EIA IBIS Open Forum

Meeting Date: **December 12, 2008**

VOTING MEMBERS AND 2008 PARTICIPANTS

Actel	(Prabhu Mohan)
Agilent Technologies	Sanjeev Gupta, Radek Biernacki, Amolak Badesha Fangyi Rao, [Ian Dodd], Yutao Hu, Vuk Borich Nobutaka Arai, Ludwig Eichingner, Cheng-ming Ren, Xuliang Yuan, Jianping Zhu
AMD	Nam Nguyen*, Tadashi Arai
Ansoft Corporation	Steve Pytel, Ricardo Teliuteuesh, Dan Dvorscak, Steele Deng, Donny Hou, Baolong Li, Davis Yan, Long Yang, Song Zheng, Kazuhiro Kadota, Mitsuyo Kawata, Toru Watanabe
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, Lanbing Chen, Wenliang Dai, Feng Li, Shirley Li, Jinbai Liu, Ping Liu, Yabao Meng, Jian (John) Peng, Jain Shan, Hui Wang, Yitong Wen, Yitong Wu, Dingru Xiao, Ke (Coco) Xu, Feng Yu, Rong Zhang, Wenjiang Zhang, Alex Zhao, George Zhou, Yukio Masuko, Morihiro Nakazato, Norikazu Takada
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, Jin (Leo) Hu, Weifeng Shu, Xinghai (Sean) Tang, Huihui (Iris) Zhao
Ericsson	Anders Ekholm*
Freescale	Jon Burnett
Green Streak Programs	Lynne Green
Hitachi ULSI Systems	Kazuyoshi Shoji, Shinmei Hirano, Shinji Itano, Sadahiro Nonoyama, Hiroshi Uematsu
Huawei Technologies	Tao Guan*, Xiaoqing Dong, Yu Chen, Jing Fu, Peng Huang, Jinjun Li, Bo Liu, Mongfang Lv, Shaokun Shen, Victor Wang, Shisheng Wu, Qilin Xu, Zhenlong Xu, Hang Ya, Zhou Yang, Wen Yu, Cheng Zhang, Gezhi Zhang, Yuehui Zhu
IBM	Adge Hawes*
Infineon Technologies AG	Christian Sporrer
Intel Corporation	Michael Mirmak*, Rich Mellitz, Wei-hsing Huang

	Vishram Pandit, Lili Deng, Haifeng Gong, Fanghui Li, Wenjie Mao, Yang Qu, Yiunglei Ren, Wayne Tsuchimoto, Yang Wu, Maoxin Yin, Xinjun Zhang, James Zhou, Nanditha Rao
LSI	[Frank Gasparik], Brian Burdick*, [Kim Helliwell]
Marvell Semiconductor	Jane Liu, Michael Wang, Yuyang Wang,
Mentor Graphics	Arpad Muranyi*, John Angulo, Minggang Hou, Jane Liao, Xuefeng Liu
Micron Technology	Randy Wolff*
Nokia Siemens Networks GmbH	Eckhard Lenski, Klaus Huebner, Katja Koller, Xianyun Wang
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 Stytte, Raymond Chen, Jiangsong Hu, Xianfeng Li, Tao (Helen) Xu
Synopsys	Ted Mido, Xuefeng Chen, Wenyun Gu, Jinghua Huang, Deng Shi
Teraspeed Consulting Group	Bob Ross*, Tom Dagostino, Al Neves
Texas Instruments	Richard Ward, Pavani Jella*
Toshiba (I.S. Corporation)	Yasumasa Kondo, Noriyasu Yoshikawa, Yoshihiro Hamaji, Atsushi Osaki
Xilinx	David Banas*, Ajay Shah, Suzanne Yiu Mustansir Fanaswalla
Zuken	Michael Schaeder, Ralf Bruening, Shigeru Hayashi, Hirohiko Matsuwawa
ZTE	Huifeng Chen, Xiaolin Chen, Jinku Guan, Hui Jiang, Nan Jiang, Shiju Sui, Zhiwei Yang, Shunlin Zhu

