IBIS Open Forum Minutes

Meeting Date: May 15, 2009

VOTING MEMBERS AND 2009 PARTICIPANTS

VOTING WILWIDERS AND 2009 P	
Actel	(Prabhu Mohan)
Agilent Technologies	Yutao Hu, Fangyi Rao, Saliou Dieye
AMD	Nam Nguyen
Ansoft Corporation	Steve Pytel
Apple Computer	(Matt Herndon)
Applied Simulation Technology	(Fred Balistreri)
ARM	V. Muniswara Reddy
Cadence Design Systems	Terry Jernberg*, Ambrish Varma
Cisco Systems	Luis Boluna, Tram Bui, Bill Chen, Syed Huq*,
	Mike LaBonte*, Pedo Miran Huyen Pham,
	AbdulRahman (Abbey) Rafiq, Ashwin Vasudevan,
	Zhiping Yang
Ericsson	Anders Ekholm
Freescale	Jon Burnett, Om Mandhama
Green Streak Programs	Lynne Green
Hitachi ULSI Systems	(Kazuyoshi Shoji)
Huawei Technologies	Xiaoqing Dong, Chunxing Huang, Guan Tao
IBM	Adge Hawes*
Infineon Technologies AG	(Christian Sporrer)
Intel Corporation	Michael Mirmak*, Jon Powell, Sirisha Prayaga
LSI	Brian Burdick*
Marvell Semiconductor	(Itzik Peleg)
Mentor Graphics	Weston Beal, Vladimir Dmitriev-Zdorov, Zhen Mu, Arpad Muranyi
Micron Technology	Randy Wolff*
Nokia Siemens Networks GmbH	Eckhard Lenski
Samtec	(Corey Kimble)
Signal Integrity Software	Barry Katz, Walter Katz*, Todd Westerhoff
Sigrity	Sam Chitwood
Synopsys	Ted Mido
Teraspeed Consulting Group	Bob Ross*
Texas Instruments	Pavani Jella
Toshiba (I.S. Corporation)	(Yasumasa Kondo)
Xilinx	[David Banas]
ZTE	(Ying Xiong)
Zuken	Michael Schaeder, Ralf Bruening

OTHER PARTICIPANTS IN 2009

AET	
Bayside Design	

Mikio Kiyono Stephen Coe, Elliot Nahas

Circuit Spectrum CST Curtiss-Wright Embedded	Zaven Tashjian Antonio Ciccomancini, Martin Schauem J. Phillips
Computing EM Integrity	Guy de Burgh
Exar	Helen Nguyen
GEIA	(Chris Denham)
ICT Solutions	Steven Wong
IdemWorks	Michelangelo Bandinu
IO Methodology	Li (Kathy) Chen, Lance Wang*, Zhi (Benny) Yan
Juniper	Kevin Ko
Leventhal Design & Communications	Roy Leventhal
Communicationic	Ron Olisar
Maxim Integrated Products	
Mindspeed Technologies	Bobby Alkay
NetLogic Microsystems	Eric Hsu
Politecnico di Torino	Igor Stievano
Sanmina SCI	Vladimir Drivanenko
Sedona International	Joe Socha
Siemens	Manfred Maurer
Signal Consulting Group	Timothy Coyle, Nicole Mitchell
Simberian	Yuriy Shlepnev
Xsigo Systems	Robert Badel
Independent	Ian Dodd

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	Telephone Number	Meeting ID
June 5, 2009	1-866-432-9903	121412040

All 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, press 1 to attend the meeting, then 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

Michael Mirmak called for any patents or pending patents related to the IBIS 3.2, IBIS 4.2, IBIS 5.0 or ICM 1.1 specifications. No patents were declared.

MEMBERSHIP UPDATE AND TREASURER'S REPORT

Michael Mirmak reported that he has had trouble getting financial information from TechAmerica. However, he just got financial statements for the end of 2008 and first 3 months of 2009 and an updated membership report three minutes before the meeting. There are 16 membership payments officially recorded. Last year, we had too much income at the end of the year and ended up with about \$2500 left over. TechAmerica thinks this may be a mix up. Bob Ross thinks this may be related to an agreed transfer of funds for Ansoft's parser pre-payment, paid in 2008 but applicable to 2009. Terry Jernberg mentioned that we should see a payment of a parser license from Cadence on the financial report within the week.

