

IBIS Update



<http://www.ibis.org/>

Mike LaBonte

SiSoft

Chair, IBIS Open Forum

2018 Asian IBIS Summit

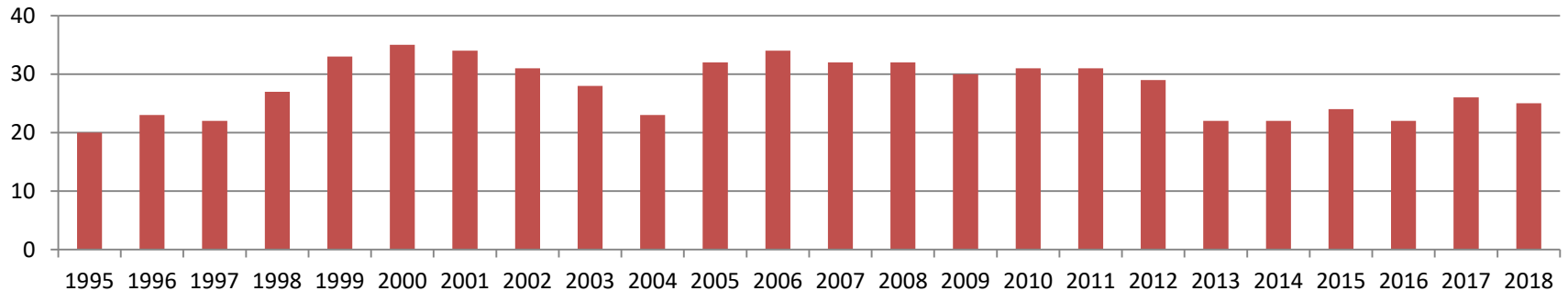
Shanghai, P. R. China

November 14, 2018

25 IBIS Members

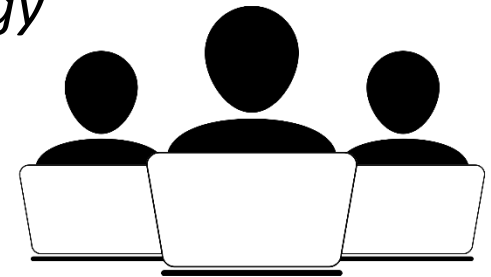


Number of Members by Year

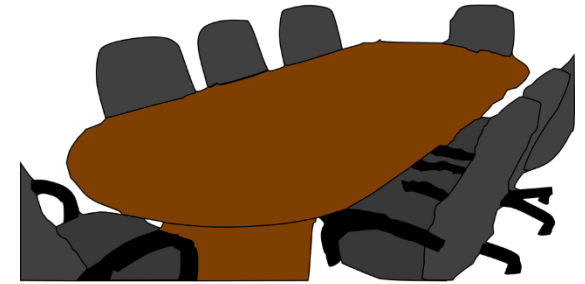


IBIS Officers 2018-2019

- Chair: *Mike LaBonte, SiSoft*
- Vice-Chair: *Lance Wang, IO Methodology Inc.*
- Secretary: *Randy Wolff, Micron Technology*
- Treasurer: *Bob Ross, Teraspeed Labs*
- Librarian: *Anders Ekholm, Ericsson*
- Postmaster: *Curtis Clark, ANSYS*
- Webmaster: *Mike LaBonte, SiSoft*



IBIS Meetings



- Weekly teleconferences
 - Quality Task Group (Tuesdays)
 - Advanced Technology Modeling Task Group (Tuesdays)
 - Interconnect Task Group (Wednesdays)
 - Editorial Task Group (some Fridays)
- IBIS Open Forum teleconference every 3 weeks
 - 480 meetings so far
- IBIS Summit meetings: DesignCon, IEEE SPI, EDICON USA, EPEPS, Shanghai, Taipei, Tokyo

SAE ITC

- SAE Industry Technologies Consortia is the parent organization of the IBIS Open Forum
- IBIS is assisted by SAE employees José Godoy, Phyllis Gross, Dorothy Lloyd
- SAE ITC provides financial, legal, and other services
- <http://www.sae-itc.org/>



