SocketModem® Cell

GPRS Cellular Modem

Universal Socket Benefits

- Interchangeable communications devices
- Quick-to-market
- Global approvals
- Easy migration to future networks
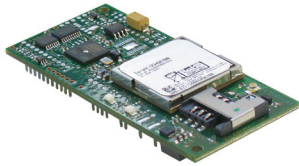
The SocketModem® Cell cellular modem is a complete, ready-to-integrate communications device that offers standards-based quad-band GSM/GPRS Class 10 performance. This quick-to-market communications device allows developers to add wireless communication to products with a minimum of development time and expense. The SocketModem Cell cellular modem is based on industry-standard open interfaces and utilizes Multi-Tech's Universal Socket design.

Features

- GPRS Class 10
- Quad-band GSM 850/900/1800/1900 MHz
- Packet data up to 85.6K bps
- Universal Socket connectivity
- Circuit-switched data up to 14,400 bps transparent and non-transparent
- Short Message Services (SMS)
- Advanced management features include phone book management, fixed dialing number, real time clock and alarm management
- UFL antenna connector and SIM socket
- Serial interface supports DTE speeds to 115.2K bps
- AT command compatible
- MNP 2 error correction, V.42bis compression
- Two-year warranty

MultiTech® Systems

Highlights

Applications. The SocketModem Cell cellular modem is targeted at applications that periodically need to send or receive data over a wireless network. It is ideal for:

- Appliances
- Asset tracking
- ATM terminals
- Automotive
- Data collection
- Industrial and medical remote monitoring systems
- Remote diagnostics
- Remote metering
- Security systems
- Vending/gaming machines
- Other devices requiring wireless connectivity

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.

Internet-enabled. The SocketModem Cell 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.

Reduces Development Time. The SocketModem Cell 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.

SocketModem Cell Pin-Out. The SocketModem Cell cellular modem interfaces easily with existing products through a standard serial communication channel. The serial DTE channel is capable of transfer speeds to 115.2K 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.

Pin	Signal		Pin	Signal
1	(I/O) Tip		64	SPKR (O)
2	(I/O) Ring		63	GND (O)
3	Safety Void		62	MICV (I)
4	(O) TX+		61	VCC (I)
5	(O) TX-		60	-LED SPD (O)
6	(I) RX+		59	-LED COL (O)
7	(I) RX-		58	-LED LINK (O)
8	Safety Void		57	-LED ACT (O)
9			56	-LED FDX (O)
10			55	
11	(O) TXCLK		54	
12	(O) RXCLK		53	
13			52	
14			51	GPIO (I/O)
15			50	GPIO (I/O)
16			49	GPIO (I/O)
17			48	GPIO (I/O)
18			47	
19			46	
20			45	
21			44	
22	(I) Mic+		43	SPK+ (O)
23	(I) Mic-		42	SPK- (O)
24	(I) -Reset		41	GND (I)
25	(I) USB_VBUS		40	-DTR (I)
26	(I) GND		39	-DCD (O)
27	(I/O) USB_DP		38	-CTS (O)
28	(I/O) USB_DN		37	-DSR (O)
29	(O) LED DCD		36	-RI (O)
30	(O) LED RX		35	-TXD (I)
31	(O) LED DTR		34	-RXD (O)
32	(O) LED TX		33	-RTS (I)

Universal Socket / SocketModem Cell

Developer's 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
GPRS Class 10, PBCCH support
Coding Schemes: CS1 to CS4
Embedded TCP/IP stack

Circuit Switched Data Features
Asynchronous, transparent & non-transparent up to 14.4K bps, MNP2 & V.42 bis

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

Connectors
Antenna: UFL
SIM: Standard 3V SIM receptacle

IP Protocols Supported
FTP, HTTP, POP3, SMTP, TCP (Client & Server), & UDP

Power Requirements
5VDC; 49mA sleep (.25W @ 5VDC), 113mA typical (.56W @ 5VDC), 240mA maximum (1.2W @ 5VDC), 1.10A peak

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

Operating Environment
-40° to +85° C

Certifications
CE Mark, R&TTE
EMC: FCC Part 15, 22, 24, EN 301 489-1, EN 301 489-7, RSS 132, 133
Safety: cUL 60950-1, EN 60950-1, UL 60950-1, AS/NZS 60950-1
Network: PTCRB
RoHS Compliant

Ordering Information

Product	Description	Region
MTSMC-G2*	GSM/GPRS Modem	Global
MTSMC-G2-ED†	GSM/GPRS Modem	Global
MTSMC-G2-V*	GSM/GPRS Modem with Voice	Global
MTSMC-G2-V-ED†	GSM/GPRS Modem with Voice	Global

* Quad-band Modem, 850/1900 MHz default
† Quad-band Modem, 900/1800 MHz default

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

Features and specifications are subject to change without notice.

Trademarks / Registered Trademarks: SocketModem, Multi-Tech, and the Multi-Tech logo: Multi-Tech Systems, Inc. / All other products and technologies are the trademarks or registered trademarks of their respective holders.

MultiTech Systems ®