



Agilent 86108B Precision Waveform Analyzer

Data Sheet

Engineered for easy and accurate characterization of high-speed electrical designs from 50 Mb/s to 32 Gb/s.

- **Unprecedented performance**
 - Bandwidths to 50 GHz
 - Ultra-low timebase jitter < 50 fs rms (typical)
 - Integrated clock recovery (CR) to 32 Gb/s
 - Adjustable clock recovery loop bandwidth/peaking
- **Unmatched value and flexibility**
 - Lowest cost oscilloscope solution for 10-28 Gb/s signals
 - continuous data rate coverage from 50 Mb/s to 32 Gb/s
 - Simple and easy connections
 - Upgradable hardware (BW and CR options)
- **Advanced analysis capability**
 - Jitter Spectrum Analysis
 - PLL characterization including loop BW/jitter transfer
 - Analyze closed eyes using trigger from Aux CR input

As high-speed electrical communication systems and components increase in data rates to 25 Gb/s and beyond, design and validation engineers are faced with the difficult task of accurately characterizing the true performance of their designs. The 86108B Precision Waveform Analyzer is a plug-in module used with the 86100C/D Infiniium DCA family of oscilloscopes that provides an ideal solution to this measurement challenge. With industry-best residual jitter well below 70 femtoseconds (<50 fs typical!), channel bandwidths to 50 GHz, and an integrated instrumentation-grade hardware clock recovery circuit, the 86108B is engineered to provide accurate jitter analysis, eye diagram, and waveform characterization on signals from 50 Mb/s to 32 Gb/s. The 86108B provides a “gold standard” for waveform accuracy and translates into confidence that the waveform displayed by the oscilloscope is a faithful representation of the true device performance.



