

The background of the slide is a composite image. On the left, a telecommunications tower with multiple antennas is visible against a blue sky with light clouds. On the right, a server rack with numerous blue network cables plugged into ports is shown. A large, semi-transparent blue triangle is overlaid on the right side of the image, and a red banner is positioned at the bottom right.

MEMS Oscillators for Communications & Enterprise

- Extensive portfolio for synchronization and wireless
- Better performance in harsh environments
- No placement constraints, no shield needed, reduces manufacturing overhead
- Programmable, instant samples, shortest lead time
- Higher reliability

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



SyncE, IEEE 1588, 4G+/5G BACKHAUL

Emerald Platform OCXOs

SiT5711 | SiT5721

- Airflow and thermal shock resistant | 50 ppt/°C
- Most precise digital control | frequency steering with ± 5 ppt resolution
- Stratum 3E compliant | best holdover in dynamic conditions
- Smallest in class | 9 mm x 7 mm x 6.3H mm



4G+/5G RADIOS, FRONTHAUL

Elite Platform Precision Super-TCXOs

SiT5356 | SiT5357 | SiT5358 | SiT5359

- High temperature operation | ± 100 ppb up to 105°C
- Airflow and thermal shock resistant | 1 ppb/°C
- Vibration resistant | 0.1 ppb/g vibration
- Precise frequency steering | 5 ppt resolution



10/100/400G DATACOM

Differential Oscillators

SiT9365 | SiT9366 | SiT9367 | SiT9120 | SiT9121 | SiT9122

- Better stability at high temperature | ± 10 ppm at 105°C
- Most flexible | 1 to 725 MHz, ± 10 to 50 ppm, LVPECL/LVDS/HCSL, 3 package options
- Better PSNR | 0.05 ps/mV, eliminates external regulators
- Low phase jitter | in small industry-standard packages



OPTICAL MODULES

Elite Platform Differential Oscillators

SiT9365 | SiT9366 | SiT9367

- Smallest size | 3.2 x 2.5 mm²
- Better stability at high temperature | ± 10 ppm at 105°C
- Better PSNR | 0.05 ps/mV, eliminates external regulators



PRECISION GNSS TIMING

Elite Platform Super-TCXOs

SiT5155 | SiT5156 | SiT5157

- High temperature operation | ± 500 ppb up to 105°C
- Airflow and thermal shock resistant | 1 ppb/°C
- Better short-term stability | 1.5e-11 ADEV at 10s
- No activity dips | no micro jumps



