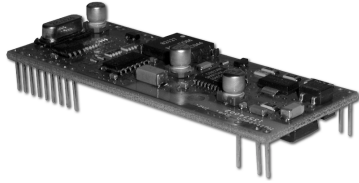


# SocketModem™

## Embedded Dial-up Modems



## Benefits

- Global Compliance
- Interchangeable Socket Connectivity
- Quick-to-Market Solution
- Increased System Reliability

The Multi-Tech SocketModem family creates communication ready devices by integrating modem or Internet functionality into a single socket design. With the SocketModem form-factor, you have the ability to provide remote monitoring, diagnostics, data collection or virtually any communication ability to your existing or new device via interchangeable dial-up, wireless or Ethernet socket connectivity. Never before has so much communication technology been integrated into such an easy-to-use package. The SocketModem gives you an edge on your competition while accelerating your time-to-market.

## Features

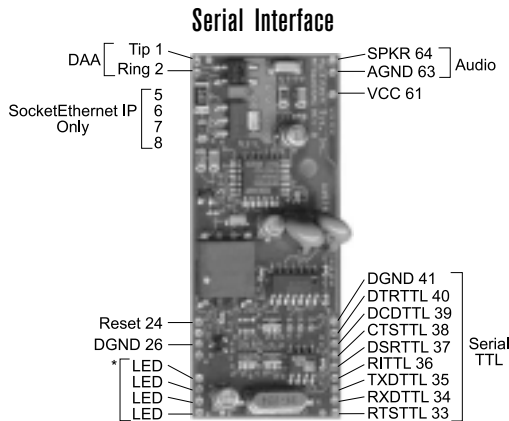
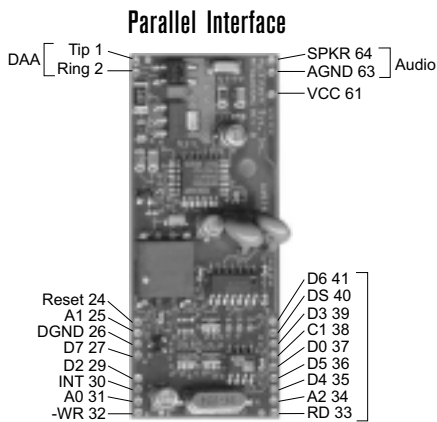
- Telecom approved in more than 50 countries
- 2400 baud to 56K bps SocketModem build options
- V.92, V.34, V.32 and V.22 data rate options
- High speed models backward compatible with lower speeds
- V.34 and V.17 Fax rate options
- V.44 and V.42bis data compression
- V.42 Error Correction
- Intelligent DAA technology detects line status
- Caller ID
- Voice record and playback
- Flash upgradeable firmware
- FastPOS (V.29) and V.22bis Fast Connect
- V.80 Synchronous Access
- Leased (dry) line operation
- 10 or 11-bit modes
- 3.3v or 5v power input options
- Serial or parallel interfaces

Not all features available on all models.

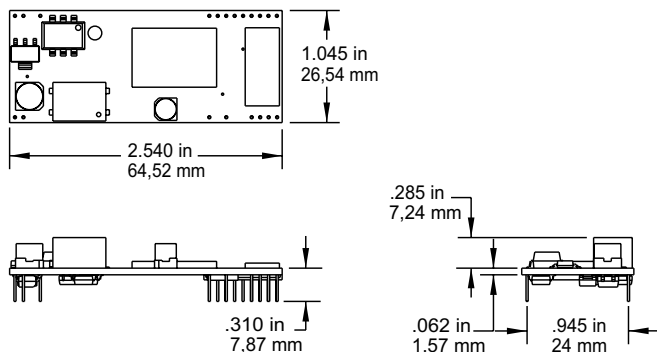
*Complete, Ready-to-Integrate Embedded Dial-up Modems*

## Highlights

**SocketModem Pin Connections.** The SocketModem interfaces easily with existing products through a standard serial or parallel communication channel. The complete on-board DAA interfaces with an RJ-11 jack for direct connection to the public switched telephone network. The SocketModem provides audio circuit outputs for audio call-progress monitoring, and LED driver outputs for visual monitoring of Carrier Detect, Transmit Data, Receive Data and DTR signals. The SocketModem is a Data Terminal Equipment (DTE) device with a serial or parallel interface and asynchronous protocol support. The serial DTE channel is capable of transfer speeds up to 230.4K bps and can be interfaced directly to a UART or microcontroller.



\* Available without LED pins.



## Specifications

### Data Modem

ITU-T V.92/V.90/56K (-92 build option), V.34/33.6K (-34 build option), V.32bis/14.4K (-32 build option), V.22bis/2400 baud (-22 build option), V.22, V.23, & V.21; Bell 212A & Bell 103  
 V.44 Error Correction (MT5634SMI and MT5600SMI)  
 V.42 LAPM, MNP 2-4 Error Correction  
 V.42bis & MNP Class 5 data compression

### Fax Modem

ITU-T V.34 (MT5634SMI)  
 ITU-T V.17, V.29, V.27 & V.21 Ch. 2 (MT5634SMI, MT5600SMI)  
 Telephony/TAM  
 V.253 commands  
 2-bit & 4-bit ADPCM, 8-bit linear PCM & 4-bit IMA coding  
 8kHz sample rate  
 Concurrent DTMF, ring, & Caller ID detection

### Power Requirements

#### MT5634SMI:

Typical: 260mA (1.3W @ 5V DC)  
 Maximum: 420mA (2.1W @ 5.25V DC)  
 Typical: 180mA (.59W @ 3.3V Dc)  
 Maximum: 290mA (1.04W @ 3.6V DC)

#### MT5600SMI:

Typical: 117mA (.58W @ 5V DC)  
 Maximum: 118mA (.61W @ 5.25V DC)  
 Typical: 115mA (.38W @ 3.3V Dc)  
 Maximum: 116mA (.41W @ 3.6V DC)

#### MT2456SMI:

Typical: 78mA (.390W @ 5V DC)  
 Maximum: 82mA (.431W @ 5.25V DC)  
 Typical: 74mA (.244W @ 3.3V Dc)  
 Maximum: 78mA (.273W @ 3.6V DC)

### Physical Description

1.045" w x 2.541" h x 0.68" d; 0.6 oz.  
 (2.65cm x 6.45cm x 1.7cm; .017 kg.)

