

LPMS-ME1

Quick Start Guide Ver.1.1



LP-RESEARCH Inc.
<http://www.lp-research.com>

1. Revisions

Date	Version	Changes
2016-07-18	ver. 1.1	Initial release

2. Pin out

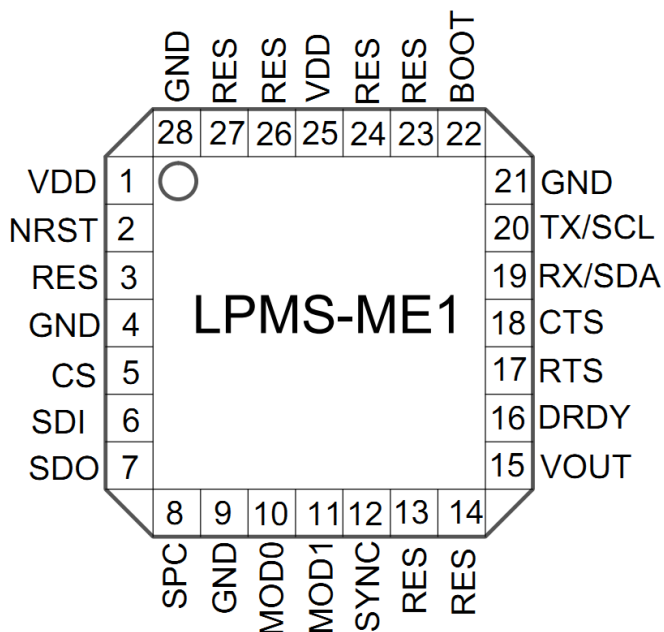


Fig. 1. Sensor pin out

Table 1-1 Pin out

Pin No.	Name	Function	Description
1, 25	VDD	Power supply	3.3V~5.5V
2	NRST	Reset	Active low
5	CS	Chip select	For SPI interface only
6	SDI	Slave data input	SPI serial data input
7	SDO	Slave data output	SPI serial data output
8	SPC	Serial clock	SPI clock
10	MOD0	Interface selection	Refer to Table 1-2.
11	MOD1		
12	SYNC	Sync	For signal synchronization



15	VOUT	Power output		3.3V output (current < 20mA)
16	DRDY	Data ready		
17	RTS	UART_RTS		
18	CTS	UART_CTS		
19	RX/SDA	UART mode	UART_RX	Common used for UART and I2C communication. In UART, it is used as RX signal, and when in I2C mode it is used for SDA signal.
		I ² C mode	I ² C_SDA	
20	TX/SCL	UART mode	UART_TX	Common used for UART and I2C communication. In UART mode, it is used as TX signal, and when in I2C mode it is used for SCL signal.
		I ² C mode	I ² C_SCL	
22	BOOT	Boot mode		Normal operation: pull low IAP operation: pull high
4, 9, 21, 28	GND	-		Signal ground
3, 13, 14,23, 24,26, 27	RES	-		reserved

Table 1-2 Communication Interface Selection

MOD1	MOD0	Interface
0	0	UART (default)
0	1	SPI (not available yet)
1	0	I ² C (ADD0=0)
1	1	I ² C (ADD0=1)

Note: ADD0: I²C address LSB.

