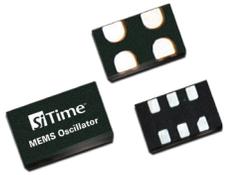# SiTime™

Instant Oscillators

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

Any frequency
Any voltage
Any stability

ACTUAL SIZE

Don't waste time searching and waiting for oscillators. The Time Machine II™ 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
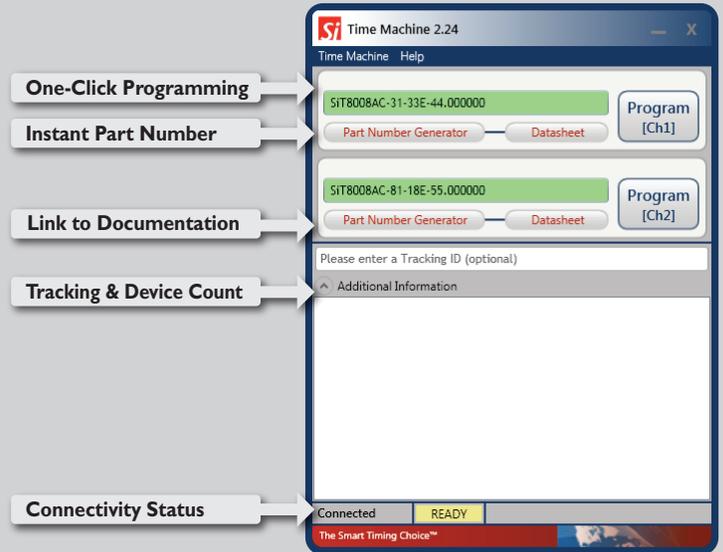- Sample field programmable device packs
- Complete documentation

Future Proof

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

Program Oscillators in 3 Simple Steps

1. 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

One-Click Programming

Instant Part Number

Link to Documentation

Tracking & Device Count

Connectivity Status

Si Time Machine 2.24 — X

Time Machine   Help

SiT8008AC-31-33E-44.000000   Program [Ch1]
Part Number Generator   Datasheet

SiT8008AC-81-18E-55.000000   Program [Ch2]
Part Number Generator   Datasheet

Please enter a Tracking ID (optional)
∧ Additional Information

Connected   READY
The Smart Timing Choice™

Configure Devices to Your Exact Specification

Customizable Frequency	Differential: 1 to 625 MHz Single-ended: 1 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	1 to 11 ns rise/fall time for low to high output drive	
Spread Spectrum	±0.25 to ±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

INSTANT SAMPLES

QUARTZ FREE

GREEN SOLUTIONS

Kit Contents (SiT6100DK)
- Programmer
- Socket cards
- USB Cable
- Tweezers
- Installation Software (USB Drive)
- Field Programmable Oscillators

SiTime Time Machine II™ MEMS Oscillator Programmer — Instant Oscillators — Any Frequency, Voltage, Stability — The Smart Timing Choice™

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