



IBIS Open Forum Minutes

Meeting Date: **October 4, 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, Baolong Li
Celestica	(Sophia Feng)
Cisco Systems	(Stephen Searce), 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)
Instituto de Telecomunicações	(Abdelgader Abdalla)
Intel Corporation	Michael Mirmak, Hsinho Wu*, Kinger Cai, Chi-te Chen, Sleiman Bou-sleiman
Keysight Technologies	Pegah Alavi, Ming Yan, David Banas, Fangyi Rao, HeeSoo Lee, Heidi Barnes
Marvell	Steven Parker, Shaowu Huang, Wei Zhang
MathWorks	Graham Kus*, Walter Katz*
Micron Technology	Justin Butterfield
MST EMC Lab	Chulsoon Hwang*, Zhiping Yang*, Jiahuan Huang, Yifan Ding, Zheben Peng, Xiangrui Su, DongHyan "Bill" Kim
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
Teraspeed Labs	(Tom Dagastino), [Bob Ross]
Waymo	(Feng Wang), [Ji Zhang]
ZTE Corporation	(Zhongmin Wei), (Shunlin Zhu)
Zuken	(Ralf Brüning), Markus Bucker
Zuken USA	Lance Wang*

OTHER PARTICIPANTS IN 2024

Alphawave Semi	Adrien Auge, Todd Bermensolo
Anacom	Filipe Saraiva
Apple Inc.	Ying Cao
Applied Logix	Dan Chirpich
Ciena	Hugues Tournier, Kaisheng Hu
Hirel Logic	Jason Riddley
HRL Laboratories	John Carlson
Hitachi Ltd.	Yutaka Uematsu
IBM	Matteo Cocchini
Kandou	Sherman Chen
KEI Systems	Shinichi Maeda
KT Smart Future-Creations	Keita Miyasato
Meta	Ashkan Hashemi, Himanshu Modi
Northrop Grumman Corp.	Will McCaffrey
Qualcomm	Scott Powers
Rivos	Yanshen Wang
Samsung Electronics	Jun-Bae Kim, Changsoo Yoon
SAE ITC	Tammy Patton*, Rich Demary
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
UNIST	Jingook Kim
Zhejiang University	Ling Zhang

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#](tel:+12677688015554664847) 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: Graham Kus announced a total of 9 organization members attending with quorum of 7 met.

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.

REVIEW OF MINUTES AND ARs

- August 9, 2024 IBIS Summit at IEEE EMC+SIPI 2024 – pending update.
- August 23, 2024 IBIS Open Forum Teleconference – pending update.
- September 13, 2024 IBIS Open Forum Teleconference – pending update.
- Lance to address broken recording links for August 9, 2024 IBIS Summit.

ANNOUNCEMENTS, CALL FOR ADDITIONAL AGENDA ITEMS

Lance Wang called for any new announcements. No new agenda items.

MEMBERSHIP STATUS AND TREASURER'S REPORT

No updates from SAE ITC on open items since the September 13 update. 1 member renewal payment is still in progress (AMD) and a 2nd for a Parser license. A TSCHK2 parser source code license purchase is completed, but the invoice payment has not been recorded yet (\$1,000). We have 28 members with a quorum of 7.

No change since September 13:

\$13,255 Balance for 2024

\$22,705 Adjusted Net Income for 2024 (adding the 2024 IBIS membership renewals received in 2023)

WEBSITE ADMINISTRATION

Lance Wang reported for Steve Parker that website status: IBIS Summit registration for Shanghai is live. The upcoming IBIS Events page has been updated with Sponsorship information for both the Japan and China IBIS Summits. Also, Steve has paid annual hosting fee to Bluehost and is seeking reimbursement. Most recent minutes received from Secretary have been posted. For Web 2024, there is a plan to move to app based upload of meeting minutes by ourselves and not require Steve to conduct the task.

No questions were asked.

MAILING LIST

Curtis Clark reported nothing new to report.

LIBRARY UPDATE

Zhiping Yang reported no updates.

INTERNATIONAL/EXTERNAL ACTIVITIES

Lance Wang reported that the IEEE has a new conference regarding Interconnect with a new conference starting this year regarding the topic. This will be held in China the end of October or beginning of November. Lance is considering next year, whether to hold an IBIS summit with the IEEE event at that time. Zhiping stated the name is IEEE Workshop for Advanced Interconnect. This year is November 6-8 in China arranged by Professor Lee. The plan is to hold this annually as a conference. Lance stated we would like to determine whether it could be a co-sponsored event.

- Link: <http://www.wai-emc.com/>

On another topic, Zhiping stated he attended a conference related to JEDEC on Automotive and Memory related topics:

- Link: <https://www.jedec.org/Automotive-Electronics-Forum-attendees-only-2024-San-Jose>

IEC 63055/IEEE 2401, JEITA "LPB:"

- Lance Wang reported on behalf of Michael Mirmak there are no updates.

Press Updates:

- No updates reported.

University Relations:

- No updates reported.

SUMMIT PLANNING AND REVIEW

Asian IBIS Summits:

Lance Wang reported that the dates are now set as follows:

- Link: www.ibis.org/events

Japan IBIS Summit (October 22, 2024)

- Location: JEITA Office Building, Tokyo, Japan & Online.