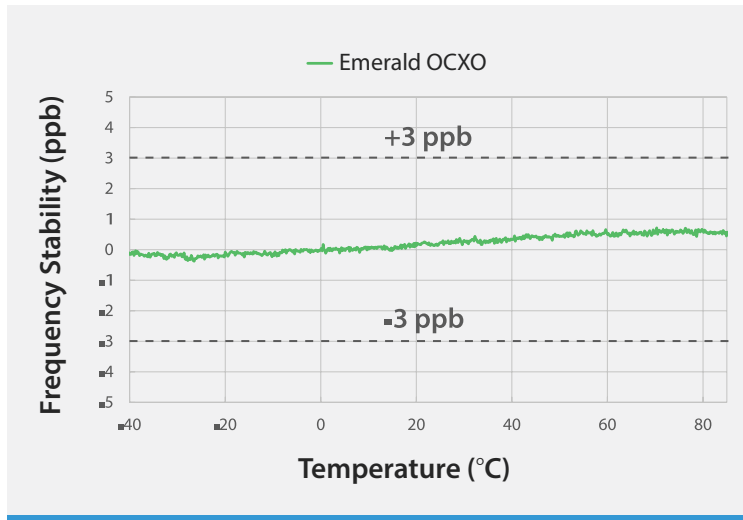
AUDIO/VIDEO & BROADCASTING

Elite Platform Differential Oscillators

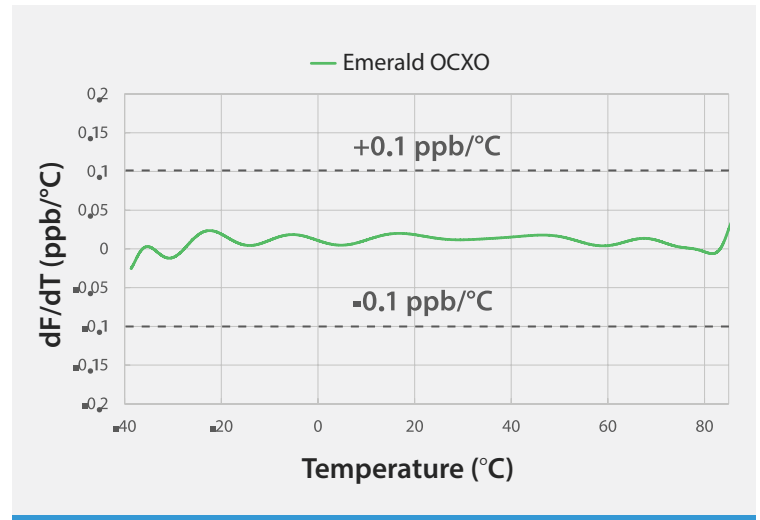
SiT9365 | SiT9366 | SiT9367

- In-system programmable | 1 to 725 MHz
- Precise frequency steering | 5 ppt resolution
- Best stability at high temperature | ± 10 ppm at 105°C

