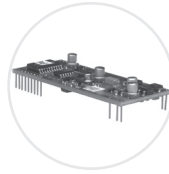# Universal Socket Connectivity Selector Guide

Multi-Tech's universal socket flexible comm-port architecture provides analog dial-up, wireless or Ethernet socket connectivity with interchangeable communications devices. This means you can utilize one system design and populate it with the appropriate connectivity option. Now you can provide a full-line of connectivity by simply dropping in the communications device of choice. In addition, you are assured a seamless migration to future technologies.

```
(I/O) Tip    1   O                          O   64  SPKR (O)
(I/O) Ring   2   O                          O   63  GND (O)
Safety Void  3   ×                          O   62  MICV (I)
(O) TX+      4   O                          O   61  VCC (I)
(O) TX-      5   O                          O   60  -LED SPD (O)
(I) RX+      6   O                          O   59  -LED COL (O)
(I) RX-      7   O                          O   58  -LED LINK (O)
Safety Void  8   ×                          O   57  -LED ACT (O)
             9                              O   56  -LED FDX (O)
            10          Universal Socket        55
(O) TXCLK   11   O                              54
(O) RXCLK   12   O                              53
            13                                  52
            14          SocketModem         O   51  GPIO (I/O)
            15          SocketModem IP      O   50  GPIO (I/O)
            16          SocketModem HSDPA   O   49  GPIO (I/O)
            17          SocketModem EDGE    O   48  GPIO (I/O)
            18          SocketModem GPRS        47
            19          SocketModem CDMA        46
            20          SocketWireless Wi-Fi    45
        (I) 21          SocketWireless Bluetooth 44
    (I) Mic+ 22   O     SocketEthernet IP   O   43  SPK+ (O)
    (I) Mic- 23   O                         O   42  SPK- (O)
  (I) -Reset 24   O                         O   41  GND (I)
(I) USB_VBUS 25   O                         O   40  -DTR (I)
    (I) GND  26   O                         O   39  -DCD (O)
(I/O) USB_DP 27   O                         O   38  -CTS (O)
(I/O) USB_DN 28   O                         O   37  -DSR (O)
(O) LED DCD  29   O                         O   36  -RI (O)
(O) LED RX   30   O                         O   35  -TXD (I)
(O) LED DTR  31   O                         O   34  -RXD (O)
(O) LED TX   32   O                         O   33  -RTS (I)
```
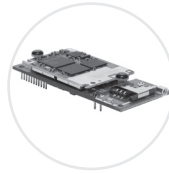
Multi-Tech's Universal IP (UIP) consists of a common set of TCP/IP networking protocols and machine-to-machine (M2M) applications implemented using a standard AT command interface. UIP allows developers to write their host application one time while having the freedom to select from a growing number of Universal Socket communication devices.

Our universal socket developer's guide assists you in evaluating the embedded family of connectivity solutions as you consider the different options for current, as well as, future requirements of your product strategy. To obtain a guide, contact Multi-Tech directly or visit our website at www.multitech.com/products/families/socketmodem

SOCKETMODEM® & SOCKETMODEM® IP

The SocketModem embedded modem includes the controller, data pump and data access arrangement (DAA) in one communications device. With connect rates from 300 bps to 56K, it is ideal for applications that periodically need to send or receive data over a standard telephone line. The SocketModem IP embedded modem integrates a complete data/fax modem solution and TCP/IP protocol stack into one communications device.
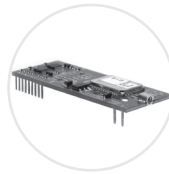
SOCKETMODEM® HSDPA, SOCKETMODEM® EDGE, SOCKETMODEM® GPRS & SOCKETMODEM® CDMA

The SocketModem HSDPA, SocketModem EDGE, SocketModem GPRS and SocketModem CDMA wireless modems offer standards-based HSDPA, EDGE Class 10, multi-band GSM/GPRS Class 10 and CDMA 2000 1xRTT performance respectively. These quick-to-market communications devices allow developers to add wireless communication to products with a minimum of development time and expense.
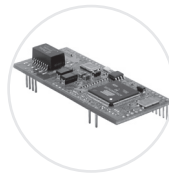
SOCKETWIRELESS® Wi-Fi®

The SocketWireless Wi-Fi device server connects serial devices to an IP network via 802.11b wireless networking. It is ideal for remote monitoring, control and configuration of any system.

