

SiTime MEMS Timing Benefits

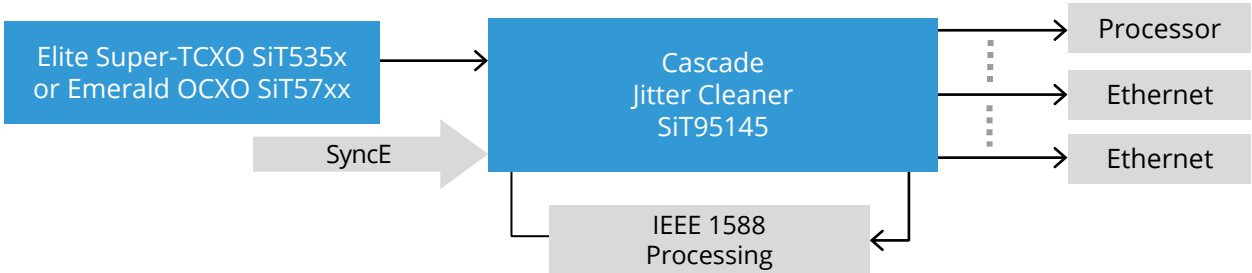
- Complete MEMS clock tree**

  - Integrated MEMS
  - Stratum 3E MEMS OCXO
  - MEMS clock IC/PLL
- Most robust in real world conditions**

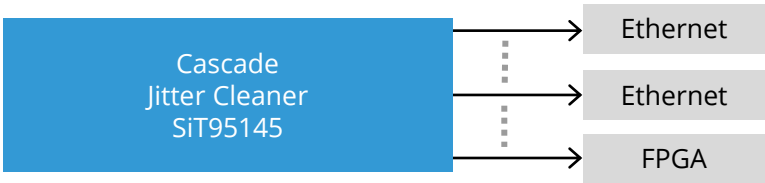
  - 4x better dF/dT for best time sync
  - 70 fs rms jitter, excellent PSNR
  - Resistant to airflow, heat, vibration
- Integrated MEMS, easy to use**

  - No external quartz
  - No quartz reliability issues
  - No cover or shielding needed

