




C24 CDMA Module

Delivering seamless mobility to the M2M world



-  Dual Band (800/1900Mhz)
-  CDMA 1X
-  Compact Size
-  Internal TCP and UDP
-  MUX
-  RoHS
-  Ext. RF
-  Fully Type Approved
-  OverThe Air
-  GPS
-  FTP - File Transfer
-  SSL - Secure Connection

Hello CDMA.

Say Hello to the C24, a CDMA solution designed using our "24" family compact form factor, continuing Motorola's tradition of expanding and innovating its M2M portfolio. The C24 enables seamless connectivity over CDMA networks for your M2M needs.

Dependable innovation.

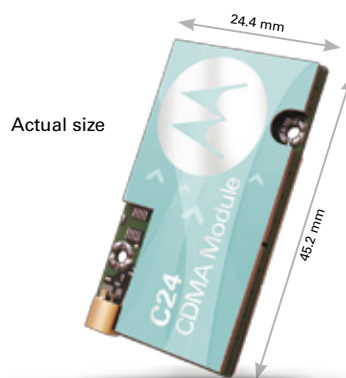
The C24 not only gives you dependable Motorola quality, you also get an innovative CDMA solution. We've designed the C24 using all we've learned to provide a fully featured wireless module that utilizes the CDMA network for expanded M2M possibilities. The C24 also gives you on-board GPS capabilities – making it the ideal choice for fleet management, asset tracking and other location-based wireless applications.

The flexibility you need.

Don't let network constraints hold back your M2M solution. Need to access a CDMA network now but want access to GSM in the future? The new C24 is built on the same form factor as the rest of the Motorola module family, giving you flexibility with a single design solution. Already utilizing a GSM network? Motorola helps you easily transition to CDMA with our unrivaled customer support. With easy interchangeability between GSM and CDMA technology, you can finally design your M2M applications to take advantage of truly global coverage.

Endless opportunities.

Have an extensive local broadband Wi-Fi network but need real-time access for remote data communication? The C24 can be stacked seamlessly with the W24 for smooth Wi-Fi to CDMA data routing. Further leverage your existing



designs for fast and easy integration for applications requiring both communication types, like fleet management, security or AMR devices. This dual use is just another way we're putting more seamless mobility in your M2M world.

Anticipating your needs.

The C24 is designed to be a practical solution. Built-in internet and security protocols allow easy integration so you can get to market faster than ever. But it doesn't stop there. We know technology doesn't stand still, so we've designed the C24 with flexibility in mind. The C24 features firmware upgradable over the air (FOTA) which keeps you up and running, allowing future upgrades to be implemented instantly, eliminating costly and time consuming maintenance activities.

The Motorola commitment.

For 80 years Motorola has been a pioneer in the communication industry. Whether we're working with you to deliver an innovative solution or assisting you with your needs from the design phase to accreditation, Motorola is here for you. Our renowned commitment to quality and dedicated support continue to set the standard for M2M.

C24 CDMA Module

Product Features

Supported Bands

- CDMA Dual Band 800/1900 MHz
- Multimode GPS (Standalone and Assisted) 1575 MHz

Physical

- Size: 24.4 x 45.2 x 5.6 mm (6.4mm stacking height)
- Mounting: two 2.4 mm holes
- Weight: 9 gram

Environmental

- Operating temperature: -30°C +85°C
- Storage temperature: -40°C +85°C

Firmware Upgrade

- Firmware upgrade Over-the-Air (FOTA)
- OMA-DM 1.2 Compliance

Performance

Operating Voltage

- Voltage: 3.3V - 4.2V

Current Consumption

- < 2.5mA @ SCI2 (Sleep mode)

TX Power

- 800 MHz – Class 3 (24 dBm)
- 1900 MHz – Class 2 (24 dBm)

Typical RX sensitivity

- -108dBm (4dB margin on top of spec)

Interfaces

Connectors

- Single 70 pin board to board
- RF MMCX
- R-UIM Card - 3.0V / 1.8V

Connectivity

- USB 2.0 full speed
- UART: BR from 300 bps to 115200 bps
- Two physical UARTs – UART1 for AT commands & Data, UART2 for NMEA or R-UIM
- MUX 27010 Support

Regulatory and Approvals

- CDG1, CDG2
- FCC, IC, CCC
- EMC
- QS9000 manufacturing
- RoHS/WEEE

Data Features

- Data Capabilities: 1x/QNC/HSPD
- Embedded TCP/IP and UDP/IP protocol stack
- Embedded FTP
- SSL - Secure Connection

CSD

- Max BR 14.4 Kbps

SMS

- MO / MT Text and PDU modes
- Cell broadcast

GPS

- Binary and NMEA modes

FAX

- Group 3, Class 2

Voice Features

- Telephony
- Digital audio
- Analog audio
- Vocoders 13K QCELP/EVRC EVRC-B
- E911-Call
- DTMF support
- Audio control: echo suppression; noise suppression; side tone; gain control

CDMA Supplementary service

- Call forwarding
- Call hold; waiting; multiparty
- Call diverting
- Call barring
- Three way Calling

Character Set

- UTF8
- UCS2
- GSM
- ASCII
- 8859-1

Control / Status Indications

- 8 GPIO's
- 3x A/D general purpose converters
- CDMA Network coverage
- Wake up in/out
- Antenna presence detect
- Voltage sensor

AT Command Set

- Motorola proprietary AT commands
- Qualcomm proprietary AT commands
- Operator proprietary AT commands

Accessories

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

For more information contact us at: M2M.Sales@motorola.com



www.motorola.com/m2m



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