## : ©hipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation, and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!


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## SocketModem ${ }^{\circ}$ Cell <br> Embedded Cellular Modem

The SocketModem ${ }^{\text {© }}$ 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.
www.multitech.com/SMCell

## BENEFITS

- 2G, 3G, and 4G models
- 4G Category 3 models include GNSS
- 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


## FEATURES

- 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

Your Devices \& Data


Connecting Your Devices



## HIGHLIGHTS

## Universal Socket Connectivity

MultiTech's Universal Socket is a flexible, comm-port architecture that provides cellular, Ethernet, PSTN or Bluetooth ${ }^{\circledR}$ 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.


## SPECIFICATIONS

| Model | MTSMC-LAT1 / MTSMC-LAT1-U <br> MTSMC-LAT3 / MTSMC-LAT3-U | MTSMC-LEU1 MTSMC-LEU1-U | MTSMC-LVW2 / MTSMC-LVW2-U MTSMC-LVW3 / MTSMC-LVW3-U |
| :---: | :---: | :---: | :---: |
| Performance | LAT1: LTE 3GPP Release 9 (Category 3; 100 Mbps peak downlink/50 Mbps peak uplink) with HSPA+ 21/GPRS fallback LAT3: LTE 3GPP Release 9 (Category 1; 10 Mbps peak downlink/5 Mbps peak uplink) with HSPA fallback | LTE 3GPP Release 9 (Category 3; 100 Mbps peak downlink/50 Mbps peak uplink) with HSPA +42 /GPRS fallback | LVW2: LTE 3GPP Release 9 (Category 3; 100 Mbps peak downlink/50 Mbps peak uplink) (No fall back) <br> LVW3: LTE 3GPP Release 9 (Category 1; 10 Mbps peak downlink/5 Mbps peak uplink) (No fall back) |
| Frequency Bands (MHz) | LAT1: 4G: 700(B17)/850(B5)/ AWS1700(B4)/1900(B2) <br> 3G: 850(B5)/1900(B2) <br> 2G: 850/1900 <br> LAT3: 4G: 700(B12/B13)/850(B5)/ AWS1700(B4)/1900(B2) 3G: 850(B5)/1900(B2) | 4G: 800(B20)/1800(B3)/2600(B7) 3G: 850(B5)/900(B8)/2100(B1) 2G: 900/1800 | LVW2: 700(B13)/AWS1700(B4) <br> LVW3: 700(B13)/ AWS1700(B4)/1900(B2) |
| 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 (LAT1/LVW2): 3 UFL (Cellular, Rx Diversity/MIMO, GPS) Antenna (LAT3/LVW3): 2 UFL (Cellular, Rx Diversity/MIMO) Mini SIM; 1.8 V \& 3 V |  |  |
| Dimensions | $3.15{ }^{\prime \prime} \times 1.375^{\prime \prime}(80.010 \mathrm{~mm} \times 34.925 \mathrm{~mm})$ |  |  |
| Power Draw* | (LAT1/LEU1) <br> 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 (LAT3) TBD |  | (LVW2) <br> Serial Model @ 5VDC; 5mA sleep, 63mA idle, 453 mA average at max power USB Model @ 5VDC; sleep N/A, 27mA idle, 500 mA average at max power (LVW3) TBD |
| Input Power | $3.3 \mathrm{~V}-5 \mathrm{VDC}$ |  |  |
| Environmental |  |  |  |
| Operating Temperature | $-40^{\circ}$ to $+85^{\circ} \mathrm{C}$ |  |  |
| Storage Temperature | $-40^{\circ}$ to $+85^{\circ} \mathrm{C}$ |  |  |
| 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.


