Spirent Builds on Mobile Device Test Leadership with LTE-Advanced Carrier Aggregation Capabilities

Spirent Communications

The industry's simplest and fastest tool for mobile device R&D testing now supports carrier aggregation.

Sunnyvale, CA – Spirent Communications [1] has announced support for Carrier Aggregation testing on its CS8 Mobile Device Tester.

As the industry's simplest and fastest tool for testing and verifying the design of mobile devices, the CS8 helps ensure LTE-Advanced (3GPP Release 10) Carrier Aggregation functionality meets the performance expectations of operators who plan to deploy the technology.

Carrier Aggregation is crucial for meeting the wireless uplink and downlink data rate targets set by the industry and required for data-hungry applications and services. Meeting these expectations requires at least 20 MHz of bandwidth in each direction, but very few network operators deploying LTE have sufficient contiguous spectrum.

Carrier Aggregation addresses this problem by combining radio channels within and across bands to increase user data rates, reduce latency and enable LTE downlink throughput speeds of up to 150Mbps.

"Meaningful testing of carrier aggregation needs much more than a radio-channel emulation solution," says Brock Butler, mobile device testing architect, at Spirent Communication.

"It also requires the ability to readily create the protocol interactions that can exercise the mobile device's ability to manage all possible combinations of carrier-aggregation scenarios. The CS8 is only single-box network emulation solution to support the aggregation of two 10 MHz carriers, each with 2x2 MIMO and

independent fading. Both are critical for accurately and rapidly testing realistic deployment scenarios."

CS8's direct access to the LTE protocol stack offers a high degree of flexibility and configurability in carrier aggregation testing across all protocol layers, from PHY/MAC to RRC and RRM. Additionally, CS8 is able to support all LTE frequency bands in a single box with multiple bandwidth combinations.

CS8, targeted at research and development of cellular phones, tablets, data cards and machine-to-machine cellular modules, bundles industry leading network emulation with innovative testing software and subject matter expertise into a solution that addresses the needs of design engineers.

CS8 supports Intra-band and Inter-band carrier aggregation, SISO, 2x2 MIMO, 4x2 MIMO for each carrier, cross-carrier scheduling, as well as integrated independent fading and AWGN (added noise) for each component carrier.

For more information visit http://www.spirent.com/Products/CS8 [1]

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[1] http://www.spirent.com/Products/CS8