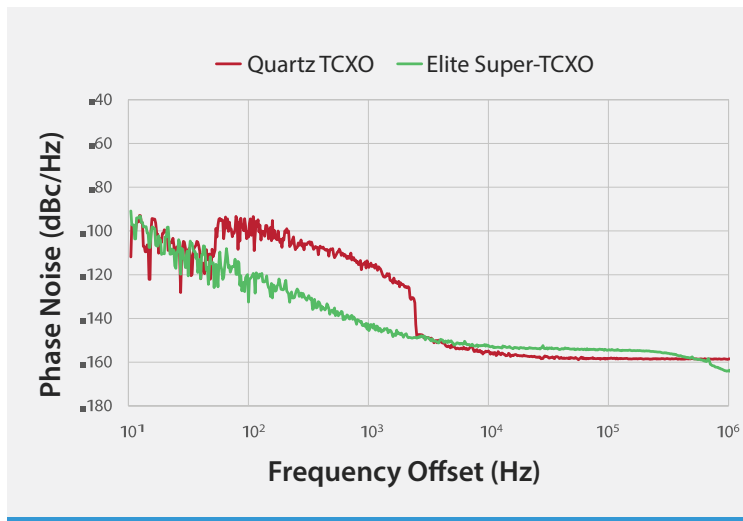
Better Stability



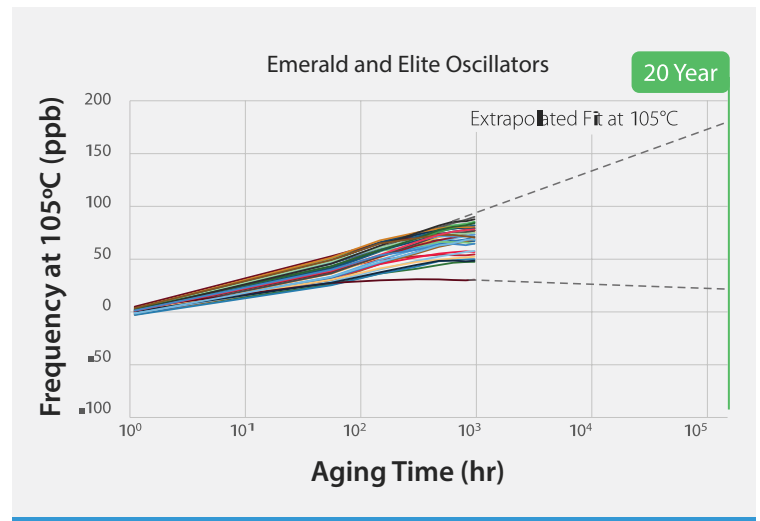
Better Frequency Slope



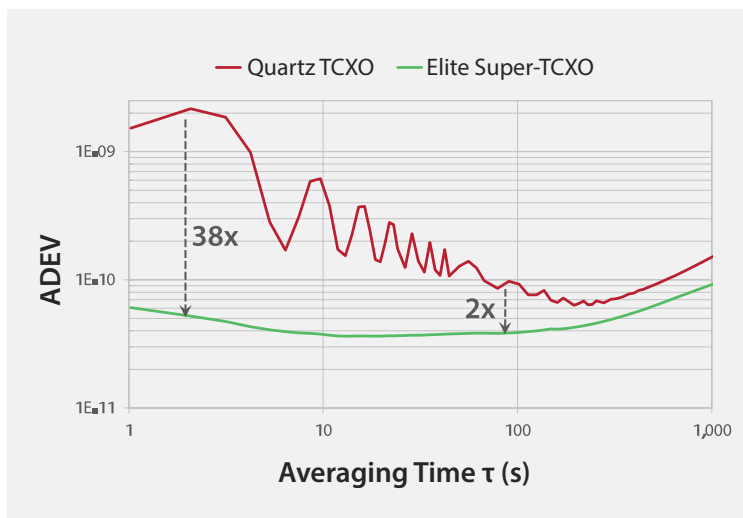
Better Vibration Resistance



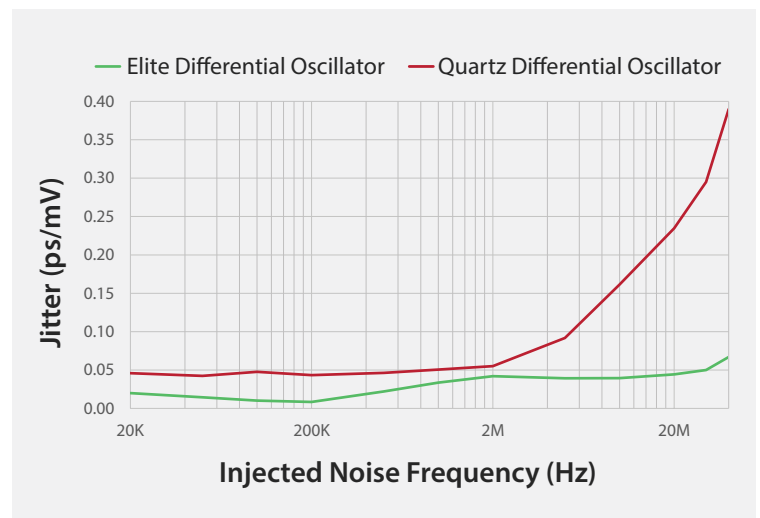
Better Aging



Better Allan Deviation



Better PSNR (Power Supply Noise Rejection)



| SiTime Base | Output | Frequency | Supply | Supply Current | Packages | Output | Features |
|-------------|--------|-----------|--------|----------------|----------|--------|----------|
|-------------|--------|-----------|--------|----------------|----------|--------|----------|

OCXOs | Airflow and thermal shock resistant | Stratum 3E compliant– better holdover in dynamic conditions | Smallest in Class

| | | | | | | | |
|----------|-----------------|------------------------|-----|-------------------------------------|---------|--------------------------------|--|
| SiT5711* | 1 MHz to 60 MHz | $\pm 0.005, \pm 0.008$ | 3.3 | 212 mA (at 50°C in steady state) | 9.0x7.0 | LVCMOS, Clipped Sinewave | ± 0.05 ppb/°C dF/dT |
| SiT5721* | | | | | | | I2C digital control, ± 5 ppt resolution |

