

# Delta Design Modem Solutions

## SMD24XX Socket Module

### Product Description

The SMD24XX MODEM MODULE is a complete modem module that meets global telephone line requirements. Available in a socket (64,5 mm x 26,5mm) size footprint, the device is ideal for embedded modem applications due to its small board space, low power consumption and global compliance. The device is available in 5 different versions, ranging from V.92 down to V.22bis. The module allows you to reduce time to market by using a ready to use approved solution.

### Features

- Data modem formats ITU – V.92, V.90, V.34, V.32bis, V.32, V.22bis, V.22, V.23, V.21, Bell 212A, 103
- V.23 Reversing
- Fast Connect V.21, V.22, Bell103, V.29
- Error Correction: ITU-V.42
- Data Compression: ITU-V.42bis
- Asynchronous Serial DTE interface
- Incoming call detection
- Caller ID detection and decode
- AT command set
- Call progress with programmable biquad filters
- Integrated DAA
  - Globally compliant line interface
  - Parallel handset (intrusion) detection
  - Overcurrent detection and protection
- 3V3 or 5V power supply (see feature table)
- Small Footprint
- Low power consumption
- EEPROM for custom defaults and firmware upgrade (see feature table)
- Based on Silicon Laboratories isomodem solution
- SIA protocol (SMD2401 version)

### Applications

- Security systems
- Point-of-sale verification systems
- Set top boxes
- Industrial /medical monitoring systems
- Power meters
- Remote monitoring
- Email Terminals
- ATM Terminals

### Standard Compliance

#### Telecom

- certified against latest european harmonized standards (ETSI TS103021-1 V1.1.1 (2003-08), ETSI TS103021-2 V1.1.2 (2003-09), ETSI TS103021-3 V1.1.2 (2003-09))

#### Safety

- IEC60950-1 compliant design
- Use of certified safety capacitors

#### EMC

Protection requirements with respect to electromagnetic compatibility:

- EN55022 class B
- EN55024

### Contact

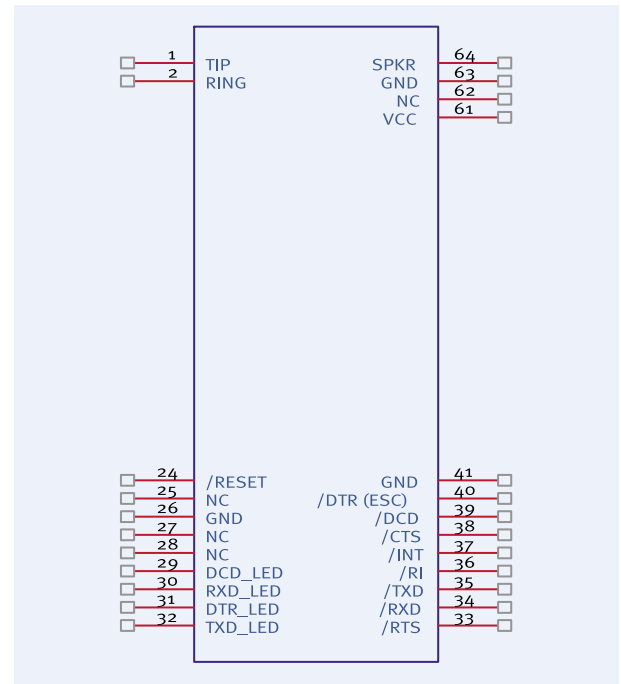
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## PIN Function

1	Telephone Line TIP
2	Telephone Line RING
24	Reset Active low input
25	NC
26	GND
27	NC
28	NC
29	DCD indicator , can drive LED anode (2mA)
30	RXD indicator , can drive LED anode (2mA)
31	DTR (ESC) indicator, can drive LED anode (2mA)
32	TXD indicator, can drive LED anode(2mA)
33	/RTS Request To Send
34	/RXD Receive Data
35	/TXD Transmit Data
36	/RI Ring Indicator
37	/INT Interrupt output
38	/CTS Clear To Send
39	/DCD Data Carrier Detect
40	/DTR (/ESC) Data Terminal Ready
41	GND
61	Vcc Power Supply ( 5V or 3V3 )
62	NC
63	GND
64	AOUT analog output

## PIN Signals



## SMD24XX modem family features

Feature	SMD2401	SMD2404	SMD2415	SMD2434	SMD2457	SMD2493
Speed(bps)	2400/2400	2400/2400	14400/14400	33600/33600	33600/56000	48000/56000
Global Compliance	X	X	X	X	X	X
V.42 MNP2-4		X	X	X	X	X
V.42bis MNP5			X	X	X	X
Fast Connect	X	X	X	X	X	X
Security Formats	X					
EEPROM		X	X	X	X	X
V.92						X

## Evaluation Kit

A modem „motherboard“ is available which allows easy evaluation of the SMD24XX modem module. This board allows the customer to connect the module to a PC via a standard DB-9 connector and to the PSTN via a standard RJ11 modular connector. The motherboard fits in a standard ABS housing.

## Ordering Information

SMD2401-3V3	V.22bis modem 3V3 supply
SMD2401-5V	V.22bis modem 5V supply
SMD2404-3V3	V.22bis modem 3V3 supply
SMD2404-5V	V.22bis modem 5V supply
SMD2415-3V3	V.32bis modem 3V3 supply
SMD2415-5V	V.32bis modem 5V supply
SMD2434-3V3	V.34bis modem 3V3 supply
SMD2434-5V	V.34bis modem 5V supply
SMD2457-3V3	V.90bis modem 3V3 supply
SMD2457-5V	V.90bis modem 5V supply
SMD2493-3V3	V.92bis modem 3V3 supply
SMD2493-5V	V.92bis modem 5V supply