

# IBIS Open Forum Minutes

Meeting Date: **December 11, 2009**

Meeting Location: **Teleconference**

## VOTING MEMBERS AND 2009 PARTICIPANTS

Actel	(Prabhu Mohan)
Agilent	Brian Andresen, Radek Biernacki, Saliou Dieye, Yutao Hu, Fangyi Rao, Xuliang Yuan
AMD	Nam Nguyen, Tadashi Arai
Ansoft Corporation	Steve Pytel, Chris Eric, Dan Hou, Baolong Li, Jack Qiu, Davis Yan
Apple Computer	(Matt Herndon)
Applied Simulation Technology	(Fred Balistreri)
ARM	V. Muniswara Reddy
Cadence Design Systems	Terry Jernberg, Ambrish Varma, Aileen Chen, Lanbing Chen, Wenliang Dai, Fenghua Gao, Feng Li, Ping Liu, Yubao Meng, Jian (John) Peng, Qian (Candy) Shen, Muker Wang, Yifong Wen, Jun Wu, Zhi (Benny) Yan, Wayne Zhang, Wenjiang Zhang, Qi (Alex) Zhao, Yukio Masuko, Morihiro Masuko
Cisco Systems	Luis Boluna, Tram Bui, Bill Chen, Syed Huq*, Mike LaBonte*, Pedro Miran, Huyen Pham, [AbdulRahman (Abbey) Rafiq], Ashwin Vasudevan, Zhiping Yang, Guan (Greg) Fu, Jin (Leo) Hu, Chunhai Li, Weifeng Shu, Xinghai Tang
Ericsson	Anders Ekholm*
Green Streak Programs	Lynne Green
Huawei Technologies	Xiaoqing Dong, Chunxing Huang, Guan Tao, Yu Chen, Zengzing Hu, Chun Huang, Jun Li, Han Li, Jinjun Li, Benguo Lin, Bo Liu, Shuyao (Charles) Liu, Longfang Lu, Luyu Ma, Huang Peng, Lin Qiang, Kaler Ren, Minghua Wu, Jianhong Xiang, Hang Yan, Xubo Ye, Hongcheng Yin, Xuequan (Tony) Yu, Cheng Zhang, Gezi Zhang, Yi Zhao, Yi Zhou
Hitachi ULSI Systems	Shinmei Hirano, Kazuyoshi Shoji, Yoshiyuki Yagami
IBM	Adge Hawes
Infineon Technologies AG	(Christian Sporrer)
Intel Corporation	Myoung J. Choi, Michael Mirmak*, Vishram Pandit, Jon Powell, Sirisha Prayaga, Lili Deng, Leo Fang, Haifeng (Bill) Gong, Fanghui Li, Jenny Li, Wenjie Mao, Yiunglei Ren, Yang Wu, Maoxin Yin, Xinjun Zhang
IO Methodology	Li (Kathy) Chen, Lance Wang*, [Zhi (Benny) Yan]

LSI	Brian Burdick
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	Brad Brim, Sam Chitwood, Raymond Chen, Jiangsong Hu, Li Li, Xianfeng Li, Lily Lou, Zhangmin Zhong
Synopsys	Ted Mido, Xuefeng Chen, Wenyun Gu, Jinghua Huang, Bo Liu, Qin (Kitty) Zhang
Teraspeed Consulting Group	Bob Ross*
Toshiba	Yoshihiro Hamaji
Xilinx	[David Banas]
ZTE	Xiaolin Chen, Yanbin Chen, Jinku Guan, Mai Hu, Nan Jiang, Fei Lu, Xiaorong Lu, Xianyu Meng, Junwei Zhang, Shunlin Zhu
Zuken	Michael Schaefer, Ralf Bruening, Motoyuki Matsuawa, Hirohiko Matsuawa

