

Oscilloscopes Evolve From Center Instrument To The Only Instrument On Your Bench

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The oscilloscope is no longer just a time-domain viewing tool. Now, it's a measurement tool that includes logic analysis, protocol analysis, and spectrum analysis capabilities.

Mobile electronic devices are featuring a greater number of various interfaces that exist either internally between the chips or externally. However, this trend goes beyond the wireless communications industry and affects others as well, such as automotive.

Designers and manufacturers have to ensure that these interfaces work, and they need instruments that can help them in validation and debugging. The convergence of technologies in electronics is driving the convergence of test equipment overall.

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The wide use of oscilloscopes, often called the center of the bench, seems to make them the ideal instrument for such integration. This has led to the convergence of technologies in oscilloscopes including that of the time and frequency domains, although it also applies to other domains such as digital.

Granted, the integrated functionalities of various instruments in oscilloscopes are sort of teasers for the full-blown standalone solutions. However, technology evolves and this integration trend seems to be here to stay.

Some companies benefit from a significant presence and expertise in adjacent segments to the oscilloscope market that could be leveraged to make powerful oscilloscope solutions. At the same time, they may not be interested in fully embracing this trend by fear of cannibalizing the significant revenue they make in those adjacent markets.

Having said this, a few oscilloscope vendors have been dedicated to the oscilloscope market and may have little to lose. These companies are also very focused on product innovation and could make some waves.

I'll be heading to IMS 2013 in the first week of June, the key tradeshow for RF and microwave technologies in North America. It's where I first heard of the mixed-domain oscilloscope (MDO) a couple of years ago, and I

look forward to getting a glimpse of what market participants have in store. If you'd like to meet up with me, feel free to contact me.

Jessy Cavazos is Frost & Sullivan's Test & Measurement Industry Director. Frost & Sullivan, the Growth Partnership Company, works in collaboration with clients to leverage visionary innovation that addresses the global challenges and related growth opportunities that will make or break today's market participants. For more information on Frost & Sullivan's Test & Measurement research or any questions on this article, contact Jeannette Garcia, Corporate Communications at Jeannette.Garcia@frost.com or 210-477-8427.

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