

Study Group Meeting #18

Ian McIntosh, Leonardo MW Ltd.



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 [TBD]
System Test Access Management
Ian McIntosh (interim chair)**

Study Group Meeting #18

Date: 2017-12-18

Author(s):

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Agenda

1. Roll Call
2. IEEE Patent Slides
3. Review and approve previous minutes:
4. Review open action items
5. Discussion Topics
6. Key Takeaways from today's meeting
7. Glossary terms from this meeting
8. Topic for next meeting
9. Schedule next meeting
10. Reminders
11. Any other business
12. List new action items
13. Adjourn

Instructions for the WG Chair

The IEEE-SA strongly recommends that at each WG meeting the chair or a designee:

- Show slides #1 through #4 of this presentation
- Advise the WG attendees that:
 - The IEEE's patent policy is described in Clause 6 of the *IEEE-SA Standards Board Bylaws*;
 - Early identification of patent claims which may be essential for the use of standards under development is strongly encouraged;
 - There may be Essential Patent Claims of which the IEEE is not aware. Additionally, neither the IEEE, the WG, nor the WG chair can ensure the accuracy or completeness of any assurance or whether any such assurance is, in fact, of a Patent Claim that is essential for the use of the standard under development.
- Instruct the WG Secretary to record in the minutes of the relevant WG meeting:
 - That the foregoing information was provided and that slides 1 through 4 (and this slide 0, if applicable) were shown;
 - That the chair or designee provided an opportunity for participants to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) of which the participant is personally aware and that may be essential for the use of that standard
 - Any responses that were given, specifically the patent claim(s)/patent application claim(s) and/or the holder of the patent claim(s)/patent application claim(s) that were identified (if any) and by whom.
- The WG Chair shall ensure that a request is made to any identified holders of potential essential patent claim(s) to complete and submit a Letter of Assurance.
- It is recommended that the WG chair review the guidance in *IEEE-SA Standards Board Operations Manual* 6.3.5 and in FAQs 14 and 15 on inclusion of potential Essential Patent Claims by incorporation or by reference.

Note: **WG** includes Working Groups, Task Groups, and other standards-developing committees with a PAR approved by the IEEE-SA Standards Board.

Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy.

- Participants [Note: Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2]:
 - “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
 - “Should inform the IEEE (or cause the IEEE to be informed)” of the identity of “any other holders of potential Essential Patent Claims” (that is, third parties that are not affiliated with the participant, with the participant’s employer, or with anyone else that the participant is from or otherwise represents)
- The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group
- Early identification of holders of potential Essential Patent Claims is strongly encouraged
- No duty to perform a patent search

Patent Related Links

All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development.

Patent Policy is stated in these sources:

IEEE-SA Standards Boards 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 or visit <http://standards.ieee.org/about/sasb/patcom/index.html>

This slide set is available at
<https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.ppt>



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:
 - Either speak up now 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
 - Cause an LOA to be submitted

Other Guidelines for IEEE WG 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, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
 - Technical considerations remain 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 ... do formally object.**

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and "Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy" for more details.

3. Review and approve minutes

Meeting #17, December 11

Draft circulated December 11.

Attendees:

Ian McIntosh (Leonardo MW Ltd.) Heiko Ehrenberg (Goepel Electronics) Eric Cormack (DFT Solutions Ltd.) Terry Duepner (National Instruments) Bill Eklow (Retired) Brian Erickson (JTAG Technologies) Peter Horwood (Firecron Ltd.) Bill Huynh (Marvell Inc.) Joel Irby (ARM) (joined 11:12) Teresa McLaurin (ARM)	Teresa McLaurin (ARM) Naveen Srivastava (Nvidia) Jon Stewart (Dell) Brad Van Treuren (Nokia) Carl Walker (Cisco Systems) Ed Gong (Intel Corp.) Russell Shannon (NAVAIR Lakehurst) Louis Ungar (ATE Solutions) Duane Lowenstein (Keysight)(guest)
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4. Review open action items

Action Item Register:

<http://files.sjtag.org/StudyGroup/ActionItemRegister.xls>

Format of action number is

[Meeting#.Action# within that meeting]

[10.2] Brad will draft a definition for "boundary".

[14.1] ALL: Develop Purpose description.

[17.1] Louis: Search for any standards that address what constitutes a fault (or pass) at system level.

5. Discussion Topics

5.a Aim 'A' - "Health reporting": What are people really expecting?

Starter remarks (from emails: Ian/Terry):

- What makes this different from conventional BIT? In my environment there's usually a contractual requirement on what BIT should do in various cases (e.g. power-on BIT, initiated BIT, continuous BIT) - is there something lacking in that? Do systems exist that have no BIT facility at all?
 - We have used a lot of subassemblies that may have BIT, but have little to no documentation that would make that BIT capability available at the system level. Hence I would say having a standard to encourage that would be a good thing. Also, realize that some companies are not working at the contract level where we can demand it, but if we can point to it as a feature we are selecting for, it may resonate with our vendors.

5. Discussion Topics (continued)

- Do we see this as operating on a push model (each assembly "pushes" its result(s) up the parent level assembly, perhaps via some callback function, as soon as it is available) or a pull model (the parent pulls (polls) the result(s) from each of its children when the parent chooses to do so). A mixture of both?
 - I was envisioning a pull process. That leaves command and control in the hands of the system designer.
- What passes between levels – a result (pass/fail), a set of test data (individual measurements/values), a result plus optional test data?
 - I would advocate for the latter, but I think how this is done may be an implementation detail.
- How, physically do you get the results from one layer to another? Do you define a specific interface? Do you need to set aside pins? Can you use an existing "mission bus"?
 - The more we can use existing busses the better, but I also see a potential need for an "out of band" com bus that would, say, operate even if the subassembly is not fully functional.

Wrap-up items

6. Today's Key Takeaways
7. Glossary terms from this meeting
8. Topic for next meeting
Expect Calling Notice around January 3
9. Schedule next meeting
January 8, 2018.
10. Reminders
11. Any other business
Forum software upgrade expected over the break.
Officers of any future working group.
12. List new action items
13. Adjourn