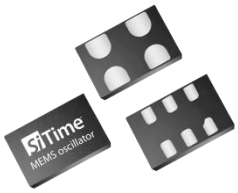
Time Machine II

MEMS Oscillator Programmer

Instant Oscillators

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

- Any frequency
- Any voltage
- Any stability



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

Benefits

- Optimize system performance with custom frequencies
- Reduce EMI with programmable drive strength
- Quickly develop prototypes and reduce design time with instant oscillators

Applications

- Ultra-Performance Oscillators: SiT8208, SiT8209
- Differential Oscillators: SiT9120, SiT9121, SiT9122
- Low Power Oscillators: SiT8008, SiT8009, SiT2001, SiT2002, SiT1602
- High Temp Oscillators: SiT8918, SiT8919, SiT8920, SiT8921, SiT2018, SiT2019, SiT2020, SiT2021, SiT1618
- AEC-Q100 Automotive Oscillators/Clocks: SiT8924, SiT8925,
- SiT2024, SiT2025
- VCXOs: SiT3807, SiT3808, SiT3809
- Spread Spectrum Oscillators: SiT9003, SiT9005
- Ruggedized: SiT5146, SiT5147, SiT5346, SiT5347, SiT5348, SiT5349, SiT9346, SiT9347
- µPower: SiT1581

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

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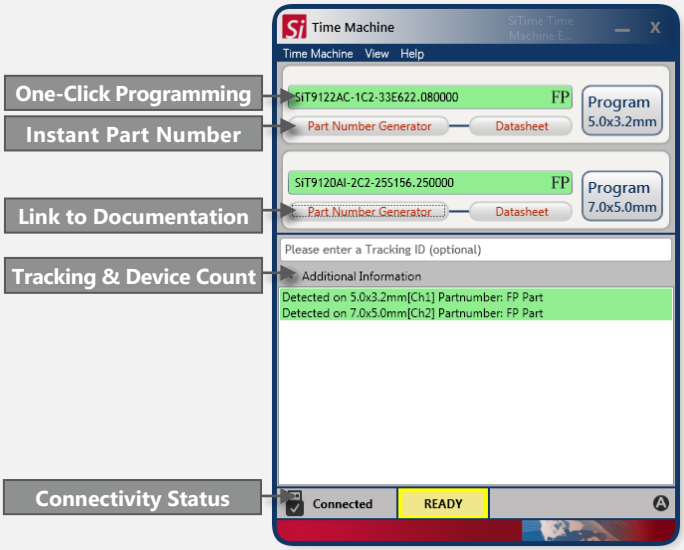
Program Oscillators in 3 Simple Steps

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

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

sitime.com/time-machine-video



Configure Devices to Your Exact Specification

Customizable Frequency	Differential: 1 to 725 MHz Single-ended: 1 to 220 MHz	6 decimals of accuracy
Frequency Stability	±0.05 to ±50 PPM	
Supply Voltage	1.8V, 2.5 to 3.3V	
Pull Range	Programmable from ±50 to ±1600 ppm in VCXO and up to ±3200 ppm in DCXO	
Drive Strength Control	0.25 to 40 ns rise/fall time for low to high output drive and load	
Spread Spectrum	±0.25 to ±2.0% center spread and -0.5 to -4.0% down spread	

Additional Options

Package Options	CSP: 1508; QFN: 2016, 2520, 3225, 5032, 7050; SOT23-5: 2928; SMD: 3225, 5032, 7050
Temperature Range	0 to +70°C , -20 to +70°C, -40 to +85°C, -40 to +95°C, -40 to +105°C, -40 to +125°C, -55 to +125°C
Output Signaling	Differential: LVPECL, LVDS, or HCSL Single-ended: LVCMOS, Clipped Sine

Kit Contents (SiT6100DK)

- Programmer
- Adapter board(s)
- USB Cable
- Tweezers
- Field Programmable Oscillators

GREEN SOLUTIONS

INSTANT SAMPLES

LIFETIME WARRANTY

Download Time Machine II Software: sitime.com/tm-sw

Field programmable oscillators: sitime.com/fp-devices

Programmer and adapter cards: sitime.com/time-machine

User Manual: sitime.com/tm-um

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