TCXO/VCTCXO/DCTCXOs | ± 6.25 to ± 3200 ppm pull range | 5 ppt resolution frequency control | Better reliability | 0.1 ppb/g (vibration sensitivity)

| | | | | | | | |
|--------------|-------------------|------------------------------|----------------------------|-------------|---------------------------------------|--------------------------------|---|
| SiT5358/59** | 1 MHz to 220 MHz | $\pm 0.05, \pm 0.1$ | 2.5, 2.8, 3.0, 3.3 | 40 to 45 mA | 5.0x3.2 | LVCMOS, Clipped Sinewave | I2C programmable, ± 1 ppb/°C slope, -40 to +105°C |
| SiT5356/57** | | $\pm 0.1, \pm 0.2, \pm 0.25$ | | | | | |
| SiT5155** | 13 Standard Freq. | $\pm 0.5, \pm 1, \pm 2.5$ | | | | | |
| SiT5156/57** | 1 MHz to 625 MHz | | | | | | |
| SiT5021/22 | 1 MHz to 625 MHz | ± 5 | 2.5, 3.3, 2.25 to 3.63 | 55 to 69 mA | 3.2x2.5, 5.0x3.2, 7.0x5.0 | LVPECL, LVDS | 0.6 ps rms phase jitter |
| SiT5000/01 | 1 MHz to 80 MHz | | 1.8, 2.5, 2.8, 3.0, 3.3 | 29 to 31 mA | 2.5x2.0, 3.2x2.5, 5.0x3.2, 7.0x5.0 | LVC MOS | 0.5 ps rms phase jitter |

LOW JITTER OSCILLATORS | Better reliability | 0.1 ppb/g (vibration sensitivity)

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|--------------|-------------------|----------------------------------|------------|-------------|---------------------------------|--|------------------------------------|
| SiT9365** | 32 Standard Freq. | $\pm 10, \pm 20, \pm 25, \pm 50$ | 2.5 to 3.3 | 76 to 84 mA | 3.2x2.5, 5.0x3.2, 7.0x5.0 | Low-swing LVPECL, LVPECL, LVDS, HCSL | 0.21 ps rms phase jitter |
| SiT9366/67** | 1 MHz to 725 MHz | | | | | | |
| SiT9120 | 31 Standard Freq. | | 2.5 to 3.3 | 54 to 69 mA | 3.2x2.5, 5.0x3.2, 7.0x5.0 | LVPECL, LVDS | 0.6 ps rms phase jitter, FP1 |
| SiT9121/22 | 1 MHz to 625 MHz | | | | | | |

VCXOs | ± 25 to ± 3200 ppm pull range, <1% linearity | Better reliability | 0.1 ppb/g (vibration sensitivity)

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|--------------|------------------|----------------------------------|------------|-------------|------------------------------|--------------------|-----------------------------|
| SiT3372/73** | 1 MHz to 700 MHz | $\pm 15, \pm 25, \pm 30, \pm 50$ | 2.5 to 3.3 | 76 to 84 mA | 3.2x2.5, 5.0x3.2, 7.0x5.0 | LVPECL, LVDS, HCSL | 0.21 ps rms phase jitter |
|--------------|------------------|----------------------------------|------------|-------------|------------------------------|--------------------|-----------------------------|

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 | $\pm 20, \pm 25, \pm 50$ | 2.5 to 3.3 | 70 to 82 mA | 5.0x3.2 | LVPECL, LVDS, HCSL | I2C programmable, 0.21 ps jitter |
|--------------|------------------|--------------------------|------------|-------------|---------|--------------------|-------------------------------------|

LOW-POWER OSCILLATORS | Better reliability | Pin-compatible footprints

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|------------|------------------|----------------------------------|-----------------|---|--|---------|---------------------------------|
| SiT8008/09 | 1 MHz to 137 MHz | $\pm 20, \pm 25, \pm 50$ | 1.8, 2.5 to 3.3 | 3.1 to 5.5 mA (0.6 - 1.0 μ A stby) | 2.0x1.6, 2.5x2.0, 3.2x2.5, 5.0x3.2, 7.0x5.0 | LVC MOS | 0.5 ps rms phase jitter, FP1 |
| SiT8208/09 | 1 MHz to 220 MHz | $\pm 10, \pm 20, \pm 25, \pm 50$ | 1.8, 2.5 to 3.3 | 2.9 to 36 mA (10 μ A stby) | 2.5x2.0, 3.2x2.5, 5.0x3.2, 7.0x5.0 | LVC MOS | |

¹Field 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