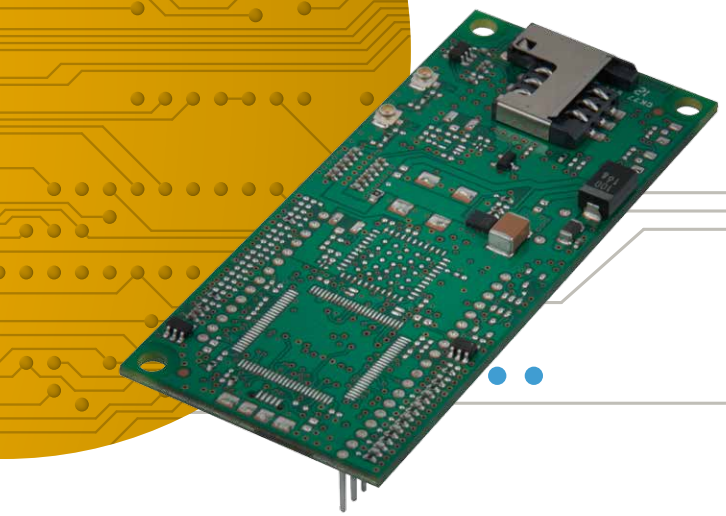
MULTITECH®
CREATE • CONNECT • COMMUNICATE

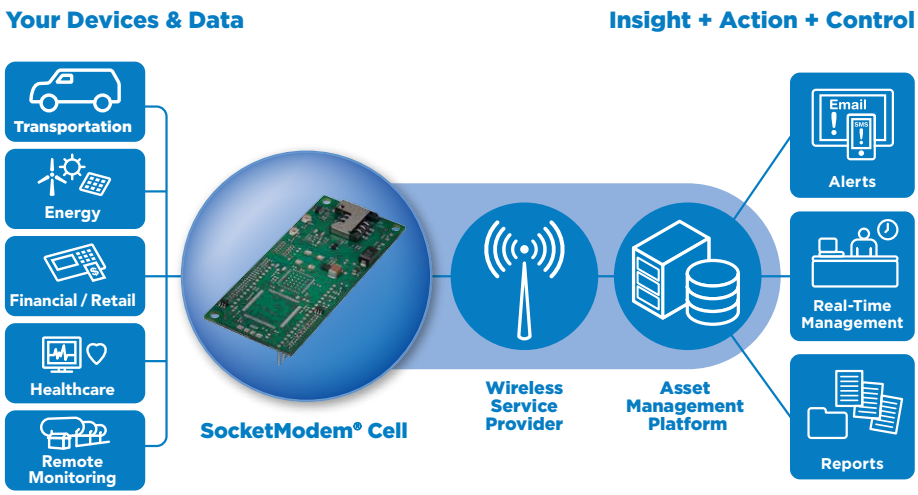
SocketModem® Cell

Embedded Cellular Modems



The SocketModem® Cell embedded cellular modem is a complete, ready-to-integrate communications device ideal for customers looking to add cellular communications to their solutions.

Choose a carrier approved and end-device certified embedded modem from MultiTech to decrease your time to market and save you money.



FEATURES

- 2G, 3G, and 4G models
- Universal Socket connectivity
- Short Message Services (SMS)
- Serial or USB interfaces
- Serial interface supports speeds up to 921.6K bps
- AT command compatible
- USB 2.0 HS compatible (3G and 4G models)
- Two-year warranty

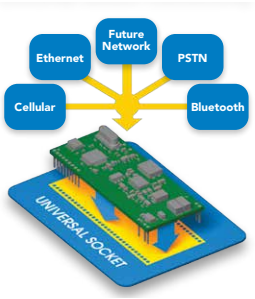
BENEFITS

- Approved by carriers and regulatory agencies saving customers time, money, and protection from the risks associated with pursuing their own certifications
- Quick to market leveraging MultiTech's approvals
- Interchangeable communications devices for easy migration to future networks
- Long solution lifecycle reduces redesign time and cost
- Support from the leading experts in M2M technology

HIGHLIGHTS

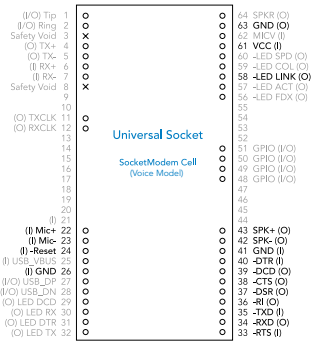
Universal Socket Connectivity

MultiTech's Universal Socket is a flexible, comm-port architecture that provides cellular, Ethernet, PSTN or Bluetooth® 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.



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 921.6K bps (depending on model) 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 data networks. It also includes an onboard LED to display network status.