SOCKETWIRELESS® BLUETOOTH®

The SocketWireless Bluetooth adapter utilizes Bluetooth technology to provide a secure, standards-based wireless connection between a host and a peripheral device. Providing wireless data transfer up to 100 meters, it completely eliminates the need for serial cable connections.

SOCKETETHERNET IP®

The SocketEthernet IP device server connects serial devices to an IP network. It is ideal for remote monitoring, control, maintenance, and configuration of any system.

MultiTech® Systems

SocketModem®

Complete, ready-to-integrate voice/data/fax modems.

Models	MT2492SMI-xx	MT2456SMI-xx	MT5600SMI-xx	MT9234SMI-xx	MT5656SMI-xx
Telecom Approvals					
Global		X	X	X	X
Interface					
Serial	X	X	X	X	X
Parallel			X	X	X
Power					
3.3 Volt	X	X	X	X	X
5 Volt	X	X	X	X	X
Maximum Data Rate					
V.92/56K	X		X	X	X
V.34/33.6K	X		X		X
V.32bis/14.4K			X		X
V.22bis/2400 baud	X	X			
Fax Capability					
V.34 Fax				X	
V.17 Fax			X	X	X
V.29/V.27/V.21 Fax			X	X	X
Fax Class 1			X	X	X
Fax Class 1.0			X	X	X
Fax Class 2				X	X
Fax Class 2.0/2.1				X	
Fax Compression (MH, MR, MMR)				X	
Error Correction Mode (ECM)				X	
Memory Type					
Flash + RAM				X	
Masked ROM	X	X	X		X
Features					
11-bit Mode			X	X	X
U.S. Caller ID	X	X		X	X
Leased Line				X	
V.22bis Fast Connect	X	X	X	X	X
FastPOS (V.29)			X		X
Callback Security				X	
Industrial Temp Range				X	
Medical Isolation				X	
LED Pin Outputs		X	X	X	X
Extension Pickup Detection	X	X	X		X
Remote Hang-up Detection	X	X	X		X
Line-in-use Detection	X	X	X		X
Digital PBX Detection & Protection	X	X	X		X
Voice Record & Playback (TAM)			X	X	X
Speakerphone I/O					X

See datasheets for more specifications and ordering part numbers.

Developer's guides are available upon request.

Features and specifications are subject to change without notice.

SocketModem® CDMA, SocketModem® GPRS SocketModem® EDGE & SocketModem® HSDPA

Complete, ready-to-integrate CDMA, GPRS, EDGE and HSDPA wireless modems.

Models	MTSMC-C	MTSMC-G	MTSMC-E	MTSMC-H
Network Type	CDMA2000 1XRTT	GPRS Class 10	EDGE Class 10	HSDPA 3.6
Dual Band CDMA	X			
Dual Band GSM		X		
Quad-band GSM			X	X
Tri-Band HSDPA				X
Short Message Service	X	X	X	X
14.4K Circuit Switched Data	X	X	X	9.6K/64K
Maximum Packet Data Rate	153.6K	85.6K	240K	3.6M
Maximum DTE Speed	230K	115.2K	460K	920K
USB 2.0 Full Speed				X
AT Command Compatible	X	X	X	X
MMCX Antenna Connector	X	X	X	X
5 VDC Operation	X	X	X	X

Embedded TCP/IP Networking

Models	MT5656SMI-IP-xx	MT100SEM	MT800SWM	MTSMC-C	MTSMC-G	MTSMC-G-F4-IP	MTSMC-E
Network Protocol Support							
ARP		X	X				
DHCP Client		X	X				
DNS	X	X	X	X	X	X	X
FTP Client	X	X	X		X	X	X
ICMP (Ping)	X	X	X		X	X	X
POP 3 (Receive mail)	X	X	X		X	X	X
PPP (Dial-out)	X			X	X	X	X
SMTP (Send mail)	X	X	X		X	X	X
SNTP Client		X					
TCP Socket	X	X	X	X	X	X	X
UDP Socket	X	X	X	X	X	X	X
M2M Features							
Automatic/Persistent Connect	X					X	
Device Monitor	X					X	
Modem Emulation	X					X	
Ping/TCP Keep Alive	X					X	
Wake-up on Ring	X					X	
Wake-up on Caller ID						X	
Authentication Protocols							
CHAP	X			X	X	X	X
PAP	X			X	X	X	X

MultiTech® Systems