Lance stated this conference would be translated.

- Sponsors:
- ANSYS, Inc.
- Apollo Giken Co.,Ltd.
- IBIS Open Forum
- JEITA EC Center
- Keysight Technologies Japan K.K.
- Seiko Epson Corporation
- Toshiba Corporation
- Zuken Inc.

China IBIS Summit (October 25, 2024)

- Location: Parkyard Hotel, Shanghai, PR China

Lance stated there are 20+ registered at present. There are 4 Sponsors that are committed:

- Sponsors:
- Ansys
- Empyrean Technology
- Aurora System
- Cadence Design Systems

Notes: Lance reported there may be issues with time zones, as this would be midnight East-Coast US time. There may be presentations that are presented by proxy; with questions answered after the event.

QUALITY TASK GROUP

Randy Wolff reported there is main work on the Parser Specification for each of the new BIRDS that will be part of IBIS 8.0. Main thing is discussing BIRD229.1 – how the Parser can impute data to the .dll/.so files in order to check for the AMI value root_name, in order to make sure the Parser checks the root_name AMI value matches the AMI file.

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 we are meeting on Tuesdays at Noon Pacific time. In the last few meetings discussed 2 topics. BIRD220.1 proposals. We asked Yifan Ding to run a few more experiments on PSIJ parameters would or would not work. A new draft could be submitted to open forum soon. Another from Michael Mirmak, parser related, regarding to what the meaning of Ramp numbers are, in presence of other parameters. As we were looking into all those, we discovered quite a few areas in the specification that may need clarification. We are discussing those details.

Note: Task group material can be found at:

https://ibis.org/macromodel_wip/

INTERCONNECT TASK GROUP

Michael Mirmak reported via email: no update to interconnect.

There was discussion about Touchstone S-Parameter vs. RLC models of ports vs. return path.

Note: Task group material can be found at:

https://ibis.org/interconnect_wip/

EDITORIAL TASK GROUP

Michael Mirmak reported via email: the team is working on a third draft of IBIS 8.0. All approved BIRDS since IBIS 7.2 have been integrated, as have all known issues in IBIS 7.2. Significant editing is still needed to ensure consistency between the largest BIRDS and the rest of the document. Meetings continue every Friday at 8am when the Open forum is not scheduled.

Randy Wolff stated there is much work to do and help is appreciated.

Note: Task group material can be found at:

https://ibis.org/editorial_wip/

NEW ADMINISTRATIVE ISSUES

IBIS membership structure change discussions

- IBIS parser source-code purchase price change
- Lance Wang reported that there was consideration whether to have different pricing for large company/high seat count vs. small company/low seat count.
- Randy Wolff stated that we are waiting to get more information on budgeting and actual costs are from SAE-ITC, which would help define these metrics.
- There was additional discussion on Budget topic which was tabled for an Officer's meeting at a later date.

ROLL CALL

Mid-meeting roll call: Graham Kus reported 9 member attendees meeting quorum requirements.

TECHNICAL DISCUSSION

No new items.

NEW AND REVISED IRDS

None.

IRDS ELIGIBLE FOR VOTE

None.

IRDS SCHEDULED FOR VOTE

None.

TABLED IRDS

BIRD220: Pre-driver PSIJ Sensitivity keyword.

Arpad Muranyi stated this was still being discussed.

- Link: <https://ibis.org/birds/bird220.docx>

IBISCHK AND TSCHK PARSER AND BUG STATUS

Randy Wolff reported working on specification for IBISCHK 8. There may be a bug submitted soon depending on discussions in ATM regarding Ramp keyword. Nothing submitted yet.

NEW TECHNICAL ISSUES

None.

NEXT MEETING AGENDA AND SCHEDULING

Lance Wang stated the next IBIS Open Forum meeting would be held as a teleconference meeting on November 1, 2024. The following meeting would be held November 22, 2024. Lance asked if there were any concerns. None were raised.

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

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VICE CHAIR: Douglas Burns

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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/bugspl.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 (attende X; absent -)

Organization	Interest Category	Standards Ballot Voting Status	Aug 9, 2024	Aug 23, 2024	Sept 13, 2024	Oct 4, 2024
Altair	User	Inactive	-	-	-	-
AMD (Xilinx)	Producer	Inactive	-	-	-	-
Analog Devices	Producer	Inactive	X	-	-	-
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	X	X
Celestica	User	Inactive	-	-	-	-
Cisco Systems	User	Inactive	-	-	-	-
Dassault Systems	User	Inactive	-	-	-	-
GE Healthcare Technologies	User	Inactive	-	-	-	-
Google	User	Inactive	-	-	-	-
Huawei Technologies	Producer	Inactive	-	-	-	-
Infineon Technologies AG	Producer	Inactive	-	-	-	-
Intel Corp.	Producer	Active	X	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	Inactive	X	-	-	-
SI-Clarity	User	Active	X	X	X	X
Siemens EDA	User	Active	X	X	X	X
STMicroelectronics	Producer	Inactive	X	-	-	-
Synopsys	User	Active	X	X	X	X
ZTE Corp.	User	Inactive	-	-	-	-
Zuken	User	Active	X	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.