Task Groups

- Interconnect Task Group
 - Chair: Michael Mirmak
 - http://ibis.org/interconn_wip/
 - Develop on-die/package/module/connector interconnect modeling BIRDs
- Advanced Technology Modeling Task Group
 - Chair: Arpad Muranyi
 - http://ibis.org/atm_wip/
 - Develop most other technical BIRDs
- Quality Task Group
 - Chair: Mike LaBonte
 - http://ibis.org/quality_wip/
 - Oversee IBISCHK parser testing and development
- Editorial Task Group
 - Chair: Michael Mirmak
 - http://ibis.org/editorial_wip/
 - Produce IBIS Specification documents

BIRD = Buffer Issue Resolution Document

IBIS Milestones

I/O Buffer Information Specification

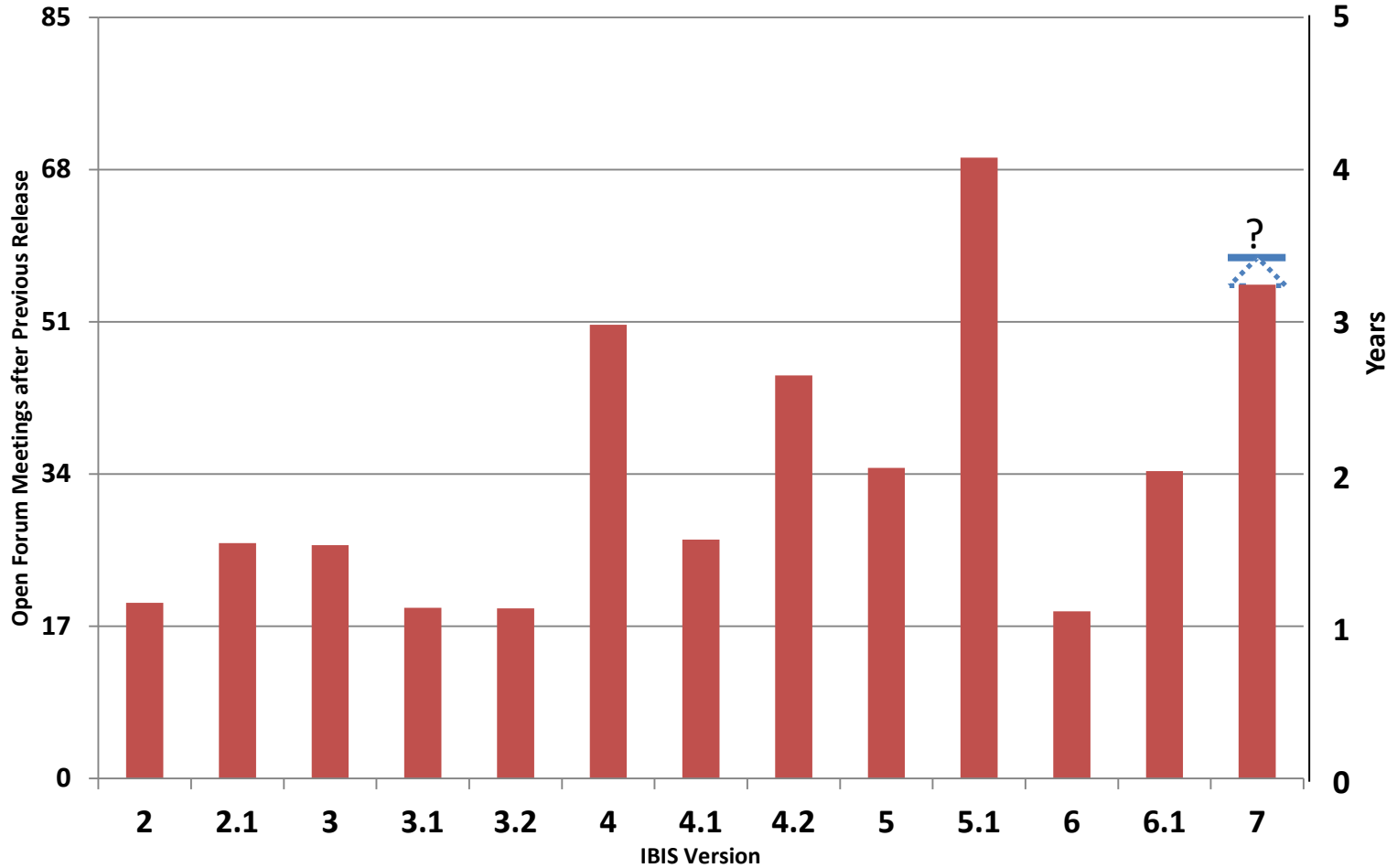
- 1993-1994 **IBIS 1.0-2.1:**
 - Behavioral buffer model (fast simulation)
 - Component pin map (easy EDA import)
- 1997-1999 **IBIS 3.0-3.2:**
 - Package models
 - Electrical Board Description (EBD)
 - Dynamic buffers
- 2002-2006 **IBIS 4.0-4.2:**
 - Receiver models
 - AMS languages
- 2007-2012 **IBIS 5.0-5.1:**
 - IBIS-AMI SerDes models
 - Power aware
- 2013-2015 **IBIS 6.0-6.1:**
 - PAM4 multi-level signaling
 - Power delivery package models
- **2019? IBIS 7.0**

