



MEMS Timing Solutions for **Industrial**

- More robust in harsh environments
- Better stability over a wide temperature range
- Programmability for flexible design
- High reliability, lifetime warranty

A small part from
SiTime runs a big
part of your world



FACTORY AUTOMATION

Single Ended, Differential, and Spread Spectrum Oscillators

SiT8918/19 | SiT9366/67 | SiT9005 | SiT9025

- High temperature operation | -55 to +105°C
- Vibration | 0.1 ppb/g typical
- EMI reduction | Up to 30 dB lower



SMART GRID

MHz Super-TCXOs and 32-kHz Oscillators

SiT5356 | SiT5357 | SiT1580 | SiT1630

- Precision timing | ± 100 ppb up to 105°C
- Airflow and thermal shock resistant | 1 ppb/°C
- Low power for longer battery life | 4.5 μ A at 100 kHz

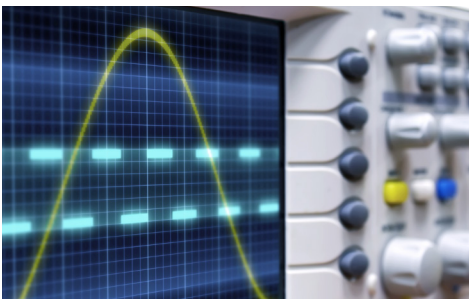


PRECISION GNSS POSITIONING

OCXOs and Super-TCXOs

SiT5711/12 | SiT5358/59 | SiT5356/57

- Precision timing | ± 5 ppb to ± 100 ppb
- Vibration resistant | 0.1 ppb/g typical
- High reliability | >1 billion hour MTBF



TEST AND MEASUREMENT

OCXOs, Super-TCXOs, and Oscillators

SiT5711/12 | SiT5721/22 | SiT5358/59 | SiT5356/57 | SiT8008/09 | SiT9366/67

- Lower aging | ± 500 ppb over 20-years
- Programmability | Any frequency, stability, voltage within wide range
- Reduce size | Smallest Stratum 3E OCXO



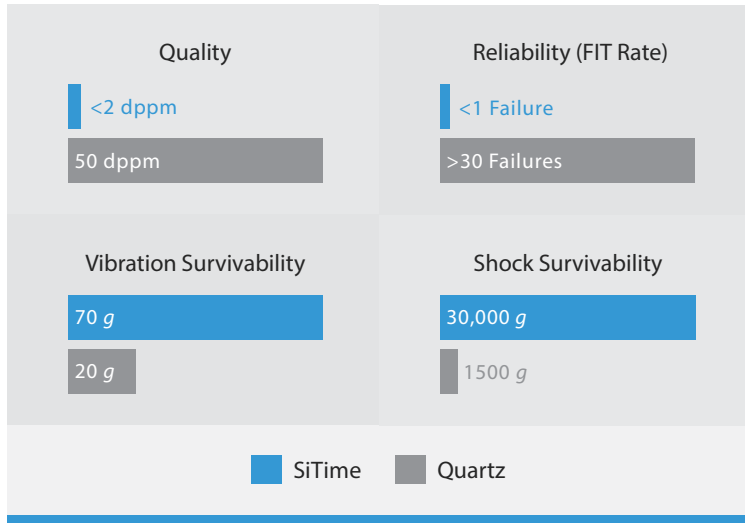
INDUSTRIAL IOT

MHz Super-TCXOs and 32-kHz Oscillators

SiT5356/57 | SiT1580 | SiT1532/33 | SiT1630

- Precision timing | ± 100 ppb, 3e-11 ADEV
- Lower power for longer battery life
- Smallest 32 kHz TCXO | 1.5 mm x 0.8 mm

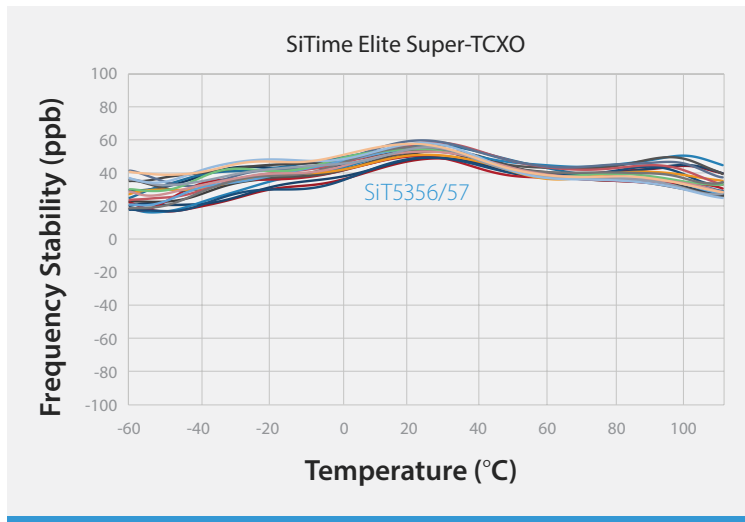
Better Quality, Reliability, and Robustness



