STR09 Series 433MHz/868MHz +20dBm RF MCU LoRa Transceiver Modules



Features - Radio

- 433MHz/868MHz ISM Frequency Band, LoRa and (G)FSK, (G)MSK, BPSK modem
- Data rate - up to 300kbps for (G)FSK, up to 62.5kbps for LoRa
- -146dBm receiver sensitivity (LoRa, SF-12, BW-10.4kHz)
- +20dBm RF output Power (adjustable with 1dB step size)
- Packet data, data spectrum shaping, FEC-Forward Error Correction
- High frequency stability by use of TCXO
- Low current consumption - 4.9mA for receive mode, less than 600nA for sleep mode
- Full radio configuration/control and modem/data parameters

Features **– Microcontroller/MCU - (STM32WLE5x/STM32WLE5CCU6)**

- 32-bit Arm Cortex-M4 CPU
- 48MHz clock frequency, MPU ve DSP commands
- AES 256-bit encryption, RNG, CRC
- Unique device ID (IEEE802-2001 compatible 64-bit UID), 96-bit unique chip ID
- 256-Kbyte Flash, 64-Kbyte RAM, 20x32-bit backup registers
- Bootloader and OTA (over-the-air) firmware update
- 2x DMA controller (7 channel each), ADC, DAC, SPI, I2C, LPUART,
- USART, AES and timers, 2xUSART (ISO 7816, IrDA, SPI), 1xLPUART, 2xSPI, 3x I2C

Other

- Power Supply : 1.8V~3.6V
- Operating Temperature : -40°C~+85°C
- Small profile : 43.10mmx28.60mm

MPN	Freuency	Connector
STR09RSH8	868MHz	SMA RF Connector
STR09RSH4	433MHz	SMA RF Connector
STR09CSH8	868MHz	U.FL RF Connector
STR09CSH4	433MHz	U.FL RF Connector

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