### Operating Environment

0-70° C, -40 – 85° C (Industrial Temperature build options)

### Certifications

UL1950, EN60950, CSA 950, AS 3260, CCC, EN60601 (High Voltage Dielectric build option)  
 EMC: FCC Part 15 (Class B), Canada (Class B), EN55022 (Class B), EN55024

## Telecom Certifications\* :

Argentina	Hungary	Philippines
Australia	Iceland	Poland
Austria	India	Portugal
Belgium	Indonesia	Russia
Brazil	Ireland	Singapore
Canada	Israel	Slovak Republic
Chile	Italy	Slovenia
China	Japan	South Africa
Cyprus	Korea	Spain
Czech Republic	Liechtenstein	Sweden
Denmark	Luxembourg	Switzerland
Finland	Malaysia	Taiwan
France	Mexico	Thailand
Germany	Netherlands	Turkey
Greece	New Zealand	United Kingdom
Hong Kong	Norway	United States

\* Some models may have additional approvals.

## Ordering Information

Product	Description	Region
MT2456SMI-22	V.22bis Serial Data Only 5V	Global
MT2456SMI-L22	V.22bis Serial Data Only 3.3V	Global
MT5600SMI-32	V.32bis Serial Data/Fax 5V	Global
MT5600SMI-L32	V.32bis Serial Data/Fax 3.3V	Global
MT5600SMI-P32	V.32bis Parallel Data/Fax 5V	Global
MT5600SMI-34	V.34 Serial Data/Fax 5V	Global
MT5600SMI-L34	V.34 Serial Data/Fax 3.3V	Global
MT5600SMI-XL34	V.34 Serial Data/Fax 3.3V	Global
MT5600SMI-P34	V.34 Parallel Data/Fax 5V	Global
MT5600SMI-PL34	V.34 Parallel Data/Fax 3.3V	Global
MT5600SMI-92	V.92 Serial Data/Fax 5V	Global
MT5600SMI-L92	V.92 Serial Data/Fax 3.3V	Global
MT5600SMI-XL92	V.92 Serial Data/Fax 3.3V	Global
MT5600SMI-P92	V.92 Parallel Data/Fax 5V	Global
MT5600SMI-PL92	V.92 Parallel Data/Fax 3.3V	Global
MT5634SMI-34	V.34 Serial Data V.34 Fax 5V	Global
MT5634SMI-92	V.92 Data V.34 Fax 5V	Global
MT5634SMI-P-92	V.92 Parallel Data V.34 Fax 5V	Global
MT5634SMI-ITP-92	V.92 Serial Data V.34 Fax Ind Temp 3.3V	Global
MT5634SMI-P-ITP-92	V.92 Data V.34 Fax Ind Temp 3.3V	Global
MT5634SMI-HV-92	V.92 Serial Data V.34 Fax Medical 5V	Global
MT5634SMI-P-HV-92	V.92 Parallel Data V.34 Fax Medical 5V	Global
MTSMI-DK	SocketModem Serial Developer Kit	Global
MTSMI-P-DK	SocketModem Parallel Developer Kit	Global

Ordering codes	
92	V.92/56K data rate
34	V.34/33.6K data rate
32	V.32bis/14.4K data rate
22	V.22bis/2400 baud data rate
P	Parallel interface (default is serial)
X	Exclude LED pin outputs (Legacy MT5600SMI and MT3400SMI support)
L	3.3 Volt power input (default is 5V)
ITP	-40 – 85° C Industrial temperature range
HV	High Voltage 3KV dielectric isolation
DK	Developer kit

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

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Tel: +(44) 118-959 7774

Models	MT2456SMI-xx	MT5600SMI-xx	MT5634SMI-xx
<b>Telecom Approvals</b>			
Global	X	X	X
<b>Interface</b>			
Serial	X		
Serial or Parallel		X	X
<b>Power</b>			
3.3 Volt	X	X	X
5 Volt or 3.3 Volt	X	X	X
<b>Maximum Data Rate</b>			
V.92/56K		X	X
V.34/33.6K		X	X
V.32bis/14.4K		X	
V.22bis/2400 baud	X		
<b>Fax Capability</b>			
V.34 Fax			X
V.17 Fax		X	X
V.29/V.27/V.21 Fax		X	X
Fax Class 1		X	X
Fax Class 1.0		X	X
Fax Class 2			X
Fax Class 2.0/2.1			X
<b>Memory Type</b>			
Flash + RAM			X
Masked ROM	X	X	
<b>Features</b>			
11-bit Mode			X
Caller ID	X	X	
Leased Line			X
V.22bis Fast Connect	X	X	X
FastPOS (V.29)		X	
Voice Record and Playback		X	X
Industrial Temp Range			X
Medical Isolation			X
LED Pin Outputs	X	X	X
Extension Pickup Detection	X	X	
Remote Hang-up Detection	X	X	
Line-in-use Detection	X	X	
Digital PBX Detection & Protection	X	X	