OTHER PARTICIPANTS IN 2008

3M	Kylin Chen, Shiang Yao
Aeroflex Metelics	David Nguyen
AET	Mikio Kiyono
Aica Kogyo	Akihiro Tanaka
Alcatel-Lucent	Haibo Wang
Alcatel-Shell	Weiping Chen, Feng Ji
Altera	Ravindra Gali, Jing Wu, John Oh, Hui Fu
ATE Service Corporation	Hideaki Endo, Yutaka Honda, Kevin Iida, Hiroyuik Itabashi, Kenji Kagawa
Avago Technologies	Minh Quach, Sari Tocco
Bayside Design	Elliot Nahas, Kevin Roselle
Canon	Seiji Hayashi, Shoji Matsumoto, Takamasa Sakuragi, Haruka Watanabe
Celestica	Ihsan Erdin, Shuxu Bao, Ricky Liu, Gloria Wang,

	Shengyu Wu, Molly Xu, Harrison Xue, Camilla Zhang, Van Zhu
Cybernet Systems	Golden Qian, Bill Wang, James Wang, David Xu Junko Kuriyama, Ryo Nakayama, Takayuki Tsuzura, Masato Yanagisawa
ECL Advantage	Thomas Iddings
EFM	Ekkehard Miersch
Elma Bustronic	Michael Munroe
Exar	Helen Nguyen
Feng Hao Shanghai Information	Zhengchang Gu
Fiberhome Telecommunications	Qian (Andy) Liao, Juan Liu, Elliotte Wan, Qi Zheng
Flextronics	Hasnain Syed
Fujitsu Advanced Technology	Shogo Fujimori, Hikoyuki Kawata, Toshiro Sato
Fujitsu Limited (Digital Process)	Masakatsu Kinjo, Kazumasa Kobayashi
GEIA	(Chris Denham)
Golden Bridge Networks	Saman Sadigh
Hisense Electronic	Haishi Hu
Huawei-3Com	Wei Yang
ICT Solutions	Steven Wong
IDT Newave	Zhiguang Li
Interface Technologies	Dan Waterloo
Inventec Corporation	Leonardo Huang, Zhong Peng
IO Methodology	Lance Wang, Zhi (Benny) Yan, Li (Kathy) Chen, Seana Tong, Salvia Yu, Zhangmin Zhong, Edwin Zhu
JEITA	Atsushi Ishikawa, Hideo Kogure
Kawasaki Microelectronics	Hajime Kinugasa, Hiroyuki Sato
KEI Systems	Shinichi Maeda
Magma DA	Anand Ramalingam
Meds IC Solutions	Xinhua Zhang
Nanjing Nari-Relays	Tao Wang, Yu Xia
NEC	Takeshi Watanabe, Itsuki Yamada
NetLogic Microsystems	Eric Hsu
North Carolina State University	Paul Franzon
Nokia	Ali Arsian
Nuova Systems	Zhiping Yang
Nvidia Corporation	Baal Yang, Tibet Zhao
Prentice Hall	Bernard Goodwin
Physware	Marc Kowalski
Politecnio di Torino	Igor Stievano
Qimonda AG	Md Morshed Alam Heial, Suhas Jawale
Radisys	Ling Li, Guo Tang
Ricoh	Yuji Maeno
Shanghai University	Shipeng Liu
Siemens AG	Manfred Maurer, Annika Woehner
Simberian	Yuriy Shlepnev

SimLab Software GmbH	Heiko Grubrich
Sony	Toshiro Honda, Iguchi Yasuhiko
Sony EMC Corporation	Takeshi Osanai
TDK	Yoshikazu Fujishiro
Tektronix	Steve Corey, Xin Wu
TietoEnator GmbH	Heinz-Hartmut Ibowski
Trident Multimedia Technologies	Xiagin Cao, Jeffery He
Tyco Electronics	Chad Morgan
Universal Scientific Industrial	Lurker Li, Spenser Tang
VeriSilicon Microelectronics	Qiang Chen, Steven Gou, Zhiying Yuan
Vertical Circuits	Mark Egbers
Victor Corporation of Japan (JVC)	Manabu Matsumoto
Winwin Corporation	Haiphe Lau, Linfa Liu
Xsigo Systems	Robert Bada
Zuken Support and Service	Seikou Go, Yoshiaki Nishi, Tomotaka Unose, Yin Yi
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
January 9, 2009	1-866-432-9903	121006125

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 will close the year with 32 members. We have more revenues than income for the year. We need to spend it by the end of the year or we lose the extra money, about $4500. We will discuss this later in the meeting.

