IBIS Open Forum Minutes

Meeting Date: March 12, 2010
Meeting Location: Teleconference

VOTING MEMBERS AND 2010 PARTICIPANTS

Actel	(Prabhu Mohan)
Agilent	Radek Biernacki, Ming Yan, Fangyi Rao
AMD	Nam Nguyen
Ansoft Corporation	(Steve Pytel)
Apple Computer	(Matt Herndon)
Applied Simulation Technology	(Fred Balistreri)
ARM	(Nirav Patel)
Cadence Design Systems	Terry Jernberg*, Wenliang Dai, Ambrish Varma
Cisco Systems	Syed Huq*, Mike LaBonte*, Tony Penaloza, Huyen Pham, Bill Chen, Ravindra Gali, Zhiping Yang
Ericsson	Anders Ekholm*, Pete Tomaszewski
Freescale	Jon Burnett, Om Mandhana
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), Myoung (Joon) Choi, Vishram Pandit, Richard Mellitz
IO Methodology	Lance Wang*
LSI	Brian Burdick*
Mentor Graphics	Arpad Muranyi*, Neil Fernandes, Zhen Mu
Micron Technology	Randy Wolff*
Nokia Siemens Networks GmbH	Eckhard Lenski*
Samtec	(Corey Kimble)
Signal Integrity Software	Walter Katz*, Mike Steinberger, Todd Westerhoff, Barry Katz
Sigrity	Brad Brim, Kumar Keshavan
Synopsys	Ted Mido
Teraspeed Consulting Group	Bob Ross*, Tom Dagostino
Toshiba	(Yasumasa Kondo)
Xilinx	Mike Jenkins
ZTE	(Huang Min)
Zuken	Michael Schaeder

OTHER PARTICIPANTS IN 2010

AET, Inc.	Mikio Kiyono
Altera	John Oh, Hui Fu

Avago	Razi Kaw
Broadcom	Mohammad Ali
Curtiss-Wright	John Phillips
ECL, Inc.	Tom Iddings
eSilicon	Hanza Rahmai
Exar Corp.	Helen Nguyen
Mindspeed	Bobby Altaf
National Semiconductor	Hsinho Wu*
NetLogic Microsystems	Eric Hsu, Edward Wu
Renesas Technology	Takuji Komeda
Simberian	Yuriy Shlepnev
Span Systems Corporation	Vidya (Viddy) Amirapu
Summit Computer Systems	Bob Davis
Tabula	David Banas*
TechAmerica	(Chris Denham)
Texas Instruments	Bonnie Baker
Independent	AbdulRahman (Abbey) Rafiq, Robert Badal

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:

Date	Meeting Number	Meeting Password
April 2, 2010	207 763 841	IBIS

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

https://cisco.webex.com/cisco/j.php?J=207763841

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

David Banas re-introduced himself. He used to be with Xilinx and is now with Tabula. Tabula recently went public with their work, so David is now able to work on standards committees again. He works on model quality at Tabula. He may become involved in the Quality Committee again if time permits.

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 we have about 19 members that have renewed so far. Our target is about 30 members for the year. Bob plans to begin following up with companies that have not renewed their memberships yet.

REVIEW OF MINUTES AND ARS

Bob Ross called for comments regarding the minutes of the February 19, 2010 IBIS Open Forum teleconference. The minutes were approved without changes.

WEB PAGE UPDATES

Syed Huq reported that he has been relocating files to the eda.org server. He moved the events and poster pages. He fixed a link on the roster page to point to eda.org. He needs to make symbolic links to index.htm files. Also, there have been some strange characters seen once uploading pages to the website with various ftp programs. Investigation is ongoing. Syed suggested there be another meeting with the officers to talk over some of the issues. Bob Ross thinks we need to get a stable website before we worry about the symbolic link pages. Every page will eventually be moved from TechAmerica's server except a single URL redirector page.

MAILING LIST ADMINISTRATION

Mike LaBonte reported that he added six email addresses to the list and dropped four. Two were dropped because they continue to bounce back. Some bounces have been fixed with help from individuals at their respective companies contacting their administrators. Mike plans to directly contact the recipients of bouncing emails to ask for their assistance. If they do not respond back, he will have to drop them from the list.

MODEL LIBRARY UPDATE

Anders Ekholm reported that his last update was made about three weeks ago. He sent the update to Syed Huq to post on the eda.org site.

PRESS UPDATE

Bob Ross and Eckhard Lenski noted an article about IBIS. The article is "From High to Low Frequencies with IBIS" by Bonnie Baker, part of her Baker's Best columns. It is found in the 2/18/2010 EDN and March 2010 EDN Europe magazine, page 18.

> http://www.edn.com/article/CA6718477.html
> http://cde.cerosmedia.com/1C4b8554b48e7b3012.cde

MISCELLANY/ANNOUNCEMENTS

Bob Ross noted that the US is switching to Daylight Savings time this weekend, so other countries should be aware of changed meeting times.

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

Syed Huq reported that the group has had discussions on license and key management. They are moving into a rights management discussion next. 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 report.

IEC APPROVAL ACTIVITIES

Randy Wolff reported that he browsed around the IEC website and found a way to contact TC93 members. He sent notes to Victor Berman and Tim Rotti, the technical officer of TC93. Tim

Rotti did respond, and he said he would try to contact Victor again and ask him about IEC approval of IBIS. Tim did not attend the IEC meeting last September when the topic was supposed to have been discussed.

