

SM H2

MODEM MODULE MANUAL

DocNumber: **SM H2 MANUAL**
Version: 05042012
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1 INTRODUCTION

1.1 PURPOSE

This document describes the SM H2 MODEM MODULE.

The SM H2 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 module allows you to reduce time to market by using a ready to use approved solution.

1.2 VERSIONS

SM H2 3V3	Without voice option
SM H2 3V3 V	With voice option

1.3 GENERAL MODEM FEATURES

- Modulation and protocols
 - ITU-T V.92
 - V.90, V.34, V.32bis, V.32, V.22bis
 - V.21, Bell 212A, Bell103
 - V.23 Reversing, V.23 half-duplex
 - V.29 FastPOS and V22bis fast connect
 - V.80 Synchronous Access Mode
 - V.17/V.29 Fax Class 1/1.0 and Fax Class 2
- V.44, V.42bis, MNP5 data compression
- Error Correction: ITU-V.42
- Call Waiting detection
- Serial Asynchronous host interface
- Flow control and speed buffering
- Type I and Type II Caller ID detect
- Call progress, blacklisting
- Integrated DAA
 - Extension pickup detection
 - Digital Line protection
 - Line –in-Use detection
- 3V3 or 5V power supply
- Low power consumption
- NVRAM for custom defaults
- Based on Silicon Labs Isomodem solution
- Small Size 64.5 x 26.5 mm
- Reliable SMD based design
- SIA protocol and Contact ID for alarm equipment
- 3 kV isolation
- Full-duplex PCM voice pass-through
- Telephony/TAM support
- Speakerphone

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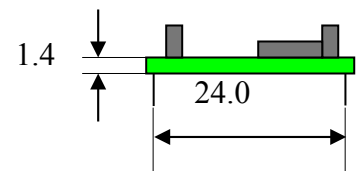
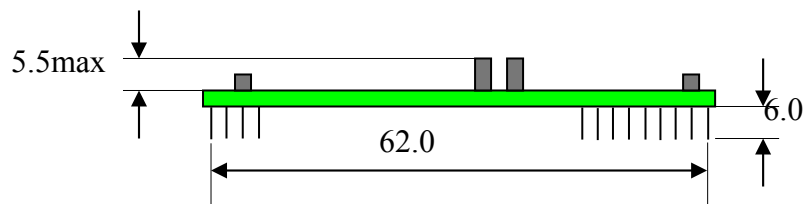
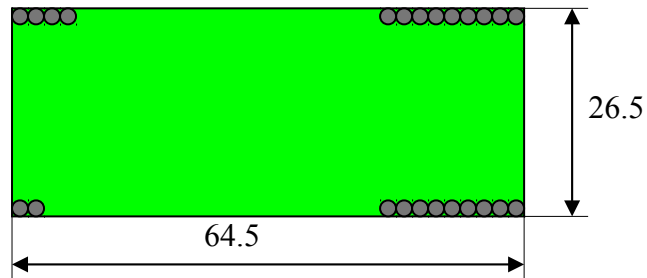
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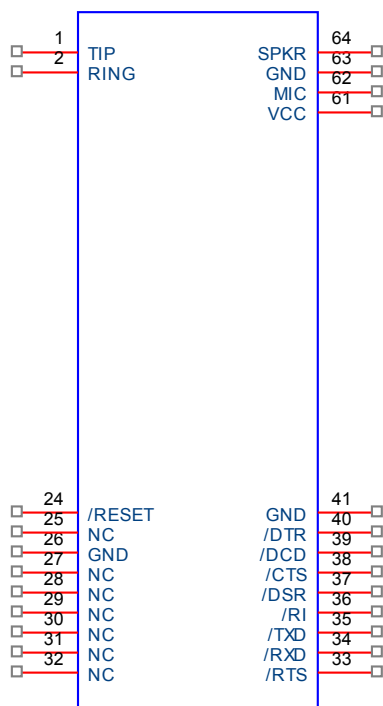
2 PHYSICAL DIMENSIONS

All Dimensions in mm
Length : 64.5 ± 0.2 mm
Width : 26.5 ± 0.2 mm
Pin pitch : 2 mm



3 INTERFACE

3.1 PIN DESCRIPTION



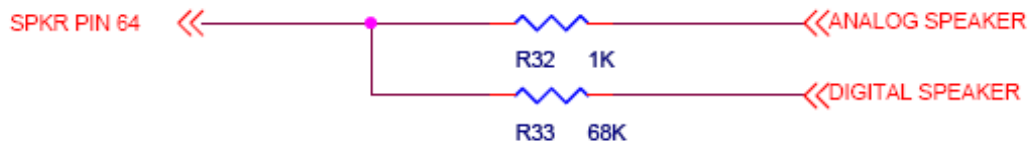
PIN	NAME	DESCRIPTION	Type
1	TIP	Telephone Line TIP	Phone Line
2	RING	Telephone Line RING	Phone Line
24	/RESET	An active low input that is used to reset all control registers to a defined initialized state.	Input
25	NC	Not Connected	
26	GND	GND	GND
27	NC	Not Connected	
28	NC	Not Connected	
29	NC	Not Connected	
30	NC	Not Connected	
31	NC	Not Connected	
32	NC	Not Connected	
33	/RTS	Request To Send	Input
34	/RXD	Receive Data	Output
35	/TXD	Transmit Data	Input
36	/RI	Ring Indicator	Output
37	/INT	Interrupt output	Output
38	/CTS	Clear To Send	Output
39	/DCD	Data Carrier Detect	Output
40	/DTR	Data Terminal Ready	Input
61	VCC	Vcc Power Supply (3V3)	POWER
62	MIC	Microphone input	Input
63	GND	GND	GND
64	SPKR	Speaker output	Output

3.2 POWER SUPPLY

-3V3 MODELS: 3.3Vdc 10% 50mA max

4 SPKR AND MIC

The SPKR output (pin 64) is a combination of the chipset digital speaker output and the voice codec (voice models only) analog speaker output.



The MIC input (pin 62) interfaces directly to the voice codec mic input pin. There is no mic bias voltage on this pin .

5 ENVIRONMENT

Temperature: -20°C to +70°C
Humidity: 10% to 75% non -condensing

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6 DECLARATION OF CONFORMITY

The undersigned hereby declares, that the product SM_H2_3V3 / SM_H2_3V3_V conforms to the main requirements and normative documents according to the Council Directive 1995/5/EEC (R&TTE Directive)

The qualification of the product to requirements is shown by conformance with the following standards

Telecom

- 1) ES203 021-1 V2.1.1
- 2) ES203 021-2 V2.1.2
- 3) ES203 021-3 V2.1.2

Safety

IEC60950-1

EMC

EN55022

EN55024

7 CONTACT

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The information in this document are subject to change without notice.

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