3. Application Examples

UART Mode

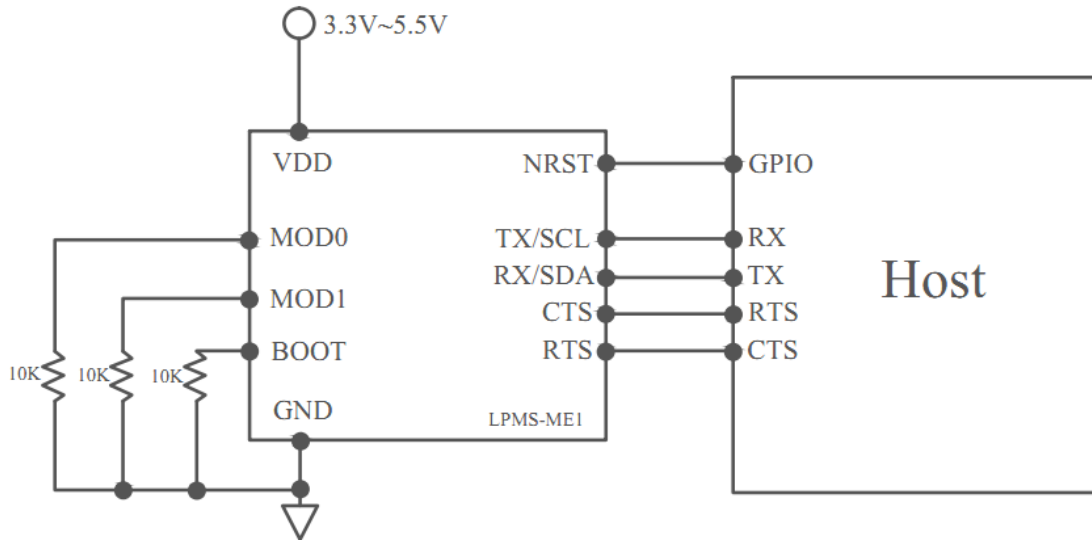


Fig. 2. LPMS-ME1 UART Mode

I²C Mode

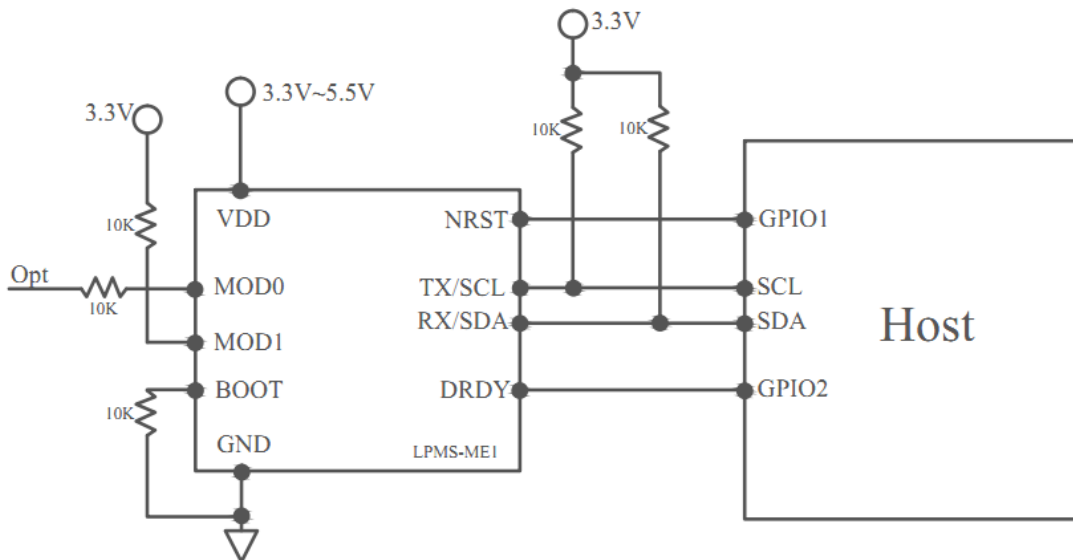


Fig. 3. LPMS-ME1 I²C Mode

