

# About SiSoft

Collaborate, Innovate, Accelerate

SiSoft accelerates design cycles by collaborating with customers and suppliers to develop innovative solutions to the world's toughest high-speed design problems. SiSoft provides seamless simulation environments through a mix of award-winning EDA software tools, automated analysis methodologies and consulting services. SiSoft leverages industry-leading design experience to help customers work "outside the box" of manufacturer's recommended guidelines, creating designs that extend the state-of-the-art in performance and reliability.

Since 1995, SiSoft has been focused on advancing the state-of-the-art in signal integrity, building on modeling standards to provide automated pre- and post-route system analysis. SiSoft's unique contributions to signal integrity include:

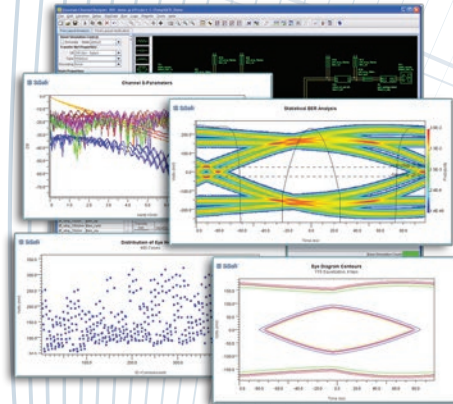
- 1999 Seamless HSPICE integration and automation
- 2001 Integrated SI/Timing analysis
- 2002 Automated post-route analysis
- 2004 Automated DDR2 analysis
- 2007 IBIS-AMI SerDes simulation models
- 2008 Automated DDR3 analysis
- 2009 IBIS-AMI correlation results
- 2010 Opal™ IBIS-AMI extensions
- 2011 Automated postroute serial link analysis
- 2012 IBIS-AMI Certification and Correlation services
- 2013 Automated DDR4 analysis
- 2014 Automated Design of Experiments methodology
- 2015 IBIS-AMI support for PAM4

## AUTOMATED SIGNAL INTEGRITY ANALYSIS

SiSoft's advanced EDA software automates both pre-route design space exploration and post-route design validation. Automated pre-route analysis explores **thousands** of design tradeoffs **automatically**, optimizing for cost, reliability and performance. Post-route analysis provides full **system-level** validation, automatically analyzing thousands of nets to find both best and worst case signals. Scatter plots of key design metrics quickly identify design trends and their causes.

Whether you're designing multi-gigabit serial links or high-speed parallel (DDR2/DDR3/DDR4) interfaces, SiSoft's tools automate repetitive tasks and accelerate your design cycle. Quantum Channel Designer (QCD) uses advanced IBIS-AMI models to simulate multi-gigabit serial links, showing how SerDes equalization interacts with high speed channels to affect link Bit Error Rate (BER). Quantum-SI (QSI) uses IBIS and HSPICE models to analyze signal integrity for parallel interfaces, automatically processing waveforms to validate compliance to DDR2, DDR3, DDR4 and other standards. Both QCD and QSI report voltage and timing margins for **every** signal in the **entire** interface.

SiSoft Design Kits contain ready-to-run setups for selected device models and interface standards. Design Kits let you perform sophisticated analysis by editing topologies to reflect your design and re-running simulation based on models and compliance rules contained in the kit. Simulation models are pre-validated and pre-integrated, so you can spend your time focusing on real work, instead of trying to get models to work and simulations to run.



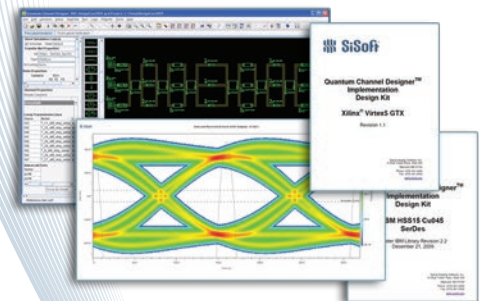
### Serial Link Design & Analysis

Quantum Channel Designer is a DesignVision 2009 award winner



### DDR2 / DDR3 / DDR4 Design and Analysis

Quantum-SI is a DesignVision 2005 award finalist



### Pre-Configured SI Design Kits

Available kits include Intel, IBM, TI, Xilinx, Altera & more

# About SiSoft *(continued)*

## CONSULTING SERVICES

SiSoft offers a complete range of system-level SI services including serial link analysis, serial/parallel interface analysis, power integrity analysis, design reviews and lab validation. SiSoft's expert consultants will analyze your design and provide the support you need to keep your project on schedule.

