

IBIS QUALITY COMMITTEE UPDATE



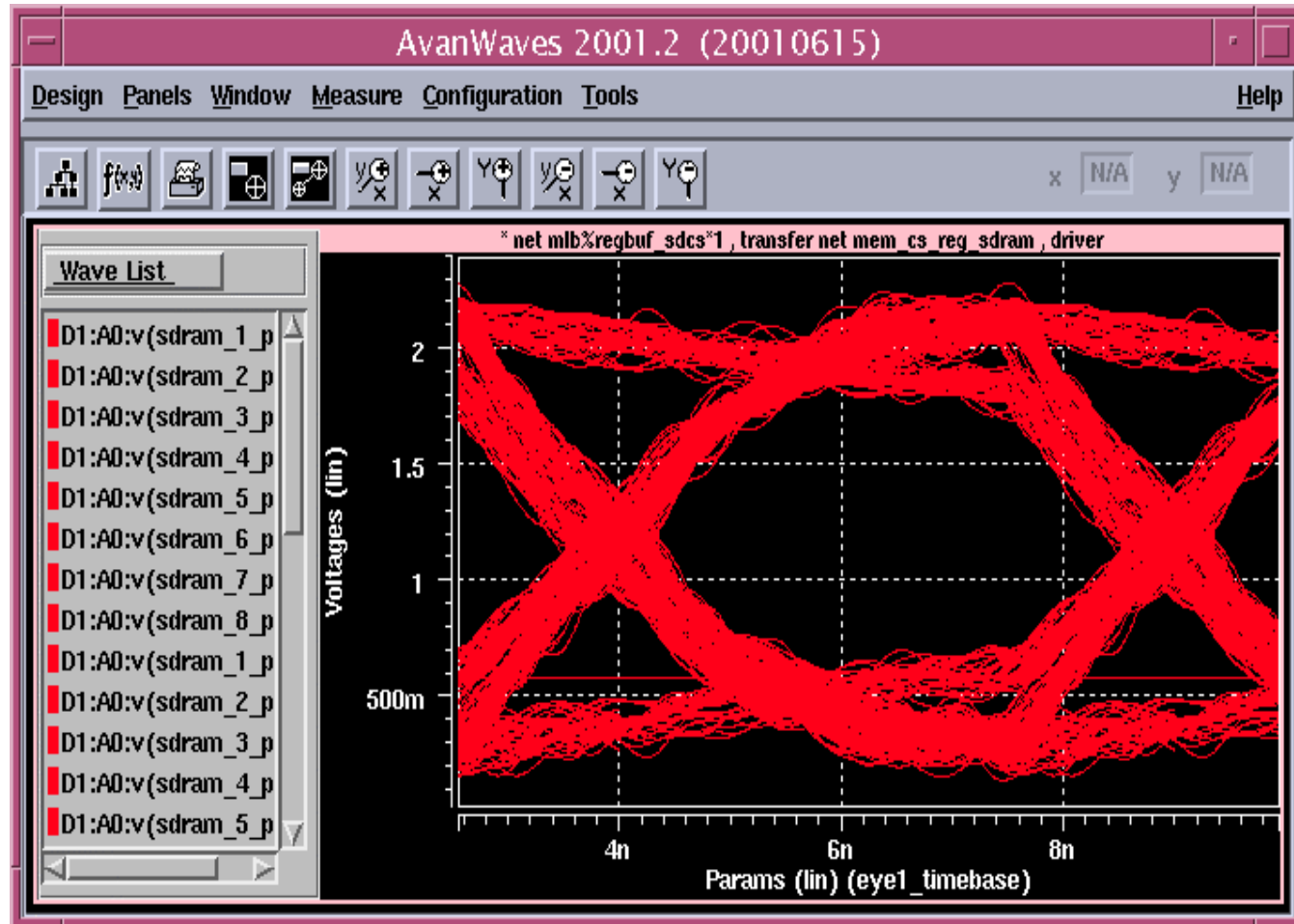
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“Eye” Grabber



IBIS QUALITY (IQ) Overview

- Industry now requires accurate IBIS models
- Recent and previous accomplishments
- To do
- Documentation
- Goals
- Participants
- Additional information
- IBIS Quality subcommittee driving industry for high IQ IBIS models !



IQ Recent Accomplishments

- Detailed Reviewed of 7 IQ Documents
 - Reference IBIS keywords
 - Quality level criteria
 - Input from industry IBIS experts
- BUG71 Monotonic Parser Bug Approved
 - Open Forum assigned a status of 'Will Be Fixed'
 - Most common warning from Parser
 - Proposed checks replace the current check
- IBISCHK Messages Captured



IQ Previous Accomplishments

- Compiled and published IBIS Quality checklist
 - <http://www.sisoft.com/ibis-quality/>
- Defined quality levels
 - Level 0 – Passes IBISCHK
 - Level 1 – Complete and correct
 - Level 2a, 2b – Correlation: Simulation, Measurement
 - Leverage off of IBIS Accuracy Handbook (spec)
 - Level 3 – All of the above
- Submitted multiple IBISCHK enhancements
- Submitted IBIS Golden Parser open source proposal
- Created, indexed first pass of documentation



IQ To Do List

- 3 Documents Left to Review
 - VT curves
 - Correlation
 - SPICE
 - LAB
 - Possible Errors
- Compile into one document
- Update Checklist
- Present to IBIS Open Forum



IQ Documentation

- Quality Summary
- General Header Section
- Component Section
- Model Section
- IV and Clamp Curves
- VT curves
- Ramp Data
- Waveform Processing
- SPICE and LAB Correlation
- Possible Errors that should be checked



IQ Subcommittee Goals

- Rating system that is easy to understand and adopt
- Communicate to vendors/users.
- Cover overall file, component, and model sections
- Check for completeness, correctness, accuracy
- Leverage off prior work



IQ Subcommittee Participants

- Committee is represented by broad cross-section of semiconductor vendors, EDA vendors, and IBIS end-users.

