IBIS Open Forum Minutes

Meeting Date: **June 21, 2024**
Meeting Location: **Teleconference**

VOTING MEMBERS AND 2024 PARTICIPANTS

Altair	(JuneSang Lee)
AMD (Xilinx)	(Bassam Mansour)
Analog Devices	Jermaine Lim-Abroguena, Toni Rose Racelis, Christine Bernal, Prachi Shukla, Aprille Hernandez-Loyola, Francis Ian Calubag, Marvin Sinues, Vincent Paul Sabillo, Esther Grace Falate, Keshav Mehrotra
Ansys	Curtis Clark*, Marco Occhiali
Ansys Japan	Satoshi Endo
Applied Simulation Technology	(Fred Balistreri)
Aurora System	(Dian Yang), Raj Raghuram
Broadcom	(Yunong Gan)
Cadence Design Systems	Kyle Lake^, Ambrish Varma, Jared James, John Phillips, Kristoffer Skytte
Celestica	(Sophia Feng)
Cisco Systems	(Stephen Scearce), Hong-Man Wu
Dassault Systemes	Stefan Paret, David Duque
GE Healthcare Technologies	(Balaji Sankarshanan)
Google	(Hanfeng Wang)
Huawei Technologies	(Hang (Paul) Yan)
Infineon Technologies AG	(Christian Sporrer)
Intel Corporation	Michael Mirmak, Hsinho Wu, Kinger Cai, Chi-te Chen
Keysight Technologies	Pegah Alavi, Ming Yan, David Banas, Fangyi Rao, HeeSoo Lee, Heidi Barnes
Marvell	Steven Parker*
MathWorks	Graham Kus, Walter Katz*
Micron Technology	Justin Butterfield
MST EMC Lab	Chulsoon Hwang, Zhiping Yang*, Jiahuan Huang
SI-Clarity	Doug Burns*
Siemens EDA	Weston Beal*, Arpad Muranyi*, Randy Wolff*, Matt Leslie, Scott Wedge, Todd Westerhoff, Zhichao Deng
STMicroelectronics	Anil-Kumar Dwivedi, Bhupendra Singh, Harsh Saini, Hemant Kumar Gangwar, Manda Padma Sindhuja, Manish Bansal, Nitin Kumar, Olivier Bayet, Pawan Verma, Pranav Singh, Rahul Kumar, Raushan Kumar, Shivam Soni, Gaurav Goel, Manisha Bisht, Charul Sharma, Manish Bansal, Mihir Pratap
Synopsys	Ted Mido*, (Andy Tai), Luis Simoes, Pedro Monteiro, Luis Neves, António Eustáquio, Diogo Coelho, Nuno Lima, Alexandre Brito
ZTE Corporation	(Zhongmin Wei), (Shunlin Zhu)
Zuken	(Ralf Brüning), Markus Bücker
Zuken USA	Lance Wang*

OTHER PARTICIPANTS IN 2024

Alphawave Semi	Adrien Auge, Todd Bermensolo
Anacom	Filipe Saraiva
Applied Logix	Dan Chirpich
Ciena	Hugues Tournier
Hirel Logic	Jason Riddley
HRL Laboratories	John Carlson
Hitachi Ltd.	Yutaka Uematsu
KEI Systems	Shinichi Maeda
KT Smart Future-Creations	Keita Miyasato
Meta	Ashkan Hashemi
Northrop Grumman Corp.	Will McCaffrey
SAE ITC	Tammy Patton*, Rich Demary
Samsung Electronics	Jun-Bae Kim
Signal Edge Solutions	Benjamin Dannan
Si-Guys	Donald Telian
Socionext America	Futoshi Terasawa
Teraspeed Labs	[Bob Ross]
Toyobo Co.	Saki Kawano
University of Illinois Urbana-Champaign	Jose Schutt-Aine

In the list above, attendees present at the meeting are indicated by "*." Those submitting an email ballot for their member organization for a scheduled vote 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 connection information for future IBIS teleconferences is as follows:

Microsoft Teams meeting
Join on your computer or mobile app
Click here to join the meeting

Join with a video conferencing device
106010980@teams.bjn.vc
Video Conference ID: 114 666 897 5
Alternate VTC dialing instructions

Or call in (audio only)
+1 267-768-8015,554664847#   United States, Philadelphia
Phone Conference ID: 554 664 847#
Find a local number | Reset PIN
Learn More | Meeting options

All teleconference meetings are 8:00 a.m. to 9:55 a.m. 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.

