

Time Machine IIMEMS Oscillator Programmer

Instant Oscillators

Complete easy-to-use programming kit for SiTime's field programmable oscillators

Any frequency

Any voltage

Any stability





Don't waste time searching and waiting for oscillators. The Time Machine II^{T} allows you to easily configure SiTime MEMS field programmable devices to your exact specification and create drop-in replacements for legacy quartz oscillators within seconds.

Benefits

- Reduce design time with instant samples
- Optimize system performance with custom frequencies
- Enable fast prototyping with always-in-stock field programmable devices

Supports popular SiTime MEMS oscillators

Ultra Performance Oscillators: SiT8208, SiT8209

Differential Oscillators: SiT9120. SiT9121. SiT9122

Low Power Oscillators: SiT8008, SiT8009, SiT1602

High Temp Oscillators: SiT8918, SiT8919, SiT8920, SiT8921, SiT1618

VCXOs: SiT3807, SiT3808, SiT3809

Differential VCXOs: SiT3821, SiT3822

Digitally Controlled Oscillators (DCXOs): SiT3907

Differential DCXOs: SiT3921, SiT3922

Spread Spectrum Oscillators: SiT9001, SiT9003

Spread Spectrum Differential Oscillators: SiT9002

Features

Easy to Use

- USB powered programmer
- Add-on cards with directional connectors and indicators
- Anti-slip bumps hold programmer in place
- One-click programming software
- Built-in part number generator
- Programming history
- Auto software update
- Compatible with all PCs and Microsoft Windows®

Complete Solution

- Small carrying case holds programmer and all accessories
- Add-on cards (socket cards) support 6 oscillator packages
- Sample field programmable device packs
- Complete documentation

Future Proof

- Software and hardware upgradable for future products
- Durable socket card connectors rated at 5000 insertions



Time Machine II

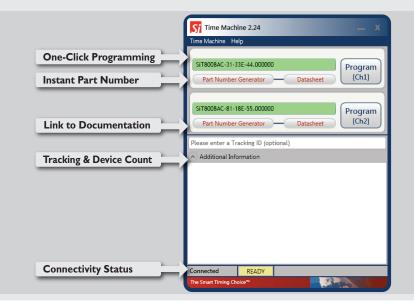
MEMS Oscillator Programmer

Program Oscillators in 3 Simple Steps

- I. Mount the field programmable device
- 2. Specify desired configuration
- 3. Program

See how easy it is to program SiTime oscillators using the Time Machine at:

www.sitime.com/time-machine-video



Configure Devices to Your Exact Specification

Customizable Frequency	Differential: I to 625 MHz Single-ended: I to 220 MHz	6 decimals of accuracy
Frequency Stability	±20 to ±50 PPM	
Supply Voltage	1.8V, 2.5 to 3.3V	
Pull Range	±25 to ±1600 ppm in VCXO and DCXO	
Drive Strength Control	I to II ns rise/fall time for low to high output drive	
Spread Spectrum	± 0.25 to $\pm 2.0\%$ center spread and -0.5 to -4.0% down spread	







Additional Options

Package Options	2016, 2520, 3225, 5032, 7050 plastic packages	
Temperature Range	-20 to +70°C, -40 to +85°C, -40 to +105°C, -40 to +125°C or -55 to +125°C	
Output Signaling	Differential: LVPECL, LVDS or HCSL, Single-ended: LVCMOS	

Kit Contents (SiT6100DK)

- Programmer
- Socket cards
- USB Cable
- Tweezers
- Installation Software (USB Drive)
- Field Programmable Oscillators



Field programmable oscillators: www.sitime.com/fp-devices Programmer and adapter cards: www.sitime.com/time-machine