

•

Complete MEMS clock tree

Stratum 3 Super-TCXO

High Temperature XO

Ultra-low jitter differential XO

SiTime MEMS Timing Benefits

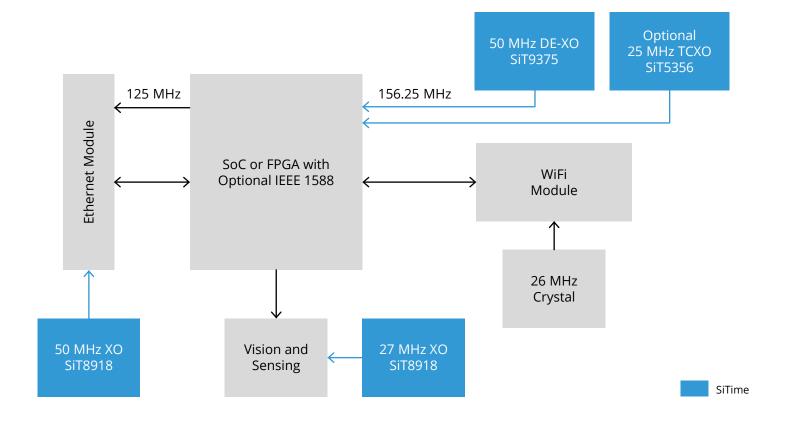
Most robust in real world conditions

- 4x better dF/dT for best time sync
- 200 fs rms jitter, excellent PSNR
- 70 g vibration and 50,000 g shock

Easy to use, built to last

- Custom configured solution
- No quartz reliability issues
- 1 billion hour MTBF

MEMS Timing Solution for Industrial Robotics



Devices	Туре	Function	Key Features
<u>SiT535x</u>	Super-TCXO	Reference clock for IEEE 1588	1 to 220 MHz, ±100 ppb, ±1 ppb/°C, 105°C
<u>SiT9375</u>	Differential XO	Reference clock for SoC or FPGA	25 to 644 MHz, 0.2 ps jitter, 105°C
<u>SiT891x</u>	High Temperature XO	Ethernet, Vision and Sensing	1 to 137 MHz, ±20 ppm, 125°C



MEMS Timing Outperforms Quartz

Better Quality, More Robust



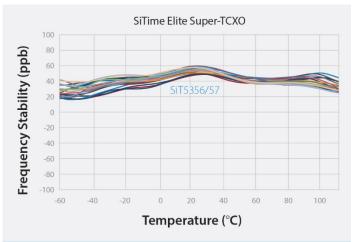
Millions of Configurations

Any Frequency O—	1 Hz 725M options 725 MHz
Any Stability 🗿 —	±0.005 ppm 18 options ±50 ppm
Any Voltage 🧿—	1.2V
Temperature 🗿 —	-55°C
Spread Spectrum 🗿 —	±2%
FlexEdge Rise/Fall Times O —	0.25 ns
VC Pull Range 🗿—	±25 ppm 10 options ±3200 ppm
In-System Programmability O—	SPI 2 options 12C

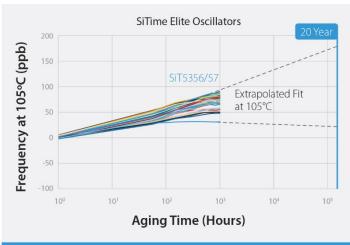
Better Vibration Resistance



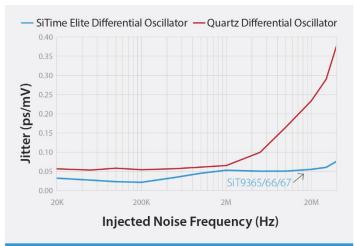
Better Stability



Better Aging



Better PSNR (Power Supply Noise Rejection)



Learn more about SiTime's Industrial timing solutions

