



## **octoScope Announces Software for Adding IEEE 802.11n Channel Emulation Logic to Wireless Test Equipment**

***octoFade™ allows wireless test equipment vendors and integrators to add channel emulation easily and quickly for testing of MIMO radios in the presence of multipath and Doppler fading***

**A whitepaper is available at <http://octoscope.com/octofadepaper/>**

**San Diego, CA**— CTIA Enterprise & Applications- October 11, 2011 - octoScope, Inc., a wireless test solutions and services company, today announced its newest product, **octoFade** software. octoFade includes a library that implements IEEE 802.11n standard channel models enabling test equipment manufacturers and integrators to cost effectively and easily add channel emulation to test instruments used to test MIMO (up to 4x4) or conventional radios. octoScope is also developing 802.11ac channel models and welcomes inquiries about this offering.

octoFade customers, including vendors of MIMO signal generators and other such test tools, can use the existing programmable logic (FPGAs) of their wireless test equipment or add FPGA capacity for channel emulation at less than 5% of the cost of integrating an off-the-shelf emulator (typically priced in the US\$200,000 range) into the testbed. Engineers can use octoFade software to generate files of IQ test patterns for simulation or for real-time streaming into the radio receivers being tested. octoFade software includes the first fully implemented and rigorously verified software library of 802.11n channel models.

“octoScope has done it again, this time with a novel approach to channel emulation that is both powerful and cost-effective,” said Craig Mathias, a Principal with the wireless and mobile advisory firm Farpoint Group. “Users of octoFade will produce the next generation of MIMO products more quickly and at lower cost than has ever been possible before.”

“The development of complex MIMO radios requires testing with a channel emulator, which is currently an expensive solution to buy off-the-shelf,” noted Fanny Mlinarsky, octoScope president. “Channel emulators incorporate sophisticated and costly RF front end circuitry already present in common radio test solutions, such as RF signal and pattern generators. octoFade enables test equipment manufacturers and integrators to add channel emulation logic to their products using the RF circuitry already present in their equipment.”

Channel modeling is used for emulating real-life wireless environments in the lab to test wireless products, including 802.11n, 802.11ac and cellular/LTE radios, to assess radio performance in the presence of multipath and Doppler fading.

octoFade allows testing of MIMO radios in an emulated environment where the radios are subjected to controlled hostile conditions such as motion and multipath. octoFade is available as C source code or binary code and can be ported to FPGAs or parallel processing computing platforms, such as GPUs (graphics processing units) for real-time low-cost channel emulation.

### **octoScope at CTIA**

octoScope is demonstrating octoFade at the CTIA Enterprise & Applications 2011, San Diego Convention Center on October 11-13, 2011. To make an appointment, please email [sales@octoscope.com](mailto:sales@octoscope.com) or call +1-978-222-3114.

### **Pricing and Availability**

octoFade software with IEEE 802.11n models is available now. octoFade can operate in the National Instruments LabVIEW environment and as a CLI (command line interface) application in the Windows and Linux environments. The API (Applications Programming Interface) C code can be compiled into

different library formats, such as Windows Win32 dynamic-link library (.dll) or Linux shared library (.so).  
For licensing fees, integration service fees and volume pricing, please contact [sales@octoscope.com](mailto:sales@octoscope.com)

### **About octoScope**

octoScope Inc. offers RF and wireless test solutions and services.

For more information, please visit [www.octoscope.com](http://www.octoscope.com).

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