NEWS RELEASE

**Breakthrough Techniques Improve Serial Link Performance**

*New Advances in Co-optimization and Discontinuity Reduction*

Oakhurst, CA – December 4 2015 --  SiGuys today announced it will present a paper demonstrating new techniques for optimizing high-speed serial links at DesignCon 2016.  "We've developed ways to achieve 60% better performance on links that are 25% longer than spec" said Donald Telian, Owner of SiGuys Signal Integrity Consulting, "by combining system-level optimization of advanced SerDes equalization with techniques that reduce impedance discontinuities by more than 30%", Telian said.  The paper "New SI Techniques for Large System Performance Tuning" demonstrates the improvements on systems with thousands of serial links, and will be presented on Wednesday January 20 2016.

The optimization techniques were jointly developed with Signal Integrity Software Inc. (SiSoft), who co-authored the paper with SiGuys.  "Channel-level SerDes equalization optimization is no simple task" said Barry Katz President and CTO of SiSoft, "and SiSoft was pleased to work with SiGuys and our leading customers to develop our 3$^{rd}$ generation co-optimizer - a significant advancement in the algorithms we've been pioneering for over a dozen years now."

The paper describes optimization using a correlated virtual system model to derive SerDes settings later programmed into hardware.  While some modern SerDes attempt to self-optimize during link training and boot-up, the virtual system has greater insight because it can simultaneously combine knowledge of all factors – Tx and Rx equalization and the passive channel fingerprint – to perform a more advanced co-optimization.  "We believe we're seeing performance gains that are not possible using other techniques, and SiGuys is excited to prove that out in the coming months in a variety of systems, hardware, and applications" Telian said.

**About SiGuys**
SiGuys leverages decades of Signal Integrity (SI) experience to provide consulting services to electronic hardware design teams.  SiGuys handles all types of SI challenges with particular focus on today's highest speed serial links, and deploys advanced simulation capabilities to ensure designs work right the first time.  SiGuys' customers receive real data, clear communication, and documented solutions for their most-challenging SI problems.  More information on SiGuys can be found at www.siguys.com.

**About SiSoft**
SiSoft collaborates with customers and their suppliers to develop innovative solutions to the world's toughest high-speed design problems. SiSoft accelerates design cycles through a combination of award-winning EDA simulation software, methodology training and consulting services. Quantum Channel Designer (QCD) is the Industry's Premier Channel Simulator for the design and analysis of Multi-Gigabit serial links and a DesignVision Award Winner. Quantum-SI (QSI) is the leading solution for integrated signal integrity, timing and crosstalk analysis of high-speed parallel interfaces. SiSoft's products automate comprehensive pre- and post-route analysis of high speed interfaces, detailing a design's operating voltage and timing margins. More information on SiSoft can be found at www.sisoft.com.