

IEEE SCC20 19-2 PLENARY

Minutes

Monday September 23, 2019

Chestnut suite 09:00-10:00

1) CALL TO ORDER

Mike Seavey

Meeting called to order at 9:03 AM

2) INTRODUCTIONS/ATTENDANCE SHEET

All

3) ANOUNCEMENTS – Hotel, Transportation, etc.

Malcolm Brown/Chris Gorringer

4) 19-2 MEETING AGENDA

Mike Seavey

Mike reviewed the agenda. No changes requested.

5) PATENTS AND CHAIRS REPORT PART 1

Mike Seavey

<See SCC20 19-2 Chairs Report Part 1 Rev 2.pptx>

6) WORKING GROUP PLANS FOR THIS MEETING

IEEE P1641 WG

Chris Gorringer

IEEE P1636.1 Cor 1 WG

Anand.Jain

IEC TC91 WG15

Chris Gorringer

<See WG15 meeting Bristol - September 2019.ppt>

7) RELIABILITY SEMINAR & MoD ATS SEMINAR INFORMATION

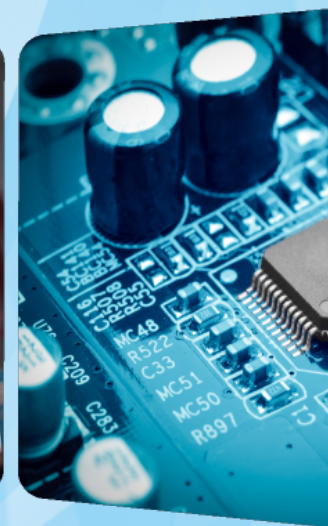
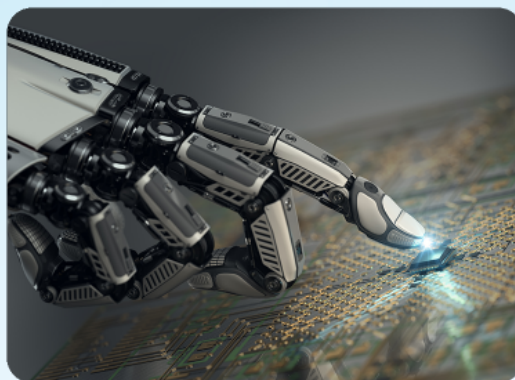
Malcolm Brown

8) IEEE 1641 SIGNAL MODELING TUTORIAL INFORMATION

Chris Gorringer

9) ADJOURN TO WORKING GROUP

Meeting adjourned at 9:45 AM



IEEE Standards Coordinating Committee 20

*Test and Diagnosis for Electronic Systems
Chairs Report Part 1: September 2019*

Mike Seavey



IEEE Patent Slideset

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 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 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 ... do formally object.

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>



IEEE Standards Coordinating Committee 20 (SCC20) 19-2 Meeting

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 Standards Coordinating Committee 20 (SCC20) 19-2 Meeting

IEEE Standards



A Note About Standards

IEEE Status Classifications

Standards are “living documents”, which may initially be published and iteratively modified, corrected, adjusted and/or updated based upon market conditions and other factors. At any given point in time, therefore, a standard may be referred to as having a number of different “status” classifications. Within the IEEE, these include:

