

SIVI-FPLL0P9G180

TSMC 180nm (1P6M)



MAIN FEATURES

- Designed on TSMC 180nm
- Supply Voltage 1.7V
- Input Frequency 13MHz, 26MHz,
- Output Frequency 0.4GHz
→1.05GHz
- Frequency resolution 400Hz
- Settling time with calibration
<90us
- RMS Phase error < 1.2°
- Phase noise950MHz @0.1MHz < -88dBc/Hz
- Phase noise950MHz @1MHz < -110dBc/Hz
- Phase noise950MHz @10MHz < -133dBc/Hz
- Current Consumption < 4.5mA
- Fully integrated solution
- Self-calibration mechanism using fully integrated calibrators and state machines
- Operational temperature range from -40°C to 125°C

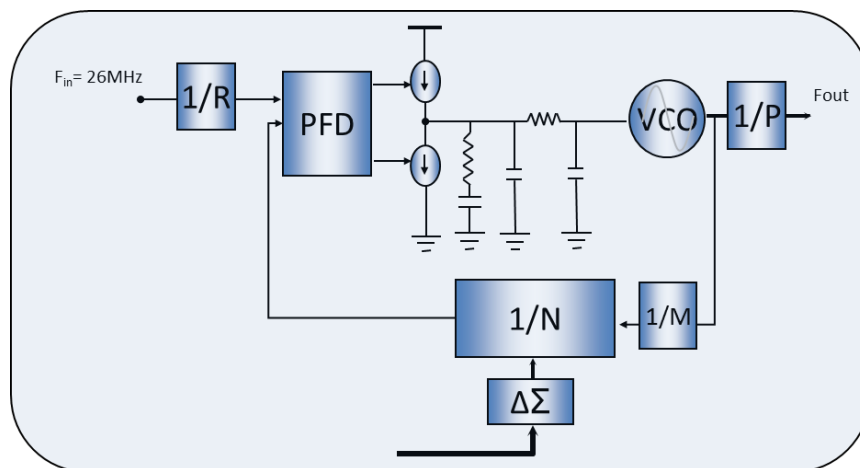
IP DESCRIPTION

Silicon Vision's SiVi-FPLL0P9G180 is a wide range sub-1GHz frequency synthesizer that operates and covers the sub-1GHz ISM Band. It can synthesize frequencies starting from 400MHz up to 980MHz with fine resolution that reaches down to 400Hz. Its low power consumption, low noise performance and fully integrated solution makes SiVi-FPLL0P9G180 perfect for sub-1GHz RF transceivers like Smart Grid and Zigbee. The IP contains a fast self-calibration mechanism for optimal operation.

SiVi-FPLL0P9G180 is ready on 180nm TSMC

APPLICATIONS

- Smart Grid and Smart Metering applications
- Zigbee Transciever



Block Diagram for SiVi-FPLL0P9G180



Silicon Vision
79 Almultaqa Alaraby,
Cairo, Egypt, P.O. Box 11361
Tel: +202-22669160
info@si-vision.com