REVIEW OF MINUTES AND ARS

Michael Mirmak called for comments regarding the minutes of the November 11, 2008 Asian IBIS summit in China, the November 14, 2008 Asian IBIS Summit meeting in Japan and the November 21, 2008 IBIS Open Forum teleconference. All three sets of minutes were approved without changes.

WEB PAGE UPDATES

Syed Huq reported that a new LSI logo was sent to ITAA for upload on the poster page.

MAILING LIST ADMINISTRATION

Bob Ross reported that everything is working normally.

MODEL LIBRARY UPDATE

No update.

PRESS UPDATE

No update.

MISCELLANY/ANNOUNCEMENTS

No update.

OPENS FOR NEW ISSUES

Syed Huq requested time for a discussion on RSS implementation for the web page.

Bob Ross noted the announcement of a merger between ITAA and AeA. Michael Mirmak said that this merger will create the Technology Association of America. The new association will represent about 2,000 member companies. New offices in Beijing and Brussels may be useful to us. We may be reorganized next year under a different group than GEIA. A news article about the merger can be found at:

http://www.eetimes.com/showArticle.jhtml?articleID=212300401&cid=NL_eet

INTERNATIONAL/EXTERNAL PROGRESS

- DASC

Michael Mirmak reported that there have been no meetings lately. The next meeting is December 18, 2008.

The DASC file and e-mail archive may be found at:

http://www.dasc.org/

- P1735 Encryption

Syed Huq reported that meetings are on Mondays, 8:00 AM PT. He has conflicts with this time, but will try to get updates regardless. 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 mentioned that we need to redesign our IBIS logo. A graphic artist friend of Bob created a few logos. These show IBIS in different fonts and carry through the white IBIS bird graphic. Michael explained that the logo needs to be updated to remove the EIA reference and to have a higher resolution logo than we do currently. Arpad Muranyi wondered if the bird was really a good part of the logo, although people are used to seeing the bird in the logo. He also wanted to make sure that the logo would print well in color, black and white, and look good against different color backgrounds.

Bob Ross noted that there are two upcoming conferences that include Signal Integrity and Power Integrity topics. Information on these is below.

The 13th IEEE Workshop on Signals Propagation on Interconnects is May 12-15, 2009 in Strasbourg, France. The call for papers deadline is February 7, 2009.

http://spi.univ-brest.fr

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

IEC APPROVAL ACTIVITIES

Randy Wolff reported that he and Michael Mirmak talked with Chris Denham of GEIA about IEC approval. Chris advised that he has an agreement with IEC that allows IEC to have a copyright on international standards while maintaining the copyright for the GEIA/ANSI version of the same standard. He mentioned that the IEEE has a dual logo agreement with IEC, and this would be the preferred method of bringing our standard into the IEC process. It is also very important to try to maintain control of our standard through the IEC approval process if we go forward with it.

Bob Ross mentioned that IEC members may want to make comments, but he is not worried about the IEC wanting to make changes to IBIS. David Banas asked if we are worried about issues in packaging in IBIS being a concern to IEC. Bob said he would be more interested in the dual logo process. David is more concerned with abandonment of the specification than it getting changed. Michael Mirmak mentioned that there are concerns with overseas members needing an international standard in some cases. Randy asked Bob if the IBIS 3.2 approval went smoothly, or if were there major editorials. Bob remembered it being a fast track process but wasn't sure if those editorials resulted in any changes to the IEC document. Randy took the AR to continue discussions with GEIA and IEC and push the idea of the dual logo process.