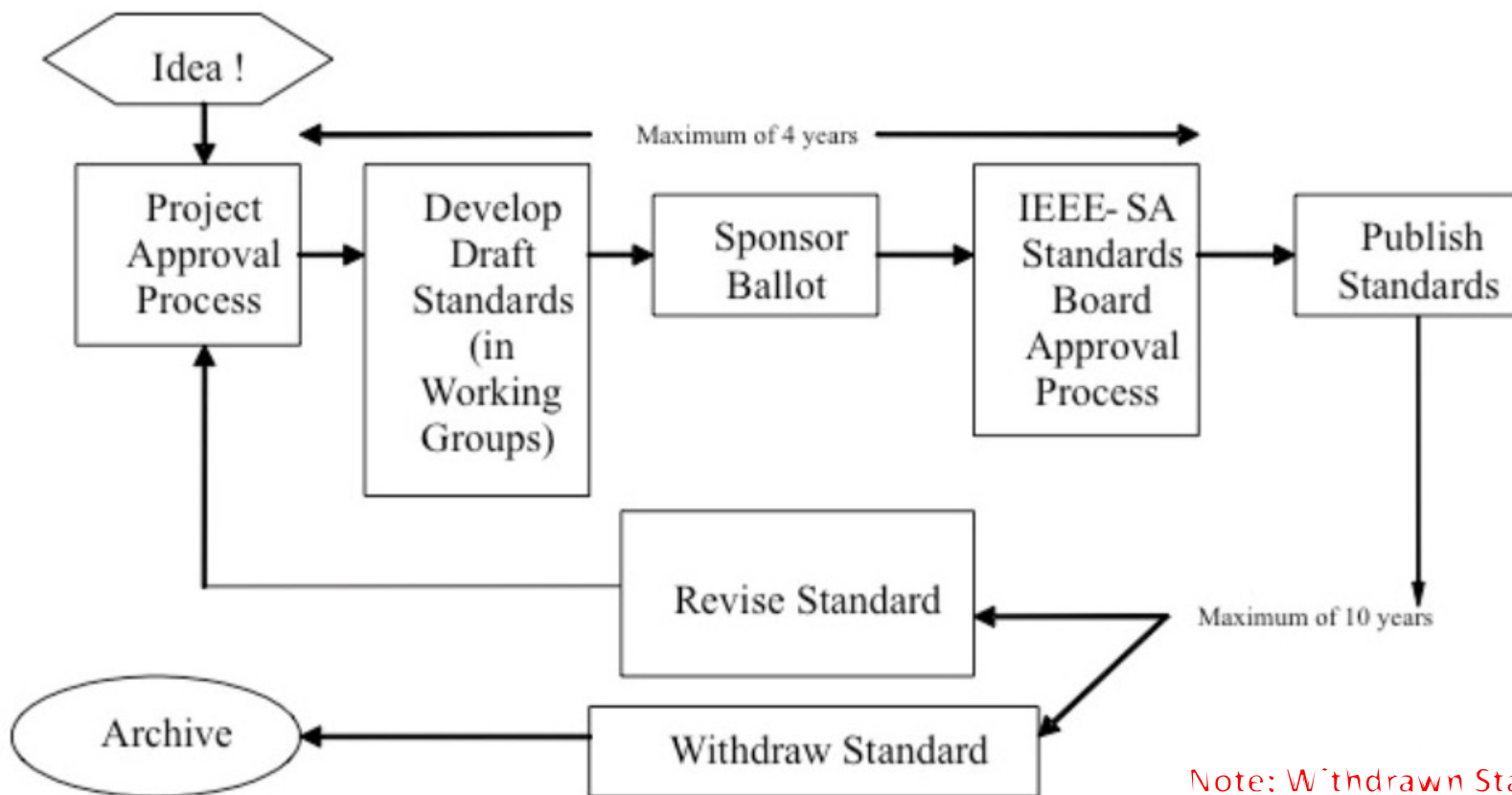
- **Approved Project** – An initial project request is approved, in stages of group formation.
- **Active Project** – An active standards development project.
- **Withdrawn Project** – A cancelled standards development project.
- **Approved Standard** – The standard is approved and published for public use.
- **Withdrawn Standard** – The standard is no longer market relevant or active.
- **Superseded Standard** – The standard has been replaced by a new standard.

Derived from IEEE Standards – How Standards Are Made



The Standards Process

IEEE



Note: Withdrawn Standards
ARE AVAILABLE FOR PURCHASE
from the IEEE

Derived from IEEE Standards – How Standards Are Made



Comments on Standards

Published in the Front Matter of Every IEEE Standard

Comments for revision of IEEE Standards documents are welcome from any interested party, regardless of membership affiliation with IEEE. However, IEEE does not provide consulting information or advice pertaining to IEEE Standards documents.

Suggestions for changes in documents should be in the form of a proposed change of text, together with appropriate supporting comments.

Since IEEE standards represent a consensus of concerned interests, it is important that any responses to comments and questions also receive the concurrence of a balance of interests. For this reason, IEEE and the members of its societies and Standards Coordinating Committees are not able to provide an instant response to comments or questions except in those cases where the matter has previously been addressed. For the same reason, IEEE does not respond to interpretation requests.