SPECIFICATIONS

Model	MTSMC-LAT1 MTSMC-LAT1-U	MTSMC-LEU1 MTSMC-LEU1-U	MTSMC-LVW2 MTSMC-LVW2-U
Performance	LTE 3GPP Release 9 (100 Mbps peak downlink/50 Mbps peak uplink) with HSPA+ 21/GPRS fallback	LTE 3GPP Release 9 (100 Mbps peak downlink/50 Mbps peak uplink) with HSPA+ 42/GPRS fallback	LTE 3GPP Release 9 (100 Mbps peak downlink/50 Mbps peak uplink) (No fall back)
Frequency Bands (MHz)	**4G:** 700(B17)/850(B5)/AWS1700(B4)/1900(B2) **3G:** 850(B5)/1900(B2) **2G:** 850/1900	**4G:** 800(B20)/1800(B3)/2600(B7) **3G:** 850(B5)/900(B8)/2100(B1) **2G:** 900/1800	700(B13)/AWS1700(B4)
SMS	Mobile Originate, Mobile Terminated and Cell Broadcast PDU or Text Mode		
USB	USB 2.0 high speed compatible (-U models)		
TCP/IP Functions	FTP, SMTP, SSL, TCP, UDP		
Connectors	Antenna: 3 UFL (Cellular, Rx Diversity/MIMO, GPS) Mini SIM; 1.8V & 3V		
Dimensions	3.15" x 1.375" (80.010 mm x 34.925 mm)		
Power Draw*	Serial Model @ 5VDC; 8mA sleep, 20mA idle, 554mA average at max power USB Model @ 5VDC; sleep N/A, 29mA idle, 560mA average at max power		Serial Model @ 5VDC; 5mA sleep, 63mA idle, 453mA average at max power USB Model @ 5VDC; sleep N/A, 27mA idle, 500mA average at max power
Input Power	3.3V – 5VDC		
Environmental			
Operating Temperature	-40° to +85° C		
Storage Temperature	-40° to +85° C		
Humidity	20% to 90% RH, non-condensing		
Certifications			
EMC Compliance	FCC Part 15 Class B	EN55022 Class B, EN55024	FCC Part 15 Class B
Radio Compliance	FCC Part 22, 24, 27	EN 301 511, EN 301 489-1, EN 301 489-7, EN 301 489-24	FCC Part 27
Safety	UL 60950-1 2nd ED, cUL 60950-1 2nd ED, IEC 60950-1 2nd ED	IEC 60950-1 2nd ED, AS/NZS 60950.1	UL 60950-1 2nd ED, cUL 60950-1 2nd ED, IEC 60950-1 2nd ED
Network	PTCRB	N/A	
Carrier	AT&T, T-Mobile	N/A	Verizon

* See device guides for additional information.

Developer Kits

The Developer Kits allow you to plug in the communications device and use it for testing, programming and evaluation.

The MTSMI-UDK developer kit is designed to work with all Universal Socket devices including cellular and analog SocketModems as well as SocketEthernet IP® and SocketWireless® Bluetooth® device servers.

The MTUDK2-ST-CELL developer kit is designed to work with all versions of our cellular SocketModems as well as the new MultiConnect® Dragonfly™ family of cellular SoMs.

Both kits include a development board and all the necessary accessories to get you up and running right out of the box.

SPECIFICATIONS

Models	MTSMC-H5	MTSMC-EV3	MTSMC-G2 MTSMC-G3	MTSMC-C2
Performance	HSPA+	EV-DO Rev A	GPRS Class 10	CDMA2000 1xRTT
Frequency Bands (MHz)	**3G:** 850/900/1700 (AWS)/1900/2100 **2G:** 850/900/1800/1900	800/1900	850/900/1800/1900	800/1900
USB	USB 2.0 High Speed		N/A	
TCP/IP Functions	FTP, SMTP, TCP, & UDP		**G2 Models:** FTP, HTTP, POP3, SMTP, TCP Client & Server, & UDP Client **G3 Model:** FTP, SMTP, TCP, & UDP	FTP, SMTP, TCP, & UDP
Connectors	Antenna: 2 UFL (Cellular, Rx Diversity) Mini SIM; 1.8V & 3V	Antenna: 2 UFL (Cellular, Rx Diversity)	Antenna: 1 UFL Mini SIM; 1.8V & 3V	1 UFL
Dimensions	3.15" x 1.375" (80.010 mm x 34.925 mm)			
Power Draw*	5VDC; 19mA sleep, 28mA idle, 397mA maximum	5VDC; 22mA sleep, 34mA idle, 423mA maximum	**G2 Models:** 5VDC; 15mA sleep, 113mA typical, 240mA maximum **G3 Model:** 5VDC; 32mA sleep, 54mA idle, 358mA maximum	5VDC; 32mA sleep, 45mA idle, 552mA maximum
Input Power	3.3V - 5VDC		**G2 Models:** 5VDC **G3 Model:** 3.3V - 5VDC	3.3V - 5VDC
Environmental				
Operating Temperature	-35° to +85° C	-40° to +85° C		
Storage Temperature	-40° to +85° C			
Humidity	20% to 90% RH, non-condensing			
Certifications				
EMC Compliance	FCC Part 15 Class B, EN55022, EN55024	FCC Part 15 Class B	**G2 Models:** FCC Part 15 Class B, EN55022, EN55024 **G3 Model:** EN55024	FCC Part 15 Class B
Radio Compliance	FCC Part 22, FCC Part 24, RSS 132, RSS 133, EN 301 511, EN 301 489-1, EN 301 489-3, EN 301 489-7, EN 301 489-24	FCC Part 22, FCC Part 24	**G2 Models:** FCC Part 22, FCC Part 24, RSS 132, RSS 133, EN 301 511, EN 301 489-1, EN 301 489-3, EN 301 489-7, AS/ACIF S042.1, AS/ACIF S042.3 **G3 Model:** EN 301 511, EN 301 489-1, EN 301 489-3, EN 301 489-7	FCC Part 22, FCC Part 24
Safety	UL 60950-1 2nd ED, cUL 60950-1 2nd ED, IEC 60950-1 2nd ED	UL 60950-1 2nd ED, cUL 60950-1 2nd ED, IEC 60950-1 2nd ED	**G2 Models:** UL 60950-1 2nd ED, cUL 60950-1 2nd ED, IEC 60950-1 2nd ED, AS/NZ 60950.1 **G3 Model:** IEC 60950-1 2nd ED	UL 60950-1 2nd ED, cUL 60950-1 2nd ED, IEC 60950-1 2nd ED
Network	PTCRB	N/A	**G2 Models:** PTCRB **G3 Model:** Uses a GCF certified module	N/A
Carrier	AT&T, Aeris, T-Mobile	Verizon, Aeris	**G2 Models:** AT&T, Aeris, T-Mobile	Verizon, Aeris, Sprint

