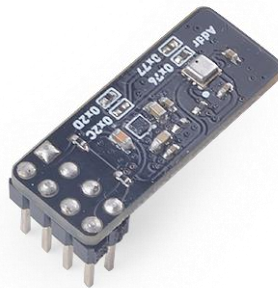


SP-WEATHER Datasheet

v1.0



Features:

- Connect to the board through the SP-MOD I2C interface
- Magnetic sensor: QMC7983 is a 3-axis single chip magnetic sensor integrated with AMR and ASIC, I2C interface with standard mode and rapid mode, Stable sensitivity in a large operating temperature range, low power consumption (75uA).
- Sensitivity: ± 30 Gauss.
- Humidity sensor: BME280 is a humidity sensor that can measure relative humidity, barometric pressure and ambient temperature.
- Size :25*10mm
- Connection method: SP-MOD (2*4P 2.54mm pin header)

UPDATE

V1.0	2019/4/7 Published original document

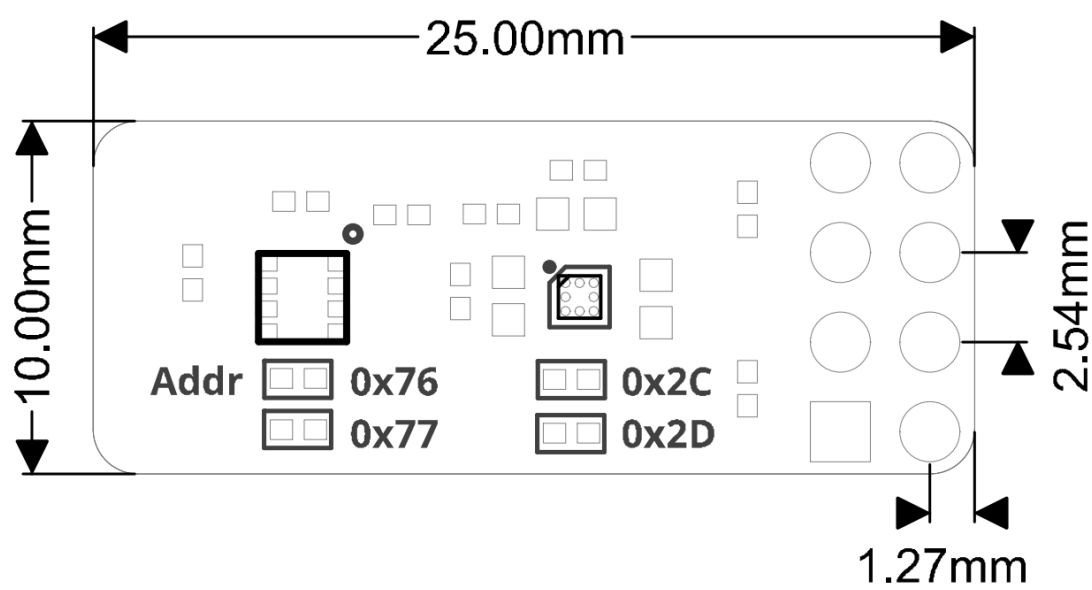
INTRODUCTION

Magnetic sensor: QMC7983	Supply voltage of external power supply : 2.6V~3.6V Supply current of external power supply: 70uA Sleep Status of Current : <1uA Sensitivity : ± 30 Gauss humidity sensor : LSB/mG RMS Noise : 2 mG Interface : I2C, default address 0x2C (Select resistance adjustment)
Humidity sensor: BME280	Supply voltage of external power supply : 1.71V~3.6V Supply current of external power supply: <633uA Sleep Status of Current : <5uA Humidity sensor : Response time : ($\square 63\%$) 1 s Accuracy tolerance : $\pm 3\%$ relative humidity Hysteresis : $\pm 1\%$ relative humidity Pressure sensor : RMS Noise: 0.2 Pa, equiv. to 1.7cm Temperature coefficient offset : ± 1.5 Pa / K, equiv. to ± 12.6 cm at 1 °C temperature change. Interface : I2C,default address 0x76 Select resistance adjustment

HARDWARE FEATURES

Supply voltage of external power supply	2.6V~3.6V
Supply current of external power supply	<1mA
Temperature rise	<30K
Range of working temperature	-30°C ~ 85°C

SIZE	
Length	25mm
Width	10mm
Height	2.9 mm(Excluding the height of pin header :8.7mm)



PIN DESCRIPTION		
1	GND	Ground
2	NC	Not connected
3	NC	Not connected
4	SDA	Receive data signal
5	3V3	Power supply(3.3V)
6	NC	Not connected
7	NC	Not connected
8	SCL	Transmit clock signal

RESOURCES	
Official Website	www.sipeed.com
Github	https://github.com/sipeed
BBS	http://bbs.sipeed.com
Wiki	maixpy.sipeed.com
Sipeed Model Store	https://maixhub.com/
SDK Reference	dl.sipeed.com/MAIX/SDK
HDK Reference	dl.sipeed.com/MAIX/HDK
E-mail(Technical Support)	support@sipeed.com
Telgram Link	https://t.me/sipeed
QQ Group	878189804



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