SocketModem® EDGE

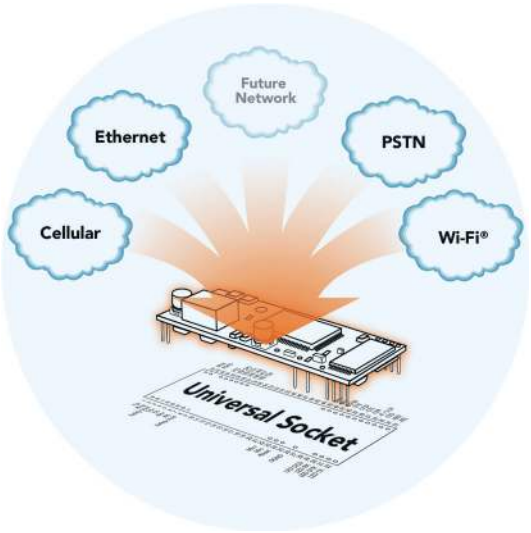
Embedded Cellular Modem

Universal Socket Benefits

- Interchangeable communications devices
- Quick-to-market
- Global approvals
- Easy migration to future networks

The SocketModem® EDGE cellular modem delivers enhanced data speeds when compared to GPRS by utilizing EDGE technology. It allows users to connect to the Internet and send and receive data up to three times faster than possible with an ordinary GSM/GPRS network making it ideal for data-intensive applications. Based on industry-standard open interfaces, the SocketModem EDGE cellular modem is equipped with quad-band GSM, which means it can be used worldwide on all existing GSM networks. In addition, it utilizes Multi-Tech's Universal Socket design.

Features



- EDGE (E-GPRS) Class 12
- GPRS Class 12
- Quad-band GSM 850/900/1800/1900 MHz
- Packet data rates up to 240K bps (coding scheme, MCS-9, LLC layer, 4 time slots)
- Universal Socket connectivity
- Embedded TCP/IP stack supports TCP, UDP, FTP, SMTP, POP3, HTTP
- Circuit-switched data up to 14.4K bps non-transparent mode
- Supports Short Message Service such as text and PDU mode, point-to-point (MT/MO) and cell broadcast
- MMCX antenna connector
- SIM card holder
- Serial interface supporting DTE speeds to 460K bps
- AT command compatible
- FCC, IC, PTCRB and R&TTE certified
- Voice features include Half rate (HR), Full rate (FR), Enhanced full rate (EFR), Adaptive multi rate (AMR), as well as hands free echo cancellation, and noise reduction
- Two-year warranty

Multi Tech® Systems

Highlights

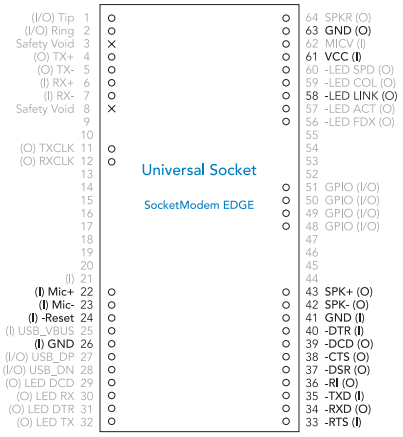
Applications. With packet data speeds up to three times faster than ordinary GPRS modems, the SocketModem EDGE cellular modem is targeted at data-intensive applications such as remote video surveillance and other multimedia applications where you are sending digital images, web pages and photographs.

Integration Reduces Space, Power and Cost. The SocketModem EDGE cellular modem integrates the controller, RF transceiver, and antenna interface in one communications device. This integration requires low power, low real estate and provides an overall reduction in costs.

Reduces Development Time. The SocketModem EDGE 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 PTCRB and RF approvals.

Internet-enabled. The SocketModem EDGE cellular modem includes an embedded TCP/IP protocol stack to bring Internet connectivity to any device without making changes to its hardware design. Using the Internet protocols and the wireless connection to an IP network, it sends and receives data over the Internet.

SocketModem EDGE Pin-Out. The SocketModem EDGE cellular modem interfaces easily with existing products through a standard serial communication channel. The serial DTE channel is capable of transfer speeds to 460K 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.



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.

Developers Kit. The Developer's Kit allows you to plug in the communications device and use it for testing, programming and evaluation. The kit includes one development board with RS-232 DB-25 connector, universal power supply, antenna and RS-232 cable.

Specifications

Packet Data Features

EDGE: E-GPRS Class 12, Modulation & coding scheme MCS 1-9, Mobile station Class B

GPRS: GPRS Class 12, full PBCCH support, coding scheme 1 – 4, Mobile station Class B

Circuit Switched Data/Fax Features

Asynchronous, non-transparent up to 14.4K bps

SMS Features

Text & PDU, Point-to-Point, cell broadcast

Connectors

Antenna: MMCX

SIM: Standard 1.8/3V SIM receptacle

IP Protocols Supported

TCP, UDP, FTP, SMTP, POP3, HTTP

Power Requirements

Sleep: 10mA (.05W @ 5VDC)

Typical: 128mA (.64W @ 5VDC)

Maximum: 675mA (3.2W @ 5VDC)

Peak: 1.5A

Physical Description

2.55" L x 1.4" W x 0.5" H; 1 oz.
(6.48 cm x 3.5 cm x .87 cm; 20 g)

Operating Environment

-30° to +70° C

Certifications

CE Mark, R&TTE

EMC: FCC Part 2, 15, 22, 24, EN 55022, EN 55024

Safety: cUL 60950-1, IEC 60950-1, UL 60950-1, AS/NZS 60950-1

Network: PTCRB

RoHS Compliant

Ordering Information

Product	Description	Region
MTSMC-E1	Quad-band EDGE Class 12	Global
MTSMC-E1-V	Quad-band EDGE Class 12 (Voice)	Global

Made in Mounds View, MN, U.S.A.

Features and specifications are subject to change without notice.

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