* See device guides for additional information.

ORDERING INFORMATION

LTE Models

Product	Description	Region
MTSMC-LAT1	LTE Embedded Modem w/Fallback (Serial Interface)	North America
MTSMC-LAT1-U	LTE Embedded Modem w/Fallback (USB Interface)	North America
MTSMC-LEU1	LTE Embedded Modem w/Fallback (Serial Interface)	Euro/GB
MTSMC-LEU1-U	LTE Embedded Modem w/Fallback (USB Interface)	Euro/GB
MTSMC-LVW2	LTE Embedded Modem w/o Fallback (Serial Interface) (Verizon)	US
MTSMC-LVW2-U	LTE Embedded Modem w/o Fallback (USB Interface) (Verizon)	US

HSPA+ Models

Product	Description	Region
MTSMC-H5	HSPA+ Embedded Modem (Serial Interface)	Global
MTSMC-H5-U	HSPA+ Embedded Modem (USB Interface)	Global

EV-DO Models

Product	Description	Region
MTSMC-EV3-N3	EV-DO Rev A Embedded Modem (Serial Interface) (Verizon)	US
MTSMC-EV3-U-N3	EV-DO Rev A Embedded Modem (USB Interface) (Verizon)	US
MTSMC-EV3-N16	EV-DO Rev A Embedded Modem (Serial Interface) (Aeris)	US
MTSMC-EV3-U-N16	EV-DO Rev A Embedded Modem (USB Interface) (Aeris)	US

GPRS Models

Product	Description	Region
MTSMC-G2	850/1900 MHz GSM/GPRS Modem	Global
MTSMC-G2-ED	900/1800 MHz GSM/GPRS Modem	Global
MTSMC-G2-V	850/1900 MHz GSM/GPRS Modem w/Voice	Global
MTSMC-G2-V-ED	900/1800 MHz GSM/GPRS Modem w/Voice	Global
MTSMC-G3-EU	850/900/1800/1900 MHz GSM/GPRS Modem	Euro/GB

CDMA Models

Product	Description	Region
MTSMC-C2-N2	CDMA2000 1xRTT Modem (Serial Interface) (Sprint)	US
MTSMC-C2-N3	CDMA2000 1xRTT Modem (Serial Interface) (Verizon)	US
MTSMC-C2-N16	CDMA2000 1xRTT Modem (Serial Interface) (Aeris)	US

Developer Kits

Product	Description	Region
MTUDK2-ST-CELL	SocketModem & Dragonfly Developer Kit - Cellular	Global
MTSMI-UDK	Universal Socket Developer Kit – Cellular, Analog, Bluetooth, Ethernet	Global

Ordering part numbers as listed are 50 packs. To order a single pack add a –SP to the end of the ordering part number. (MTSMC-LAT1-SP)

SERVICES & WARRANTY

MultiTech's comprehensive Support Services programs offer a full array of options to suit your specific needs. These services are aimed at protecting your investment, extending the life of your solution or product, and reducing total cost of ownership. Our seasoned technical experts, with an average tenure of more than 10 years, can walk you through smooth installations, troubleshoot issues and help you with configurations.

INSTALLATION SUPPORT

MultiTech's Installation Support Service delivers priority service with the ability to work one-on-one with an experienced MultiTech technical support engineer, to guide you through the installation process for our products.

TECHNICAL SUPPORT SERVICES

At MultiTech, we're committed to providing you personalized attention and quality service while providing you a quick response to your product support needs. We have several options of support for you to choose from.

For additional information on Support Services as well as other service offerings, please contact your MultiTech representative or visit www.multitech.com/support.go

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