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USB-Sized Pulse Generator Produces Clean 32-ps Edge

Picotest's PerfectPulse Fast Edge Signal Generator produces a square pulse with a clean 32-ps edge in a pocket size, self-contained package, requiring only a USB power source. This generator can be used for TDR, scope/probe calibration, DSP calibration, and other applications that require a fast pulse edge (see the figure). The generator will be priced in the $3500 range. According to the vendor, this level of performance has not been previously available in this type of portable package (a USB style package) and at this price level.

Single button operation allows selection of different operating modes, while red, yellow and green LEDs indicate the current operating mode. The -500-mV, 50-Ω output signal is very square, without overshoot or undershoot making it well suited for verifying instrument and probe rise/fall times, as well as verifying signal path rise/fall time and undershoot/overshoot.

The addition of a 10-GHz power splitter allows the signal generator to be used as a reflectometer for measuring PCB coupons, cable and PCB trace impedance, verifying cable crimps, measuring trace and cable lengths, dielectric constant and many other applications.

For more information, see the company website.

Figure. The PerfectPulse Fast Edge Signal Generator is shown here with its TDR splitter, which is included with the product.