SocketModem® iCell

Intelligent EV-DO Cellular Modem

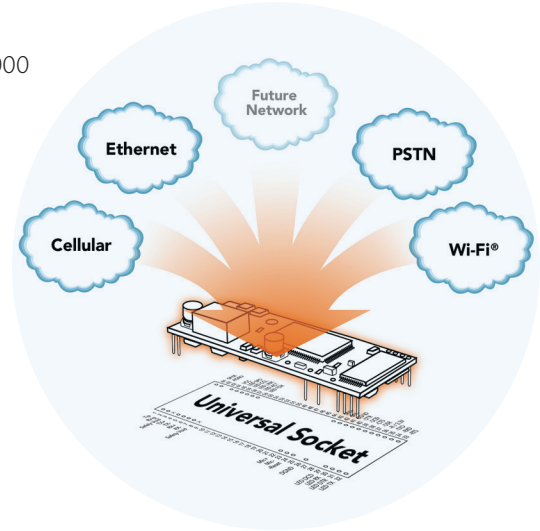
Universal Socket Benefits

- Interchangeable communications devices
- Intelligent Universal IP stack
- Quick-to-market
- Easy migration to future networks

The SocketModem® iCell intelligent cellular modem is a complete, ready-to-integrate communications device that offers standards-based dual-band EV-DO Rev A performance. This quick-to-market communications device allows developers to add wireless communication and GPS tracking to products with a minimum of development time and expense. The intelligence of the embedded Universal IP® stack allows for automatic/persistent connectivity for mission critical applications and enhanced M2M functionality. The SocketModem iCell intelligent cellular modem is based on industry-standard open interfaces and utilizes Multi-Tech's Universal Socket design.

Features

- EV-DO Rev A, backwards compatible to EV-DO Rev 0 and CDMA2000 1xRTT
- Dual-band 800/1900 MHz
- Universal Socket connectivity
- Intelligent Universal IP stack for enhanced M2M functionality
- Models with GPS tracking capability
- NMEA-0183 V3.01 compliant GPS messages
- Event monitoring and reporting via four programmable GPIOs
- Circuit-switched data up to 14.4K bps
- Short Message Services (SMS)
- UFL antenna connector
- Serial only or Serial/USB models
- Serial interface supports DTE speeds to 921.6K bps*
- AT command compatible
- Carrier approved
- Two-year warranty



* Effective throughput is 700-750K bps

MultiTech® Systems

Highlights

Applications. With increased 3G packet data rates, the SocketModem iCell intelligent cellular modem will support highly data-intensive applications such as remote video surveillance, multimedia POS/ATM terminals as well as other data-intensive applications. For asset tracking and fleet management applications, models with a dedicated GPS receiver are available.

Universal Socket Connectivity. Multi-Tech's Universal Socket is a flexible, comm-port architecture that provides cellular, Ethernet, PSTN or Wi-Fi® network access with interchangeable communications devices. This means you can utilize one system design and populate it with your connectivity device of choice accommodating multiple connectivity requirements. In addition, you are assured a seamless migration to future technologies.

Universal IP. Multi-Tech's Universal IP consists of a common set of TCP/IP networking protocols and machine-to-machine (M2M) applications implemented using a standard AT command interface. Universal IP allows developers to write their host application one time while having the freedom to select from a growing number of Universal Socket communication devices.

Reduces Development Time. The SocketModem iCell intelligent cellular modem enhances your product while you focus on developing its core features. It actually provides faster time-to-market because it relieves the burden and expense of obtaining CDG 1 and 2 network and RF approvals.

SocketModem iCell Pin-Out. The SocketModem iCell intelligent cellular modem interfaces easily with existing products through a standard serial or USB 2.0 interface. The serial DTE channel is capable of transfer speeds to 921.6K bps and can be interfaced directly to a UART or microcontroller. The complete on-board RF transceiver interfaces with an antenna for direct connection to wireless SMS, circuit-switched dial-up, or packet data networks. It also includes an onboard LED to display network status.

Developer's Kit. The Developer's Kit allows you to plug in the communications device and use it for testing, programming and evaluation. For a complete listing of the Developer Kit contents, visit www.multitech.com/pdfs/devkit.go

Ordering Information

Product	Description	Region
MTSMC-EV2-IP	EV-DO Rev A Serial Embedded Modem	Regional
MTSMC-EV2-GP	EV-DO Rev A Serial Embedded Modem (GPS)	Regional
MTSMC-EV2-MI-IP	EV-DO Rev A Serial/USB Embedded Modem	Regional
MTSMC-EV2-MI-GP	EV-DO Rev A Serial/USB Embedded Modem (GPS)	Regional

Ordering Codes	Description
-N2	For Sprint Networks (USA)
-N3	For Verizon Networks (USA)
-N16	For Aeris Communications Networks (USA)

* Use ordering codes for specific build options. Go to www.multitech.com for detailed product model numbers.

Produced in the US of US and non-US components.

Features and specifications are subject to change without notice.

Specifications

Packet Data Features
EV-DO Rev A / CDMA2000 1xRTT

Frequency Bands
800/1900 MHz

Connectors
Antenna: UFL (one each, cellular & GPS)

GPIO Functions (MI builds only)
Pins 48 & 49: Programmable digital input/output
Pins 50 & 51: Programmable digital input/output or ADC

IP Protocols Supported
DNS resolve, FTP client, Ping, POP3 client, PPP (dial-out), SMTP client, TCP RAW client & server, UDP RAW client & server, PAP, CHAP authentication

GPS
Position: 2.5 meters
Aquisition: Hot start 1 second; cold start 29 seconds average
Sensitivity: Tracking - 161 dBm
Protocol: NMEA-0183 V3.01, GGA, GLL, GSA, GSV, RMC, VTG

M2M Applications
Automatic connect/reconnect, device monitor, modem emulation, Ping & TCP keep alive, wake-up on Caller ID, wake-up on ring, GPIO event monitoring & alerts

Power Requirements
5VDC
IP Models: Sleep: 173mA; Typical: 400mA; Maximum: 1.2A
GP Models: Sleep: 180mA; Typical: 420mA; Maximum: 1.2A

Physical Description
3.1" L x 1.4" W x 0.5" H; 1 oz.
(8.0 cm x 3.5 cm x 1.2 cm; 28 g)

Operating Environment
-40° to +85° C

Certifications
EMC: FCC Part 15 Class B
Radio Compliance: FCC Part 22 & 24
Safety: UL 60950-1, IEC 60950-1
Network: CDG 1 & 2
RoHS Compliant

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