#### **OTHER PARTICIPANTS IN 2009**

3M	Kylin Chen, Shiang Yao
AET	Mikio Kiyono
Altera	Hui Fu
Apache	Yu Lin, Junyong Deng, Shulong Wu
ATE	Nob Tanaka, Kenny Suga, Hideaki Endo, Ytaka Honda, Kotaro Iida, Hiroyuki Itabashi, Kenji Kagawa
Bayside Design	Stephen Coe, Elliot Nahas
Canon	Takamasa Sukuragi
Celestica	Fajiang Liu, Cao Wang, David Wu, Baoshu Xu, Fei Xue, Van Zhu
Circuit Spectrum	Zaven Tashjian
CST	Antonio Ciccomancini, Martin Schaefer
Curtiss-Wright Embedded Computing	J. Phillips
Cybernet Systems	Golden Qian, Takayuki Tsuzura
EM Integrity	Guy de Burgh
EMC Corporation	Mingchang Wang, Vincent Yan
Elpida Memory	Masakazu Koso
Exar	Helen Nguyen
Freescale	Jon Burnett, Om Mandhama, Jesse Qin
Fujitsu Advanced Technologies	Shogo Fujimori, Hikoyuki Kawata
Fujitsu VLSI	Tetsuya Inoue
H3C	Huanyang Chen, Xiaoqun Li

Hua Symantec	Senliang Han
Ibiden	Kiyohisa Hasegawa
ICT Solutions	Steven Wong
Interactive Devices Technology (IDT)	Zhiguang (Andy) Li
IdemWorks	Michelangelo Bandinu
Japan Aviation Electronics Industry	Hiroaki Ikeda
JEITA EC Center	Atsushi Ishikawa
Juniper	Kevin Ko
Kineret Design	Ricardo Teliuteuesh
Kyocera Elco Corporation	Noniyuki Akai
LeCroy Corporation	Weidong (Derek) Hu, Scott Zhang
Leventhal Design & Communications	Roy Leventhal
Marvell	Mingzhen (Jane) Liu, Fang Lv, Yuyang Wang
Maxim Integrated Products	Ron Olisar
Mindspeed Technologies	Bobby Alkay
NEC Electronics Corp.	Takeshi Watanabe
NetLogic Microsystems	Eric Hsu
Politecnico di Torino	Igor Stievano
Sanmina SCI	Vladimir Drivanenko
Sedona International	Joe Socha
Shanghai ITG Information Technology	Rongsheng Yuan
Siemens	Manfred Maurer
Signal Consulting Group	Timothy Coyle, Nicole Mitchell
Signal Khobho	Atsuhito Noda
Simberian	Yuriy Shlepnev
Sony	Toshiro Honda, Yasuhiko Iguchi, Hiroshi Takamizawa (Chris Denham)
TechAmerica (GEIA)	Pavani Jella
Texas Instruments	Yoshikazu Fujishiro
TDK	Yohei Izhizone
THine Electronics	Yoshikazu Suzuki
Towa Electronics	Jing Lou
Vendor Chain International	Robert Badel
Xsigo Systems	Seikou Go, Ryosuke Tokonami, Tomotaka Unose, Yin Yi
Zuken Support and Service	Ian Dodd
Independent	

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
January 8, 2010	204 512 431	IBIS

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

<https://cisco.webex.com/cisco/j.php?J=204512431>

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

NOTE: "AR" = Action Required.

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## **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 we will finish the year with 30 paid members, and this agrees with TechAmerica accounting. We sold another ibischk5 parser license. This makes 7 parser purchases. Another parser license sale is pending. Another tschk2 license purchase is pending. Invoices for 2010 will be prepared and sent out next week. Up-to-date member addresses are needed. A budget has been submitted to TechAmerica for next year.

## **REVIEW OF MINUTES AND ARS**

Bob Ross called for comments regarding the minutes of the November 20, 2009 IBIS Open Forum teleconference. The minutes were approved with no changes.

