

Quectel M66 R2.0

Ultra-compact Quad-band GSM/GPRS Module



M66 R2.0 is an ultra-compact quad-band GSM/GPRS module using LCC castellation packaging. Based on the latest 2G chipset, it has the optimal performance in SMS & data transmission and audio service even in harsh environment. The highly compact 17.7mm × 15.8mm × 2.3mm profile makes it a perfect selection for size sensitive applications.

M66 R2.0 adopts surface mounted technology, making it an ideal solution for durable and rugged designs. The low profile and small size of LCC package ensure it can be easily embedded into size-constrained applications, and provides reliable connectivity with applications. This kind of package is ideally suited for large-scale manufacturing which has strict requirements for cost and efficiency.

The compact form factor, low power consumption and extended temperature range make M66 R2.0 a best choice for M2M applications such as wearable devices, automotive, industrial PDA, personal tracking, wireless POS, smart metering, telematics, and so on.



Key Benefits

- ✓ Extremely compact quad-band GSM/GPRS module
- ✓ Easier soldering process with LCC package
- ✓ Power consumption as low as 1.3mA
- ✓ Support Voice and QuecFOTA® functions
- ✓ Embedded powerful Internet service protocols, multiple Sockets & IP addresses



Quad-band



GPRS Multi-slot
Class 12



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



Highly Compact Size



LCC Package



Embedded Internet
Services Protocols



Quectel Enhanced
AT Commands



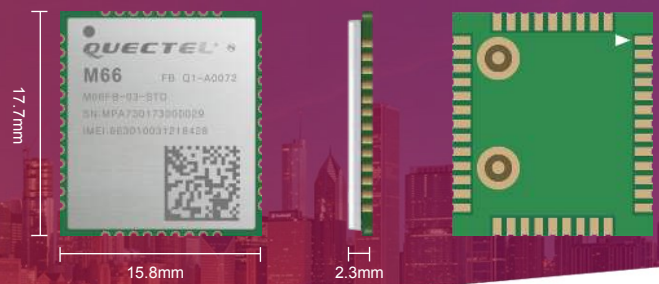
Digital Audio



Bluetooth 3.0

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Frequency Bands

Quad-band:

850/900/1800/1900MHz

Data

GPRS Class 12:

Max. 85.6kbps (Downlink)

Max. 85.6kbps (Uplink)

Coding Schemes:

CS-1, CS-2, CS-3, CS-4

USSD

Non-transparent Mode

SMS

Point-to-point MO and MT

SMS Cell Broadcast

Text and PDU Modes

Voice

Speech Codec Modes:

Half Rate (HR)

Full Rate (FR)

Enhanced Full Rate (EFR)

Adaptive Multi-rate (AMR)

Echo Arithmetic:

Echo Cancellation

Echo Suppression

Noise Reduction

Interfaces

(U)SIM Interface:

3.0V/ 1.8V

UART × 3

Analog Audio Channels:

2 Output Channels and 1 Input Channel

PCM × 1

RTC × 1

ADC × 1

SD Card × 1 (Multiplexed from PCM)

Bluetooth:

BT 3.0 (Profile SPP, HFP, OPP)

Antenna Pads:

× 2 (GSM and Bluetooth antennas)

Enhanced Features

eCall

Jamming Detection

DTMF

Audio Play/ Audio Recording

QuecFOTA®

QuecLocator®

QuecCell

QuecFile

RIL for Android

CMUX

Electrical & Sensitivity

Output Power:

Class 4 (2W @850/900MHz)

Class 1 (1W @1800/1900MHz)

Consumption:

1.3mA @DRX=5

1.2mA @DRX=9

Sensitivity:

GSM850: -109dBm

GSM900: -109dBm

DCS1800: -109dBm

PCS1900: -109dBm

Supply Voltage:

3.3V~4.6V, 4.0V Typ.

Software Features

Protocols:

TCP/ UDP/ PPP/ FTP/ HTTP(S)/ SMTP(S)/ CMUX/

SSL/ MQTT

General Features

GPRS Multi-slot Class:

Class 1~12 (12 by default)

GPRS Mobile Station:

Class B

Operation Temperature Range:

-35°C ~ +75°C

Extended Temperature Range:

-40°C ~ +85°C

Dimensions:

17.7mm × 15.8mm × 2.3mm

Weight:

Approx. 1.2g

LCC Package

GSM 07.07, 07.05 and Other Enhanced AT

Commands

Approvals

Regulatory:

CE (Europe)

Others:

RoHS

* Under Development