SiTime

MEMS Timing Solutions for **Automotive**

- Best-in-class performance in harsh environments
- Higher quality and reliability, AEC-Q100 compliant
- Programmable, instant samples, short lead time

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

Automotive Camera

±20 ppm over -55 to 125°C,
Small 2016 footprint,
EMI reduction up to 17 dB

SiT8924/25 | SiT9025
Oscillator

Self-Driving Computer

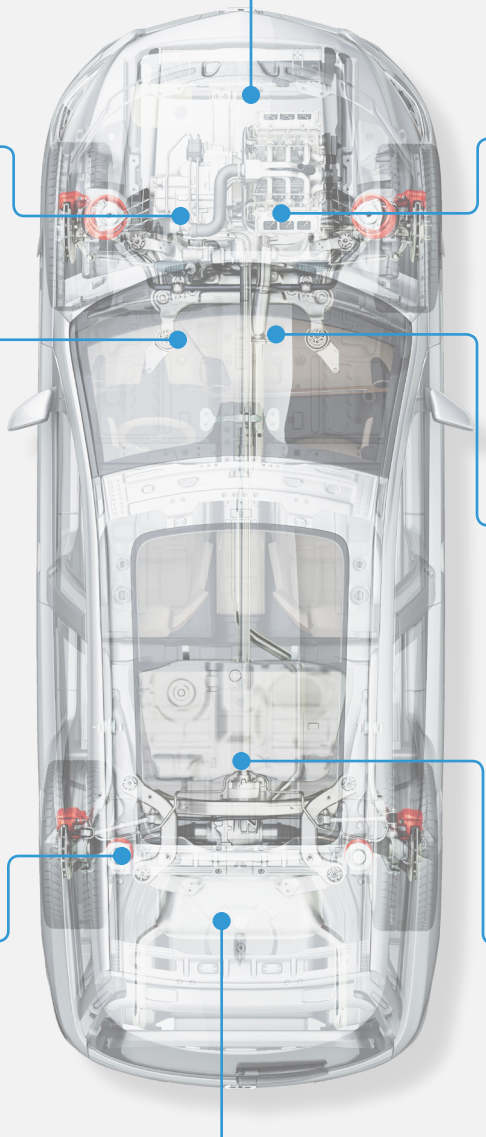
Best-in-class jitter,
Up to 125°C temperature
Any frequency from 1 to 725 MHz

SiT9386/87 | SiT8924/25 | SiT2024/25
Oscillators

Electrical Control Unit (ECU)

±20 ppm over -55 to 125°C,
Any frequency from 1 to 150 MHz,
Higher reliability >1 B hours MTBF

SiT8924 | SiT9825
Oscillators



Infotainment

EMI reduction up to 17 dB,
Reliable startup in cold temps,
Higher reliability >1 B hours MTBF

SiT9025 | SiT8924/25 | SiT2024/25
Oscillators

Wireless Charger

Short lead time even for
custom frequencies,
Flexible capacity for quick ramp up

SiT8924 | SiT2024 | SiT9025
Oscillators

Active Suspension

More robust,
Higher reliability >1 B hours MTBF,
Leaded & wettable flank packages