## **WEB PAGE UPDATES**

Syed Huq reported that there are some updates requested by Bob Ross that are in progress. Bob Ross noted that there is some cleanup needed of the member roster. Also cleanup of the FAQ page is needed. Eckhard Lenski offered to help Syed specifically update the FAQ page.

## **MAILING LIST ADMINISTRATION**

Mike LaBonte reported that we have had a few joins lately. Mike noted that there is an 80% overlap of membership between the two mailing lists. He is thinking about sending out a notice to both lists to make sure the members know that both lists exist in case they want to sign up for both. The lists might be combined if there is no resistance to doing so.

## **MODEL LIBRARY UPDATE**

No update.

## **PRESS UPDATE**

None.

## **MISCELLANY/ANNOUNCEMENTS**

None.

## **OPENS FOR NEW ISSUES**

Bob Ross noted three issues he would like to make time for:

1. At the end of administrative activities, a discussion on what to do with excess IBIS money – where to spend it. This may include a vote.
2. New BUG report BUG109 along with BUG108 already scheduled.
3. At the end of the meeting, he has a hodge podge of items to discuss (but time did not permit this).

## **INTERNATIONAL/EXTERNAL ACTIVITIES**

### **- DASC**

Michael Mirmak reported that there was a DASC meeting a couple of weeks ago. There was no IBIS related information. New officers were elected. 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**

None.

## **TECHAMERICA STATUS**

Bob Ross reported that our main contact is on vacation the last two weeks of the year. As a result, we are trying to handle all business matters quickly. Bob noted that Chris Denham is now in charge of all the standards under the TechAmerica umbrella.

## **IEC APPROVAL ACTIVITIES**

Randy Wolff reported that he has not heard any update from Victor Berman on the status of IEC approval of the IBIS 4.2 specification. He emailed Victor again recently for an update. Michael Mirmak recommended contacting Stan Krolikoski, the new DASC chairperson. Michael plans to send Randy an email with Stan's contact information.

## **SUMMIT STATUS**

### **-DesignCon Summit Planning**

The meeting is scheduled for Thursday, February 4, 2010. Bob Ross noted that Cisco is an official sponsor of the meeting. We are not planning a booth this year unless a local person wants to organize it. Bob asked Syed Huq to check with the hotel on pricing in case it is better to hold the meeting in the adjacent hotel. Lance Wang is the main contact for signups. The first announcement will go out today. The question came up about having vendor tables in the meeting room. Bob did not think this would work out. At least four officers are planning to attend.

### **-European Summit Planning**

No update. The European organizers are still favoring holding the meeting at the SPI conference in May in Hildesheim, Germany.

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 addressing correlation issues such as the Accuracy Handbook and whether or not to update it, and organizing upcoming topics. They are looking at recommending test fixtures for the Accuracy Handbook. They have also discussed contents of Quality reports and how to integrate the results of real world testing into the reports. The group meets Tuesdays at 8AM PST.

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

[http://www.eda.org/ibis/quality\\_ver2.0/quality\\_ver2\\_0.pdf](http://www.eda.org/ibis/quality_ver2.0/quality_ver2_0.pdf)

## **IBIS MODEL REVIEW TASK GROUP**

No update.

## **ADVANCED TECHNOLOGY MODELING TASK GROUP**

Arpad Muranyi reported that there is one more meeting this year. He is trying to collect responses related to the AMI BIRD. He sent out an email with two questions about backwards compatibility versus cleanliness of the specification. Arpad encouraged votes from not only EDA vendors but also IC vendors who will be making the models. The AMI BIRD is an attempt to fix issues found with the original specification and to add capabilities. The group plans to discuss a new flow diagram next week.

Task group material can be found at:

[http://www.eda-stds.org/ibis/macromodel\\_wip/](http://www.eda-stds.org/ibis/macromodel_wip/)

## **AD HOC TASK GROUPS (INTERCONNECT)**

Michael Mirmak reported that the group is meeting weekly on Wednesdays at 9AM PST. They are tying up loose ends on the [Sparse Matrix Mapping] keyword for Touchstone 2.1. They will then move on to talk about node to port mapping and then binary file formats. There is also a topic from Sigrity on package to board to die connections, but it is unclear the best place to discuss this. Bob Ross noted that Michael will be taking a temporary position in Taiwan next year, and Bob will take over as chair of the task group as needed.