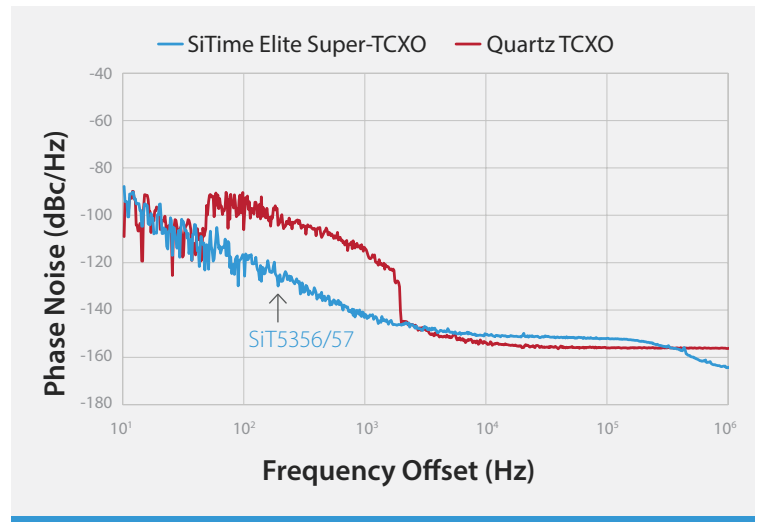
Rich Programmable Features



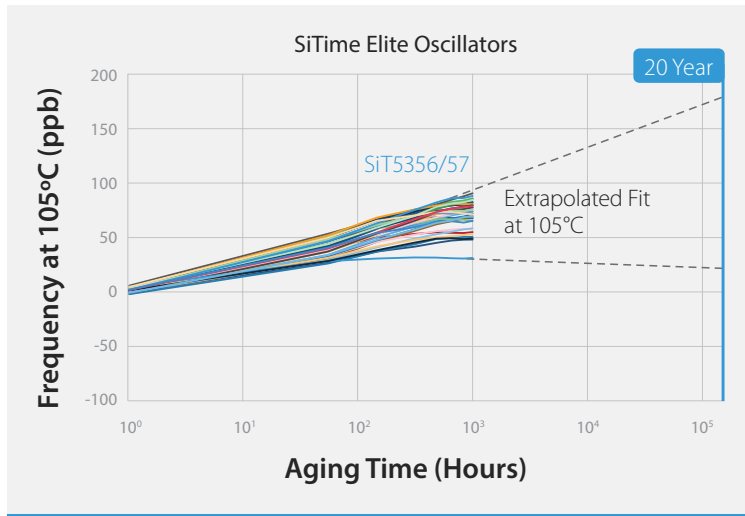
Better Stability



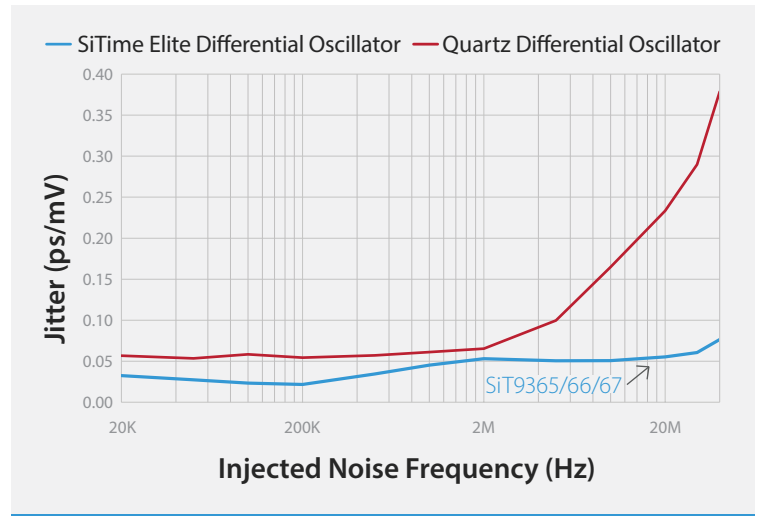
Better Vibration Resistance



Better Aging



Better PSNR (Power Supply Noise Rejection)