SiSoft's consulting team provides comprehensive methodology training that enables you to perform the same advanced analyses as our own consultants. Where other SI consultants are reluctant to teach customers their methods, SiSoft enables its software customers with the same methods we use internally. We'll even help you integrate SiSoft's analysis flow with existing tools and processes.

Jump Start Consulting provides design kit set-up and methodology training associated with a specific project. SiSoft will take your data, get the analysis running, then deliver the kit with on-site training to get you up and running **quickly**.

## IBIS-AMI MODEL DEVELOPMENT

Signal Integrity simulations are only as good as the models used, and SiSoft has more experience developing IBIS-AMI SerDes simulation models than anyone. SiSoft maintains its leadership position in IBIS-AMI by working with semiconductor vendors to develop and correlate models for next generation devices, defining new techniques that ensure IBIS-AMI keeps pace with market developments.

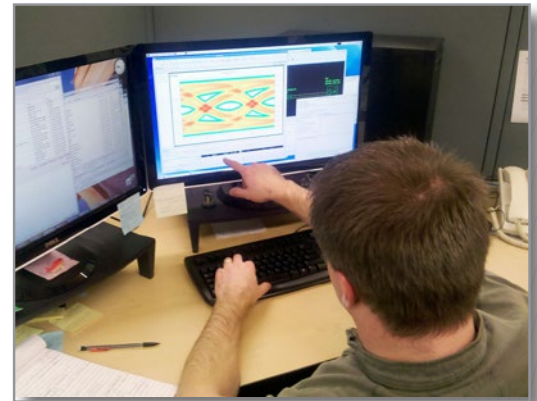
*"We've worked with SiSoft to create IBIS-AMI models across our SerDes based PHY's in IBM technologies. SiSoft has demonstrated continued leadership in SerDes modeling by first driving the development of the IBIS-AMI standard and then becoming the leading provider of IBIS-AMI model development, correlation and validation services."*

Synopsys

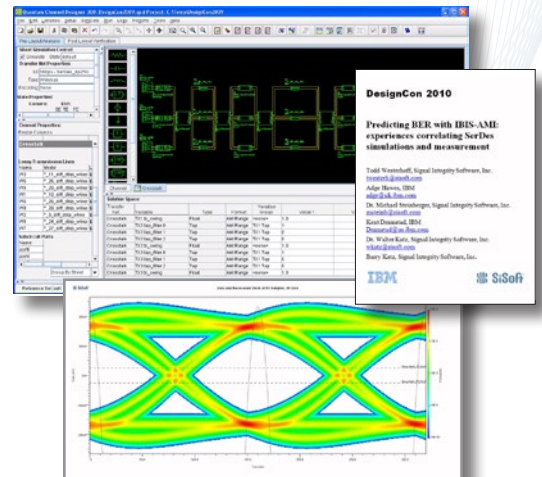
SiSoft offers a complete set of IBIS-AMI model development tools, services and training. Our IBIS-AMI Software Development Kit has been used to develop more IBIS-AMI models than anyone's.

## COLLABORATION + INNOVATION = ACCELERATION

SiSoft excels at working closely with customers and suppliers to solve complex design problems quickly and effectively. Whether your challenge is obtaining qualified simulation models, data scrubbing and conversion or integrating SI analysis with your design flow, SiSoft's experts can help. SiSoft has a long history of realtime innovation, creating new techniques on-the-fly to keep project schedules on-track. Partnerships with the world's leading high-speed digital design companies keep us at the forefront of advanced system-level signal integrity. Our extensive experience enables us to provide superior customer support and allows our customers to benefit from working with people who understand advanced simulation tools and how to use them to solve today's most challenging design problems.



High-Speed Digital Design Services



IBIS-AMI Model Development

To learn more about SiSoft's products, contact [sales@sisoft.com](mailto:sales@sisoft.com) or visit our website at [www.sisoft.com](http://www.sisoft.com).

 **SiSoft**<sup>TM</sup>  
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