NOTE: "AR" = Action Required.

INTRODUCTIONS AND MEETING QUORUM

Roll Call: Randy Wolff announced a total of 7 organization members attending with quorum of 7 met.

Randy took meeting minutes.

CALL FOR PATENTS

Lance Wang called for declaration of any patents or pending patents related to the IBIS, IBIS-ISS, ICM, or Touchstone 2.0 specifications.

None were announced.

REVIEW OF MINUTES AND ARs

- May 15, 2024 Hybrid IBIS summit at SPI 2024
- The minutes were not available. Graham Kus had a PC failure and has to redo them.
- May 31, 2024 IBIS Open Forum
- Graham sent minutes out for board review, but they are not ready to publish yet.

ANNOUNCEMENTS, CALL FOR ADDITIONAL AGENDA ITEMS

Lance Wang called for any new announcements.

MEMBERSHIP STATUS AND TREASURER'S REPORT

Randy Wolff reported we have 1 more member renewal completed for a total of 25. 1 member renewal payment is in progress. One new member has joined at the ½ year rate.

We have 27 members with a quorum of 7.

We will no longer record SAE ITC end-of-year assessments, so that line item has been removed from the report for 2023. A payment to Steve Parker for website expenses is completed. A request for an IBISCHK7 parser source code license purchase is in progress. A request for a TSCHK2 parser source code license purchase is in progress.

$9,255 Balance for 2024

$18,705 Adjusted Net Income for 2024 (adding the 2024 IBIS membership renewals received in 2023)

Lance noted SI-Clarity needed to be added to the member poster on the website.

WEBSITE ADMINISTRATION

Steve Parker reported that he added an online registration page for the IEEE EMC+SIPI IBIS Summit. Lance Wang asked Steve to update the meeting time information for the time zone.

Arpad Muranyi asked for status on task group leads being able to add their own documents to the website. Steve said he is working on the minutes page first, then he'll work on task group pages.

Lance noted he added the new officers on the "about" page.

MAILING LIST

Curtis Clark reported there were some issues with emails bouncing that was quickly resolved.

LIBRARY UPDATE

Zhiping Wang reported no new updates on the library.

INTERNATIONAL/EXTERNAL ACTIVITIES

IEC 63055/IEEE 2401, JEITA "LPB:"

- No updates reported.

Press Updates:
- No updates reported.

University Relations:

- No updates reported.

SUMMIT PLANNING AND REVIEW
IEEE EMC+SIPI 2024 IBIS Summit
Location:
- 8-12pm August 9, 2024 in Phoenix, AZ (GMT-7, Note: Arizona does not observe US daylight time)

Notes:

- Estimate approximately half-day Summit, similar count of 7-10 presentations.

IBIS Summit Sponsors:

- IEEE EMC+SIPI is the main sponsor. Lance Wang noted that other sponsors are welcome.

More information is available at the following link:
https://www.emc2024.org/

QUALITY TASK GROUP

Randy Wolff reported as acting Chair of this group that there have not been meetings due to no agenda items. New topics for discussion are welcome and a meeting would be scheduled at that point.

Normally, the Quality Task Group meets every Tues Morning at 9am Pacific. Meetings are currently suspended.

Lance Wang asked if there were questions. None were asked.

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

https://ibis.org/quality_wip/

ADVANCED TECHNOLOGY MODELING TASK GROUP

Arpad Muranyi reported the group is meeting regularly now at noon Pacific. They recently discussed supporting MIPI C-PHY in IBIS.

Lance Wang asked if there were questions. None were asked.

Note: Task group material can be found at:

>   https://ibis.org/macromodel_wip/

INTERCONNECT TASK GROUP

Arpad Muranyi reported that the group has been discussing the port mapping proposals. This week's meeting was cancelled due to the US Juneteenth holiday.

Lance Wang asked for questions. None were asked.

Note: Task group material can be found at:

>   https://ibis.org/interconnect_wip/

EDITORIAL TASK GROUP

Lance Wang reported that this task group is still suspended.