SUMMIT STATUS
-European Summit Planning
The summit is planned for Wednesday, May 12 from 1pm-6pm. This is after the SPI conference, which ends at noon. It will be held at the same hotel and location as the SPI conference in Hildesheim, Germany. Ralf Bruening is helping with local arrangements. The first announcement will go out in a few weeks. Mentor, Sigrity and Zuken are co-sponsors.

-DAC Summit Planning
Traditionally this meeting is the annual meeting with the election of officers. June 15 is tentatively scheduled for the summit. DAC is in Anaheim, CA this year.

-Asian Summits Planning
The planning committee is discussing three potential summits this year in China, Japan and possibly Taiwan. Lance Wang is helping with arrangements for the China and Taiwan summits. Lance has started sending emails to Chinese and Taiwanese companies to gauge interest in sponsorship. He has not had any response yet. Lance also asked Michael Mirmak to help with Taiwan planning, since Michael is currently working there.

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 has talked about issues with the IBIS Quality 2.0 specification brought up by Anders Ekholm. They are looking at a process to keep track of requested changes to the specification. They might call these documents QUAILs. They plan to discuss Feature Selective Validation (FSV) further.

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

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

IBIS MODEL REVIEW TASK GROUP
No update.

ADVANCED TECHNOLOGY MODELING TASK GROUP
Arpad Muranyi reported that the group is discussing editorial work on the IBIS AMI BIRD and how to proceed with it.

Task group material can be found at:

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

AD HOC TASK GROUPS (INTERCONNECT)

Bob Ross reported that he plans to remove the Ad Hoc label on the task group. In the short term, they are discussing the Model Connection Protocol from Sigrity. Brad Brim may present a BIRD proposal next week.   They are also discussing a binary encoding proposal for Touchstone. The group needs to decide when to cutoff additions for a Touchstone 2.1 release.

Task group material can be found at:

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

NEW ISSUES

None.

TSIRD1 – SPARSE MATRIX MAPPING

Bob Ross introduced TSIRD1. This TSIRD proposes an index-pair mapping solution using two new keywords, [Number of Sparse Labels] and [Sparse Matrix Mapping]. This solution helps reduce file size by reducing the size of matrices with symmetries and zero values.

A full description of TSIRD1 is found at:

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

and

http://www.eda.org/ibis/tsirds/tsird1.0.pdf

Bob plans to discuss this further at the next meeting with a possible vote at the following meeting.

TSCHK2 BUG STATUS

No BUGs to report.

IBISCHK5 BUG STATUS

No new BUGs to report.

IBISCHK5 PROJECT

Bob Ross noted that there are 8 open BUGs right now. A new project will be started to fix these BUGs. He plans to get a new quote from the parser developer.

NEW ISSUES
None.

NEXT MEETING
The next IBIS Open Forum teleconference will be held April 2, 2010 from 8:00 to 10:00 AM US Pacific Standard Time.

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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
       lwang@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
       ibis-librarian@eda.org
       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
       huqs@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 (ibis@eda.org)
> IBIS Users' Group Reflector (ibis-users@eda.org)
> 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

I/O Buffer Information Specification Committee (IBIS)

Organization	Interest Category	Standards Ballot Voting Status	January 29, 2010	February 4, 2010	February 19, 2010	March 12, 2010
Actel	Producer	Inactive				
Advanced Micro Devices	Producer	Inactive	X	-	-	-
Agilent Technologies	User	Inactive	-	X	-	-
Ansoft	User	Inactive	-	-	-	-
Apple Computer	User	Inactive	-	-	-	-
Applied Simulation Technology	User	Inactive	-	-	-	-
ARM	Producer	Inactive	-	-	-	-
Cadence Design Systems	User	Active	-	X	X	X
Cisco Systems	User	Active	X	X	X	X
Ericsson	Producer	Active	X	X	X	X
Freescale	Producer	Inactive	-	X	-	-
Green Streak Programs	General Interest	Inactive	-	X	-	-
Huawei Technologies	Producer	Inactive	-	-	-	-
Hitachi ULSI Systems	Producer	Inactive	-	-	-	-
IBM	Producer	Active	X	X	X	X
Infineon Technologies AG	Producer	Inactive	-	-	-	-
Intel Corp.	Producer	Inactive	-	X	-	-
IO Methodology	User	Active	X	X	-	X
LSI	Producer	Active	X	X	X	X
Mentor Graphics	User	Active	X	X	X	X
Micron Technology	Producer	Active	X	X	X	X
Nokia Siemens Networks	Producer	Active	X	-	X	X
Samtec	Producer	Inactive	-	-	-	-
Signal Integrity Software	User	Active	X	X	-	X
Sigrity	User	Inactive	-	X	-	-
Synopsys	User	Inactive	-	X	-	-
Teraspeed Consulting	General Interest	Active	X	X	X	X
Toshiba	Producer	Inactive	-	-	-	-
Xilinx	Producer	Inactive	-	X	-	-
ZTE	User	Inactive	-	-	-	-
Zuken	User	Inactive	-	X	-	-

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 TECHAMERICA 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.