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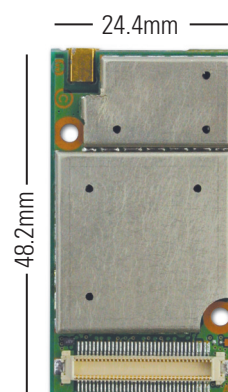
g20

Embedded GSM/GPRS 850/1900 & 900/1800 MHz Solution

Motorola g20 is an innovative GSM embedded module, utilizing the most advanced technology for data and voice communications market

This new GSM/GPRS cellular module is extremely small and packed with many highly advanced features designed to facilitate fast and easy integration within the OEM user product.

The g20 module is ideally suited for the automotive, telemetry, security, EPOS industries, delivery and hand-held terminal markets.



Product Highlights

GSM bands

- EGSM 900/1800 MHz
- GSM 850/1900 MHz

GPRS Multi-slot class 8

Small Size

- 24.4 x 48.2 x 6.0 mm

MO/MT SMS

FAX

TCP/IP stack

STK over RS232

Application Programming Interface (API)

Wide functional temperature range

Product Features**Operating systems**

- EGSM 900/1800 MHz
- GSM 850/1900 MHz

Physical

- Size: 24.4 x 48.2 x 6.0 mm
- Mounting: Two 2.2 mm holes
- Weight: 11.9 gram

Environmental

- Operating temperature: -20°C +60°C
- Functional temperature: -20°C +70°C
- Storage temperature: -40°C +85°C

Performance**Operating Voltage**

- Voltage: 3.0 - 4.2 V

Current consumption

- < 2.5mA @DRX9 (Idle mode)

TX Power

- 0.6W 850 MHz
- 2W 900 MHz
- 1W 1800/1900 MHz

Interfaces**Connectors**

- Single 70 pin board to board
- RF MMCX

SIM Card

- Local SIM connectivity
- 32K SIM
- 1.8 / 3.0V

Serial

- RS232
 - BR from 300 bps to 115 Kbps
 - Auto BR from 300 bps to 115 Kbps
- USB

Data Features**GPRS**

- Multi slot class 8 (4 up; 1 down)
- Max BR 85.6 Kbps
- Class B GSM 07.10 multiplexing protocol
- Coding Scheme CS1-CS4

CSD

- Max BR 14.4 Kbps

SMS

- MO / MT Text and PDU modes
- Cell broadcast

FAX Class 1**Voice Features**

- Telephony
- Digital audio
- Differential analog audio lines
- Vocoders EFR/ER/FR/AMR
- DTMF support
- Audio control: echo cancellation; noise suppression; side tone; gain control

GSM Supplementary Service

- USSD phase II
- Call Forwarding
- Call hold; waiting; multiparty
- Call diverting
- Missed call indicator
- AOC
- Call barring

Character Set

- UTF8
- UCS2

Control / Status indications

- GPRS coverage
- Wake up
- Antenna detect

Features over RS232

- Embedded TCP/IP stack
- STK class II

User Application

- Application Programming Interface (API)
- 12 GPIO lines
- 2 A/D lines

Emergency & Location

- FCC E911 Phase II Location mandate using EOTD

AT Command Set

- GSM 07.05
- GSM 07.07
- Motorola proprietary AT commands

Accessories

- Firmware data loader
- Data logger
- Developer Kit

Regulatory and Approvals

- FTA, FCC, DOC, PTCRB
- R&TTE
- GCF
- EMC
- BABT
- QS9000 manufacturing

Specifications subject to change without prior notice.

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