IBIS Open Forum Minutes

Meeting Date: January 29, 2010 Meeting Location: Teleconference

VOTING MEMBERS AND 2010 PARTICIPANTS

Actel (Prabhu Mohan) Agilent (Sanjeev Gupta) AMD Nam Nguyen* Ansoft Corporation (Steve Pytel) Apple Computer (Matt Herndon) **Applied Simulation Technology** (Fred Balistreri) ARM (Nirav Patel) Cadence Design Systems (Terry Jernberg) **Cisco Systems** Syed Hug*, Mike LaBonte* Anders Ekholm* Ericsson Freescale (Jon Burnett) **Green Streak Programs** (Lynne Green) Hitachi ULSI Systems (Kazuyoshi Shoji) Huawei Technologies (Jinjun Li) IBM Adge Hawes* Infineon Technologies AG (Christian Sporrer) Intel Corporation (Michael Mirmak) IO Methodology Lance Wang* LSI **Brian Burdick*** Mentor Graphics Arpad Muranvi* Micron Technology Randy Wolff* Nokia Siemens Networks GmbH Eckhard Lenski* Samtec (Corey Kimble) Signal Integrity Software Walter Katz* Sigrity (Raymond Chen) Synopsys (Andy Tai) Teraspeed Consulting Group Bob Ross* Toshiba (Yasumasa Kondo) Xilinx (Raymond Anderson) ZTE (Huang Min) Zuken (Michael Schaeder)

OTHER PARTICIPANTS IN 2010

TechAmerica

(Chris Denham)

In the list above, attendees at the meeting are indicated by *. Principal members or other active members who have not attended are in parentheses. Participants who no longer are in the organization are in square brackets.

UPCOMING MEETINGS

The bridge numbers for future IBIS teleconferences are as follows:

DateMeeting NumberMeeting PasswordFebruary 4, 2010DesignCon IBIS Summit - No teleconferenceFebruary 19, 2010203 886 410IBIS

For teleconference dial-in information, use the password at the following website:

https://cisco.webex.com/cisco/j.php?J=203886410

All teleconference meetings are 8:00 AM to 9:55 AM US Pacific Time. Meeting agendas are typically distributed seven days before each Open Forum. Minutes are typically distributed within seven days of the corresponding meeting. When calling into the meeting, follow the prompts to enter the meeting ID. For new, local international dial-in numbers, please reference the bridge numbers provided by Cisco Systems at the following link:

http://www.cisco.com/web/about/doing_business/conferencing/index.html

NOTE: "AR" = Action Required.

INTRODUCTIONS AND MEETING QUORUM

No new participants.

CALL FOR PATENTS

Bob Ross called for any patents or pending patents related to the IBIS 3.2, IBIS 4.2, IBIS 5.0, Touchstone 2.0 or ICM 1.1 specifications. No patents were declared.

MEMBERSHIP UPDATE AND TREASURER'S REPORT

Bob Ross reported that 10 memberships are paid so far for 2010. Freescale is a new paid member this year. Bob thinks we have spent the balance of the money for 2009, but this needs to be confirmed with TechAmerica. Three parser purchases are completed for this year with 2 pending. We are in good shape financially this year.

REVIEW OF MINUTES AND ARS

Bob Ross called for comments regarding the minutes of the January 8, 2010 IBIS Open Forum teleconference. The minutes were approved with no changes.

WEB PAGE UPDATES

Syed Huq reported that he updated the roster page. The poster page was submitted to TechAmerica for an update. Bob Ross noted that TechAmerica staff has been in a meeting all week.

MAILING LIST ADMINISTRATION

Mike LaBonte reported that he discovered many email addresses reporting bounces. As postmaster, had not been receiving administrative notices of these. He was able to clean up the mailing lists to purge some names. The eda.org server we use has been changed to a new machine. It is faster, but the way email is done changed a little bit. He is seeing problems with some companies bouncing emails. He is trying to fix this.

Bob Ross noted that there is a 1MB limit imposed on attachments sent through the reflector. He noticed a message bounced to <u>ibis-librarian@eda.org</u> due to this.