SPI Mode

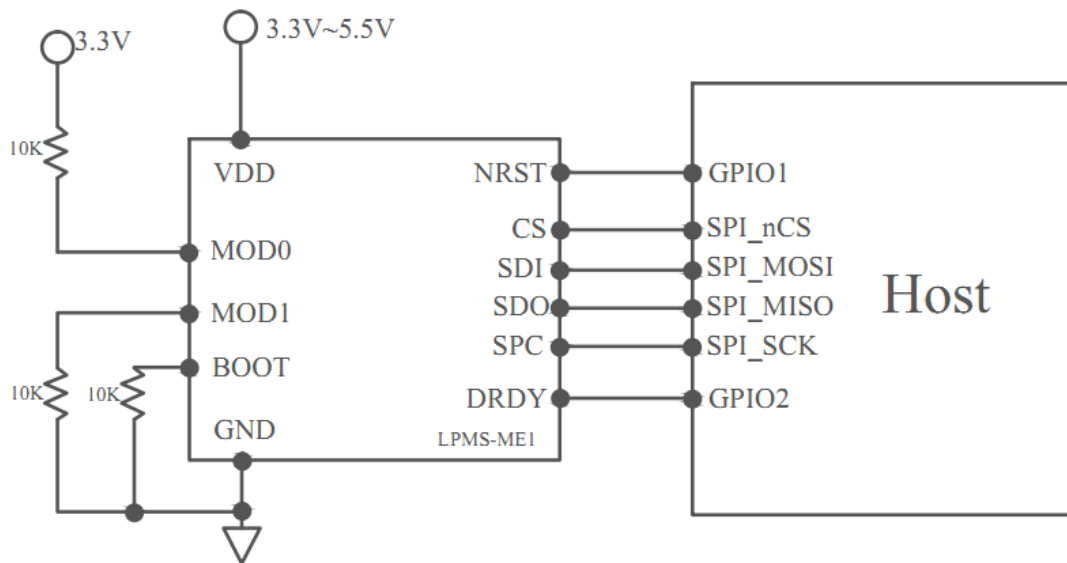


Fig. 4. LPMS-ME1 SPI Mode

4. Coordinate

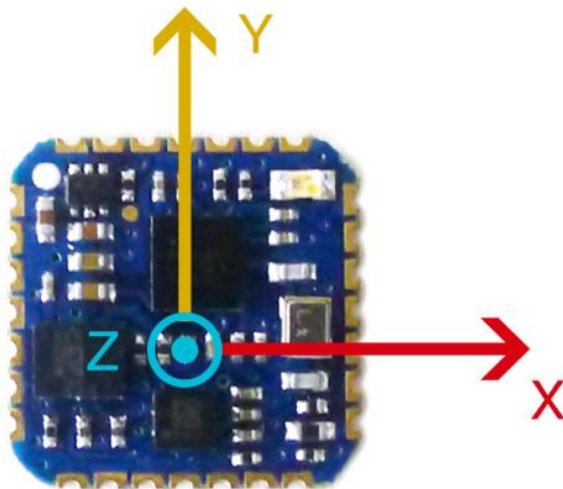
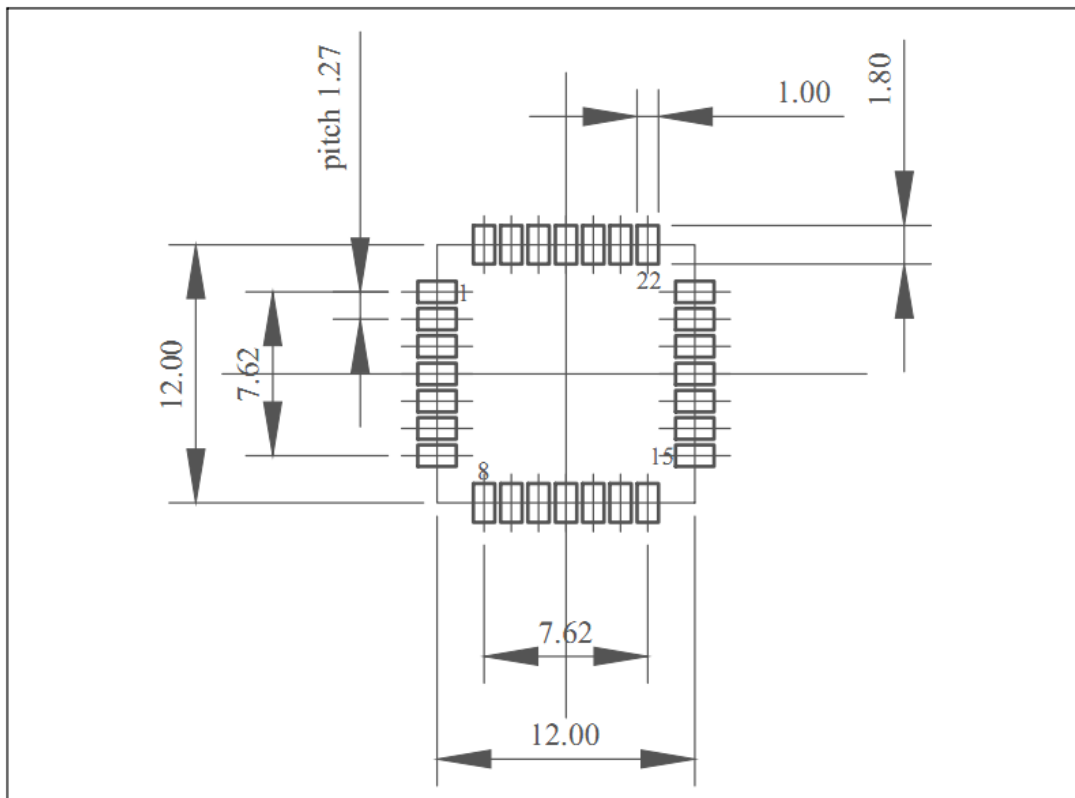
