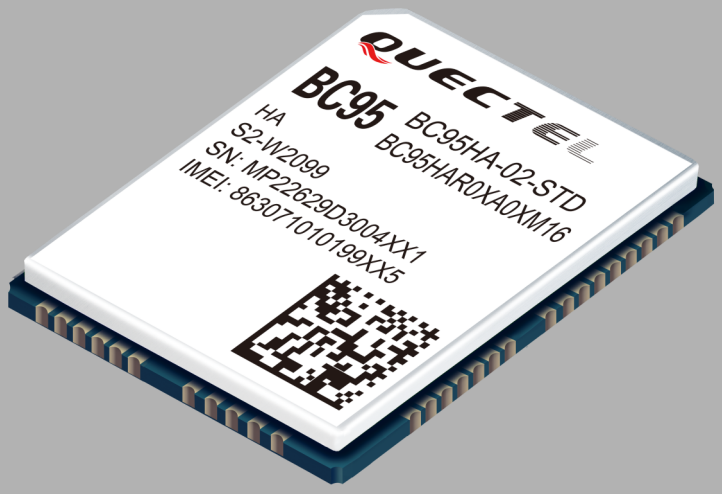
# Quectel BC95

## Compact NB-IoT Module with Ultra-low Power Consumption

NB-IoT




Compact Size

B8/B5/B20

Extended Temperature Range: -40°C to +85°C

LCC Package

Multiple Serial Ports

Embedded Internet Services Protocols

Quectel Enhanced AT Commands

BC95 is a high-performance NB-IoT module with extremely low power consumption. The ultra-compact 19.9 × 23.6 × 2.2mm profile makes it a perfect choice for size sensitive applications. Designed to be compatible with Quectel GSM/GPRS M95 module in the compact and unified form factor, it provides a flexible and scalable platform for migrating from GSM/GPRS to NB-IoT networks.

BC95 adopts surface mounted technology, making it an ideal solution for durable and rugged designs. The low profile and small size of LCC package allow BC95 to be easily embedded into low-volume applications and provide reliable connectivity with the applications. This kind of package is ideally suited for large-scale manufacturing which has strict requirements for cost and efficiency.

Due to compact form factor, ultra-low power consumption and extended temperature range, BC95 is the best choice for a wide range of M2M applications, such as smart metering, smart city, security and asset tracking, white goods, agricultural and environmental monitoring, etc. It is able to provide a complete range of SMS and data transmission services to meet client-side demands.

## Key Benefits

- Compact-sized NB-IoT module
- Ultra-low power consumption
- Super high sensitivity
- LCC package makes it easy for large volume manufacturing
- Compatible with Quectel GSM/GPRS module, easy for future upgrading
- Embedded with abundant Internet service protocols
- Fast time-to-market:
  Reference designs, evaluation tools and timely technical support minimize design-in time and development efforts

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Build a Smarter World

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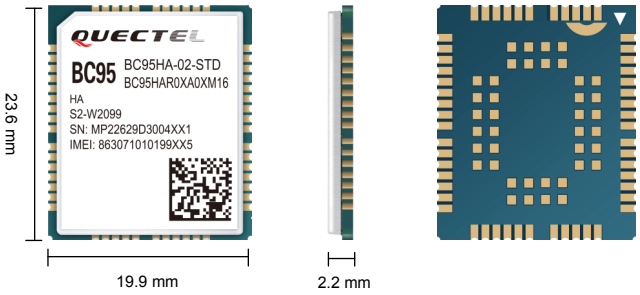


## General Features

| | |
|---|---|
| **Frequency Band** | BC95-B8: 900MHz<br>BC95-B5: 850MHz<br>BC95-B20: 800MHz |
| **Package** | LCC |
| **Pin Number** | 94 |
| **Supply Voltage Range** | 3.1V~4.2V Typical: 3.8V |
| **Operation Temperature** | -40°C ~ +85°C |
| **Dimension** | 19.9 × 23.6 × 2.2mm |
| **Weight** | 1.6g |
| **AT Command** | 3GPP Rel-13 and enhanced AT commands |
| **Download** | UART, Over the Air* |
| **SIM Application Toolkit** | |

## Electrical Characteristics

| | |
|---|---|
| **Output Power** | 23dBm |
| **Sensitivity** | -129dBm |
| **Power Consumption** | Sleep: 5uA<br>Idle: 6mA |

## Interfaces

| | |
|---|---|
| **SIM/USIM** | × 1 |
| **UART** | × 2 |
| **ADC*** | × 1 |
| **RESET** | × 1 |
| **Antenna** | × 1 |

## Specification

| | |
|---|---|
| **Data Transmission** | 100bps<bit rate<100kbps (TBC) |
| **Protocol Stack** | IPV4/IPV6*<br>UDP/COAP |
| **SMS*** | Point-to-point MO and MT<br>Text/PDU Mode |

* Under development

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