IBIS Open Forum Minutes

Meeting Date: **September 13, 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 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)
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, Zhekun Peng, Xiangrui Su, DongHyan "Bill" Kim
SI-Clarity	Douglas 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 Bücker
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 Gruman 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#   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 7 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. None were announced.

REVIEW OF MINUTES AND ARs

- August 9, 2024 IBIS Summit at IEEE EMC+SIPI: These minutes were not yet available.
- August 23, 2024 IBIS Open Forum Minutes: These minutes were not yet available.

ANNOUNCEMENTS, CALL FOR ADDITIONAL AGENDA ITEMS

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

MEMBERSHIP STATUS AND TREASURER'S REPORT

Randy Wolff reported via email 1 member renewal payment is still in progress (AMD).

IBIS Open Forum currently has 28 members with a quorum of 7.

A sponsorship payment of $550 for the European IBIS Summit was recorded.

A TSCHK2 parser source code license purchase is completed, but the invoice payment has not been recorded yet ($1,000).

IBIS Officers including Lance Wang, Doug Burns, and Randy Wolff met with Tammy Patton on Monday September 9, 2024 to discuss 2025 budgeting.

Budgets are mostly set but need SAE ITC approval. Income estimates include 27 members and 7 parser purchases of IBISCHK8. Major expenses include expected parser development costs for IBISCHK8 and TSCHK3 as well as IBIS Summits. Membership fees for 2025 will need to increase to cover rising costs and ensure to maintain positive net income. Further discussions and voting are needed so 2025 membership invoice can be created in late October.

$13,255   Balance for 2024

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

WEBSITE ADMINISTRATION

There were no new updates.

MAILING LIST

Curtis Clark reported that everything is going fine, there are a few items but otherwise things are proceeding smoothly.

LIBRARY UPDATE

Lance Wang reported for Zhiping Yang there was no update on library status.

INTERNATIONAL/EXTERNAL ACTIVITIES

IEC 63055/IEEE 2401, JEITA "LPB:"

- Michael Mirmak reported there were no updates.

Press Updates:
- No updates reported.

University Relations:

- Lance Wang reported for Professor Chulsoon Hwang who advised via email that there were no updates to report.

SUMMIT PLANNING AND REVIEW

Lance Wang reported on Summit activity 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 organized by JEITA, and would be translated. Lance would plan to attend this Summit in-person.
- Sponsors:
- JEITA EC Center
- IBIS Open Forum

China IBIS Summit (October 25, 2024)
- Location: Parkyard Hotel, Shanghai, PR China

Lance reported that the first announcement had been sent out. Also some of the sponsorship had been arranged. Nothing official had been back yet.

QUALITY TASK GROUP

Randy Wolff reported that review activity for IBISCHK 8 would be starting and there would be some work on that parser specification. Michael Mirmak had submitted a draft of a bug, but that is still in ATM, not official yet.

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 that we are continuing our meetings Noon Pacific Time. There are quite a few different topics, for example Michael Mirmak brought up parser and checking IV and curves. Also have Kinger Cai's ongoing discussion on power delivery topics and extending the BIRD in time domain as well. He also has a new power delivery topic he is discussing. We are also discussing BIRD220 with Yifan Ding and Chulsoon Hwang, running more test cases and reporting back on those topics.

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

Michael Mirmak reported there were draft revisions and the port mapping draft for Touchstone 3. These are the last technical changes before we do the draft document.

Lance Wang asked for questions. None were asked.

Note: Task group material can be found at:

https://ibis.org/interconnect_wip/

EDITORIAL TASK GROUP

Michael Mirmak reported this has resumed as of last week, and will be meeting on Fridays in the same time slot as the IBIS Open Forum but on days that is not held. There is a draft of IBIS 8, where BIRDs are incorporated. It will take time to incorporate topics such as SPIM and other BIRDs, but so far making progress.

Note: Task group material can be found at:

https://ibis.org/editorial_wip/

NEW ADMINISTRATIVE ISSUES

Lance Wang reported there was a SAE ITC meeting last week with Tammy Patton to discuss 2025 budgeting. Randy Wolff reported that there was discussion on income and estimated expenses for 2025. Estimate that there would be a similar number of members and also IBISCHK 8 parser which would expect to result in new income. In 2025 there may also be a TSCHK3 parser available, but it is not clear when that would be finalized. Also discussed a Bob Ross scholarship fund. Additionally, there was discussion of potential Officer travel expense. Finally there was discussion for a need to likely raise membership fees for 2025, not prepared yet to have full discussion yet in the larger group. Lance would

be working on those items. Randy stated that in general IBIS is running a tight budget vs. planning, and there is some desire to have more income due to other rising costs, for example over time there has been less sponsorship for IBIS Summits.

ROLL CALL

Mid-meeting roll call: Graham Kus reported 7 member attendees.

TECHNICAL DISCUSSION

No new items.

NEW AND REVISED IRDs

None.

IRDS ELIGIBLE FOR VOTE SCHEDULING

None.

IRDS SCHEDULED FOR VOTE

No items scheduled for vote.

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

Weston Beal reported no new bugs reported for IBISCHK or TSCHK.

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 October 4, 2024. The following meeting would be held November 1, 2024.

There was a motion to adjourn and a seconded motion. The meeting adjourned.

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NOTES

IBIS CHAIR: Lance Wang (978) 633-3388
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  Solutions Architect, Zuken USA
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VICE CHAIR: Douglas Burns
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SECRETARY: Graham Kus
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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

- o https://www.freelists.org/list/ibis-editorial
- o 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

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

Organization	Interest Category	Standards Ballot Voting Status	June 21, 2024	Aug 9, 2024	Aug 23, 2024	Sept 13, 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
Keysight Technologies	User	Inactive	-	-	-	-
Marvell	Producer	Active	X	X	X	-
MathWorks	User	Active	X	X	X	X
Micron Technology	Producer	Inactive	-	-	-	-
MST EMC Lab	User	Inactive	X	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.