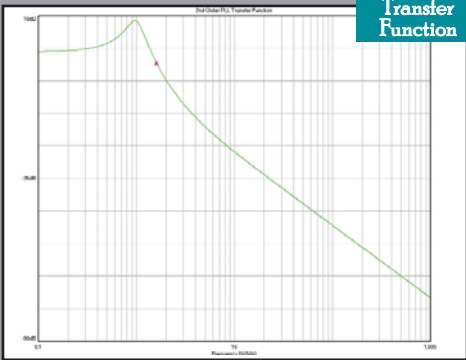
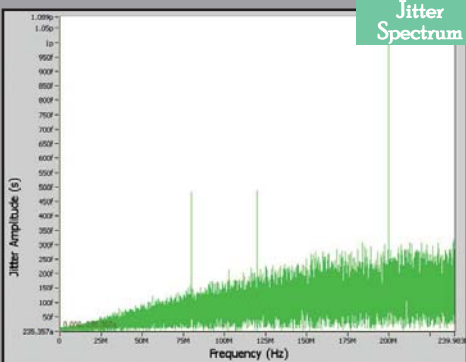


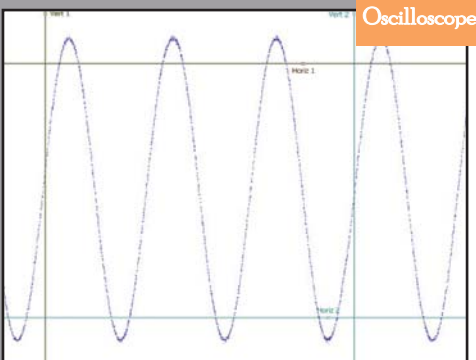
Phase Noise



Transfer Function



Jitter Spectrum



Oscilloscope



The Only General Purpose Clock Tool Available

Interact with colleagues on familiar terms: Frequency, Amplitude or Time

- ◆ Translate domains using the “Rosetta Stone” of instruments
- ◆ Address requirements of Telecom, SONET, Military/Aerospace and PC/Server datacom markets
- ◆ Meet the widest range of oscillator test specifications

Tackle More Test Parameters Than Current Single Instrumentation

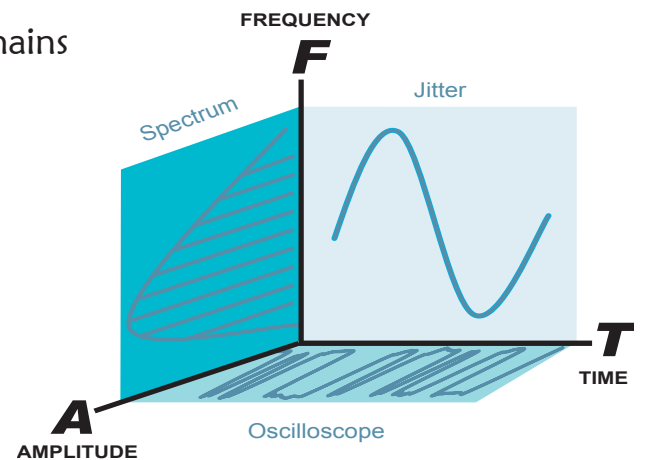
Phase Noise	Transfer Function	Jitter & Timing	Oscilloscope
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Functionality of four systems in one, easy-to-use instrument

- ◆ Spectrum Analyzer, Phase Noise Analyzer, Jitter Analyzer and Oscilloscope

Measure in three domains

- ◆ Frequency
- ◆ Amplitude
- ◆ Time



Extensive Functionality in 1 Easy to Use Solution

◆ Phase Noise

- ◆ Low noise $< -150\text{dBc/Hz}$ @ 10 KHz, 1 MHz and 10 MHz offsets
- ◆ Extremely wide offset from 1 KHz to $F_c/2$ - well beyond 100 MHz
- ◆ Runs jitter for 12 KHz - 20 MHz and 50 KHz - 80 MHz, standard
- ◆ Customer selectable RMS jitter bandpass with programmable roll-off

◆ Transfer Function

- ◆ Fast transfer functions for 2nd and 3rd PLL and DLL
- ◆ Complete transfer function solution - no stimulus required
- ◆ Graphical views of transfer function, bode plots; poles and zeros
- ◆ PLL characteristics including peaking, BW, natural frequency and others

◆ Jitter

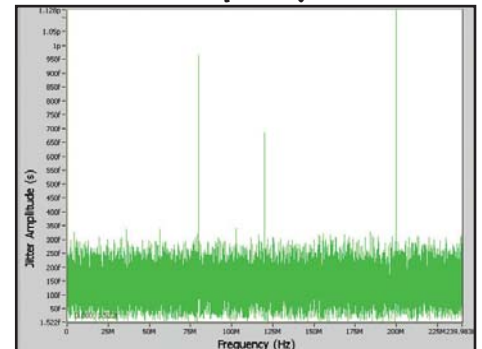
- ◆ Jitter spectrum with noise floor $< 150\text{ fs}$
- ◆ Directly measures Random (RJ), Periodic (PJ), Deterministic (DJ) and Total Jitter (TJ)
- ◆ Phase Jitter, Period Jitter, cycle-to-cycle jitter measurements
- ◆ Output skew and other timing measurements with 200 fs resolution
- ◆ Allen variance and wander with internal reference (1s) $5e10^{-11}$ and lower with external reference

◆ Oscilloscope

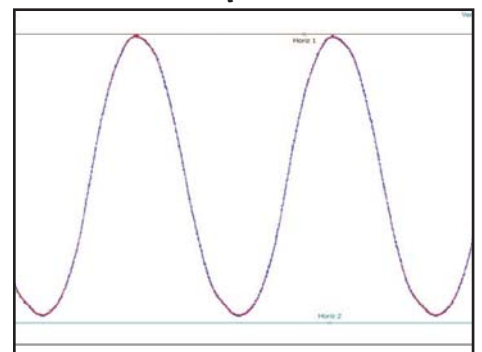
- ◆ 15 GHz bandwidth
- ◆ Rise time/fall time to $< 25\text{ ps}$ (10% - 90%)
- ◆ Time Interval Error
- ◆ VOH/VOL, overshoot and ring back with 300 μV resolution
- ◆ Full featured oscilloscope with multiple trigger options

Unleash the lowest noise floor capabilities of your SIA4000 by adding the SSA software package.

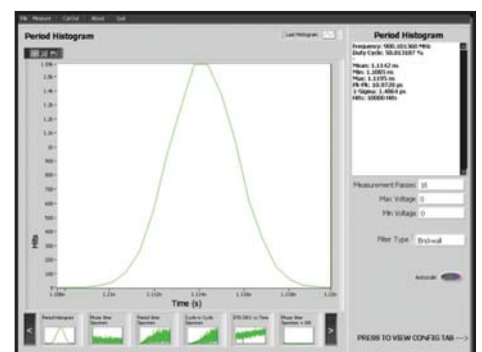
Frequency



Amplitude



Time



SSA software for the SIA4000 allows you to directly see how jitter and phase noise values relate by displaying all of these results for your clock at once without using different instru-