

Quectel FC20

Wi-Fi&BT Module with Ultra-compact LCC Package

Wi-Fi&BT Module



Ultra Compact Size



SDIO Interface



Extended Temperature range -40°C to +85°C



LCC Package



IEEE802.11 b/g/n/ac Standards



Bluetooth 4.1*



Key Benefits

- ☞ Ultra-compact Wi-Fi module
- ☞ Support BT 4.1 BLE standard
- ☞ Easier soldering and testing process with LCC package
- ☞ Stable and reliable SDIO communication I/O
- ☞ Support IEEE802.11b/g/n/ac standards
- ☞ Fast time-to-market: simple design minimizes design-in time and development efforts

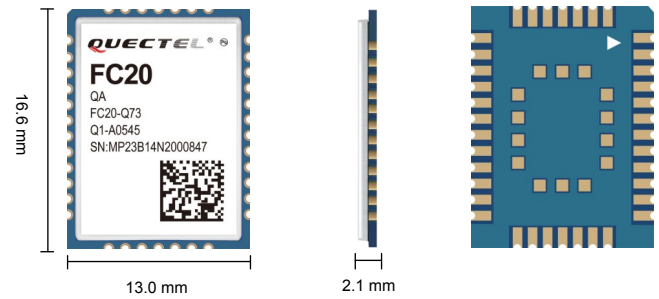
FC20 is a new embedded Wi-Fi and BT wireless communication module featuring high performance and low cost. Designed in ultra-compact 16.6×13.0×2.1mm profile, FC20 module can effectively optimize size and cost for end-products, which totally meets customer requirements on size sensitive applications to the maximum extent.

FC20 adopts surface mounted technology (SMT), making it an ideal solution for durable and rugged designs. The low profile and small size of LCC package make sure FC20 can be easily embedded into the low-volume applications and provide reliable connectivity with these applications. The advanced package allows for large-scale automated manufacturing which has strict requirements for cost and efficiency. Additionally, it can also be manually soldered in small unit manufacturing.

FC20 is typically used in combination with Quectel EC25 LTE module. The compact form factor, low power consumption, extended temperature range and stable SDIO I/O make FC20 the best choice for a wide range of M2M applications, such as vehicle, security, industrial PDA, MIFI, medical, and so on.

Quectel FC20

Wi-Fi&BT Module with Ultra-compact LCC Package



General Features

Frequency Range	2.4 ~ 2.4835GHz 4.9 ~ 5.9250GHz
WLAN Standard	802.11b/g/n/ac
BT Standard	BT 4.1 BLE standard
Channel Number	14
Modulation Mode	DBPSK, DQPSK, CCK, BPSK, QPSK, 16QAM, 64QAM
Encryption Mode	WEP, TKIP, AES, WPA-PSK, WPA2-PSK
AP (Max Access Point)	32
Operator Mode	STA and AP
Supply Voltage Range	3.14 ~3.46V, 3.3V Typ. 1.71 ~ 1.89V, 1.8V Typ.
Operation Temperature	-40 °C ~ +85 °C
Dimension	16.6 × 13.0 × 2.1mm
Weight	TBD

Data Transmission

802.11b	Max 11Mbps
802.11g	Max 54Mbps
802.11n	Max 150Mbps
802.11ac	Max 433Mbps
BT 4.1	Max 24Mbps

Electrical Characteristics

Receiving Sensitivity	TBD @802.11b/1Mbps TBD @802.11b/11Mbps TBD @802.11g/6Mbps TBD @802.11g/54Mbps TBD @802.11n/HT20 MCS0 TBD @802.11n/HT80 MCS7 TBD @802.11ac/HT20 MCS0 TBD @802.11ac/HT80 MCS7
Transmitting Power	TBD @802.11b/1Mbps TBD @802.11b/11Mbps TBD @802.11g/6Mbps TBD @802.11g/54Mbps TBD @802.11n/HT20 MCS0 TBD @802.11n/HT80 MCS7 TBD @802.11ac/HT20 MCS0 TBD @802.11ac/HT80 MCS7

I/O

SDIO	1 (SDIO 3.0)
Reset	1
Antenna	1 (Wi-Fi & BT Antenna)

* Under Development