MODEL LIBRARY UPDATE

Anders Ekholm noted that the top of the page has an alphabetical index to IBIS models. He plans to add a separate index to companies with AMI models. Bob Ross said that it is worth adding them to same list or a separate list. Anders may ask other companies with models if they want to be on the list (go public with the fact that they have models).

PRESS UPDATE

Kazuyoshi Shoji and Shinichi Maeda released a document in Japanese entitled IBIS Guide. It is a cookbook for IBIS models that includes:

- 1. IBIS background and history
- 2. IBIS outline and characteristics
- 3. Model structure
- 4. Model details
- 5. I / O model electrical means
- 6. IBIS analysis
- 7. IBIS accuracy

The document can be found at:

http://tinyurl.com/yd479p3

Bob Ross also mentioned a book from Intel available the end of Q1 that briefly mentions IBIS.

Mastering High Performance Multiprocessor Signaling, David Coleman and Michael Mirmak, Intel Press. More information can be found at:

http://www.intel.com/intelpress/sum_qpied.htm

MISCELLANY/ANNOUNCEMENTS

None.

OPENS FOR NEW ISSUES

None.

INTERNATIONAL/EXTERNAL ACTIVITIES

- DASC No update. The DASC file and e-mail archive may be found at:

http://www.dasc.org/

- P1735 Encryption

No update. The IEEE Study Group on Encryption web reflector archives are found at:

http://www.eda-stds.org/ip-encrypt/hm/

-Conferences

Signal Propagation on Interconnects Workshop (SPI) is May 9 - 12, 2010 in Hildesheim, Germany. There is SI content and sometimes IBIS topics at this conference. The European IBIS Summit will be held in conjunction with this event on Wednesday afternoon.

http://www.spi.uni-hannover.de/

TECHAMERICA STATUS

No update.

IEC APPROVAL ACTIVITIES

Randy Wolff reported that he emailed Stan Krolikoski, the new DASC chairperson. He has been unable to contact Victor Berman, and Michael Mirmak recommended that Randy try contacting Stan. Randy has not heard back from Stan or Victor with any updates.

SUMMIT STATUS

-DesignCon Summit Planning

The meeting is scheduled for Thursday, February 4, 2010. Cisco is an official sponsor of the meeting. Room 203 in the main conference center is reserved. The meeting will be in the same area as most other DesignCon meetings. Lance Wang reported 32 people officially registered at this point. Bob Ross expects a few more signups. Bob and Brad Brim will bring projectors. Syed reported that all logistics are on schedule. Adge Hawes is preparing a presentation last minute and will send it out for review when completed.

-European Summit Planning

Bob Ross reported that he has had discussions with Ralf Bruening. Wednesday afternoon of

May 12 is planned for the summit after the SPI conference. There are major flights into Hannover, Germany which is close to Hildesheim.

Sponsorship opportunities for all upcoming IBIS summits are available, with sponsors receiving free mentions in the minutes, agenda, and other announcements. Contact the IBIS Board for further details.

IBIS QUALITY TASK GROUP

Mike LaBonte reported that the group is reviewing and updating the new IBIS Quality Checklist. There will be a presentation at the DesignCon summit about the checklist. They will be discussion correlation at the next meeting in two weeks. They are starting an outline for a new IBIS Correlation Handbook.

The Quality Task Group checklist and other documentation can be found at:

http://www.eda.org/ibis/guality_wip/

IBIS MODEL REVIEW TASK GROUP

No update. There will be a presentation at the DesignCon summit about the model review task group by Lynne Green.

ADVANCED TECHNOLOGY MODELING TASK GROUP

Arpad Muranyi reported that the group is working on an AMI BIRD draft. There will be a presentation at the DesignCon summit about the ATM group activities.

Task group material can be found at:

http://www.eda-stds.org/ibis/macromodel_wip/

AD HOC TASK GROUPS (INTERCONNECT)

Walter Katz reported that the group is moving ahead on the sparse matrix topic. They just need to clean up the documentation. Brad Brim is presenting paper at DesignCon on a Model Interconnect Protocol topic. Bob Ross mentioned that there is also discussion of a binary file option for Touchstone.

