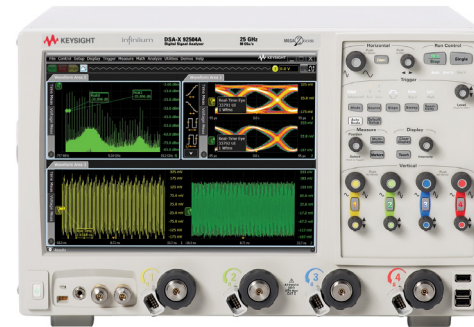


## Competitive Comparison

# Infiniium 90000 X-Series versus Danaher-Tektronix 70000C Series Oscilloscope

33 GHz of true analog bandwidth that delivers

1. The industry's highest measurement accuracy – In side by side comparisons the Infiniium 90000-X Series will measure more accurately (closer to reality) than the Danaher-Tektronix 70000C oscilloscope
2. The industry's highest probing bandwidth (30 GHz) – You are only as good as your probe, combine the 90000-X Series with InfiniiMax III probing system for 30 GHz of probing bandwidth
3. The industry's most flexible user interface – View and debug quicker with Infiniium's new user interface
4. The industry's highest-performance mixed signal oscilloscope (MSO) – Now you can have fast logic analysis with 16 channels at up to 50 ps timing resolution

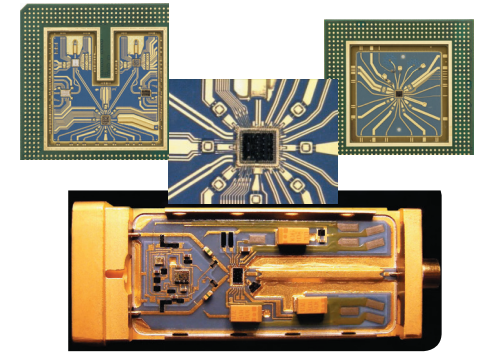


	Infiniium 90000-X Series		Danaher-Tektronix 70000C	
Maximum analog bandwidth	33 GHz	■	16 GHz	□
Maximum bandwidth (4 channel)	16 GHz	□	20 GHz	■
Maximum memory depth	2 G - 4 channels	■	256 Mpts	□
Sample rate (2 channel)	80 GSa/s	□	100 GSa/s	■
Noise floor at 20 GHz (100 mV/div)	0.41% FS	■	0.74% FS	□
Jitter measurement floor	150 fs	■	300 fs	□
Maximum probing bandwidth	30 GHz	■	20 GHz	□
Effective bits at 20 GHz bandwidth (10 GHz)	5.8	■	3.1	□
Bandwidth upgradable	Yes to 33 GHz	■	Yes to 20 GHz	□
Waveform areas	8	■	1	□
Number of grids per waveform area	16	■	1	□
FFT/measurement/bookmark callouts	Yes	■	No	□

# Engineered for 33 GHz of true analog bandwidth that delivers

## How did we achieve this?

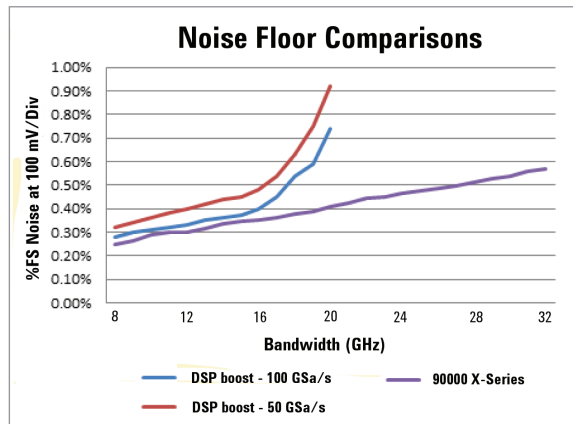
Keysight Technologies, Inc. has hardware performance to 33 GHz, Tektronix uses a technique known as DSP boosting to achieve its 20 GHz. While this technique allows for higher bandwidth, it increases the noise density and causes significant interleaving errors, which means measurement errors. The 90000-X Series uses custom Indium Phosphide chips and signal integrity expertise to achieve true analog bandwidth to 33 GHz. The oscilloscope uses no DSP boosting to achieve this performance, which means you don't have to make a higher noise density tradeoff to achieve high bandwidth. It also means you get the highest measurement accuracy, whether you are using 16 GHz of bandwidth or 33 GHz.



## It provides the highest measurement accuracy

The 90000-X Series provides true analog bandwidth above 16 GHz which gives you the following:

1. The industry's lowest noise floor
2. The industry's lowest jitter measurement floor
3. The industry's flattest frequency response



Oscilloscope noise is the largest single contributor to measurement errors. The 90000-X Series has less than 1/2 the noise of the Tektronix 70000C.

## It provides the highest probing bandwidth

The InfiniiMax III probing system, provides the industry's highest probing bandwidth 30 GHz and:

1. Custom probe amplifier characterization
2. The industry's only AC calibration
3. The industry's only bandwidth upgradeability



A measurement system is only as good as its highest bottleneck. The InfiniiMax III probing system provides 30 GHz of bandwidth to ensure high bandwidth probing.

## It provides the most flexible user interface

The 90000-X Series' user interface makes sharing information and debugging designs even easier.

1. Up to eight waveform areas with 16 grids per area
2. FFT, measurement, and bookmark callouts
3. Floating windows and analysis charts



Whether you are doing analysis, including jitter, de-embedding, or equalization, compliance, or protocol analysis, Keysight has the software that you need.



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