

EIA IBIS Open Forum

Meeting Date: **October 31, 2008**

VOTING MEMBERS AND 2008 PARTICIPANTS

Actel	(Prabhu Mohan)
Agilent	Sanjeev Gupta, Radek Biernacki, Amolak Badesha Fangyi Rao, [Ian Dodd], Yutao Hu, Vuk Borich Nobutaka Arai, Ludwig Eichinger
AMD	Nam Nguyen*
Ansoft Corporation	Steve Pytel, Ricardo Teliuteuesh, Dan Dvorscak
Apple Computer	(Bill Cornelius)
Applied Simulation Technology	(Fred Balistreri)
ARM	(Nirav Patel)
Cadence Design Systems	Terry Jernberg, Hemant Shah, Ambrish Varma [C. Kumar], Brad Griffin, Zhen Mu
Cisco Systems	Syed Huq*, Mike LaBonte*, AbdulRahman (Abbey) Rafiq Huyen Pham, Emily Yao, Susmita Mutsuddy John Fisher, Paul Ruddy, Jun Li, Jianmin Zhang Luis Boluna, Kelvin Qiu, Jane Lim, Ilyoung Park Rick Brooks, Chris Padilla, Ehsan Kabir
Ericsson	Anders Ekholm*
Freescale	Jon Burnett
Green Streak Programs	Lynne Green
Hitachi ULSI Systems	Kazuyoshi Shoji
Huawei Technologies	Tao Guan, Xiaoqing Dong
IBM	Adge Hawes*
Infineon Technologies AG	Christian Sporrer
Intel Corporation	Michael Mirmak*, Rich Mellitz, Wei-hsing Huang Vishram Pandit
LSI	[Frank Gasparik], Brian Burdick, [Kim Helliwell]
Marvell Semiconductor	(Itzik Peleg)
Mentor Graphics	Arpad Muranyi, John Angulo
Micron Technology	Randy Wolff*
Nokia Siemens Networks GmbH	Eckhard Lenski*, Klaus Huebner, Katja Koller
Samtec	Jim Nadolny, Justin McCalister
Signal Integrity Software	Mike Steinberger, Walter Katz, Todd Westerhoff Doug Burns, Mike Mayer, Barry Katz
Sigrity	Sam Chitwood, Brad Brim, Ben Franklin Kristopher Stytt, Raymond Chen
Synopsys	Ted Mido
Teraspeed Consulting Group	Bob Ross*, Tom Dagostino, Al Neves
Texas Instruments	Richard Ward, Pavani Jella*
Toshiba	Yasumasa Kondo, Noriyasu Yoshikawa
Xilinx	David Banas*, Ajay Shah, Suzanne Yiu

Zuken
ZTE

Mustansir Fanaswalla
Michael Schaefer, Ralf Bruening
(Ying Xiong)

OTHER PARTICIPANTS IN 2008

Aeroflex Metelics	David Nguyen
Aica Kogyo	Akihiro Tanaka
Altera	Ravindra Gali, Jing Wu, John Oh, Hui Fu
Avago Technologies	Minh Quach, Sari Tocco
Bayside Design	Elliot Nahas, Kevin Roselle
Celestica	Ihsan Erdin
ECL Advantage	Thomas Iddings
EFM	Ekkehard Miersch
Elma Bustronic	Michael Munroe
Exar	Helen Nguyen
Flextronics	Hasnain Syed
GEIA	(Chris Denham)
Golden Bridge Networks	Saman Sadigh
ICT Solutions	Steven Wong
Interface Technologies	Dan Waterloo
IO Methodology	Lance Wang, Zhi (Benny) Yan, Li (Kathy) Chen
JEITA	Atsushi Ishikawa
Magma DA	Anand Ramalingam
NEC	Takeshi Watanabe
NetLogic Microsystems	Eric Hsu
North Carolina State University	Paul Franzon
Nokia	Ali Arsian
Nuova Systems	Zhiping Yang
Prentice Hall	Bernard Goodwin
Physware	Marc Kowalski
Politecnio di Torino	Igor Stievano
Qimonda AG	Md Morshed Alam Heial, Suhas Jawale
Siemens AG	Manfred Maurer, Annika Woehner
Simberian	Yuriy Shlepnev
SimLab Software GmbH	Heiko Grubrich
Tektronix	Steve Corey
TietoEnator GmbH	Heinz-Hartmut Ibowski
Tyco Electronics	Chad Morgan
Vertical Circuits	Mark Egbers
Xsigo Systems	Robert Bada
Independent	Guy de Burgh, Ardy Forouhar, Dave Galloi
	Kazuhiko Kusunoki

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
November 11, 2008 - Asian IBIS Summit - Shanghai China - No Teleconference		
November 14, 2008 - Asian IBIS Summit - Tokyo, Japan - No Teleconference		
November 21, 2008	1-866-432-9903	121522040

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 members.