Any person who would like to participate in revisions to an IEEE standard is welcome to join the relevant IEEE working group. Comments on standards should be submitted to the following address:

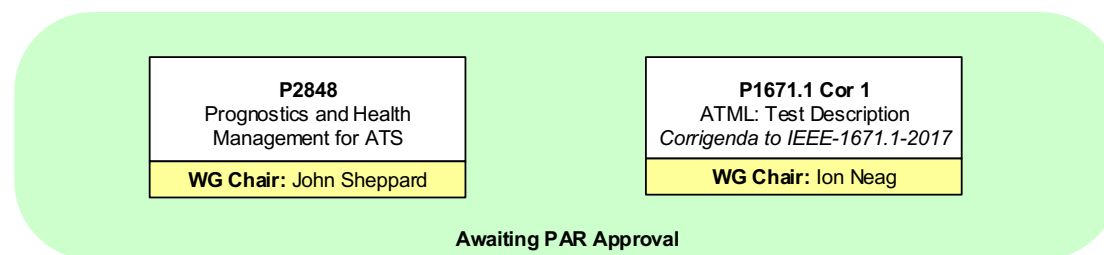
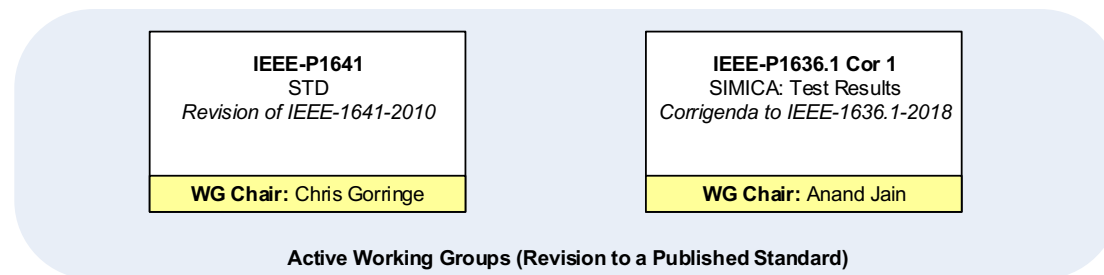
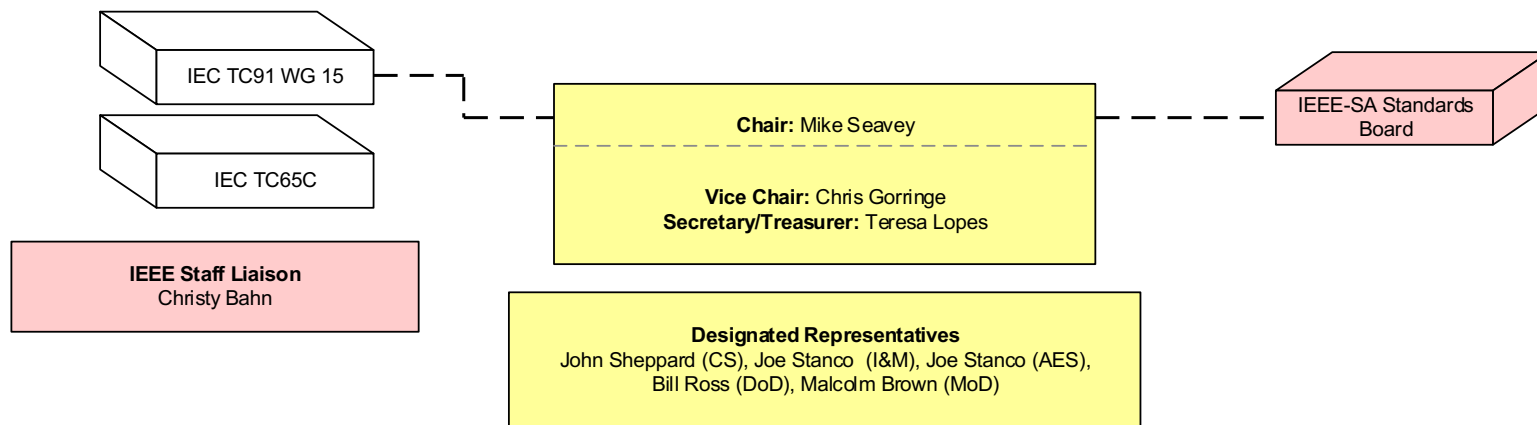
Secretary, IEEE-SA Standards Board
445 Hoes Lane
Piscataway, NJ 08854 USA

Note: As of Sept 10, there have been no comments to a SCC20 related standard received by the IEEE-SA Secretary