SiT8934/35 | SiT2024/25
Oscillators

Precision GNSS

Maintains satellite lock under shock,
vibration and
thermal gradients

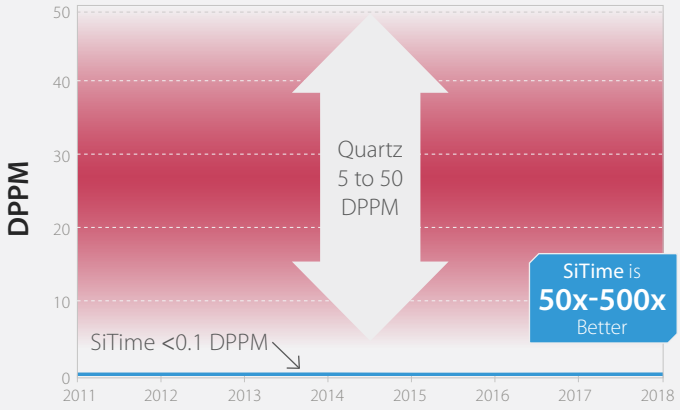
SiT5186/87 | SiT5386/87
Super-TCXOs

Automotive Ethernet

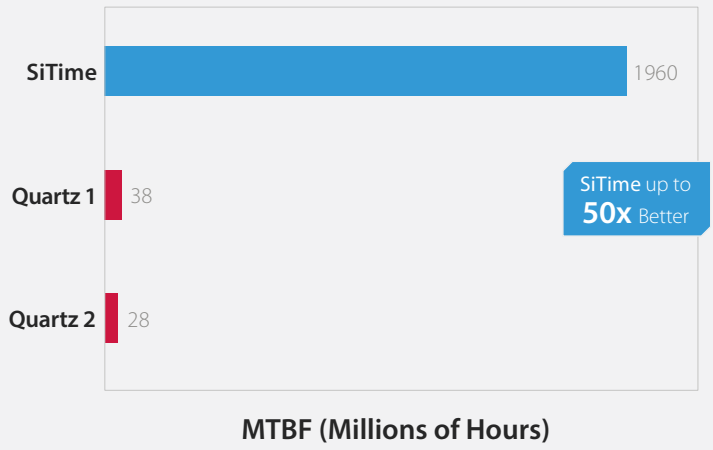
Best-in-class jitter,
±20 ppm over -40 to 105°C,
Resistant to shock, vibration
and thermal gradients

