Revolutionary architecture gives this channel card the ability to perform both multi-site and in-site parallel testing of existing and upcoming mixed-signal devices

Testing the ICs that drive wireless communications presents several challenges. Viable ATE test solutions need the flexibility to handle today’s wide range of communication protocols as well as the extendibility to provide a path for testing next-generation 5G chips, coupled with high productivity and cost efficiency.

With the Wave Scale™ generation of channel cards from ADVANTEST, the V93000 single scalable platform can test mixed-signal semiconductors with industry-leading parallelism and throughput. The cards give the V93000 platform the ability to perform highly parallel multi-site and in-site parallel testing for unprecedented performance.

Versatile Mixed-Signal Testing

The Wave Scale MX card has the far-ranging capabilities to test any of the highly integrated mixed-signal ICs used in LTE, LTE-Advanced and LTE-A Pro smart phones as well as LTE-M, WLAN, GPS, ZigBee, Bluetooth and IoT wireless applications. In addition to handling today’s market requirements, this card has the flexibility to address future test challenges foreseen for 5G networks.

Multi-Site and In-Site Parallel Capabilities

The Wave Scale MX has unique capabilities beyond those of traditional test solutions. The card’s innovative architecture allows totally independent settings on each path without any shared resources in the card. By performing both in-site parallel testing and massively parallel multi-site testing, the Wave Scale MX card significantly reduces the cost of test for highly integrated mixed-signal ICs.
High Productivity

This high-speed card is optimized for analog IQ baseband applications and testing of high-speed DACs and ADCs. By using 32 fully independent AWG/digitizer instruments per board and a dedicated PMU at each pogo, it enables truly independent baseband measurements and precision DC measurements. The source and measurement functions are optimized for dedicated analog baseband communication standards. The parallel and independent operation of each instrument is controlled and synchronized by the V93000's powerful test processor.

The Wave Scale MX leverages its 300-MHz bandwidth to test devices with advanced modulation standards including out-of-channel measurements on aggregated analog baseband channels.

A flexible I/O matrix simplifies the loadboard design and improves multi-site testing by providing full functionality at every pogo. Dedicated calibration equipment is not required, with only IQ calibration needing a separate board.