Task group material can be found at:

http://www.eda.org/ibis/adhoc/interconnect/

NEW ISSUES None.

ICMCHK1 BUG STATUS

All BUGs have been closed. No new BUGs have been filed.

TSCHK2 BUG STATUS

No BUGs to report.

IBISCHK5 BUG STATUS

Bob Ross has a BUG to submit at the next meeting related to IBIS AMI. There is no change in BUG status from the last meeting.

IBISCHK5 PARTIAL BUG FIX RELEASE V5.0.2

Bob Ross reported that he is on target for a quick release. The parser developer indicated he may send the new release Monday. The release will fix BUG109, BUG110 and BUG111.

Bob plans to have a discussion later about starting a new project to fix other open BUGs.

NEW ISSUES

None.

NEXT MEETING

The next Open Forum summit will be held at DesignCon on February 4, 2010. No teleconference will be available. The next IBIS Open Forum teleconference will be held February 19, 2010 from 8:00 to 10:00 AM US Pacific Standard Time.

NOTES

IBIS CHAIR: Bob Ross (503) 246-8048, Fax: (503) 239-4400

bob@teraspeed.com Staff Scientist, Teraspeed Consulting Group 10238 SW Lancaster Road Portland, OR 97219

VICE CHAIR: Lance Wang (978) 633-3388

Iwang@iometh.com President / CEO, IO Methodology, Inc. PO Box 2099 Acton, MA 01720

SECRETARY: Randy Wolff (208) 363-1764, Fax: (208) 368-3475

rrwolff@micron.com

SI Modeling Manager, Micron Technology, Inc. 8000 S. Federal Way Mail Stop: 01-711 Boise, ID 83707-0006

LIBRARIAN: Anders Ekholm (46) 10 714 27 58, Fax: (46) 8 757 23 40 <u>ibis-librarian@eda.org</u> Digital Modules Design, PDU Base Stations, Ericsson AB BU Network Färögatan 6 164 80 Stockholm, Sweden

WEBMASTER: Syed Huq (408) 525-3399, Fax: (408) 526-5504

hugs@cisco.com

Manager, Hardware Engineering, Cisco Systems 170 West Tasman Drive San Jose, CA 95134-1706

POSTMASTER: Mike LaBonte (978) 936-2147

milabont@cisco.com

Signal Integrity Engineer, Cisco Systems Mail Stop BXB01/1/ 1414 Massachusetts Ave Boxborough, MA 01719

This meeting was conducted in accordance with the GEIA Legal Guides and GEIA Manual of Organization and Procedure.

The following e-mail addresses are used:

majordomo@eda.org

In the body, for the IBIS Open Forum Reflector: subscribe ibis <your e-mail address>

In the body, for the IBIS Users' Group Reflector: subscribe ibis-users <your e-mail address>

Help and other commands: help

ibis-request@eda.org

To join, change, or drop from either or both: IBIS Open Forum Reflector (<u>ibis@eda.org</u>) IBIS Users' Group Reflector (<u>ibis-users@eda.org</u>) State your request.

ibis-info@eda.org

To obtain general information about IBIS, to ask specific questions for individual response, and to inquire about joining the EIA-IBIS Open Forum as a full Member.

ibis@eda.org

To send a message to the general IBIS Open Forum Reflector. This is used mostly for IBIS Standardization business and future IBIS technical enhancements. Job posting information is not permitted.

ibis-users@eda.org

To send a message to the IBIS Users' Group Reflector. This is used mostly for IBIS clarification, current modeling issues, and general user concerns. Job posting information is not permitted.

ibis-bug@eda.org

To report ibischk parser BUGs as well as tschk2 parser BUGs. The BUG Report Form for ibischk resides along with reported BUGs at:

http://www.eda.org/ibis/bugs/ibischk/ http://www.eda.org/ibis/bugs/ibischk/bugform.txt

