SVI-TRX301S

IEEE.802.15.4 2.4GHz Zigbee Radio

MAIN FEATURES

- Process: HHGrace-Logic 110nm (1P6M)
- Compatible with IEEE.802.15.4
- Frequency range: 2.400–2.4835 GHz
- O-QPSK modulation
- Sensitivity = -98 dBm @ 250kbps
- Output power range: -25 – +2 dBm
- Ultra low power consumption
  - Peak RX: 14.3 mA @ 1.2V
  - Peak TX: 13.5 mA @ 1.2V (0 dBm)
- Chip Rate: 2.0 MChip/s
- -40 – +85 °C temperature range
- Ultra low power OFF/Standby modes
- Automatic Frequency Correction (AFC)
- Single ended & Differential PA options
- Offset Cancellation Loop
- Frequency hopping capability
- Programmable Channel Filter Bandwidth
- Integrated PLL loop filter
- Efficient SPI interface (read/write) access
- Automatic VCO & RX filter tuning
- Single ended & Differential PA options
- Can fit in 20L-QFN package in case of standalone IC
- Silicon samples Q4-14

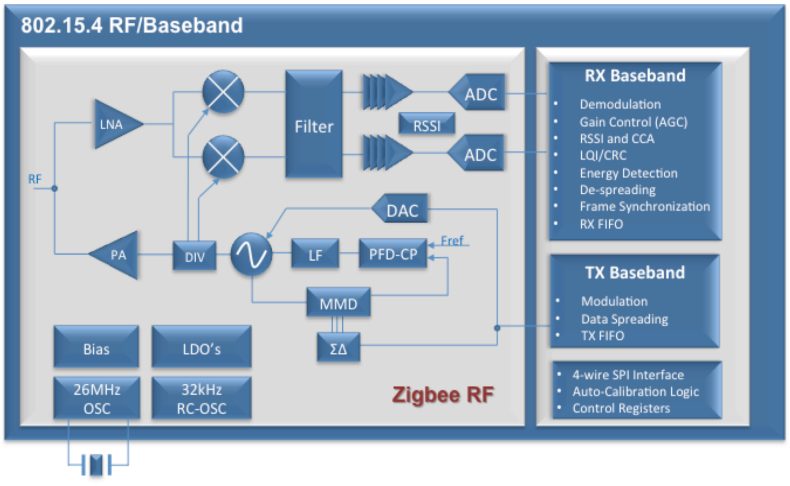
IP DESCRIPTION

Silicon Vision, *SVI-TRX303G* is a fully integrated radio transceiver IP targeting IEEE 802.15.4 standard. The *SVI-TRX303G* performance is tailored for low power operation to be used in ZigBee systems and battery-powered modules.

Transmitter output power ranges from -25 to +2dBm, while receiver sensitivity is -98dBm at 250kbps. The frequency range allows operation in 2.4GHz Industrial, Scientific, Medical (ISM) band. The Radio IP contains the RF-PHY, MODEM and IEEE.802.15.4 Baseband.

APPLICATIONS

- ☑ Health
- ☑ Energy
- ☑ Home Automation
- ☑ IoT Applications



Block Diagram for SVI-TRX303G

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