supported
- ✓ Multi-constellation GNSS receiver available for applications requiring fast and accurate fixes in any environment (optional)
- ✓ Feature refinements: DFOTA and VoNR/ VoLTE (optional)

 5G NR Sub-6 GHz Bands	 LTE Cat 4	 Quectel Enhanced AT Commands
 Embedded Abundant Protocols	 Mini PCIe Form Factor	 Multi-constellation GNSS (optional)
 USB 2.0 High Speed Interface	 VoNR/VoLTE (optional)	

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5G Sub-6		RG255C-GL Mini PCIe
Region/Operator	Global	
Dimensions (mm)	30.0 × 50.95 × 4.95	
Weight (g)	11.0	
Temperature Range		
Operating Temperature	-30 °C to +75 °C	
Extended Temperature	-40 °C to +85 °C	
Frequency Bands		
5G	5G NR	3GPP Release 17 RedCap SA operation, Sub-6 GHz
	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/ 79
	DL 2 × 2 MIMO	n1/ 2/ 3/ 5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 30/ 38/ 40/ 41/ 48/ 66/ 70/ 71/ 77/ 78/ 79
LTE	LTE-FDD	B1/ 2/ 3/ 4/ 5/ 7/ 8/ 12/ 13/ 14/ 17/ 18/ 19/ 20/ 25/ 26/ 28/ 30/ 66/ 70/ 71
	LTE-TDD	B34/ 38/ 39/ 40/ 41/ 42/ 43/ 48
	DL 2 × 2 MIMO	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/ 70/ 71
GNSS (optional)	GPS/ GLONASS/ BDS/ Galileo/ NavIC	
Certifications		
Regulatory	CE*/ RCM*/ FCC*/ IC*	
Carrier	TBD	
Others	RoHS	
Data Rates (Max.) ^①		
5G SA Sub-6	223 Mbps (DL)/ 123 Mbps (UL)	
LTE	195 Mbps (DL)/ 105 Mbps (UL)	
Interfaces		
(U)SIM	× 1	
UART	× 2	
USB 2.0	× 1	
PCM	× 1	
I2C	× 1	
PERST#	●	
Antennas	Cellular: × 2; GNSS: × 1	
Voice		
Voice	Digital Audio and VoNR/VoLTE (optional)	
Enhanced Features		
eSIM	○	
DTMF*	●	
DFOTA	●	
(U)SIM Card Detection	●	
Drivers		
USB Serial Driver	Windows 8.1/10/11; Linux 2.6–6.7; Android 4.x–12.x	
RIL Driver	Android 4.x–12.x	
USB MBIM Driver*	Windows 10/11; Linux 3.18–6.7	
USB GobiNet Driver	Linux 2.6–6.7	
USB QMI_WWAN Driver	Linux 3.4–6.7	
Electrical Features		
Supply Voltage Range	3.0–3.6 V, typ. 3.3 V	
Power Consumption	TBD	

NOTE:

- ①: Theoretical only; actual values depend on network conditions.
- *: Under development/In progress.
- : Supported; ○: Optional.
- TBD: To be determined.