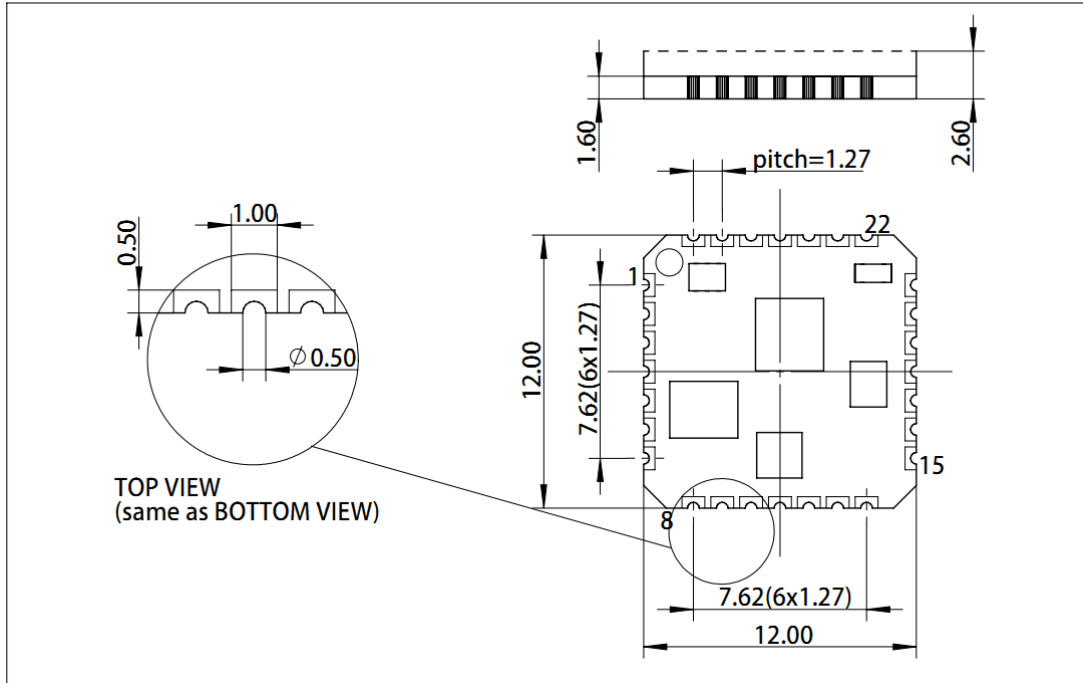


Fig. 5. LPMS-ME1 Coordinate

5. Footprint





© 2017 LP-RESEARCH - All rights reserved

Tokyo – Guangzhou – Munich

www.lp-research.com