

P2654 STAM WG Meeting #182

Ian McIntosh, Leonardo



Compliance with IEEE Standards Policies and Procedures

Subclause 5.2.1 of the *IEEE-SA Standards Board Bylaws* states, "While participating in IEEE standards development activities, all participants...shall act in accordance with all applicable laws (nation-based and international), the IEEE Code of Ethics, and with IEEE Standards policies and procedures."

The contributor acknowledges and accepts that this contribution is subject to

- The IEEE Standards copyright policy as stated in the *IEEE-SA Standards Board Bylaws*, section 7, <http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#7>, and the *IEEE-SA Standards Board Operations Manual*, section 6.1, <http://standards.ieee.org/develop/policies/opman/sect6.html>
- The IEEE Standards patent policy as stated in the *IEEE-SA Standards Board Bylaws*, section 6, <http://standards.ieee.org/guides/bylaws/sect6-7.html#6>, and the *IEEE-SA Standards Board Operations Manual*, section 6.3, <http://standards.ieee.org/develop/policies/opman/sect6.html>

**IEEE P2654
System Test Access Management
Ian McIntosh (chair)**

Working Group Meeting #182

Date: 2023-03-13

Author(s):

Name	Affiliation	Phone [optional]	Email [optional]
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2. Agenda

1. Roll Call
2. Agenda
3. IEEE Patent and Copyright Slides
4. Review and approve previous minutes: March 6
5. Review open action items
6. Inter-group Collaboration
7. Discussion Topics:
 - a. IEEE P2654 Architecture & Concepts 20230313 draft
8. Any other business
9. Key Takeaways from today's meeting
10. Glossary terms from this meeting
11. Schedule next meeting
12. Topic for next meeting
13. Reminders
14. List new action items
15. Adjourn

PARTICIPANTS HAVE A DUTY TO INFORM THE IEEE

- Participants shall inform the IEEE (or cause the IEEE to be informed) of the identity of each holder of any potential Essential Patent Claims of which they are personally aware if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents
- Participants should inform the IEEE (or cause the IEEE to be informed) of the identity of any other holders of potential Essential Patent Claims

**Early identification of holders of potential
Essential Patent Claims is encouraged**

WAYS TO INFORM IEEE

- **Cause an LOA to be submitted to the IEEE SA (patcom@ieee.org); or**
- **Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or**
- **Speak up now and respond to this Call for Potentially Essential Patents**

If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance, please respond at this time by providing relevant information to the WG Chair

OTHER GUIDELINES FOR IEEE WORKING GROUP MEETINGS

- All IEEE SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.
 - Don't discuss the interpretation, validity, or essentiality of patents/patent claims.
 - Don't discuss specific license rates, terms, or conditions.
 - Relative costs of different technical approaches that include relative costs of patent licensing terms may be discussed in standards development meetings.
 - Technical considerations remain the primary focus.
 - Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.
 - Don't discuss the status or substance of ongoing or threatened litigation.
 - Don't be silent if inappropriate topics are discussed. Formally object to the discussion immediately.

For more details, see *IEEE SA Standards Board Operations Manual*, clause 5.3.10 and *Antitrust and Competition Policy: What You Need to Know* at <http://standards.ieee.org/develop/policies/antitrust.pdf>

PATENT-RELATED INFORMATION

The patent policy and the procedures used to execute that policy are documented in the:

- ***IEEE SA Standards Board Bylaws***
(<http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6>)
- ***IEEE SA Standards Board Operations Manual***
(<http://standards.ieee.org/develop/policies/opman/sect6.html#6.3>)

Material about the patent policy is available at
<http://standards.ieee.org/about/sasb/patcom/materials.html>

**If you have questions, contact the IEEE SA
Standards Board Patent Committee
Administrator at patcom@ieee.org**

IEEE SA Copyright Policy

By participating in this activity, you agree to comply with the IEEE Code of Ethics, all applicable laws, and all IEEE policies and procedures including, but not limited to, the IEEE SA Copyright Policy.

- Previously Published material (copyright assertion indicated) shall not be presented/submitted to the Working Group nor incorporated into a Working Group draft unless permission is granted.
- Prior to presentation or submission, you shall notify the Working Group Chair of previously Published material and should assist the Chair in obtaining copyright permission acceptable to IEEE SA.
- For material that is not previously Published, IEEE is automatically granted a license to use any material that is presented or submitted.

IEEE SA Copyright Policy

- The IEEE SA Copyright Policy is described in the IEEE SA Standards Board Bylaws and IEEE SA Standards Board Operations Manual
 - IEEE SA Copyright Policy, see
 - Clause 7 of the IEEE SA Standards Board Bylaws
<https://standards.ieee.org/about/policies/bylaws/sect6-7.html#7>
 - Clause 6.1 of the IEEE SA Standards Board Operations Manual
<https://standards.ieee.org/about/policies/opman/sect6.html>

- IEEE SA Copyright Permission
 - <https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/permissionltrs.zip>

- IEEE SA Copyright FAQs
 - <http://standards.ieee.org/faqs/copyrights.html/>

- IEEE SA Best Practices for IEEE Standards Development
 - http://standards.ieee.org/develop/policies/best_practices_for_ieee_standards_development_051215.pdf

