Digital Design and Debug with TDS3000B Series Digital Phosphor Oscilloscopes

Digital Troubleshooting

After a prototype of a new electronic product is assembled, the engineer's real work begins: characterizing the unit's performance, detecting and troubleshooting problems, and tracking down their causes.

The TDS3000B Digital Phosphor Oscilloscope (DPO) family dramatically simplifies these engineering tasks. With bandwidths to 500 MHz, up to four simultaneous full-bandwidth channels, and a TekProbe interface that supports fast FET and differential probes, the TDS3000B Series is fully qualified to confront difficult design characterization and troubleshooting problems.

- It's DPO waveform display helps designers see transients and signal details that may be the cause or the effect of a design problem. The display intensifies areas of the waveform proportional to the frequency with which they occur, much as an analog oscilloscope does.
- WaveAlert™ waveform anomaly detection identifies any event (such as a glitch) that deviates from the "normal" input waveshape.
- The optional TDS3AAM Advanced Analysis Module adds on-board automated measurements and provides extended math capability; including area and cycle area measurements, Differentiation and integration, FFT, measurement statistics (min./max. or mean/standard deviation), and Arbitrary math expressions.
- The TDS3TRG Extended Trigger capability adds state triggering, runt and pulse width triggering, and more to the TDS3000B.

None of this would be useful without the basic oscilloscope performance to meet engineering needs. With bandwidths to 500 MHz, up to four simultaneous full-bandwidth channels, and a TekProbe interface that supports fast FET and differential probes, the TDS3000B Series is fully qualified to confront difficult design characterization and troubleshooting problems.

Tektronix®
Enabling Innovation