CALL FOR PATENTS

Michael Mirmak called for any patents or pending patents related to the IBIS Version 3.2, 4.0, 4.1, 4.2, or ICM 1.1 specifications. No patents were declared.

MEMBERSHIP UPDATE AND TREASURER'S REPORT

Michael Mirmak reported that we stand at 32 members. We are well into the black for revenues and expenses. We should be able to close the year by spending all available money so as not to lose any per GEIA rules. We have filed a draft budget, but we have not heard back from ITAA. He is not sure if GEIA allocation will increase. We may pay for a GIEA member visit to a summit meeting next year.

REVIEW OF MINUTES AND ARS

Michael Mirmak called for comments regarding the minutes of the October 10, 2008 IBIS Open Forum teleconference. The minutes were approved without changes.

WEB PAGE UPDATES

Syed Huq reported that he updated the roster entry for Ansoft and is putting a new logo on the

poster page soon.

MAILING LIST ADMINISTRATION

Bob Ross reported that everything is working normally.

MODEL LIBRARY UPDATE

No update.

PRESS UPDATE

None.

MISCELLANY/ANNOUNCEMENTS

No update.

OPENS FOR NEW ISSUES

Michael Mirmak noted one change to the agenda. He plans to discuss BUG 101.

INTERNATIONAL/EXTERNAL PROGRESS

- 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 is discussing key management at this time. The IEEE DASC Study Group on Encryption web reflector archives are found at:

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

- GEIA/ITAA Issues

Bob Ross asked if we can do an independent logo redesign. We need to remove EIA from the logo design. Michael Mirmak took the AR to check with GEIA about this.

IEC APPROVAL ACTIVITIES

Randy Wolff reported that he plans to contact Victor Berman again to ask for an update on the IEC September meeting. Michael Mirmak took the AR to check with Chris Denham to see if he talked with Victor about copyrights.

SUMMIT STATUS

- Asian IBIS Summit (China) Planning

The China summit will be held November 11, 2008 in Shanghai, at the Shanghai Mart Convention Center. The China summit contacts are Bob Ross and Lance Wang. Huawei Technologies, Agilent Technologies, Ansoft, Cadence Design, Cybernet Systems, Intel, Mentor Graphics, SiSoft, Sigrity, Synopsys and ZTE Corporation are the official sponsors. Bob Ross noted that the presentation booklet is complete and was sent to the printers. A full agenda has been released. Michael Mirmak thanked Bob Ross for all his help in organization. Bob noted there are just under 150 people registered. There are 14 presentations scheduled. He may get another 20 people signing up with the last meeting notice release.

- Asian IBIS Summit (Japan) Planning

The Japan summit will be held in Tokyo at JEITA headquarters November 14, 2008. Bob Ross or Kazuyoshi Shoji should be contacted if planning to attend the Japan summit. Official sponsors are JEITA, Agilent Technologies, Ansoft, ATE (Sigrity), Cadence Design Systems, Cybernet Systems, Fujitsu and Zuken. Michael Mirmak noted that we may have more attendance than previous years. Another announcement is going out today. Bob Ross noted about 45 signups so far, but he is expecting about 70. He is unsure if there are vendor tables. He is making final arrangements for refreshments.

- DesignCon Planning

The DesignCon event is scheduled for February 2-5, 2009 at the Santa Clara Convention Center in Santa Clara, California. Thursday, February 5, 2009 is tentatively scheduled for the summit. Michael Mirmak noted that all agreements have been signed for co-sponsorship and a booth. We will probably be in the same room in the convention center as last year. The first announcement will go out in early December. Chris Denham was planning to attend but has conflicts with ITAA business, so he now plans to attend DAC.

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 task group is nearly at the end of discussing regular checks. They are discussing possible new checks such as cross-checking between [Ramp] and I-V tables to be added to the IBIS parser. One could check the dV part of Ramp and possibly dt against the V-t curves. The next meeting is November 18.

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

Bob Ross reported that the group discussed more of the C_comp modeling proposal but with a subcircuit approach. Walter Katz sent out a proposal that has not been discussed yet. John Angulo presented on the use of [External Circuit to] model the same thing.

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 is moving through list of changes to Touchstone 2.0. They are looking to release the document soon.

Task group material can be found at:

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

NEW ISSUES

None.

