### **PIN Definition** 24 NRST ■ N/A PC10← PBO IO INT1← PA6\_SPI1\_MISO PA9\_USART1\_TX PC6 PA10\_USART1\_RX PB1 IO INT2 PB6 SCL PA13\_SWDIO PB7 SDA PC4 PA14\_SWCLK PC2 PB5 PC3 GND GND

Transceiver	SX1276
MCU	AcSiP STM32L073xZ
Operating supply voltage	3.3V
Frequency	EU868/US915 MHz
Band Width	62.5~500KHz
Modulation	LoRa/GFSK/FSK/OOK/MSK/GMSK
Transmit power	+20dBm max.
Sensitivity	Down to -137dBm
Data rate	300Kbps(FSK)
Communication distance	10Km
Antenna impedance	50Ω
Operating temperature	-40°C ~ +85°C
Storage temperature range	-50°C ~ +105°C
Dimension	23.5mm×23.2mm×3.1mm

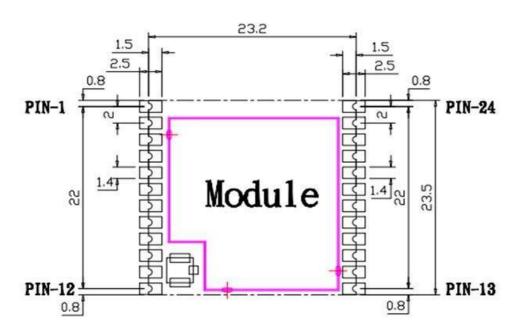
#### Note

- The module transmission data rate will affect Transmission distance, the higher the data rate, the closer the distance, and the lower the receiving sensitivity.
- The supply voltage to the module will affect TX power, in the operating supply voltage range, the lower the voltage to get the lower the TX power.
- The antenna will strongly affect the communication distance, please select matched antenna and connect it correctly.
- The module mount will affect the communication distance.

## **Pin Configuration**

PIN#	PIN NAME	Function Description
1	N/A	N/A
2	PC10	For RS485/1:RS485 Tx, 0: RS485 Rx
3	PA6_SPI1_MISO	GPIO
4	DO1	ModBus-1, DO
5	PB6_SCL	Channel Scan
6	PB7_SDA	Channel Scan
7	PC4	GPIO
8	PC2	GPIO
9	PC3	Cfg Mode(0)/Normal Mode(1) Sel
10	GND	GND
11	ANT	ANT
12	GND	GND
13	GND	GND
14	GND	GND
15	+3.3V	+3.3V
16	+3.3V	+3.3V
17	DO2	GPIO
18	PA14_SWCLK	S/W GPIO - P01, ModBus-2, DO
19	PA13_SWDIO	S/W GPIO - P03, ModBus-2, DI
20	DI2	GPIO
21	PA10_USART1_RX	Pass Through UART RX
22	PA9_USART1_TX	Pass Through UART TX
23	DI1	ModBus-1, DI
24	NRST	Reset

# **PCB Dimension**



### Note

- The module power supply voltage is recommended work at DC3.3V.
- The module interface uses half circle pad to soldering on the system PCB board, the GND must soldering to the system digital GND reliably, or use connector to connect main-board.
- The antenna must get to the module's ANT pin as close as possible.