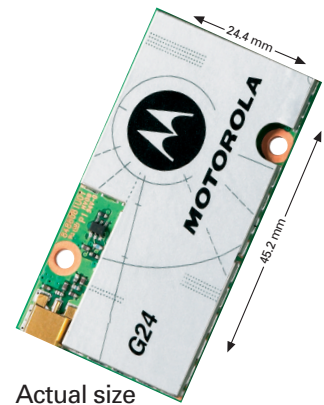


G24 GSM module

Delivering seamless mobility to the M2M world



Motorola's G24 high-speed, quad-band GSM module enables seamless connectivity for today's fastest-growing M2M applications. The G24, a single engine capable of multiple software configurations, including JAVA, is designed for flexibility to meet the specific needs of its customers around the globe. Motorola, a wireless pioneer in both the M2M and the automotive industries, brings to market superb technologies and rugged hardware. These meet in the design of a cost-effective, easily integrated mobility engine. Motorola establishes true relationships with customers to deliver reliable, customized products and best-in-class support. Our service approach helps to ensure Motorola customers have the ability to establish the foundation for increased productivity and efficiency, while conforming to the strictest industry standards.



Actual size

MOTO2MOTO



The G24 GSM Module, a lead-free product, conforming to the RoHS standard, is one of the most compact modules available and is ideally suited for a wide range of M2M applications, including:

- Security and Tracking
- Telemetry and Automated Meter Reading (AMR)
- Automotive Telematics Control Units (TCU)
- Electronic Point-Of-Sale (EPOS)

G24 GSM module

Product Specifications

PRODUCT FEATURES

Supported Bands

- Quad band
850/900/1800/1900 MHz

Physical

- Size: 24.4 x 45.2 x 6.0 mm
(6mm stacking height).
- Mounting: Two 2.4 mm holes
- Weight: 10.1 gram

Environmental

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

PERFORMANCE

Operating Voltage

- Voltage: 3.3 - 4.2V

Current Consumption

- < 2.5mA @DRX9 (Sleep mode)

TX Power

- 850/ 900 MHz – Class 4 (2 Watt)
- 1800/1900 MHz – Class 1 (1 Watt)

Typical RX sensitivity

- -106dBm (4dB margin on top of spec)

JAVA FEATURES - model dependant

- JSR 185 JTW1 compliant:
JSR 139 CLDC 1.1
JSR 118 MIDP 2.0
JSR 135 MMAP 1.1
JSR 120 WMA 1.1
- JSR 75 compliant:
File connection API
PIM API
- Proprietary API
16 GPIO's
3x A2D converters
3 simultaneous serial connections
(2 UART & USB)
CSD/Voice call
General operations and settings
- OTA Midlet download
- Midlet auto start
- More than 2 MB of Java application memory
- More than 512 KB RAM
- On device debugging

INTERFACES

Connectors

- Single 70 pin board to board
- RF MMCX

SIM Card

- 3.0V
- STK 3.1

Connectivity

- USB 2.0 full speed
- UART:
BR from 300 bps to 115 Kbps
Auto BR
- Two physical UARTs for
AT commands & Data *

DATA FEATURES

GPRS

- Multi slot class 10 (4 Down; 2 Up;
5 Total)
- Max BR Downlink 85.6 Kbps
- Class B GSM 07.10 multiplexing
protocol
- Coding Scheme CS1-CS4
- Embedded TCP/IP and UDP/IP
protocol stack

EDGE - model dependant

- Multi slot class 10 (4 Down; 2 Up;
5 Total)
- Max BR Downlink 236.8 Kbps
(Over RS232)
- Coding Scheme MCS1-MCS9

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 suppression;
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
- HEX

CONTROL / STATUS INDICATIONS*

- 8 GPIO's
- 3x A2D general purpose converters
- GSM/GPRS coverage
- Wake up in/out
- Antenna presence detect
- Temperature sensor
- Voltage sensor

AT COMMAND SET

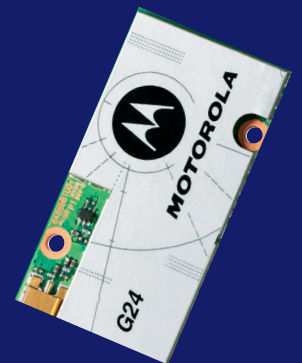
- GSM 07.05
- GSM 07.07
- GSM 07.10
- Motorola proprietary AT
commands

ACCESSORIES

- Firmware data loader over
serial connection *
- Data logger
- Developer Kit

REGULATORY AND APPROVALS

- FTA, FCC, IC, PTCRB
- R&TTE
- GCF
- EMC
- QS9000 manufacturing
- RoHS



CONTACT

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For more information check out our website at www.motorola.com/m2m

* Availability of some features depends on the software revision.

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