BIRD111.1: EXTENDED USAGE OF EXTERNAL SERIES COMPONENTS IN EBDS

Bob Ross summarized that the BIRD adds language to support the use of [Series Element]s to model differential pair terminations. There is concern about opening up the EBD language to allow too much flexibility in modeling interactions between [Path Description]s that won't be supported in any software. The BIRD has not been fully reviewed between Bob and Michael Schaefer.

IBISCHK5 PARSER STATUS

Michael Mirmak reported that a parser bid review committee plans to draft a bid packet, make an announcement, and decide on a parser developer before the end of the year. The group is discussing how much to include in the bid packet – maybe include several bid options of including limited features at first and adding on more features as more payments come in. Michael would like to discuss AMI parser coverage in the ATM meeting to talk about technical details. Syed Huq commented that if we don't parse the non-IBIS files, how would we check for consistency between several AMI models. Bob Ross said that a parser would have to operate in various operating systems to parse the executable AMI files. This is unrealistic. David Banas asked if this would be redundant with software already available for checking AMI models. There may be some code donated to IBIS for this purpose. Mike LaBonte warned against including any code within IBISCHK for this purpose – keep it as a separate program. Michael noted that a .ami file contains ASCII text with parameters, and this file might need to be parsed. Bob commented that if we make the parser development too intense, it will take a lot more time to raise funds to start the development.

Adge Hawes noted that including error numbers in the new parser would be very helpful. Bob said that this could be done as a separate project to update IBISCHK4 or as part of IBISCHK5. Michael noted that Agilent mentioned a year ago that the code is difficult to integrate into other software. We need to decide how much to include in a new parser. Error numbers and BUG fixes could be put out as a fixed bid right away. This development could be done first, and then proceed with IBISCHK5.

IBISCHK4 BUG STATUS

BUG101 was submitted October 10. If a [Model Selector] exists, but its name is not referenced in the IBIS file, no warnings are given by the parser. The parser does issue warnings on [Model]s that are not used. Anders Ekholm and Bob Ross discussed whether there should be a warning or not for this. It was agreed that it made sense to issue a warning. The BUG was filed as an Enhancement, Low priority, and Open status.

The BUG report list is available at the link below:

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

ICMCHK1 BUG STATUS

Michael Mirmak noted that he received instructions from the previous parser writer for how to upgrade the parser with quality assurance tests. We need to find a volunteer to update the code. This is a small fix. Bob Ross took the AR to ask John Angulo about this.

NEW ISSUES

None.

NEXT MEETING

The next IBIS Open Forum summit will be held November 11, 2008 in Shanghai followed by a summit November 14, 2008 in Tokyo. No teleconference is available for these summit meetings. The next IBIS Open Forum teleconference will be held November 21, 2008 from 8:00 AM to 10:00 AM US Pacific Standard Time.

=====

NOTES

IBIS CHAIR: Michael Mirmak (916) 356-4261, Fax: (916) 377-3788

michael.mirmak@intel.com

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

shuq@cisco.com

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

lwang@iometh.com

President / CEO, IO Methodology, Inc.
PO Box 2099
Acton, MA 01720

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

shuq@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 (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. 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/bugspl.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>

All eda.org documents can be accessed using a mirror:

<http://www.ibis-information.org>

Note that the "/ibis" text should be removed from directory names when this URL mirror is used. Other trademarks, brands and names are the property of their respective owners.

GEIA STANDARDS BALLOT VOTING STATUS

I/O Buffer Information Specification Committee (IBIS)

Organization	Interest Category	Standards Ballot Voting Status	August 29, 2008	September 19, 2008	October 10, 2008	October 31, 2008
Actel	Producer	Inactive				
Advanced Micro Devices	Producer	Active	√	√	√	√
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	√	√	√	√
Ericsson	Producer	Inactive	√		√	√
Freescale	Producer	Inactive				
Green Streak Programs	General Interest	Inactive				
Hitachi ULSI Systems	Producer	Inactive				
Huawei	User	Inactive	√			
IBM	Producer	Active	√		√	√
Infineon Technologies AG	Producer	Inactive				
Intel Corp.	Producer	Active	√	√		√
LSI	Producer	Inactive	√			
Marvell Semiconductor	Producer	Inactive				
Mentor Graphics	User	Active	√	√	√	
Micron Technology	Producer	Active		√	√	√
Nokia Siemens Networks	Producer	Active	√	√	√	√
Samtec	Producer	Inactive				
Signal Integrity Software	User	Active	√		√	
Sigrity	User	Inactive	√			
Synopsys	User	Inactive				
Teraspeed Consulting	General Interest	Active	√	√	√	√
Texas Instruments	Producer	Active	√	√		√
Toshiba	Producer	Inactive				
Xilinx	Producer	Active	√	√		√
ZTE	User	Inactive				
Zuken	User	Inactive				

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.