SiSoft - Barry Katz (Chairman), Robert Haller, Eric Brock, Kevin Fisher

Siemens – Eckhard Lenski, Katja Koller

IBM – Greg Edlund

Cadence – Lynne Green

Apple – John Figueroa, Kim Helliwell

Mentor – Bob Ross, Hazem Hegazy, Sherif Hammad,

Cisco – Mike LaBonte, Todd Westerhoff

EMC – Brian Arsenault

Hitachi ULSI Systems – Shoji Kazuyoshi, Nonoyama Sadahiro

Leventhal Design & Communications – Roy Leventhal

Intel – Benjamin Silva

Teraspeed - Tom Dagostino

AMCC - Peter LaFlamme

Fairchild – Adam Tambone



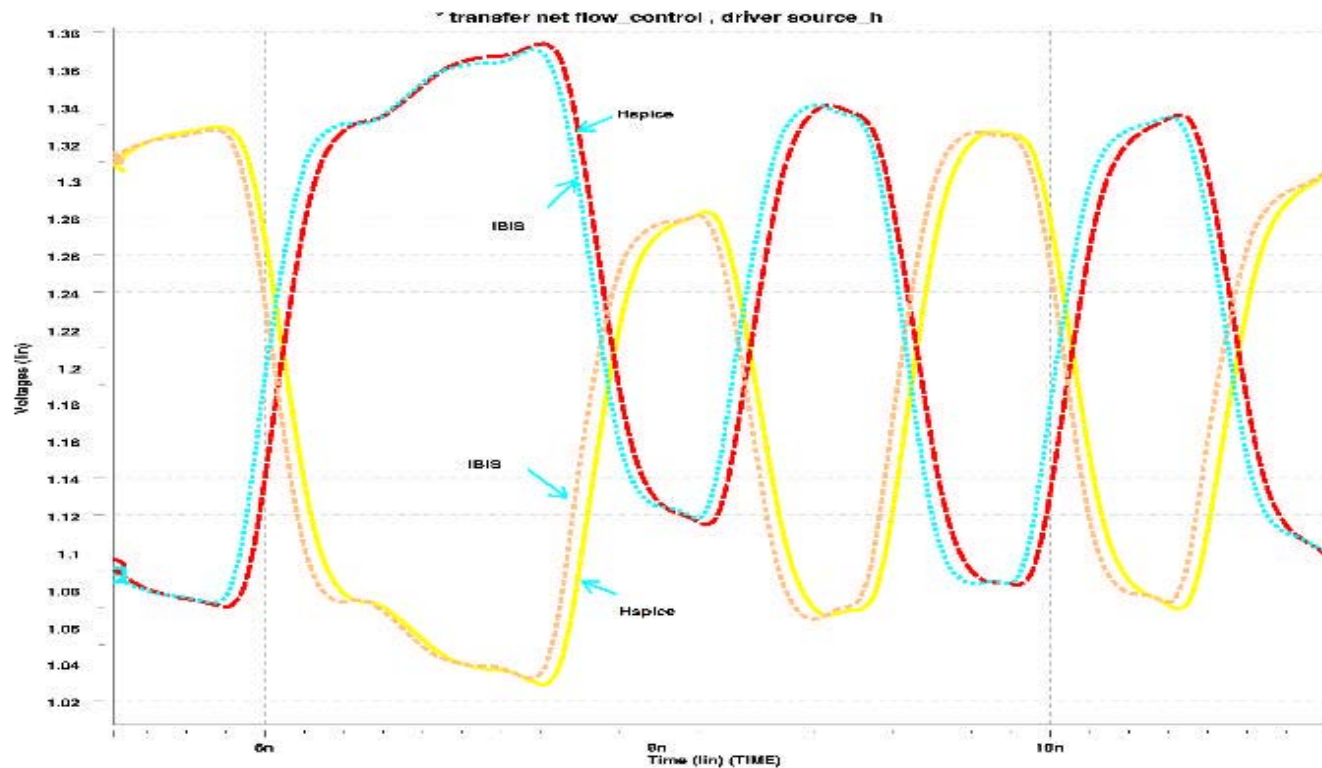
IQ Subcommittee Additional Information

- Mailing list
 - ibis-quality@freelists.org
 - <http://www.freelists.org/archives/ibis-quality>
- Web Sites
 - <http://www.sisoft.com/ibis-quality>
 - <http://www.sisoft.com/ibis-quality/minutes>
 - <http://www.sisoft.com/ibis-quality/docs>
 - <http://www.vhdl.org/pub/ibis/bugs/ibischk>



Goal of IQ Committee !

Accurate LVDS IBIS Model @ 1.25GHz



SPI4 interface: 1.25GHz, target pad, VDDQ=2.375