Note: Task group material can be found at:

>   https://ibis.org/editorial_wip/

NEW ADMINISTRATIVE ISSUES

Officer Election Result:

Arpad Muranyi reported the election ended on June 17, 2024. Elections were unanimous electing the following officers:

Chair: Lance Wang, Zuken USA

Vice-Chair: Doug Burns, SI-Clarity

Secretary: Graham Kus, MathWorks

Treasurer: Randy Wolff, Siemens EDA

Librarian: Zhiping Yang, MST EMC Lab

Webmaster: Steven Parker, Marvell

Postmaster: Curtis Clark, ANSYS

ROLL CALL

Mid-meeting roll call: Randy Wolff reported 8 member attendees (9 including email vote).

TECHNICAL DISCUSSION

No new items.

NEW AND REVISED *IRDs

TSIRD7.2: Standardized Pole-Residue Representation of Touchstone Data

Arpad Muranyi reported there was a small change requested by Curtis Clark to update an equation.

Link: https://app.ibis.org/tsirds/

*IRDS ELIGIBLE FOR VOTE SCHEDULING

None.

MOTIONS SCHEDULED FOR VOTE

The group discussed and slightly edited two motions related to the next version of IBIS.

Motion 1: "The next release of the IBIS Specification shall be version 8.0."

Motion 2: "To clearly define the technical features of the IBIS 8.0 Specification, be it resolved that, of the BIRDs submitted to-date, only the following BIRDs shall be included in the IBIS 8.0 Specification to be assembled by the Editorial Task Group:

BIRD 223.1: Add support for SPIM in IBIS
BIRD 224: New AMI Reserved Parameters for Ts4file port order
BIRD 225: Clarification for bus_label rules
BIRD 226: PSIJ Sensitivity
BIRD 227: AMI Ignore Block Feature
BIRD 228: Pin Name Field Extension
BIRD 229.1: AMI Test Data Support
BIRD 230.1: Adding a Definitions Section to IBIS
BIRD 231: Clarifications on AMI Block Concepts

Note that editorial clarification BIRDs that have a technical impact may be developed and submitted for possible inclusion in the IBIS 8.0 Specification by the Editorial Task Group."

Arpad Muranyi moved to vote on Motion 1. Curtis Clark seconded the motion.

The vote tally for Motion 1 was:

ANSYS – yes
Cadence – yes (by email)
Marvell – yes
MST EMC Lab – yes
SI-Clarity – yes
Siemens – yes
Synopsys – yes
Zuken – yes

Motion 1 passed.

Arpad Muranyi moved to vote on Motion 2. Curtis Clark seconded the motion.

The vote tally for Motion 2 was:

ANSYS – yes
Cadence – yes (by email)
Marvell – yes
MST EMC Lab – yes

SI-Clarity – yes
Siemens – yes
Synopsys – yes
Zuken – yes

Motion 2 passed.

TABLED *IRDS

BIRD220: Pre-driver PSIJ Sensitivity keyword.

Zhiping Yang reported that he talked with Chulsoon Hwang, and Chulsoon plans to discuss the BIRD in the ATM task group soon.

Link: https://ibis.org/birds/bird220.docx

IBISCHK AND TSCHK PARSER AND BUG STATUS

Randy Wolff reported that there are no new bugs reported for IBISCHK or TSCHK. Source code license purchases are in progress for both IBISCHK7 and TSCHK2.

Lance asked if there were questions. None were asked.

NEW TECHNICAL ISSUES

Arpad Muranyi mentioned again that MIPI C-PHY is being discussed in IBIS ATM task group. It is a unique technology with technical challenges for support in IBIS.

NEXT MEETING AGENDA AND SCHEDULING

Lance Wang stated the next IBIS Open Forum meeting would be held as a teleconference meeting on July 12, 2024. The following meeting would be held August 2, 2024.

Arpad Muranyi motioned to adjourn. Doug Burns seconded the motion. The meeting adjourned.

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NOTES

IBIS CHAIR: Lance Wang (978) 633-3388
　　　　lance.wang@ibis.org
　　　　Solutions Architect, Zuken USA
　　　　238 Littleton Road, Suite 100
　　　　Westford, MA 01886

VICE CHAIR: Doug Burns
　　　　vice-chair@ibis.org
　　　　Consultant, SI-Clarity

SECRETARY: Graham Kus
　　　　graham.kus@ibis.org
　　　　Senior Engineer, The MathWorks, Inc.
　　　　3 Apple Hill Drive
　　　　Natick, MA 01760

TREASURER: Randy Wolff
　　　　randy.wolff@siemens.com

Product Architect, Siemens EDA

LIBRARIAN: Zhiping Yang
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WEBMASTER: Steven Parker (845) 372-3294
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2070 Route 52
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POSTMASTER: Curtis Clark
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This meeting was conducted in accordance with SAE ITC guidelines.