SiTime Base Part No.	Output Frequency	Frequency Stability (ppm)	Supply Volt. (V)	Supply Current (Typical)	Packages (mm x mm)	Output Logic	Features
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SINGLE-ENDED OSCILLATORS | Better reliability | Pin-compatible footprints

SiT1602, SiT8008/09	1 MHz to 137 MHz	±20, ±25, ±50	1.8, 2.5 to 3.3	3.1 to 5.5 mA (0.6 - 1.0 µA stby)	QFN: 2.0 x 1.6, 2.5 x 2.0, 3.2 x 2.5, 5.0 x 3.2, 7.0 x 5.0	LVCMOS	1.3 ps RMS phase jitter, Field Programmable
SiT1618, SiT8918/19	1 MHz to 137 MHz	±20, ±25, ±30, ±50		3.6 to 5.4 mA (1.0 µA stby)	SOT23: 2.9 x 2.8		
SiT2018/19							
SiT1630	32.768, 16.384 kHz	75, 100, 150	1.5 to 3.63	1.0 µA	QFN: 2.0 x 1.2		Small 2012 QFN package

DIFFERENTIAL OSCILLATORS | Better reliability | 0.2 ps/mV power supply noise rejection (PSNR)

SiT9120/21/22	1 MHz to 625 MHz	±10, ±20, ±25, ±50	2.5, 3.3, 2.25 to 3.63	54 to 69 mA	QFN: 3.2 x 2.5, 5.0 x 3.2, 7.0 x 5.0	LVPECL, LVDS	0.6 ps RMS phase jitter
SiT9365/66/67*	1 MHz to 725 MHz		2.5 to 3.3	76 to 84 mA		Low-swing LVPECL, LVPECL, LVDS, HCSL	0.21 ps RMS phase jitter

VXOs | ±25 to ±3200 ppm pull range, <1% linearity | Better reliability | 0.1 ppb/g accelerator sensitivity

SiT3372/73*	1 MHz to 700 MHz	±15, ±25, ±30, ±50	2.5 to 3.3	76 to 84 mA	QFN: 3.2 x 2.5, 5.0 x 3.2, 7.0 x 5.0	LVPECL, LVDS, HCSL	0.21 ps RMS phase jitter
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EMI REDUCTION OSCILLATORS | Most flexible EMI reduction options | Low cycle-cycle jitter

SiT9005	1 MHz to 150 MHz	±20, ±25, ±50	1.8, 2.5 to 3.3	5.0 to 5.6 mA (0.4 - 2.1 µA stby)	QFN: 2.0 x 1.6, 2.5 x 2.0, 3.2 x 2.5	LVCMOS	40 spread options, up to ±2.0%, down to -4.0%, Smallest, Field Programmable
SiT9025							

DCXOs | In-System Programmable | Digital pull for lower noise | Up to ±1600 ppm pull range, 5 ppt pull resolution, <1% linearity

SiT3521/22*	1 MHz to 725 MHz	±20, ±25, ±50	2.5 to 3.3	70 to 82 mA	SMD: 5.0 x 3.2	LVPECL, LVDS, HCSL	I2C programmable, 0.23 ps RMS phase jitter
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Super-TCXOs | ±1 ppb/°C ΔF/ΔT slope | 5 ppt resolution frequency control | 0.001 ppb/g acceleration sensitivity

SiT5155/56/57*	1 MHz to 625 MHz	±0.5, ±1, ±2.5	2.5, 2.8, 3.0, 3.3	40 to 45 mA	SMD: 5.0 x 3.2	LVCMOS, Clipped Sinewave	I2C programmable, ±1 ppb/°C (ΔF/ΔT) slope, -40 to +105°C
SiT5356/57*	1 MHz to 220 MHz	±0.1, ±0.2, ±0.25					

STRATUM 3E OXOs | Airflow and thermal shock resistant | Stratum 3E compliant- better holdover in dynamic conditions | Smallest OCXO

SiT5711**	1 MHz to 60 MHz	±0.005, ±0.008	3.3	180 mA (at 50°C in steady state)	9.0 x 7.0, 14.0 x 9.0, 25.0 x 22.0	LVCMOS, Clipped Sinewave	±50 ppt/°C ΔF/ΔT
SiT5712**	60 MHz to 220 MHz						

Field Programmable Oscillators – Always Available



ANY FREQUENCY



ANY VOLTAGE



ANY STABILITY



Easy-to-use programming kit

- Don't waste time searching & waiting for timing devices
- Optimize system performance with custom frequencies
- Instantly reduce EMI with programmable drive strength