*Current
development*

Other Work

- 1995: **ANSI/EIA-656**
 - IBIS 2.1
- 1999: **ANSI/EIA-656-A**
 - IBIS 3.2
- 2001: **IEC 62014-1**
 - IBIS 3.2
- 2003: **ICM 1.0**
 - Interconnect Model Specification
- 2006: **ANSI/EIA-656-B**
 - IBIS 4.2
- 2009: **Touchstone 2.0***
- 2011: **IBIS-ISS 1.0**
 - Interconnect SPICE Subcircuit specification

IBIS Version Development



As of 12-Nov-2018

Possible IBIS 7.0 Timeline

Meeting Date	Milestone
4/21/2017	Vote to establish 7.0 as the next IBIS version passes.
...	<i>BIRD review and acceptance (30 meetings)</i>
7/20/2018	7.0 BIRD set accepted.
...	<i>Editorial task group drafts IBIS 7.0</i>
12/21/2018	Editorial announces IBIS 7.0 ready. Review period begins
1/11/2019	
2/8/2019	Vote to ratify 7.0 scheduled for next meeting
3/1/2019	IBIS 7.0 ratified



BIRDs Included in IBIS 7.0

BIRD	Title
147.6	Back-channel Support
165	Parameter Passing Improvements for [External Circuit]s
179	New IBIS-AMI Reserved Parameter Special_Param_Names
180	Require Unique Pin Names in [Pin]
182	POWER and GND [Pin] signal_name as [Pin Mapping] bus_label
183	[Model Data] Matrix Subparameter Terminology Correction
184.2	Model_name and Signal_name Restriction for POWER and GND Pins
185.2	Section 3 Reserved Word Guideline Update
186.4	File Naming Rules
187.3	Format and Usage Out Clarifications
188.1	Expanded Rx Noise Support for AMI
189.6	Interconnect Modeling Using IBIS-ISS and Touchstone
191.2	Clarifying Locations for Si_location and Timing_location
192.1	Clarification of List Default Rules
193	Figure 29 corrections
194	Revised AMI Ts4file Analog Buffer Models
196.1	Prohibit Periods at the End of File Names

BIRDS Excluded from IBIS 7.0

BIRD	Title
166.2	Resolving problems with Redriver Init Flow
181.1	I-V Table Clarifications
190	Clarification for Redriver Flow
195.1	Enabling [Rgnd] and [Rpower] Keywords for Input Models

Green = Approved BIRD

[Thank You]



IBIS Open Forum:

Web: <http://www.ibis.org>

Email: ibis-info@freelists.org

We welcome participation by all IBIS model makers, EDA tool vendors, IBIS model users, and interested parties.