All inquiries may be sent to info@ibis.org. Examples of inquiries are:

- To obtain general information about IBIS.
- To ask specific questions for individual response.
- To subscribe to or unsubscribe from the official ibis@freelists.org and/or ibis-users@freelists.org email lists (formerly ibis@eda.org and ibis-users@eda.org):
  - https://www.freelists.org/list/ibis
  - https://www.freelists.org/list/ibis-users
- To subscribe to or unsubscribe from one of the Task Group email lists: ibis-macro@freelists.org, ibis-interconn@freelists.org, ibis-editorial@freelists.org, or ibis-quality@freelists.org:
  - https://www.freelists.org/list/ibis-macro
  - https://www.freelists.org/list/ibis-interconn
  - https://www.freelists.org/list/ibis-editorial
  - https://www.freelists.org/list/ibis-quality
- To inquire about joining the IBIS Open Forum as a voting Member.
- To purchase a license for the IBIS parser source code.
- To report bugs or request enhancements to the free software tools: ibischk7, tschk2, icmchk1, s2IBIS, s2IBIS2 and s2iplt.

The BUG Report Form for ibischk resides along with reported BUGs at:

https://ibis.org/bugs/ibischk/
https://ibis.org/ bugs/ibischk/bugform.txt

The BUG Report Form for tschk2 resides along with reported BUGs at:

https://ibis.org/bugs/tschk/
https://ibis.org/bugs/tschk/bugform.txt

The BUG Report Form for icmchk resides along with reported BUGs at:

https://ibis.org/bugs/icmchk/
https://ibis.org/bugs/icmchk/icm_bugform.txt

To report s2IBIS, s2IBIS2 and s2iplt bugs, use the Bug Report Forms which reside at:

https://ibis.org/bugs/s2IBIS/bugs2i.txt
https://ibis.org/bugs/s2IBIS2/bugs2i2.txt
https://ibis.org/bugs/s2iplt/bugsplt.txt

Information on IBIS technical contents, IBIS participants and actual IBIS models are available on the IBIS Home page:

https://ibis.org/

Check the IBIS file directory on IBIS.org for more information on previous discussions and results:

https://ibis.org/directory.html

Other trademarks, brands and names are the property of their respective owners.

SAE STANDARDS BALLOT VOTING STATUS (attendee X; absent -)

Organization	Interest Category	Standards Ballot Voting Status	May 10, 2024	May 15, 2024	May 31, 2024	June 21, 2024
Altair	User	Inactive	-	-	-	-
AMD (Xilinx)	Producer	Inactive	-	-	-	-
Analog Devices	Producer	Inactive	-	-	-	-
Ansys	User	Active	X	X	X	X
Applied Simulation Technology	User	Inactive	-	-	-	-
Aurora System	User	Inactive	-	-	-	-
Broadcom Ltd.	Producer	Inactive	-	-	-	-
Cadence Design Systems	User	Active	-	-	X	X
Celestica	User	Inactive	-	-	-	-
Cisco Systems	User	Inactive	-	-	-	-
Dassault Systems	User	Inactive	-	X	-	-
GE Healthcare Technologies	User	Inactive	-	-	-	-
Google	User	Inactive	-	-	-	-
Huawei Technologies	Producer	Inactive	-	-	-	-
Infineon Technologies AG	Producer	Inactive	-	-	-	-
Intel Corp.	Producer	Active	X	X	X	-
Keysight Technologies	User	Inactive	-	-	-	-
Marvell	Producer	Inactive	X	-	-	X
MathWorks	User	Active	X	X	X	X
Micron Technology	Producer	Inactive	-	-	-	-
MST EMC Lab	User	Active	X	X	X	X
SI-Clarity	User	Active			X	X
Siemens EDA	User	Active	X	-	X	X
STMicroelectronics	Producer	Inactive	-	X	-	-
Synopsys	User	Active	X	-	X	X
ZTE Corp.	User	Inactive	-	-	-	-
Zuken	User	Active	X	-	X	X

 = Temporarily not a voting member

Criteria for SAE member in good standing:
- Must attend two consecutive meetings to establish voting membership.
- Membership dues current
- Must not miss two consecutive meetings (voting by email counts as attendance)

Interest categories associated with SAE standards 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.