The BUG Report Form for tschk2 resides along with reported BUGs at:

http://www.eda.org/ibis/tschk_bugs/ http://www.eda.org/ibis/tschk_bugs/bugform.txt

icm-bug@eda.org

To report icmchk1 parser BUGs. The BUG Report Form resides along with reported BUGs at:

http://www.eda.org/ibis/icm_bugs/ http://www.eda.org/ibis/icm_bugs/icm_bugform.txt

To report s2ibis, s2ibis2 and s2iplt bugs, use the Bug Report Forms which reside at:

http://www.eda.org/ibis/bugs/s2ibis/bugs2i.txt http://www.eda.org/ibis/bugs/s2ibis2/bugs2i2.txt http://www.eda.org/ibis/bugs/s2iplt/bugsplt.txt

Information on IBIS technical contents, IBIS participants and actual IBIS models are available on the IBIS Home page:

http://www.eigroup.org/ibis/ibis.htm

Check the IBIS file directory on eda.org for more information on previous discussions and

results:

http://www.eda.org/ibis/directory.html

Other trademarks, brands and names are the property of their respective owners.

IBIS CURRENT MEMBER VOTING STATUS

		Standards				
Organization	Interest Category	Ballot Voting Status	November 20, 2009	December 11, 2009	January 8, 2010	January 29, 2010
Actel	Producer	Inactive				
Advanced Micro Devices	Producer	Active	\checkmark		\checkmark	\checkmark
Agilent Technologies	User	Inactive				
Ansoft	User	Inactive				
Apple Computer	User	Inactive				
Applied Simulation Technology	User	Inactive				
ARM	Producer	Inactive				
Cadence Design Systems	User	Inactive				
Cisco Systems	User	Active	\checkmark	\checkmark	\checkmark	\checkmark
Ericsson	Producer	Active	\checkmark	\checkmark		\checkmark
Freescale	Producer	Inactive				
Green Streak Programs	General Interest	Inactive				
Huawei Technologies	Producer	Inactive				
Hitachi ULSI Systems	Producer	Inactive				
IBM	Producer	Active	\checkmark		\checkmark	\checkmark
Infineon Technologies AG	Producer	Inactive				
Intel Corp.	Producer	Inactive		\checkmark		
IO Methodology	User	Active	\checkmark	\checkmark	\checkmark	\checkmark
LSI	Producer	Active	\checkmark		\checkmark	\checkmark
Mentor Graphics	User	Active	\checkmark	\checkmark	\checkmark	\checkmark
Micron Technology	Producer	Active	\checkmark	\checkmark	\checkmark	\checkmark
Nokia Siemens Networks	Producer	Active	\checkmark	\checkmark		\checkmark
Samtec	Producer	Inactive				
Signal Integrity Software	User	Active	\checkmark	\checkmark	\checkmark	\checkmark
Sigrity	User	Inactive				
Synopsys	User	Inactive				
Teraspeed Consulting	General Interest	Active	\checkmark	\checkmark	\checkmark	\checkmark
Toshiba	Producer	Inactive				
Xilinx	Producer	Inactive				
ZTE	User	Inactive				
Zuken	User	Inactive				

I/O Buffer Information Specification Committee (IBIS)

CRITERIA FOR MEMBER IN GOOD STANDING:

- MUST ATTEND TWO CONSECUTIVE MEETINGS TO ESTABLISH VOTING MEMBERSHIP
- MEMBERSHIP DUES CURRENT
- MUST NOT MISS TWO CONSECUTIVE MEETINGS

INTEREST CATEGORIES ASSOCIATED WITH GEIA BALLOT VOTING ARE:

- USERS MEMBERS THAT UTILIZE ELECTRONIC EQUIPMENT TO PROVIDE SERVICES TO AN END USER.
- PRODUCERS MEMBERS THAT SUPPLY ELECTRONIC EQUIPMENT.
- GENERAL INTEREST MEMBERS ARE NEITHER PRODUCERS NOR USERS. THIS CATEGORY INCLUDES, BUT IS NOT LIMITED TO, GOVERNMENT, REGULATORY AGENCIES (STATE AND FEDERAL), RESEARCHERS, OTHER ORGANIZATIONS AND ASSOCIATIONS, AND/OR CONSUMERS.