- Distribution of Draft Standards (see 6.1.3 of the SASB Operations Manual)
 - <https://standards.ieee.org/about/policies/opman/sect6.html>

Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct

- All participants in IEEE-SA activities are expected to adhere to the core principles underlying the:
 - [IEEE Code of Ethics](#)
 - [IEEE Code of Conduct](#)
- The core principles of the IEEE Codes of Ethics & Conduct are to:
 - *Uphold the highest standards of integrity, responsible behavior, and ethical and professional conduct*
 - *Treat people fairly and with respect, to not engage in harassment, discrimination, or retaliation, and to protect people's privacy.*
 - *Avoid injuring others, their property, reputation, or employment by false or malicious action*
- The most recent versions of these Codes are available at <http://www.ieee.org/about/corporate/governance>

Participants in the IEEE-SA “*individual process*” shall act independently of others, including employers

- The [IEEE-SA Standards Board Bylaws](#) require that “*participants in the IEEE standards development individual process shall act based on their qualifications and experience*”
- This means participants:
 - **Shall act & vote** based on their personal & independent opinions derived from their expertise, knowledge, and qualifications
 - **Shall not act or vote** based on any obligation to or any direction from any other person or organization, including an employer or client, regardless of any external commitments, agreements, contracts, or orders
 - **Shall not direct** the actions or votes of other participants or retaliate against other participants for fulfilling their responsibility to act & vote based on their personal & independently developed opinions
- By participating in standards activities using the “*individual process*”, you are deemed to accept these requirements; if you are unable to satisfy these requirements then you shall immediately cease any participation

IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints

- The [IEEE-SA Standards Board Bylaws](#) (clause 5.2.1.3) specifies that *“the standards development process shall not be dominated by any single interest category, individual, or organization”*
 - This means no participant may exercise *“authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints”* or *“to hinder the progress of the standards development activity”*
- This rule applies equally to those participating in a standards development project and to that project’s leadership group
- Any person who reasonably suspects that dominance is occurring in a standards development project is encouraged to bring the issue to the attention of the Standards Committee or the project’s IEEE-SA Program Manager

4. Review and approve minutes

Working Group Meeting #181, March 6

Draft circulated March 6

Corrections: Attendance: Delete "(joined 11:09)" against Louis' name

Attendees:

Ian McIntosh (Leonardo) (chair)
Eric Cormack (DFT Solutions)
Heiko Ehrenberg (GOEPEL Electronics) (joined 11:05)
Brian Erickson (JTAG Technologies)
Richard Pistor (Curtiss-Wright)
Louis Ungar (A.T.E. Solutions)
Brad Van Treuren (VT Enterprises Consulting Services)
Carl Walker (Cisco Systems)

5. Review open action items

Action Item Register:

<http://files.sjtag.org/P2654WG/ActionItemRegister.xlsx>

Format of action number is

[Meeting#.Action# within that meeting]

- None.

6. Inter-group Collaboration

Nothing known prior to meeting.

7. Discussion Topics

7. a IEEE P2654 Architecture & Concepts 20230313 draft

- Drafts located on iMeetCentral site:
 - <https://iee-sa.imeetcentral.com/p/aQAAAAAFA9Wg> (D03)
 - WiP in Group Submission: IEEESTD-P2654_Draft_D03_BGVT_20230227.docm (<https://iee-sa.imeetcentral.com/p/aQAAAAAFBHNU>)

General References:

- Definitions from forum:
<http://forums.sjtag.org/viewforum.php?f=40>
- Reference Pack (all previous 2020 material):
http://files.sjtag.org/P2654WG/P2654_Reference_Pack.pptx
- Reference Pack 2 (all previous 2021 material):
http://files.sjtag.org/P2654WG/P2654_Reference_Pack_2.pptx
- Reference Pack 3 (all previous 2022 material):
http://files.sjtag.org/P2654WG/P2654_Reference_Pack_3.pptx

Wrap-up items

8. Any other business

- Elections update

9. Today's Key Takeaways

- None.

10. Glossary terms from this meeting

- Forthcoming as Brad's Excel spreadsheet.

11. Schedule next meeting

- March 20

12. Topic for next meeting

- Continue presentation.

13. Reminders

- <https://github.com/bradfordvt/P2654Model> Brad's first demo code
- <https://github.com/bradfordvt/P2654Model2> Brad's slides and diagrams under docs folder (Also view dynamic C4 Models now in README.md)

14. List new action items

- None.

15. Adjourn

Classification of Use Cases for Annexes

- Top- Level canned tests
 - Injection of SVF/STAPL Player of files
 - Full chain
 - Sub-chain (2654 retargeting to full chain view)
 - Device level (2654 retargeting to full chain view)
 - Injection of CTL/STIL vectors from a player of files
 - IEEE 1500 wrapper
 - ATE interface
- Dynamic interaction
 - Register Injection for non-1687 or non-1149.1 applications
 - 2654 Top-down Modeled approach (2654 retargeting based on tree model and node paths via PDL or some other DSL driving register/state variable injections)
 - Register access
 - System to sub-system control
- Integrated hybrid
 - Bottom up EDA Tool driven transformations (1687 or 1149.1 retargeters)
 - JTAG to I2C Bridge leveraging EDA tool to retarget I2C Host register calls to JTAG calls for transfer library (Can we generalize?)