

IEEE-SA Symposium on EDA Interoperability
Industry Connections Activity Initiation Document (ICAID)
Version: 1.3, March 6 2015
IC13-001-03 Approved by the IEEE SASB 26 March 2015

Instructions

- Instructions on how to fill out this form are shown in red. It is recommended to leave the instructions in the final document and simply add the requested information where indicated.
- **Shaded Text** indicates a placeholder that should be replaced with information specific to this ICAID, and the shading removed.
- Completed forms, in Word format, or any questions should be sent to the IEEE Standards Association (IEEE-SA) Industry Connections Committee (ICCom) Administrator at the following address: industryconnections@ieee.org.
- The version number above, along with the date, may be used by the submitter to distinguish successive updates of this document. A separate, unique Industry Connections (IC) Activity Number will be assigned when the document is submitted to the ICCom Administrator.

1. Contact

Provide the name and contact information of the primary contact person for this IC activity. Affiliation is any entity that provides the person financial or other substantive support, for which the person may feel an obligation. If necessary, a second/alternate contact person's information may also be provided.

Name: Yatin Trivedi
Email Address: trivedi@synopsys.com
Phone: +1-650-584-4423
Employer: Synopsys, Inc.
Affiliation: Synopsys, Inc.

2. Type of Activity

Specify whether this activity will be entity-based (participants are entities, which may have multiple representatives, one-entity-one-vote), or individual-based (participants represent themselves, one-person-one-vote).

[Entity-Based Event administration; attendance open to the public.](#)
[In concept, this activity will be similar to SIIT; SIIT is focused on Standards in ICT, whereas this activity will be focused on EDA standards and interoperability.](#)

3. Purpose

3.1. Motivation and Goal

Briefly explain the context and motivation for starting this IC activity, and the overall purpose or goal to be accomplished.

Synopsys, a long time Corporate member of IEEE-SA, has conducted EDA Developer's Forum to address interoperability issues between EDA tools and semiconductor IPs in IC (chips, System-on-Chips) design flows. The topics for these Forums were based on the current interoperability interests of the industry.

Synopsys has hosted 24 of these forums since 1994. Keynote speakers, technologists and subject matter experts were invited from the EDA industry, user community, research community, and academia – especially those involved in interoperability and standards activities. Attendees learned about various design data exchange formats, use models and methodologies, and necessary tool development and/or customization in their design environment. Specific topics have included building accurate cell libraries, semiconductor building blocks, Application Procedural Interfaces (APIs) to EDA tools and configurations for trading runtime vs accuracy of analysis. These forums were open to anyone interested in these topics, including many competitors of Synopsys.

As the industry has grown and the chip design methodology has become more complex, there are several new standards have been developed within IEEE-SA Design Automation Standards Committee (DASC) as well as other industry-specific organizations (e.g. IEEE-ISTO, Accellera, Si2).

There is a stronger need in the market place to promote the standards and their use to address interoperability issues.

Proposed IEEE-SA Symposium on EDA Interoperability will focus on addressing this need by continuing, restructuring and expanding the scope of current event organized by Synopsys.

3.2. Related Work

Provide a brief comparison of this activity to existing, related efforts or standards of which you are aware (industry associations, consortia, standardization activities, etc.).

There are a few EDA-focused conferences sponsored by IEEE:

- USA: Design Automation Conference (DAC), International Conference in Computer Aided Design (ICCAD), Design and Verification Conference (DVCon).
- Europe: Design and Test in Europe (DATE), IP/SoC Conference
- Asia: Asia Pacific Design Automation Conference (ASPDAC), ED&S Forum

- There are a few workshops as well as vendor-specific user groups organized around the world.

None of these conferences or events focus on EDA and semiconductor IP interoperability.

3.3. Potential Markets Served

Indicate the main beneficiaries of this work, and what the potential impact might be.

As mentioned above, Synopsys has hosted this event in Silicon Valley since 1994. It is the largest potential market due to significant presence by many EDA vendors, IP providers, fabless semiconductor designers, and design services companies.

Initial proposal is for hosting an annual event in Silicon Valley to address EDA interoperability issues. Future markets may include China, India, Taiwan, Israel and Europe (in that order) due to their large EDA user base.

4. Estimated Timeframe

Indicate approximately how long you expect this activity might take to achieve its proposed results (e.g., number of weeks/months/years). Also indicate when you expect this activity to be reviewed by ICCom for completion or possible extension (maximum two years).

Expected Completion/Review Date:

Annual event, starting 10/2013.

