

SocketModem® Shield



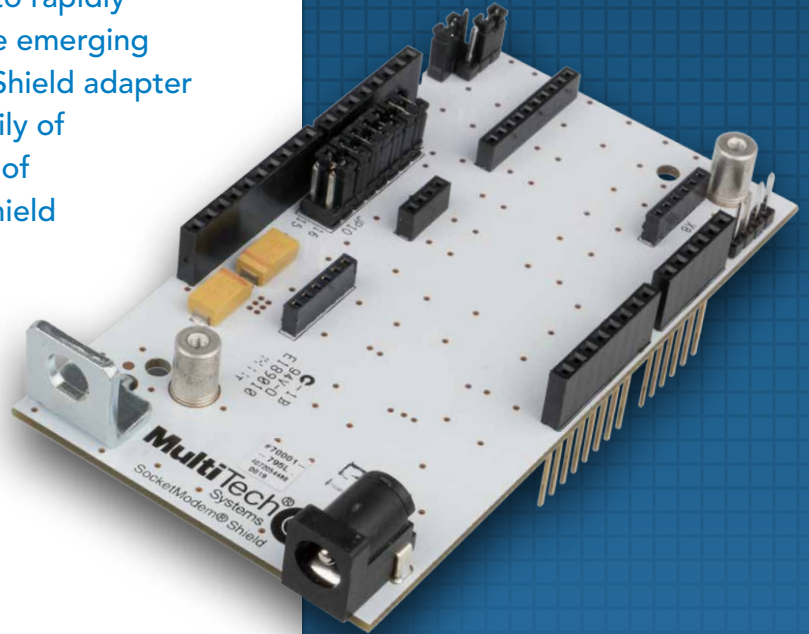
SocketModem® Adapter Shield for Cellular Connectivity

The SocketModem® Shield is the fastest way to rapidly prototype embedded cellular solutions for the emerging Internet of Things (IoT) market. This Arduino Shield adapter board brings MultiTech's industry leading family of embedded cellular modems to a wide variety of development platforms. Not only does this Shield assist with rapid prototyping, MultiTech's line of SocketModems provides the fastest and most hassle free route from concept to deployment on a carrier network.

Features

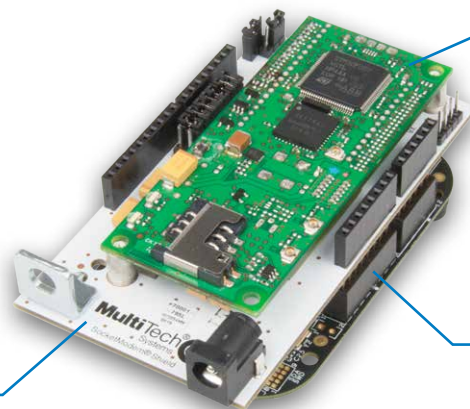
- Standard Arduino R3 Shield interface
- SocketModem compatible footprint (supports all MultiTech SocketModems)
- mbed library support (www.mbed.org)
- Connection and network management
- USB and Serial interface support
- Highly configurable modem signal routing
- SMA antenna connector and hepta-band antenna
- Dedicated power supply

mbed



Targeted Applications

- R&D projects
- University programs & labs
- Rapid prototyping
- Hobbyist projects
- School projects



SocketModem® Shield
- Shield adapter board
(included in kit)

MultiTech SocketModem®
- Embedded cellular radio
(purchase separately)

Shield Compatible Board
- Programmable prototyping device
(purchase separately)

Specifications

Model	MTSAS-DK
Power Requirements	
Input Voltage	5 - 9VDC
Connectors	
RF Antenna	50 ohm SMA (female connector)
Power	2.5mm miniature
Physical Description	
Dimensions (L x W x H)	3.85" x 2.04" x 1.10" (98mm x 52mm x 28mm)
Weight	1.2 oz.

Software Support

MultiTech provides two software development paths.

mbed Library

To support the rapid prototyping and development process MultiTech has developed a set of mbed compatible libraries. mbed is an ARM sponsored software development system and community focused on speed and collaboration. These libraries work with most MultiTech SocketModem products and provide support for:

- SMS Messaging
- Radio & Connection Management
- IP Protocol Support

These C++ libraries can also be used as a reference for developing a library in another language. For more information visit our developer page at:

<http://mbed.org/components/Multi-Tech-SocketModem-Arduino-Shield-MT/>

Command Interface

All MultiTech SocketModems come with a simple text-based command interface (known as AT commands). These simple commands are transferred over the device's serial port and can configure/control all aspects of the cellular modem's operation. This includes special commands to easily use IP protocols like UDP, TCP, HTTP, SMTP, and FTP. Since these are text based commands they are language agnostic and integrate easily into any software development framework. Refer to SocketModem command guides for model specific features and usage:

http://www.multitech.com/en_US/DOCUMENTS/Families/SocketModemCell/manuals.aspx

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http://www.multitech.com/en_US/DOCUMENTS/Families/SocketModemiCell/manuals.aspx

Required Accessories

There are several **REQUIRED** accessories that you will need to purchase along with your SocketModem Shield to complete your cellular development system. This includes the following:

MultiTech SocketModem

MultiTech's industry leading line of fully certified embedded cellular modems gives you a variety of footprint compatible connectivity options. In selecting your option it is important to consider speed, coverage and preferred carrier.

Data Plan

You will need a data plan and SIM Card (GSM radios only) to use your new cellular development system. Contact the appropriate cellular provider based on your region and model of SocketModem to get your device activated. Another option is to use a pre-paid SIM card (GSM radios only).

Shield Compatible Development Board

The Arduino Shield interface has become the de-facto standard in the maker and development communities for bringing additional functionality to embedded development platforms. This includes development ecosystems like:

- ARM® mbed™ (MultiTech Library Support)
- Arduino
- Linux
- .NET Micro Framework

Kit Information

The SocketModem Shield Developer Kit comes with a number of accessories to quickly get you up and running with your development. These include:

- SocketModem Shield
- Quick Start guide
- Hepta-band antenna
- Universal power supply (US, EU, GB, AU)
- Antenna cable assembly

Ordering Information

Developer Kits

Product	Description	Region
MTSAS-DK	SocketModem Adapter Shield Developer Kit	Global

The SocketModem Shield works with the following MultiTech SocketModems. Refer to www.multitech.com or your distributor for additional information about your SocketModem options.

SocketModem	Technology	Region/Carrier
MTSMC-H5-xxx	3G / HSPA+	Global
MTSMC-G3-xxx	2G / GSM/GPRS	Europe
MTSMC-EV3-N3-xxx	3G / cdma2000 EV-DO	US/Verizon
MTSMC-C2-N3-xxx	2G / cdma2000 1xRTT	
MTSMC-EV3-N16-xxx	3G / cdma2000 EV-DO	US/Aeris
MTSMC-C2-N16-xxx	2G / cdma2000 1xRTT	
MTSMC-C2-N2-xxx	2G / cdma2000 1xRTT	US/Sprint

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. Products include a 2-year warranty.

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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