SCC20 Organization

As of September 10, 2019



SCC20 Standards Tracking

Page 1 of 2

Publication	Project	PAR by	PAR Approval Date	PAR Expiration Date	Valid Standard Until	IEC Adoption	Notes
488.1-2003	—		—	—	3/19/2019	IEC 60488-1 First Edition 2004-07	
488.2-1992	—		—	—	6/17/2020	IEC 60488-2 First Edition 2004-05	
716-1995(R2011)	—		—	—	12/31/2021	IEC 61926-1 Ed. 1.0	
771-1998(R2009)	—		—	—	12/9/2019		
1155-1992	—		—	—	—	—	Withdrawn
1174-2000	—		—	—	3/19/2019	—	
1232-2010	—	—	—	—	12/8/2020	IEC 62243 Ed. 2.0	
1232.3-2014	—	—	—	—	12/31/2024		
1445-2016	—	—	—	—	12/8/2026	IEC 61445 Ed 1.0	IEEE Published February 2017
1505-2010	—	—	—	—	9/30/2020	IEC 63004 Ed 1.0	
1505.1-2019	—	—	—	—	12/31/2029	IEC 63003 Ed 1.0	IEEE Published August 20, 2019
1505.3-2015	—	—	—	—	12/31/2025		
1546-2000(R2011)	—	—	—	—	12/31/2021		Will be Administratively Withdrawn December 2021.
1636-2018	—	2025	—	—	12/31/2029	IEC 61636 Ed. 1.0	Published February 28, 2019
1636.1-2018	P1636.1 Cor 1	—	June 4, 2019	December 31, 2023	12/31/2029	IEC 61636-1 Ed. 1.0	Published March 8, 2019
1636.2-2018		2025	—	—	12/31/2029		Published March 8, 2019
1636.99-2013	—	—	—	—	12/31/2023	IEC 61636-99 Ed. 1.0	

SCC20 Standards Tracking

Page 2 of 2

Publication	Project	PAR by	PAR Approval Date	PAR Expiration Date	Valid Standard Until	IEC Adoption	Notes
1641-2010	P1641	—	December 7, 2016	December 31, 2020	6/17/2020	IEC 62529 Ed. 2.0	
1641.1-2013	—	2019	—	—	12/31/2023		
1641.1a-2018	—	—	—	—	12/31/2028		Published March 8, 2018
1671-2010	—	2016	—	—	9/30/2020	IEC 61671 Ed 1.0	
1671.1-2017	P1671.1 Cor 1	—	Pending	—	12/31/2027		Published March 19, 2018
1671.2-2012	—	2018	—	—	12/31/2022	IEC 61671-2 Ed 1.0	
1671.3-2017	—	2023	—	—	12/31/2027		Published April 13, 2018
1671.4-2014	—	2020	—	—	12/31/2024	IEC 61671-4 Ed 1.0	
1671.5-2015	—	2021	—	—	12/31/2025	IEC 61671-5 Ed 1.0	
1671.6-2015	—	2021	—	—	12/31/2025	IEC 61671-6 Ed 1.0	
1871.1-2014	—	2020	—	—	12/31/2024		
1871.2-2017	—	2023	—	—	12/31/2027		Published March 14, 2018
	P2848		Pending				
As of 9/10/2019		Discuss	IEC represents previous version of IEEE Published Standard	PAR due to expire in 2020	In ballot	IEC TC91 WG 15 Design Automation: Testing of Electro technical Products IEC TC65C Industrial Networks	

Questions ?

IEC/TC91 WG15 Meeting

23rd September, 2019
Chestnut Suite, Holiday Inn
Bristol, UK

WG15 convener
Acting: Chris Gorringer
Osamu Karatsu
Narayanan Ramachandran

Agenda

1. Opening of the meeting
2. Approval of Agenda
3. Review of WG15 memberships and scope
4. Report of WG15 after Frankfurt WG15 meeting
5. Discussion: Bird Eye's View of Testing Standards
6. Standard Development and Maintenance
 - SCC-20 update
 - IEEE 1636, 1636.1, 1636,2 Dual Logo revision status
7. Any other business
8. Date and place of the next meeting
Shanghai, China, 24 October 2019
8. Closure of the meeting

WG15 Members

Conveners:

Narayanan Ramachandran (US),

Osamu Karatsu (JP*)

Members:

✦ Yoshiharu Furui (JP),

✦ Erin Spiewak (US),

✦ Masahiro Ishida (JP),

✦ Mike Seavey (US),

✦ Alec Stanculescu (US*),

✦ Chris Gorringer (UK),

✦ Mukund Modi (US),

✦ Jaeho Lee (KR) ,

✦ Sunhue Huh (KR),

✦ YoungSoo Kim (KR),

✦ Doug Sober (US),

Takashi Kambe (JP),

Christy Bahn (US),

Detlef Mueller (GE)

