



SiTime™

MEMS Timing Solutions



Programmable Spread Spectrum Oscillators



Static sensitive device

SiTime's programmable spread-spectrum oscillators are an excellent solution for EMI problems. They are 100% drop-in replacements for quartz oscillators and ensure that customers can pass environment tests without any board changes or the use of expensive components.

Key features are:

- Available in differential (SiT9002), low power (SiT9003) and high performance (SiT9001) versions for a wide variety of applications
- Various configurable down spread and center spread options available on each device
- Lowest cycle-cycle jitter in the industry
- Industry standard footprints for easy replacement: 2520, 3225, 5032 and 7050 packages for LVCMOS and 5032 and 7050 for differential
- Available as field programmable

Model	Output Type & Description	Frequency & Characteristics	Op Temp. Range & Stability Option	Spread (%)	Package Size (mm)
SiT9002	LVPECL, LVDS, CML, and HCSSL O/P	1-220MHz Programmable voltage support of : 1.8V, 2.5V or 3.3V	-20°C to +70°C -40°C to +85°C	±0.25, ±0.5, ±1.0, ±2.0, -0.5, -1.0, -2.0, -4.0	5.0 x 3.2 x 0.75 7.0 x 5.0 x 0.9
SiT9003	LVPECL & LVDS O/P Low Power Programmable Frequency	1-110MHz 1.8, 2.5, 2.8, & 3.3V	-20°C to +70°C -40°C to +85°C ±50PPM or ±100PPM	Center spread (%) ±0.25% and ±0.5% Down spread (%) -0.5% and -1.0%	2.5x2.0x0.75 3.2x2.5x0.75 5.0x3.2x0.75 7.0x5.0x0.9
SiT9001	LVPECL & LVDS O/P High Performance Programmable Frequency	1-200MHz 1.8V, 2.5V & 3.3V 30ps Cycle to Cycle Jitter	-20°C to +70°C -40°C to +85°C	±0.25, ±0.5, ±1.0, ±2.0, -0.5, -1.0, -2.0, -4.0	2.5x2.0x0.75 3.2x2.5x0.75 5.0x3.2x0.75 7.0x5.0x0.9