Task group material can be found at:

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

## **NEW ISSUES**

Bob Ross asked for a vote to authorize the IBIS Board to spend excess funds in the IBIS account as necessary to make sure none is lost at the end of the fiscal year. Bob is not sure how much will be available to spend until he gets another update from TechAmerica. Bob plans to spend some of the money to prepay the DesignCon meeting. A second option is to prepay the parser developer for fixing BUGs next year. Another option is to prepay some of the China summit expenses. Bob noted that he is working with TechAmerica to determine how to handle the ibischk5 parser funds received in late 2008 through 2009.

Bob called for a vote on the question as stated above. The vote passed with the following vote tally:

Cisco: yes

Ericsson: yes

Intel: yes

IO Methodology: yes

Mentor: yes

Micron: yes

Nokia Siemens Networks: yes

SiSoft: yes

Teraspeed: yes

## **TSCHK2 PARSER STATUS**

Bob Ross noted that the parser has been released. There is one source code license purchase pending. Executables for five systems are available. Bob added that he may temporarily share the source code with a couple of non-source code purchasers to get more executables created. Bob noted that the parser supports Touchstone 1 and can upgrade a Touchstone 1.0 file to a Touchstone 2.0 file and downgrade some Touchstone 2.0 files to Touchstone 1.0.

## **IBISCHK5 BUG STATUS**

BUG108 was introduced. It was filed by Shangli Wu and Bob Ross. They found that IBISCHK5 produces Error and Warning messages when the file is set to [IBIS Ver] 5.0 for a file that passes without any messages when it is set to 4.2. This appears to relate to some missing code in the multi-lingual modules. The BUG was classified as High priority, Severe severity, and Closed status. A fix has already been coded and tested. The new version 5.0.1 has been released to the source code licensees, and the executables will be updated soon.

BUG109 was also introduced. It was filed by Todd Westerhoff. The BUG found that the parser is not accepting a type "String" as a value for Model\_Specific parameters. Michael Mirmak asked if there is clarity on what should be allowed for parameters. Walter Katz stated that he did not see any ambiguity in the specification, and this is clearly a BUG. The BUG was classified as High priority, Severe severity, and Open status.

## **ICMCHK1 BUG STATUS**

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

## **NEW ISSUES**

None.

## **NEXT MEETING**

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

## **NOTES**

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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](mailto: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](mailto:ibis-request@eda.org)

To join, change, or drop from either or both:

IBIS Open Forum Reflector ([ibis@eda.org](mailto:ibis@eda.org))

IBIS Users' Group Reflector ([ibis-users@eda.org](mailto:ibis-users@eda.org))

State your request.

[ibis-info@eda.org](mailto: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](mailto: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](mailto: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](mailto: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](mailto: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/)

[http://www.eda.org/ibis/icm\\_bugs/icm\\_bugform.txt](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>

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## IBIS CURRENT MEMBER VOTING STATUS

### I/O Buffer Information Specification Committee (IBIS)

Organization	Interest Category	Standards Ballot Voting Status	November 4, 2009	November 6, 2009	November 20, 2009	December 11, 2009
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	√	√	√	√
Green Streak Programs	General Interest	Inactive				
Huawei Technologies	Producer	Inactive		√		
Hitachi ULSI Systems	Producer	Inactive	√			
IBM	Producer	Inactive			√	
Infineon Technologies AG	Producer	Inactive				
Intel Corp.	Producer	Inactive	√			√
IO Methodology	User	Active	√	√	√	√
LSI	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	√	√	√	√
Toshiba	Producer	Inactive		√		
Xilinx	Producer	Inactive				
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.