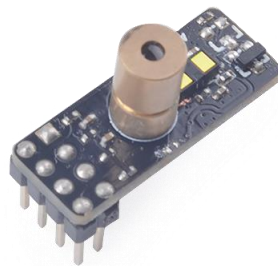


# SP-ToF(1P) Datasheet

## v1.0



### Features:

- Using SP-MOD I2C to communicate with TOF module
- ToF module : The VL53L0X sensor used in this module is an I2C interface and a long distance single point flight time measurement (ToF) sensor. It has high performance and high reliability.
- With the longest distance of 4m and the highest refresh rate of 50Hz
- With the red laser pointer, the laser is activated through XSHUT and connected by SP\_MOD.
- Size :25\*10mm
- Connection method: SP-MOD (2\*4P 2.54mm pin header).

### UPDATE

V1.0	2019/4/6 Published original document

### INTRODUCTION

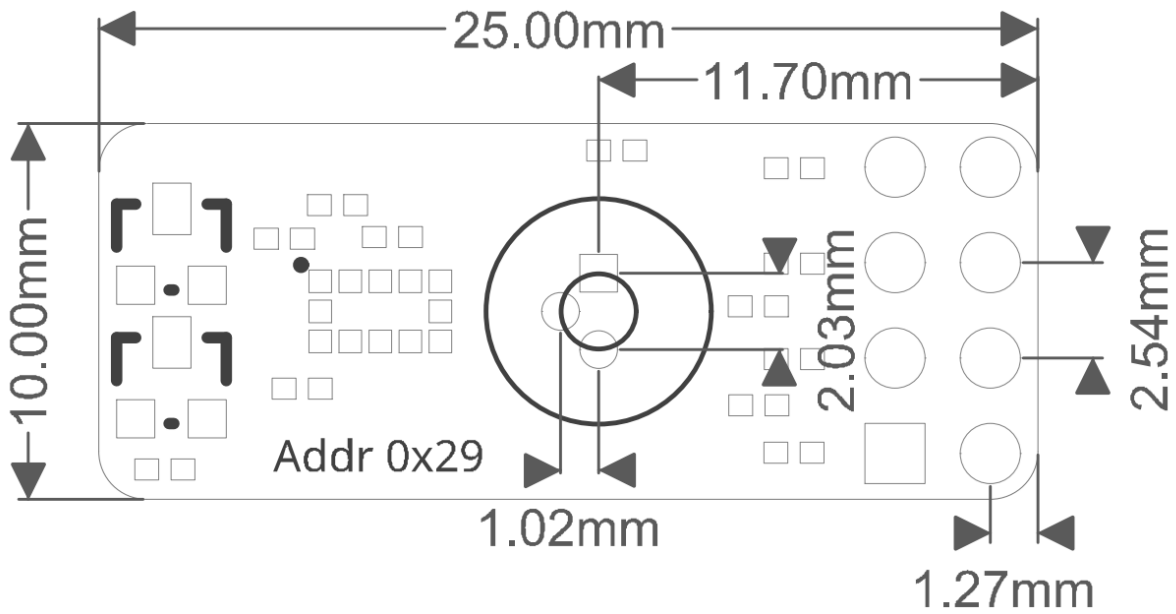
ToF Module: VL53L0X	Max ranging distance : 4000mm Refresh rate : 50Hz Measuring angle : 27° Communication Interface : I2C Supply voltage of external power supply : 2.6V~3.5V Range of working temperature : -40°C - 80°C Supply current of external power supply : 18mA Sleep Status of Current : 5uA
Red laser module	Supply voltage of external power supply : 2.8-3.3V Supply current of external power supply : 20mA

### HARDWARE FEATURES

Supply voltage of external power supply	2.8~3.5V
Supply current of external power supply	<20mA
Temperature rise	<30K
Range of working temperature	-40°C ~ 85°C

### SIZE

Length	25mm
Width	10mm
Height	3.15 mm (Excluding the height of pin header :8.7mm)



PIN DESCRIPTION		
1	GND	Ground
2	IRQ	Interrupt input pin, connected to GPIO1 of VL53L0X
3	NC	Not connected
4	SDA	Receive data signal
5	3V3	Power supply(3.3V)
6	NC	Not connected
7	SHT	Xshutdown pin(active low)
8	SCL	Transmit clock signal

RESOURCES	
Official Website	<a href="http://www.sipeed.com">www.sipeed.com</a>
Github	<a href="https://github.com/sipeed">https://github.com/sipeed</a>
BBS	<a href="http://bbs.sipeed.com">http://bbs.sipeed.com</a>
Wiki	<a href="http://maixpy.sipeed.com">maixpy.sipeed.com</a>
Sipeed Model Store	<a href="https://maixhub.com/">https://maixhub.com/</a>
SDK Reference	<a href="http://dl.sipeed.com/MAIX/SDK">dl.sipeed.com/MAIX/SDK</a>
HDK Reference	<a href="http://dl.sipeed.com/MAIX/HDK">dl.sipeed.com/MAIX/HDK</a>
E-mail(Technical Support)	<a href="mailto:support@sipeed.com">support@sipeed.com</a>
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