REVIEW OF MINUTES AND ARS

Michael Mirmak called for comments regarding the minutes of the April 23, 2009 IBIS summit at DATE and the April 24, 2009 IBIS Open Forum teleconference. Both sets of minutes were approved without changes.

WEB PAGE UPDATES

Syed Huq reported that we are having trouble getting the web pages updated. He has a pending request for a change to the events page. Lance Wang requested the s2ibis3 help link be changed to point to an IO Methodology email address.

MAILING LIST ADMINISTRATION

Bob Ross reported that everything is working normally.

MODEL LIBRARY UPDATE

Lance Wang reported that he just sent out another update to fix the LSI Logic model link. He changed the link to make it a request to LSI for support. Brian Burdick is looking into getting some models back on the website.

PRESS UPDATE None.

MISCELLANY/ANNOUNCEMENTS

None.

OPENS FOR NEW ISSUES

None.

INTERNATIONAL/EXTERNAL PROGRESS

- DASC

Michael Mirmak reported that the next DASC meeting is May 21. The DASC file and e-mail archive may be found at:

http://www.dasc.org/

- P1735 Encryption

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

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

-Conferences

The 2009 International Microwave Symposium is June 7-12, 2009 in Boston, MA. The conference may have some IBIS and interconnect related material.

http://www.ims2009.org

The Electrical Performance of Electronic Packaging and Systems (EPEPS 2009) is October 19-21, 2009 at the Embassy Suites in Portland, OR. This is a major meeting for SI people from universities and industry.

http://www.epep.org/

The 7th International Workshop on Electromagnetic Compatibility of Integrated Circuits (EMC COMPO 2009) is November 17-20, 2009 in Toulouse, France. The call for papers deadline is May 30, 2009.

http://www.emccompo.org

- TechAmerica Status

Michael Mirmak noted that the transition is still in flux. We will have an opportunity to ask questions at DAC depending on travel budget.

IEC APPROVAL ACTIVITIES

Randy Wolff reported that he had a meeting between himself, Chris Denham and Victor Berman on May 7. The group discussed copyright ownership of the IBIS specification document as it

would apply to TechAmerica and IEC if IBIS becomes an IEC approved specification. Victor and Chris plan to collaborate on a dual logo process of approval between TechAmerica and IEC as well as the copyright issue. Victor also plans to let Randy know what steps are needed to advance the IBIS specification through the IEC approval process.

SUMMIT STATUS

-DAC Planning

DAC is scheduled for July 26-31, 2009 in San Francisco. The IBIS summit is scheduled for Tuesday, July 28. Sponsorship is welcome. Elections are also held at this meeting. Let the board know if you are interested in an officer position. The first call for papers should go out in two weeks. Mentor Graphics is a co-sponsor of this event and is arranging for a room in the Westin San Francisco Market Street.

-China Summit Planning

Michael Mirmak noted that there is a lot of interest in sponsorship for this event. It is tentatively scheduled during the week of November 9-13 in Shanghai. Bob Ross noted that we are waiting upon a major sponsorship payment in order to fund this event.

-Japan Summit Planning Michael Mirmak noted that there is sponsorship interest in this event as well.

It is unlikely we will host any other Asian events this year, such as in Taiwan.

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 completed reviews of the Quality specification. They are reviewing editorials and should complete this soon. The group has one enhancement request for the parser to submit.

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

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

IBIS MODEL REVIEW TASK GROUP

No update.

ADVANCED TECHNOLOGY MODELING TASK GROUP

Walter Katz reported that the group is focusing on IBIS Interconnect SPICE. They are making progress. Next week, they should have a document to review including all the SPICE elements that will be in the final document.

Task group material can be found at:

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

AD HOC TASK GROUPS (INTERCONNECT)

Michael Mirmak reported that the group has resumed meetings. They are discussing a Touchstone 2.0 parser as well as two possible updates to Touchstone. Updates include a sparse matrix representation and mapping of nodes to ports for ease of import to EDA tools.

Task group material can be found at:

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

NEW ISSUES

None.