Activity will be reviewed by ICCOM in 03/2015 (after two events) for possible continuation/extension. The activity members request an extension until 12/2017 (two additional events). It is anticipated that the next review will result in (a) continue to operate the Symposium under IEEE-SA/ICCOM, (b) transfer the Symposium to IEEE Conference organizers, or (c) Disassociate IEEE-SA from the event.

5. Proposed Deliverables

Outline the anticipated deliverables and output from this IC activity, such as documents, proposals for standards, conferences and workshops, databases, computer code, etc., and indicate the expected timeframe for each.

Initial proposal is for an annual IEEE-SA Symposium addressing EDA interoperability issues in Silicon Valley. Frequency may be increased and/or new locations may be added after further market research supports such a decision.

6. Funding Requirements

Outline any contracted services or other expenses that are currently anticipated, beyond the basic support services provided to all IC activities. Indicate how those funds are expected to be obtained (e.g., through participant fees, sponsorships, government or other grants, etc.). Activities needing substantial funding may require additional reviews and approvals beyond ICCom.

Funding will be provided by the board members and/or other sponsors (see Section 7, Management and Procedures). Sponsorships will be available on a first-come-first-served basis.

No funding from IEEE-SA is anticipated at this time.

7. Management and Procedures

7.1. IEEE Sponsoring Committee

Indicate whether an IEEE sponsoring committee of some form (e.g., an IEEE Standards Sponsor) has agreed to oversee this activity and its procedures.

Has an IEEE sponsoring committee agreed to oversee this activity?:

No

If yes, indicate the sponsoring committee's name and its chair's contact information, and skip the remaining parts of this section (skip 7.2 and 7.3, below).

Sponsoring Committee Name: Committee Name

Chair's Name: Full Name

Chair's Email Address: who@where

Chair's Phone: Number, including country code

Additional sponsoring committee information, if any.

7.2. Activity Management

If no IEEE sponsoring committee has been identified in 7.1 above, indicate how this activity will manage itself on a day-to-day basis (e.g., executive committee, officers, etc).

An Event Board (steering committee) will be set up with representatives from the industry and academia. Such a Board will be responsible for appointing the "Event Committee" for each annual event hosted under the banner of IEEE-SA Symposium on EDA Interoperability. The event committee may operate multiple subcommittees as the number of activities/tasks grow.

7.3. Procedures

If no IEEE sponsoring committee has been identified in 7.1 above, indicate what documented procedures will be used to guide the initial operations of this activity (e.g., the *Industry Connections Activity Baseline Procedures*).

Initially, the Event Board will use Industry Connections Activity Baseline Procedures in a manner similar to SIIT using such procedures. Once the Board is formed, additional operational procedures may be defined/modified to suit the needs. Such enhancements to operating procedures will be brought to ICCOM for approval.

8. Participants

8.1. Stakeholder Communities

Indicate the stakeholder communities (the types of companies or other entities, or the different groups of individuals) that are expected to be interested in this IC activity, and will be invited to participate.

Based on the history of Synopsys EDA Developer's Forum, we believe various members of the electronics/semiconductor design and verification community will be interested in (and benefit from) this activity, including standards developers and users at:

- EDA vendors
- Semiconductor IP suppliers
- EDA Tools, IP users and Fabless semiconductor companies
- Internal EDA tool developers/support staff at Fabless semiconductor companies
- Design Services companies and individual consultants
- University professors, students and research staff

8.2. Expected Number of Participants

Indicate the approximate number of entities or individuals expected to be actively involved in this activity.

Board members: 5
Event Committee: 10-15
Event attendees: 75.

For reference, please note that the attendance at Synopsys EDA Developers Forum has ranged from 50 to 125 for the 24 events it hosted since 1994.

8.3. Initial Participants

Provide a list of the entities or individuals that will be participating from the outset. It is recommended there be at least three initial participants for an entity-based activity, or five initial participants (each with a different affiliation) for an individual-based activity.

Use the following table for an entity-based activity: (Example board members, all have not been contacted/confirmed yet)

Entity	Primary Contact	Additional Representatives
Synopsys, Inc.	Yatin Trivedi trivedi@synopsys.com +1-650-584-4423	Karen Bartleson karenb@synopsys.com EDA Company

Mentor Graphics	Dennis Brophy Dennis_brophy@mentor.com +1-503-685-0893	EDA Company
Cadence	Stan Krolikoski stanleyk@cadence.com	
Intel	Shishpal Rawat shishpal.s.rawat@intel.com	

Use the following table for an individual-based activity:

Individual	Contact Information	Employer	Affiliation