## 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 921.6 K 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.

## 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 ${ }^{\circledR}$ and SocketWireless ${ }^{\circledR}$ Bluetooth ${ }^{\circledR}$ 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 ${ }^{\oplus}$ Dragonfly ${ }^{\text {™ }}$ 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-C3 | MTSMC-C2 |
| :---: | :---: | :---: | :---: | :---: |
| Performance | HSPA+ | EV-DO Rev A | GPRS Class 10 | CDMA2000 1xRTT |
| Frequency Bands (MHz) | $\begin{aligned} & \text { 3G: 850/900/1700 } \\ & \text { (AWS)/1900/2100 } \\ & \text { 2G: 850/900/1800/1900 } \end{aligned}$ | 800/1900 | 850/900/1800/1900 | $\begin{aligned} & \text { 800/1900 } \\ & \text { Band Class } 10 \text { (-N2 only) } \end{aligned}$ |
| USB | USB 2.0 High Speed |  | N/A |  |
| TCP/IP Functions | FTP, SMTP, TCP, \& UDP |  | FTP, SMTP, TCP, \& UDP | FTP, SMTP, TCP, \& UDP |
| Connectors | Antenna: 2 UFL (Cellular, Rx Diversity) <br> Mini SIM; 1.8V \& 3V | Antenna: 2 UFL (Cellular, Rx Diversity) | Antenna: 1 UFL <br> Mini SIM; 1.8V \& 3V | 1 UFL |
| Dimensions | $3.15^{\prime \prime} \times 1.375^{\prime \prime}(80.010 \mathrm{~mm} \times 34.925 \mathrm{~mm})$ |  |  |  |
| Power Draw* | 5VDC; 19mA sleep, 28 mA idle, 397mA maximum | 5VDC; 22mA sleep, 34 mA idle, 423 mA maximum | 5VDC; 32mA sleep, 54mA idle, 358 mA maximum | 5VDC; 32mA sleep, 45 mA idle, 552 mA maximum |
| Input Power | 3.3V-5VDC |  | $3.3 \vee-5 V D C$ | 3.3 V -5VDC |
| Environmental |  |  |  |  |
| Operating Temperature | $-35^{\circ}$ to $+85^{\circ} \mathrm{C}$ |  | $-40^{\circ}$ to $+85^{\circ} \mathrm{C}$ |  |
| Storage Temperature | $-40^{\circ}$ to $+85^{\circ} \mathrm{C}$ |  |  |  |
| Humidity | 20\% to $90 \% \mathrm{RH}$, non-condensing |  |  |  |
| Certifications |  |  |  |  |
| EMC Compliance | FCC Part 15 Class B, EN55022, EN55024 | FCC Part 15 Class B | EN55024 | FCC Part 15 Class B |
| Radio Compliance | FCC Part 22, FCC Part 24, RSS 132, RSS 133, <br> EN 301 511, EN 301 489-1, EN 301 489-3, <br> EN 301 489-7, EN 301 489-24 | FCC Part 22, FCC Part 24 | 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``` | IEC 60950-1 2nd ED | ```UL 60950-1 2nd ED, cUL 60950-1 2nd ED, IEC 60950-1 2nd ED``` |
| Network | PTCRB | N/A | Uses a GCF certified module | N/A |
| Carrier | AT\&T, Aeris, T-Mobile, Rogers | Verizon, Aeris, Sprint | N/A | Verizon, Aeris, Sprint |

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## ORDERING INFORMATION

LTE Models

| Product | Description | Region |
| :--- | :--- | ---: |
| MTSMC-LAT1 | LTE Cat 3 Embedded Modem w/Fallback \& GNSS (Serial Interface) | US/Can |
| MTSMC-LAT1-U | LTE Cat 3 Embedded Modem w/Fallback \& GNSS (USB Interface) | US/Can |
| MTSMC-LEU1 | LTE Cat 3 Embedded Modem w/Fallback \& GNSS (Serial Interface) | Euro/GB/AU |
| MTSMC-LEU1-U | LTE Cat 3 Embedded Modem w/Fallback \& GNSS (USB Interface) | Euro/GB/AU |
| MTSMC-LVW2 | LTE Cat 3 Embedded Modem w/GNSS w/o Fallback (Serial Interface) (Verizon) US |  |
| MTSMC-LVW2-U | LTE Cat 3 Embedded Modem w/GNSS w/o Fallback (USB Interface) (Verizon) | US |
| MTSMC-LAT3 | LTE Cat 1 Embedded Modem w/Fallback (Serial Interface) | US/Can |
| MTSMC-LAT3-U | LTE Cat 1 Embedded Modem w/Fallback (USB Interface) | US/Can |
| MTSMC-LVW3 | LTE Cat 1 Embedded Modem w/o Fallback (Serial Interface) (Verizon) | US |

MTSMC-LVW3-U
LTE Cat 1 Embedded Modem w/o Fallback (USB Interface) (Verizon)
HSPA+ Models

Product
MTSMC-H5
MTSMC-H5-U
EV-DO Models
Product

## Description

MTSMC-EV3-N2 EV-DO Rev A Embedded Modem (Serial Interface) (Sprint)
MTSMC-EV3-U-N2
EV-DO Rev A Embedded Modem (USB Interface) (Sprint)
EV-DO Rev A Embedded Modem (Serial Interface) (Verizon)
MTSMC-EV3-U-N3
EV-DO Rev A Embedded Modem (USB Interface) (Verizon)
EV-DO Rev A Embedded Modem (Serial Interface) (Aeris)
EV-DO Rev A Embedded Modem (USB Interface) (Aeris)

## Description

850/900/1800/1900 MHz GSM/GPRS Modem

Description
Region
CDMA2000 1xRTT Modem (Serial Interface) (Sprint)
CDMA2000 1xRTT Modem (Serial Interface) (Verizon)
CDMA2000 1xRTT Modem (Serial Interface) (Aeris)
US
Developer Kits
Product
MTUDK2-ST-CELL
MTSMI-UDK

## Description

HSPA+ Embedded Modem (Serial Interface)
HSPA+ Embedded Modem (USB Interface)
Region
Global
Global

Region

Region
Euro/GB

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)

Region
Global Global

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

## WORLD HEADQUARTERS

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[^1]Produced in the U.S. of U.S. and non-U.S. components. Features and specifications are subject to change without notice.


[^0]:    *See device guides for additional information.

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