

SIVI-XO32K18001

TSMC 180nm-G (1P5M)

MAIN FEATURES

- Designed on TSMC 180nm Generic Process
- 1.8V Supply Voltage
- Automatic current control loop
- Ultra Low current consumption
- High Frequency resolution
- Fast wake up time
- Temperature Range from -40C° to 125C°

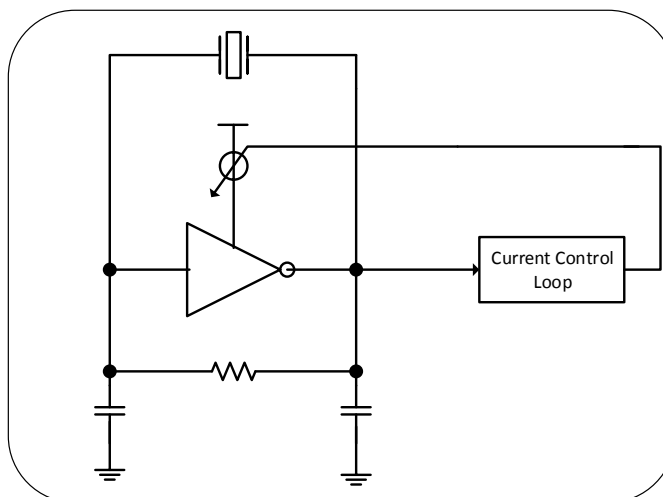
IP DESCRIPTION

SiVi-XO32K18001 is an ultra-low power high resolution Crystal oscillator that nominally operates from a 32 kHz quartz crystal. The IP provide low power solution due to its on-chip current control loop. SiVi-XO32K18001 provides ultra-low power performance which makes it suitable for low power RTCs applications in modern SoCs.

SiVi-XO32K18001 is silicon verified on TSMC/SMIC 180nm generic process.

ELECTRICAL SPECIFICATIONS

Spec / Result	Min	Typ	Max	Unit
Supply Voltage	1.6	1.8	2.0	V
Temperature Range	-40	27	125	°C
Crystal Frequency Range		32		kHz
Current Consumption		0.2	0.5	μA
Wake Up time			200	ms
Gain		10		dB
Duty Cycle	49.5	50.5	51.3	%



SiVi-XO32K18001 Block Diagram