

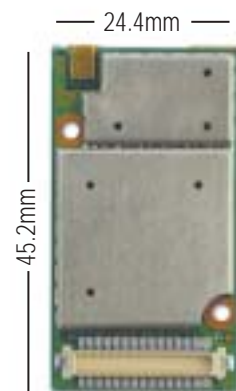
g20

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

Class B - MUX 07.10 protocol

Small Size

- 24.4 x 45.2 x 6.0 mm

MO/MT SMS

FAX

TCP/IP stack

STK over RS232

RS232/USB serial interfaces

Wide functional temperature range



Product Specifications

Product Features

Operating systems

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

Physical

- Size: 24.4 x 45.2 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 down; 1 up)
- 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/HR/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
- GSM
- IRA

Control / Status indications

- GPRS coverage
- Wake up
- Antenna detect

Features over RS232

- Embedded TCP/IP stack
- STK class II

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.

Contacts:

Asia / America's Email: w10928@motorola.com • Tel: +1 847 862 2544 • Fax: +1 847 862 8016

Europe & Africa Email: ldl002@motorola.com • Tel: +44 (0) 1256 488 360 • Fax: +44 (0) 1256 477 600

Middle East Email: c14842@motorola.com • Tel: +972 3 5658164 • Fax: +972 3 5658501

for more information please contact us at <http://www.motorola.com/automotive/telematics/products/datamodules/products.html>



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