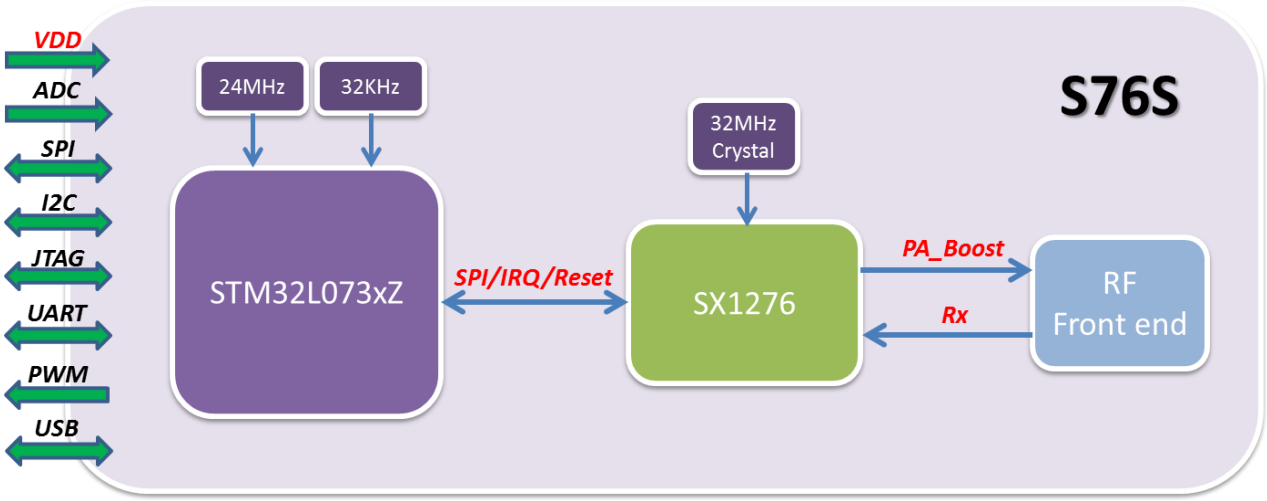
S76S
Product Brief

FEATURE

- Chipset: STM32L073xZ and SX1276
- High performance ARM® Cortex® -M0+ 32-bit RISC core operating at a 32 MHz frequency
- Embedded memories (up to 192 Kbytes of Flash memory and 20 Kbytes of RAM)
- LoRa Modem
- +20 dBm constant RF output vs. V supply
- Programmable bit rate up to 300 kbps
- High sensitivity: down to -137 dBm
- Excellent blocking immunity
- FSK, GFSK, MSK, GMSK, LoRa and OOK modulation
- Packet engine up to 256 bytes with CRC
- Built-in temperature sensor and low battery indicator
- Epoxy molding finished module in LGA type
- Small footprint：13 mm x 11 mm x 1.1 mm

S76S Block Diagram



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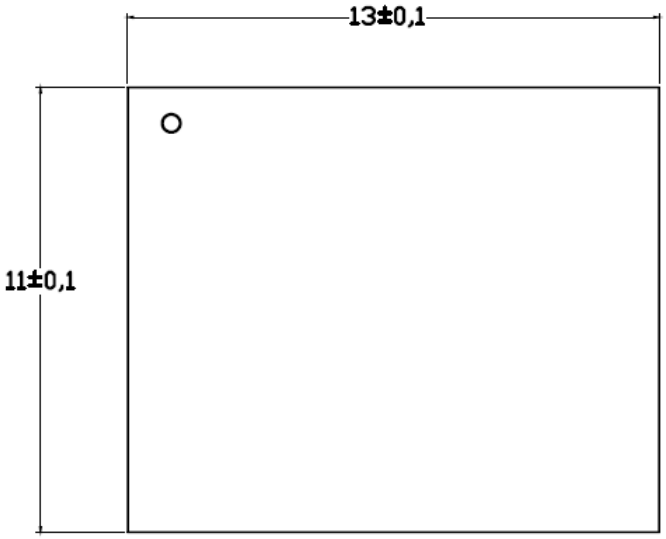
Technical Specification	
Model Name	S76S
Product Description	LoRa Wireless Communication Module
Package	LGA type
Host Interface	UART
Dimension	13 mm x 11 mm x 1.1 mm
Operation Conditions	
Operating Voltage	■ 3.3V
Temperature	■ Storage：-50℃ ~ +105℃ ■ Operating：-40℃ ~ +85℃
Humidity	■ Operating：10 ~ 95% (Non-Condensing) ■ Storage：5 ~ 95% (Non-Condensing)
Electrical Specifications	
Frequency	EU868 / US915
Band Width	62.5~500KHz
Tx Power	+20dBm max.
Sensitivity	Down to -137dBm

S76S PIN Definition

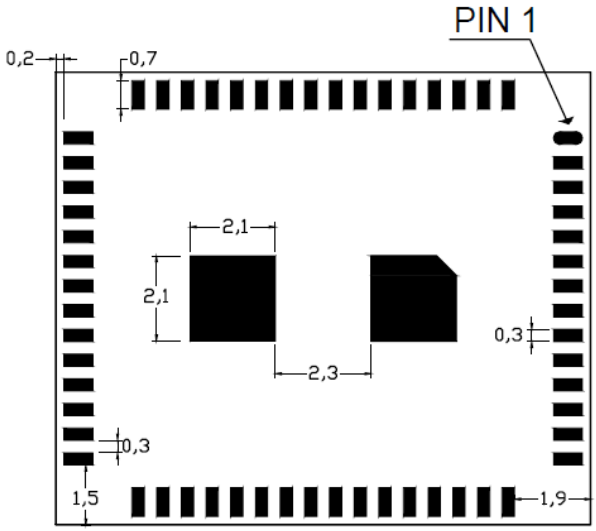
Pin No.	Pin Name	Pin No.	Pin Name
1	NC	32	GND
2	GND	33	RF_ANT
3	GND	34	GND
4	PC0	35	GND
5	PC1	36	PA1_RF_FEM_CPS
6	PC2	37	GND
7	PC3	38	NC
8	NC	39	GND
9	NC	40	NC
10	NC	41	GND
11	NC	42	NC
12	NRESET	43	VDD
13	PA0	44	VDD
14	GND	45	PA8_USART1_CK
15	GND	46	PA10_USART1_RX
16	PA2_TXD_A	47	PA9_USART1_TX
17	PA3_RXD_A	48	PA11_USART1_CTS
18	PA4_SPI1_NSS	49	PA12_USART1_RTS
19	PA5_SPI1_SCK	50	PA13_SWDIO
20	PA6_SPI1_MISO	51	PA14_SWCLK
21	PA7_SPI1_MOSI	52	PC10
22	PC4	53	PC11
23	PC5	54	PC12
24	PB0_IO_INT1	55	PD2
25	PB1_IO_INT2	56	PB5
26	PC6	57	PB6_SCL
27	PC7	58	PB7_SDA
28	PC8	59	BOOT0
29	PC9	60	PB8_IO_LED_FCT
30	RXTX/RFMOD	61	GND
31	GND	62	GND

S76S Mechanical Dimension

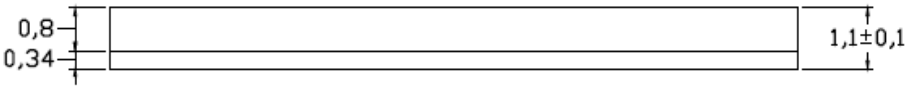
Unit: mm



Top View



Bottom View



Side view