SUMMIT STATUS

- 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 scheduled for the summit. Michael Mirmak noted that the first call for papers will go out after the meeting. Other announcements will follow a 2-week release schedule. Michael showed a map of the convention center to show our room location. This year the summit will be in the main classroom area, rooms 209-210. We should see more foot traffic. We will need to arrange for booth transportation if we move forward with the booth in the exhibit area.

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

Bob Ross reported that the group continued on section 6, discussing whether this section includes checklist items or just advisory items. There are more topics to discuss in section 7, the last section to review.

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

Arpad Muranyi reported that the group is discussing a complete IBIS overhaul and sketching out ideas and plans for what it would look like if we did it. The group is making lists of things that need to be fixed to make it more useful and extend it to new technologies and cover simulation needs of IBIS users. He wondered if discussion should continue in the ATM group or if it should be handled by a new committee. He encouraged participation and comments.

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 last meeting of the year is next Wednesday. The group has settled out major technical and keyword issues. They are looking over a final draft for editorial comments and should have a final document to vote on soon.

Task group material can be found at:

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

2008 BUDGET CLOSURE

Michael Mirmak reported that we have about $4500 of extra revenue for 2008. This must be allocated by January 12, 2009 or we lose it. Some options include pre-payment of DesignCon IBIS Summit expenses ($4000), new logo development ($500-$1000), BUG fixes to IBISCHK4 and IBIS DesignCon booth expenses ($500). The IBIS booth at DesignCon requires additional expenses this year, and we have all the information on these costs. Syed Huq asked about funding for the IBISCHK5 parser. Michael responded that we need about 6 weeks to finish the bidding process, so we don't have enough time for this. Bob Ross thinks that if we do not get significant sponsorship for DesignCon, then we should prepay up to $4000 for the summit and cancel the booth. Bob felt we should also look at prepaying the logo development. Arpad Muranyi asked if we could prepay DesignCon with all the money we have and get a refund later if we go over. This might be an option. Also, Bob mentioned prepaying for a GEIA representative to attend the DAC IBIS summit. The board will discuss this further offline, and a vote if required will happen during the January 9, 2009 teleconference.

NEW ISSUES

Syed Huq explained that Really Simple Syndication (RSS) allows us to setup an RSS feed on our webpage that alerts viewers to changes on the website page. GEIA wants to wait until the mergers are completed to see if RSS is a feature that can be supported across the organization. Michael Mirmak felt that this would be a good addition to the website. Syed will keep the group updated on any progress.

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

Bob Ross noted that no further work has been done on this yet. Walter Katz had asked about adding comments about handling differential nets, and Bob needs to review this.

IBISCHK5 PARSER STATUS

Michael Mirmak showed a draft parser development contract. The debate is still open on whether code should be included for AMI file parsing. Bob Ross mentioned that we may need to have a pay-as-you-go approach to funding. Critical items need to be funded first.

IBISCHK4 BUG STATUS

Michael Mirmak reported that two BUGs are open right now and there is a potential one related to BIRD106. There are no plans to fix these in the near term.

The BUG report list is available at the link below:

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

ICMCHK1 BUG STATUS

John Angulo looked into the code further, and a new update should be able to be released in about a week.

NEW ISSUES

Bob Ross mentioned that all member companies should have received invoices for 2009 dues. These can be paid at any time without affecting our budgeting.

NEXT MEETING

The next IBIS Open Forum teleconference will be held January 9, 2009 from 8:00 AM to 10:00 AM US Pacific Standard Time.

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NOTES

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Staff Scientist, Teraspeed Consulting Group
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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/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.

GEIA STANDARDS BALLOT VOTING STATUS

I/O Buffer Information Specification Committee (IBIS)

Organization	Interest Category	Standards Ballot Voting Status	November 11, 2008	November 14, 2008	November 21, 2008	December 12, 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	Active	√	√	√	√
Freescale	Producer	Inactive				
Green Streak Programs	General Interest	Inactive				
Hitachi ULSI Systems	Producer	Inactive		√		
Huawei	User	Active	√		√	√
IBM	Producer	Active			√	√
Infineon Technologies AG	Producer	Inactive				
Intel Corp.	Producer	Active	√	√	√	√
LSI	Producer	Active			√	√
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	Inactive				√
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.