Real-time Jitter and Eye-diagram Analysis

DPOJET is the premiere eye-diagram, jitter, and timing analysis package available for real-time oscilloscopes. Operating in the Tektronix DPO/DSA70000B, MSO70000, and DPO7000 Series oscilloscopes, DPOJET provides engineers the highest sensitivity and accuracy available in real-time instruments.

With comprehensive jitter and eye-diagram analysis and decomposition algorithms DPOJET simplifies discovering signal integrity concerns and jitter and their related sources in today's high-speed serial, digital, and communication system designs.

Analog and digital designers in the computer, semiconductor, and communications industries are facing new challenges as processor clock speeds race beyond 3 GHz and back-plane bus and serial link data rates exceed 8 GT/s. These increasing speeds mean reduced circuit tolerance, or margin, for jitter and related signal integrity problems. By using tools that help you rapidly characterize and discover sources of jitter and signal integrity concerns, you can bring new designs to market faster, with more confidence that they operate reliably in today's ultra high-speed environment.

DPOJET Jitter and Eye-diagram Analysis Tools extend the capability of Tektronix real-time oscilloscopes, performing complex measurements and analysis of clock, serial, and parallel data signals captured in Single-shot Acquisition mode or in Continuous-run Acquisition mode. Providing jitter and timing measurements with pass/fail parameter testing, and eye diagrams with mask testing for today’s most common industry standards, DPOJET is specifically designed to meet the advanced measurement needs of today's high-speed digital designers in the computer and communications industries.

DPOJET provides the ability to make measurements of single-ended and differential signals, measurements between two separate inputs, and measurements on multiple inputs simultaneously; with each input and each measurement independently configurable for maximum flexibility.

DPOJET supports displaying measurement results and plots on the internal display, on an external monitor, or both locations, thus making full use of the oscilloscope dual display ports.

DPOJET analysis plots, like Spectrum and Trend, go beyond simple measurements and results display. Trend analysis quickly shows engineers how timing parameters change over time, like frequency drift, PLL startup transients, or a circuit’s response to power supply changes. Spectrum analysis quickly shows the precise frequency and amplitude of jitter and modulation sources for easy, rapid identification.

Finding sources like adjacent oscillators and clocks, power supply noise, or signal crosstalk is no longer a tedious chore. Unique in the industry, DPOJET also provides

Phase Noise plots to show jitter in root/Hertz and Transfer Function plots that allow direct comparison of jitter spectrums between two signals of differing frequencies, providing the perfect tool for determining jitter in PLL circuits like clock multipliers.

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