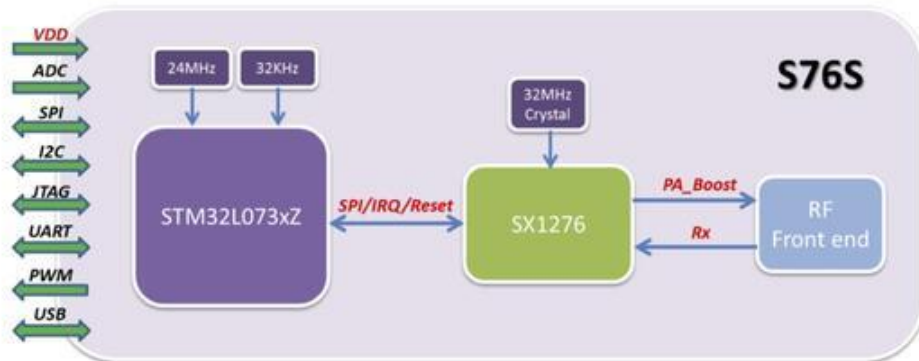


S76S



- 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: 13mm*11mm*1.1mm

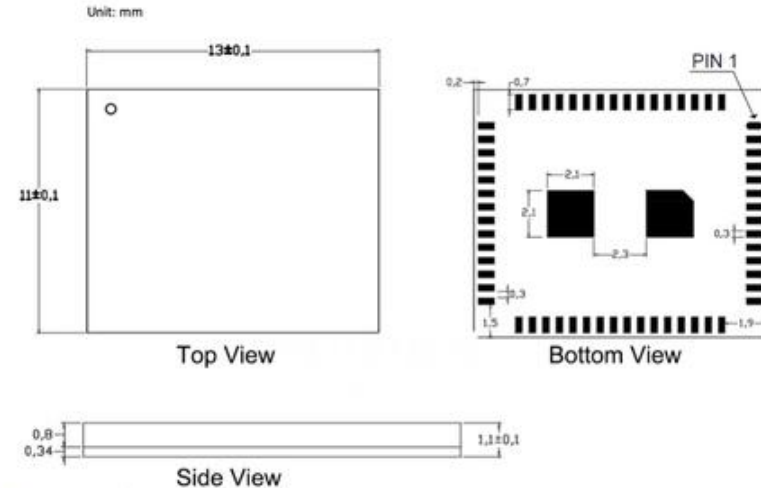
S76S Block Diagram



S76S SPEC

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

S76S Mechanical Dimension



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 | NF |
| 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 |