IBISCHK5 PARSER STATUS

Michael Mirmak reported that a contract is signed. The parser developer is working on the errors/warnings code currently. Atul Agarwal is the parser developer. A letter/number scheme is used to categorize and report error and warning messages from the parser.

IBISCHK4 BUG STATUS

Two BUGs are open right now. There are no plans to fix these in the near term, as they are not included in the IBISCHK5 parser development.

The BUG report list is available at the link below:

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

ICMCHK1 BUG STATUS

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

TOUCHSTONE 2.0 STATUS

Michael Mirmak noted that there are plans to develop a parser. A document has been put together for bid solicitation. A parser committee is put together to review parser bids. A 'tschk' program will be developed. The group plans to close the bid process towards the end of June.

NEW ISSUES

None.

LOGO DISCUSSION

Bob Ross displayed additional logos prepared based on feedback from the last meeting. He showed black and white versions of the logo too. The logo with the IBIS letters including a shadow stands out. A logo will be put forward for a vote at the next meeting. The logo options can be found at:

http://www.eda-stds.org/ibis/logos wip/ibis logo new 2.pdf

NEXT MEETING

The next IBIS Open Forum teleconference will be held June 5, 2009 from 8:00 AM to 10:00 AM US Pacific Standard Time.

NOTES

IBIS CHAIR: Michael Mirmak (916) 356-4261, Fax: (916) 377-3788 <u>michael.mirmak@intel.com</u> Server Platform Technical Marketing Engineer, Intel Corporation FM5-239 1900 Prairie City Rd. Folsom, CA 95630

VICE CHAIR: Syed Huq (408) 525-3399, Fax: (408) 526-5504 <u>shuq@cisco.com</u> Manager, Hardware Engineering, Cisco Systems 170 West Tasman Drive San Jose, CA 95134-1706

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: Lance Wang (978) 633-3388 <u>Iwang@iometh.com</u> President / CEO, IO Methodology, Inc. PO Box 2099 Acton, MA 01720

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

bob@teraspeed.com

Staff Scientist, Teraspeed Consulting Group 10238 SW Lancaster Road Portland, OR 97219

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. The BUG Report Form resides along with reported BUGs at:

http://www.eda.org/ibis/bugs/ibischk/ http://www.eda.org/ibis/bugs/ibischk/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								
	Interest	Ballot Voting	April 3,	April 23,	April 24,	May 15,		
Organization	Category	Status	2009	2009	2009	2009		
Actel	Producer	Inactive						
Advanced Micro Devices	Producer	Inactive	\checkmark		\checkmark			
Agilent Technologies	User	Inactive		\checkmark				
Ansoft	User	Inactive						
Apple Computer	User	Inactive						
Applied Simulation Technology	User	Inactive						
ARM	Producer	Inactive						
Cadence Design Systems	User	Active	\checkmark		\checkmark	\checkmark		
Cisco Systems	User	Active	\checkmark		\checkmark	\checkmark		
Ericsson	Producer	Active	\checkmark	\checkmark	\checkmark			
Freescale	Producer	Inactive						
Green Streak Programs	General Interest	Inactive						
Hitachi ULSI Systems	Producer	Inactive						
Huawei	User	Inactive						
IBM	Producer	Active			\checkmark	\checkmark		
Infineon Technologies AG	Producer	Inactive						
Intel Corp.	Producer	Active			\checkmark	\checkmark		
LSI	Producer	Active	\checkmark		\checkmark	\checkmark		
Marvell Semiconductor	Producer	Inactive						
Mentor Graphics	User	Inactive			\checkmark			
Micron Technology	Producer	Active	\checkmark		\checkmark	\checkmark		
Nokia Siemens Networks	Producer	Active	\checkmark	\checkmark				
Samtec	Producer	Inactive						
Signal Integrity Software	User	Inactive	\checkmark			\checkmark		
Sigrity	User	Inactive						
Synopsys	User	Inactive						
Teraspeed Consulting	General Interest	Active	\checkmark		\checkmark	\checkmark		
Texas Instruments	Producer	Inactive						
Toshiba	Producer	Inactive						
Xilinx	Producer	Inactive	\checkmark					
ZTE	User	Inactive						
Zuken	User	Inactive		\checkmark				

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.