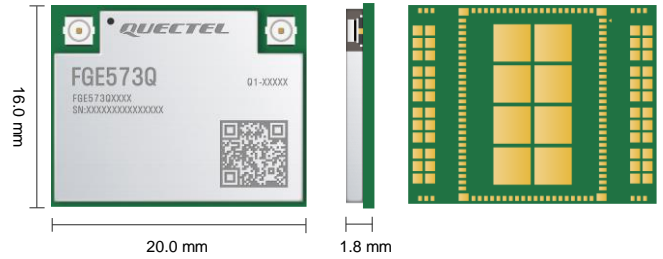


Quectel FGE573Q

2.4/ 5/ 6 GHz Wi-Fi Bands

2 × 2 MIMO

Wi-Fi 7 & Bluetooth 5.3 Module



FGE573Q is a highly integrated module supporting Wi-Fi 7 and Bluetooth 5.3. With 4K-QAM and 160 MHz bandwidth, FGE573Q achieves a maximum data rate of 2.9 Gbps. Meanwhile, it supports ultra-low latency for real-time response.

FGE573Q also integrates dual Bluetooth and supports LE audio, Bluetooth Low Energy (BLE) with a maximum data rate of 2 Mbps and BLE Long Range.

Multi-Link Operation (MLO) is one unique feature that allows routers to use multiple wireless bands and channels simultaneously to connect to a Wi-Fi 7 client. FGE573Q supports MLO and brings faster data rate, much lower latency and higher network reliability to users.

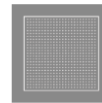
The higher data rate, lower latency and enhanced network reliability makes FGE573Q suitable for the cloud gaming, 8K A/V streaming, AR/VR, industrial IoT and telemedicine.

Key Features

- ✓ 2.4 GHz/ 5 GHz/ 6 GHz Wi-Fi bands and Bluetooth 5.3
- ✓ 4096 QAM
- ✓ Multi-Link Operation
- ✓ Ultra-low Latency
- ✓ Multi-User Multiple Input Multiple Output
- ✓ Wide operating temperature range: -20 °C to +70 °C



Multi-Link Operation



4K-QAM



IEEE 802.11
a/b/g/n/ac/ax/be



Ultra-low Latency



MU-MIMO



Bluetooth 5.3

Quectel FGE573Q

Wi-Fi 7 & Bluetooth 5.3	FGE573Q			
WLAN Protocol	IEEE 802.11a/b/g/n/ac/ax/be			
Wi-Fi Frequency Band	2.4 GHz/ 5 GHz/6 GHz			
Wi-Fi Antenna	2 × 2			
Wi-Fi Modulation Mode	DBPSK/DQPSK/CCK/BPSK/QPSK/QAM			
2.4 GHz Channel Bandwidth	20/ 40 MHz			
5 GHz Channel Bandwidth	20 MHz/ 40 MHz/ 80 MHz/ 160 MHz			
6 GHz Channel Bandwidth	20 MHz/ 40 MHz/ 80 MHz/ 160 MHz			
Encryption Mode	WPA3			
Wi-Fi Operating Mode	AP/ STA			
Bluetooth Protocol	Bluetooth 5.3			
Dimensions	16.0 mm × 20.0 mm × 1.8 mm			
Weight	TBD			
Temperature Range				
Operating Temperature	-20 °C to +70 °C			
Data Rate (Max.)				
802.11a	54 Mbps			
802.11b	11 Mbps			
802.11g	54 Mbps			
802.11n	600 Mbps			
802.11ac	1732 Mbps			
802.11ax	2400 Mbps			
802.11be	2900 Mbps			
Interfaces				
PCIe	× 1 (for Wi-Fi)			
PCM	× 1 (for Bluetooth)			
UART	× 1 (for Bluetooth)			
Wi-Fi/Bluetooth Antenna Interface	× 2			
Electrical Features				
Power Supply Voltage	VBAT: 3.0–3.6 V, Typ. 3.3 V			
Power Consumption	Max. current in Tx mode: TBD			
Certifications				
Regulatory (Planning)	Europe: CE America: FCC Canada: IC Korea: KC China: SRRC Japan: TELEC Australia/New Zealand: RCM			
Model	Ordering Code	Antenna	DBS	Development Board (Only for Debugging)
FGE573Q	FGE573QAAMD	Two antennas	Not supported	FGE573QAAM2