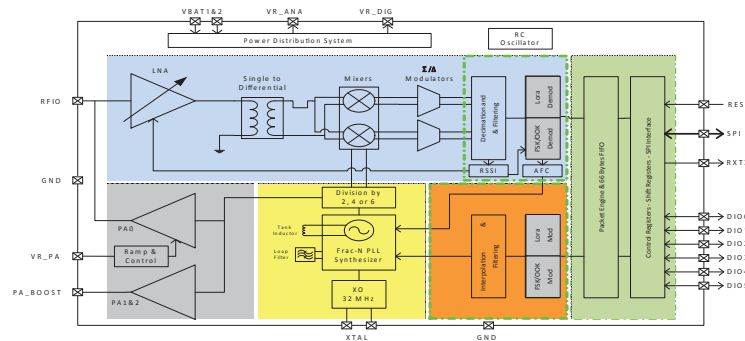


WIRELESS & SENSING

SX1272/73 - 860-1050 MHz Ultra Low Power Long Range Transceiver



GENERAL DESCRIPTION

Semtech's SX1272/73 family provides ultra long range while maintaining low current consumption, making it optimal for numerous applications.

With Semtech's patented modulation technique the device can achieve sensitivity of over -138.5 dBm using a low cost crystal and bill of materials. The high sensitivity combined with the integrated +20 dBm power amplifier creates the highest link budget making it optimal for any application requiring range. This modulation technique also provides significant advantages in blocking and selectivity over FSK.

The devices also support high performance (G)FSK for WMBus, IEEE802.15.4g, and other legacy modes. Semtech's technology overcomes a typical trade-off of performance versus current consumption. The devices deliver exceptional phase noise, selectivity, receiver linearity, and IIP3 for significantly lower current consumption than competing devices.

The devices cover the frequency band from 860-1050MHz.

KEY PRODUCT FEATURES

- ◆ 158 dB maximum link budget
- ◆ +20 dBm - 100 mW constant RF output vs. V supply
- ◆ +14 dBm high efficiency PA
- ◆ Programmable bit rate up to 300 kbps
- ◆ High sensitivity: down to -138.5 dBm
- ◆ Bullet-proof front end: IIP3 = -12 dBm with FSK
- ◆ 100 dB blocking immunity
- ◆ Low RX current of 10 mA, 200 nA register retention
- ◆ Fully integrated synthesizer with a resolution of 61 Hz
- ◆ FSK, GFSK, MSK, GMSK, LORA and OOK modulations
- ◆ Built-in bit synchronizer for clock recovery
- ◆ Sync word recognition
- ◆ Preamble detection
- ◆ 115 dB+ Dynamic Range RSSI
- ◆ Automatic RF Sense with ultra-fast AFC
- ◆ Packet engine up to 64 bytes with CRC
- ◆ Built-in temperature sensor and low battery indicator

APPLICATIONS

- ◆ Automated Meter Reading
- ◆ Home and Building Automation
- ◆ Wireless Alarm and Security Systems
- ◆ Industrial Monitoring and Control

ORDERING INFORMATION

Part Number	Delivery	MOQ / Multiple
SX1272	T&R	3000 pieces
SX1273	T&R	3000 pieces