SocketModem® CDMA

Embedded Wireless Modem

Universal Socket Benefits

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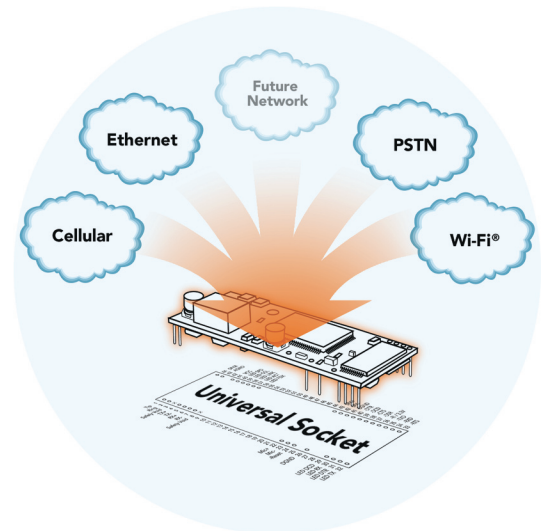- Easy migration to future networks

The Multi-Tech SocketModem® CDMA wireless modem is a complete, ready-to-integrate communications device that offers standards-based multi-band CDMA2000 1xRTT 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 CDMA wireless modem is based on industry-standard open interfaces and utilizes Multi-Tech's universal socket design.

Features

- CDMA2000 1xRTT
- Qualcomm® MSM6050 chipset
- CDMA IS-95A, IS-95B backwards compatible
- Dual-band 800/1900 MHz CDMA
- Models with R-UIM support
- Packet data up to 153.6K bps forward and reverse
- Circuit-switched data up to 14.4K bps
- Short Message Services (SMS)
- MMCX antenna connector
- Serial interface supports DTE speeds to 230K bps
- AT command compatible
- Universal socket connectivity
- CDG 1 and 2 network certified
- Two-year warranty

MultiTech®
Systems

Highlights

Applications. The SocketModem CDMA wireless modem is targeted at applications that periodically need to send or receive data over a wireless network. It is ideal for:
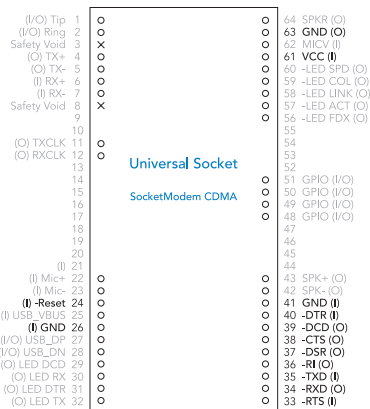
- Appliances
- Asset tracking
- ATM terminals
- Automotive
- Data collection
- Industrial and medical remote monitoring systems
- Remote diagnostics
- Remote metering
- Security systems
- Vending/gaming machines
- Other devices requiring wireless connectivity

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

Reduces Development Time. The SocketModem CDMA wireless 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.

Management Features. The SocketModem CDMA wireless modem provides advanced management features including phone book management, fixed dialing number, real time clock and alarm management.

SocketModem CDMA Pin-Out. The SocketModem CDMA wireless modem interfaces easily with existing products through a standard serial communication channel. The serial DTE channel is capable of transfer speeds to 230K 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.

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

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
CDMA2000 1xRTT, up to 153K bps forward & reverse channels

Circuit Switched Data/Fax Features
IS-95A, IS-95B up to 14.4K bps

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

Connectors
Antenna: MMCX
R-UIM: Standard 3V R-UIM receptacle (-N11 model only)

Power Requirements
5VDC; 400mA typical, 700mA maximum

Physical Description
3.1" L x 1.4" W x 0.5" H; 1.2 oz.
(8.0 cm x 3.5 cm x 1.2 cm; 34 g)

Operating Environment
-30° to +70° C (FCC certified from -30° to +50° C)

Certifications
EMC: FCC Part 2, 15, 22, 24, EN 55022, EN 55024
Safety: cUL, EN 60950, UL 60950
Network: CDG 1 & 2

Ordering Information

Product	Description	Region
MTSMC-C*	800/1900 MHz CDMA Modem	Regional
Ordering Codes	**Description**	
-N1	Generic, Requires Provisioning (A-key = Random)	
-N2	For Sprint Networks (USA)	
-N3	For Verizon Networks (USA)	
-N9	Generic, Requires Provisioning (A-key = 0)	
-N11	800/1900 MHz CDMA Modem w/ R-UIM	
-N12	Bell Mobility (Canada)	
-N14	Alltel (USA)	
-N15	For Telus Networks (Canada)	
-N16	For Aeris Networks (USA)	

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

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

Features and specifications are subject to change without notice.

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