SiT9386 | SiT9387 | SiT8924
Oscillators

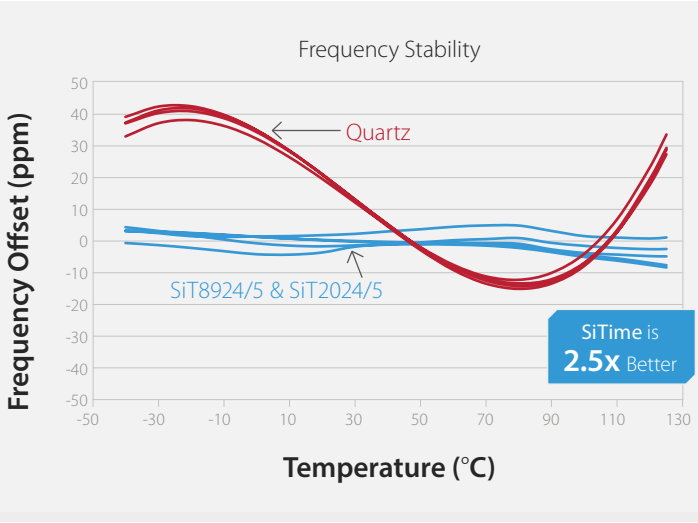
Higher Quality



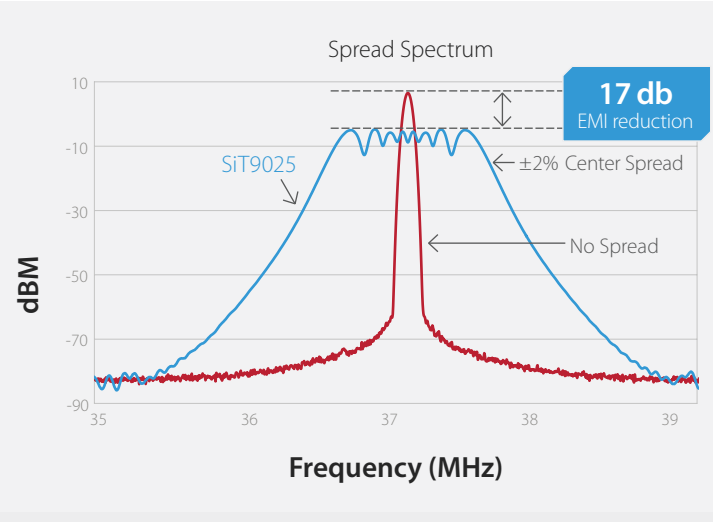
Higher Reliability



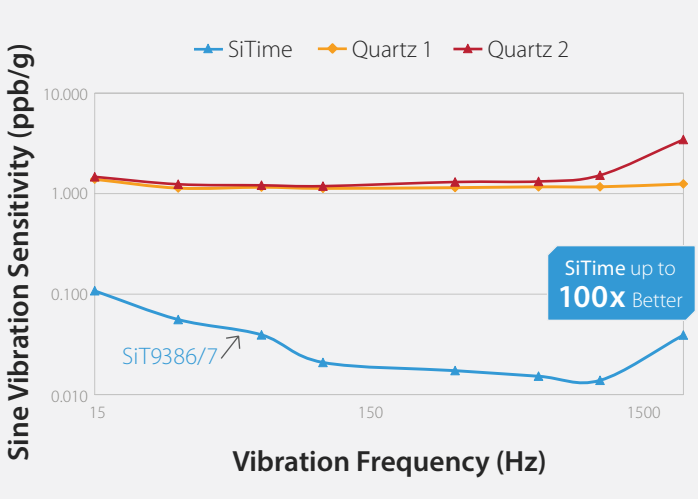
Tighter Stability



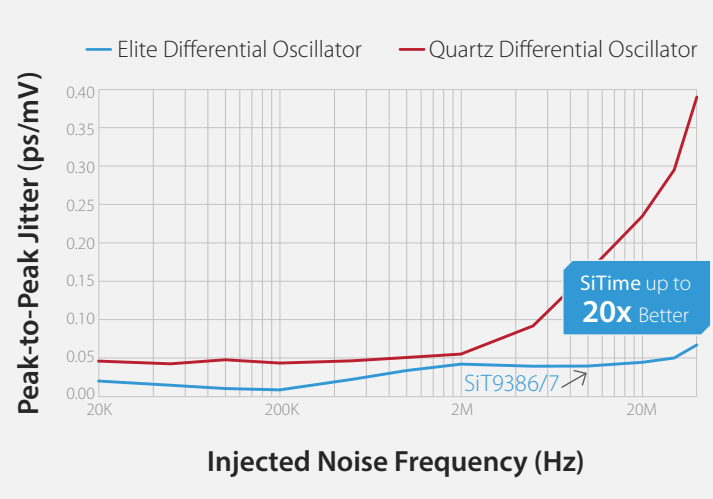
Better EMI Reduction



Immune to Vibration



Better Noise Rejection



SiTime

AEC-Q100 MEMS Timing Solutions for Automotive

SiTime Base Part No.	Output Frequency	Temperature Range (°C)	Frequency Stability (ppm)	Supply Voltage (V)	Packages (mm x mm)	Output Logic	Features
QFN OSCILLATORS | Pin-compatible QFN | Short lead time even for custom frequencies							
SiT8924	1 to 110 MHz	-40 to +85, -40 to +105, -40 to +125, -55 to +125	±20, ±25, ±30, ±50	1.8, 2.5 to 3.3	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	8 output drive strength options, Field Programmable
SiT8925	115.2 to 137 MHz						
SiT8934	1 to 150 MHz	-40 to +85, -40 to +105, -40 to +125, -55 to +125	±20, ±25, ±30, ±50	1.8, 2.5 to 3.3	QFN with wettable flank: 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	8 output drive strength options, Field Programmable
SiT8935							
SOT23 OSCILLATORS | Best solder-joint reliability | Short lead time even for custom frequencies							
SiT2024	1 to 110 MHz	-40 to +85, -40 to +105, -40 to +125, -55 to +125	±20, ±25, ±30, ±50	1.8, 2.5 to 3.3	SOT23-5: 2.9 x 2.8	LVCMOS	8 output drive strength options, Field Programmable
SiT2025	115.2 to 137 MHz						
DIFFERENTIAL OSCILLATORS | Best-in-class jitter | Wide frequency range							
SiT9386	1 to 220 MHz	-40 to +85, -40 to +105	±10, ±20, ±25, ±50	2.5, 2.8, 3.0, 3.3	QFN with wettable flank: 3.2 x 2.5, 7.0 x 5.0	LVPECL, LVDS, HCSL	0.23 ps rms phase jitter
SiT9387	220 to 725 MHz						
EMI REDUCTION OSCILLATORS | Most flexible EMI reduction options | Low cycle-cycle jitter							
SiT9025	1 to 150 MHz	-40 to +85, -40 to +105, -40 to +125, -55 to +125	±20, ±25, ±50	1.8, 2.5 to 3.3	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
TCXO/VCTCXO/DCTCXO | ±6.25 to ±3200 ppm pull range | 5 ppt resolution frequency control							
SiT5186	1 to 220 MHz	-40 to +85, -40 to +105	±0.5, ±1, ±2.5	2.5, 2.8, 3.0, 3.3	SMD: 5.0 x 3.2	LVCMOS, Clipped Sinewave	I2C programmable, 1 ppb/°C slope, Field Programmable
SiT5187							
SiT5386			±0.1, ±0.2, ±0.25[1]				
SiT5387							
32 KHZ OSCILLATORS | Small size | Low power | Reliable startup in cold temperature							
SiT1680	32.768 kHz	-40 to 85, -40 to 105	±3, ±5, ±10, ±20, ±100, ±150	1.5 to 3.63	CSP: 1.5 x 0.8	LVCMOS, NanoDrive™	Smallest XO/TCXO

[1] Contact SiTime for ±50 ppb

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

All products are available in -40 to +85°C unless otherwise noted

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