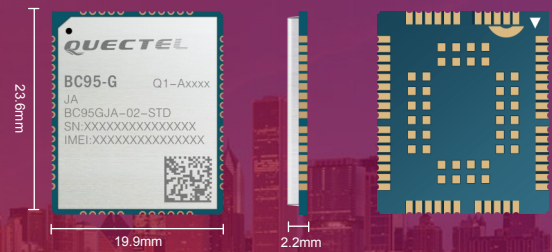


Quectel BC95-G

Multi-band NB-IoT Module with Ultra-low Power Consumption



Frequency Bands

BC95-G:

B1 @H-FDD: 2100MHz
B3 @H-FDD: 1800MHz
B8 @H-FDD: 900MHz
B5 @H-FDD: 850MHz
B20 @H-FDD: 800MHz
B28* @H-FDD: 700MHz

Data

Data Transmission:

Single Tone:

DL: 25.2kbps
UL: 15.625kbps

Multi Tone*:

DL: 25.2kbps
UL: 54kbps

Protocol Stacks:

IPv4
IPv6*
UDP
CoAP
LwM2M
Non-IP
DTLS*
TCP*
MQTT*

Download Method:

UART
DFOTA*

SMS

Point-to-point MO and MT
Text/PDU Mode

Electrical Characteristics

Maximum Output Power:

23dBm $\pm$ 2dB

Sensitivity:

-129dBm $\pm$ 1dB

Power Consumption (Typical) :

3.6uA @PSM
2mA @Idle Mode, DRX=1.28s

LTE Cat NB1 Connectivity:

250mA @Radio Transmission, 23dBm (B1/B28*)

230mA @Radio Transmission, 23dBm (B3/B8/B5/B20)

80mA @Radio Transmission, 12dBm (B1/B3/B8/B5/B20/B28*)

65mA @Radio Transmission, 0dBm (B1/B3/B8/B5/B20/B28*)

50mA @Radio Reception

Interfaces

USIM $\times$ 1: Supports 1.8V/3.0V USIM Card
UART $\times$ 2
ADC* $\times$ 1
RESET $\times$ 1
Antenna $\times$ 1

General Features

LCC Package
94 Pins

Supply Voltage Range:

3.1V~4.2V, 3.6V Typ.

Temperature Range:

-40°C ~ +85°C

Dimension:

23.6mm $\times$ 19.9mm $\times$ 2.2mm

Weight:

1.8g $\pm$ 0.2g

AT Command:

3GPP TS 27.007 V14.3.0 (2017-03) and
Quectel Enhanced AT Commands

Approvals

RoHS Compliant
CE*/GCF*/ATEX* (Europe)
JATE*/TELEC*/KDDI* (Japan)
KC* (Korea)
Telefónica* (Spain)
RCM* (Australia)

* Under Development