MEMS Timing Solutions with SyncE or IEEE 1588



MEMS Timing Solutions without SyncE or IEEE 1588

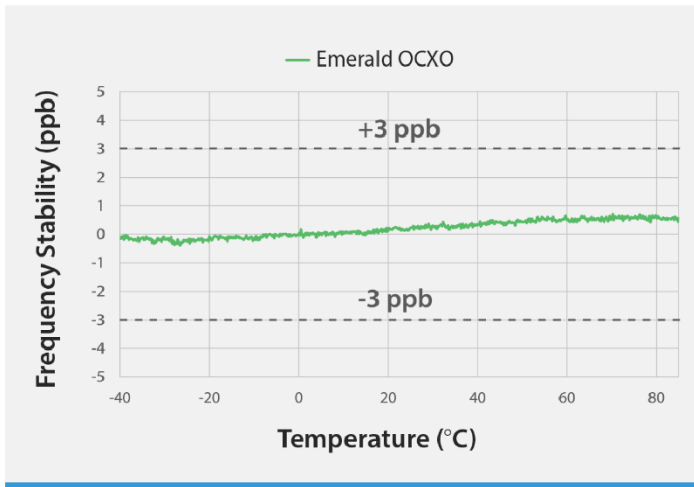


MEMS XO + Buffer Alternative Timing Solution

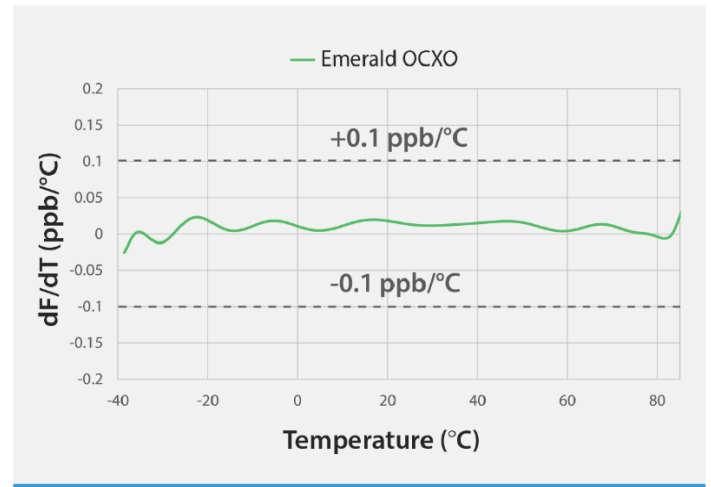


Devices	Type	Function	Key Features
<a href="#">SiT535x</a>	Super-TCXO	Reference clock for jitter cleaner and IEEE 1588	1 to 220 MHz, ±100 ppb, ±1 ppb/°C 105°C
<a href="#">SiT57xx</a>	OCXO		1 to 60 MHz, ±5 ppb, ±0.04 ppb/°C
<a href="#">SiT9514x</a>	Clock generator	Ethernet	4-in, 11-out, 4-PLL, 8 kHz to 2.1 GHz
<a href="#">SiT9514x</a>	Network synchronizer, jitter cleaner	Ethernet, processor	4-in, 11-out, 4-PLL, 8 kHz to 2.1 GHz
<a href="#">SiT9501, SiT9375</a>	Differential XO	Ethernet, FPGA	1 to 725 MHz, 0.07 to 0.25 ps jitter, 105°C

## Better Stability



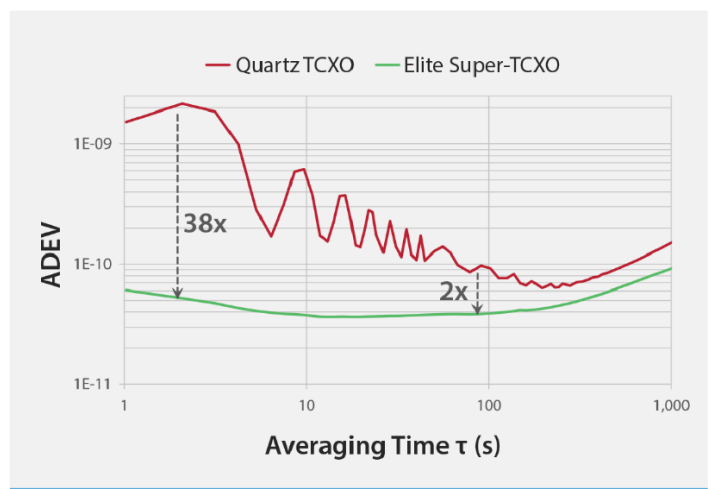
## Better Frequency Slope



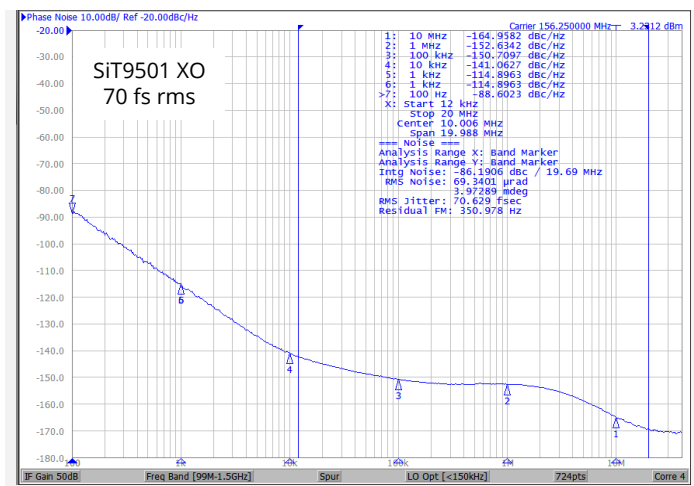
## Better Vibration Resistance



## Better Allan Deviation



## Excellent Phase Noise, 156.25 MHz



## Better PSNR (Power Supply Noise Rejection)