John Sheppard (US),

Mitsuru Takahashi (JP),

Hiromi Yamashita (JNC Chair*) ,

Takeshi Shoda (JP),

Gen-ichi Tanaka (JP),

Daewoo Nam (KR),

Hajime Kawano (JP)

Satoshi Kojima (JP)

Total number of persons: 24

Green :Attendees, (*) : Remote

WG15 Scope

Title:

Design Automation: Testing of Electrotechnical Products

Scope:

The activity of this WG is to develop and coordinate testing protocols. This group handles the development, review and recommendation for standards related to test and diagnosis of electrotechnical products. The test scheme is to cover from the small device to the huge complex system. WG handles various test procedures and hierarchies. IEEE SCC20 is one of the important feeder organizations of such testing technology standard candidates. WG has launched several Dual Logo standards in this technology field and these standards are in the maintenance process of the IEC practice. There will be more candidates of the testing standard from SCC20 and related activities. These will cover the system test, the function test, the electric test, the optical test, and so on, of the electrotechnical products. The activity will provide the management, development, expansion and improvement scheme of testing.

Update after the last meeting

WG15 meeting on 24 May 2019, in Frankfurt Germany

- ☛ - The “Bird’s Eye View of Testing Standard” work discussion made progress. Hiromi Yamashita is leading the project as the leader.
- ☛ - IEEE 1636, 1636.1 Dual Logo revision update were announced and will be approved by two-thirds majority at the TC91 plenary meeting in Shanghai, China, on 25 October 2019. (IEC 91/1596/INF document)
- ☛ - IEEE 1636.2 Dual Logo request was not received by the IEC Central Office yet.



Bird's Eye View of Testing Standard

Project members started to work;

- ☞ - Project leader: Hiromi Yamashita (JP)
- ☞ - Expert: Chris Gorringer (UK)
- ☞ - Expert: Takeshi Shoda (JP)
- ☞ - Expert: Detlef Mueller (GE)
- ☞ - Expert: Masahiro Ishida (JP)
- ☞ - Expert: Hajime Kawano (JP)

IEEE SCC20 activity update

SCC-20 19-2 meeting

- Date : 23 – 25 September, 2019
- Place: Bristol, UK
- Plenary, Steering, WGs
- Chair Plenary: Mike Seavey
- Vice Chair: Chris Gorringer

Review of Stability Date 1

Publication Number	Publication Date	Stability Date	Maintenance Team	Description
IEC 61445:2012 ED1 -> 2016	2012-06-21	2026	WG15	IEEE1445 Digital Test Interchange Format (DTIF) SCC20
IEC 61636:2016 ED1	2016-11-08	2021	WG15	IEEE 1636 Software Interface to Maintenance Information Collection and Analysis (SIMICA) SCC20
IEC 61636-1: 2016 ED1	2016-11-08	2023	WG15	IEEE 1636.1 SIMICA-Test Results and Session Information via the eXtensible Markup Language (XML) SCC20
IEC 61636-99: 2016 ED1	2016-11-08	2023	WG15	IEEE 1636.99 SIMICA-Common Information Elements SCC20
IEC 61671:2012 ED1	2012-06-21	2020	WG15	IEEE1671 Automatic Test Markup Language (ATML) for Exchanging Automatic Test Equipment and Test Information via XML SCC20
IEC 61671-2: 2016 ED1	2016-04-08	2022	WG15	IEEE 1671.2 Automatic Test Markup Language (ATML) Instrument Description SCC20

Review of Stability Date 2

Publication Number	Publication Date	Stability Date	Maintenance Team	Description
IEC 61671-4:2016 ED1	2016-04-08	2024	WG 15	IEEE1671.4 Automatic Test Markup Language (ATML) Test Configurations SCC20
IEC 61671-5:2016 ED1	2016-04-08	2025	WG 15	IEEE1671.5 Automatic Test Markup Language (ATML) Test Adapter Description SCC20
IEC 61671-6:2016 ED1	2016-04-08	2025	WG 15	IEEE1671.6 Automatic Test Markup Language (ATML) Test Station Description SCC20
IEC 61926-1:1999 ED1	1999-10-18	2021	WG 15	IEEE716 Abbreviated Test Language for All System (ATLAS) SCC20 (In 2021, this will be administratively withdrawn)
IEC TR 61926-1-1:1999 ED1	1999-10-20	2018	WG 15	Withdrawn SCC20
IEC 62243:2012 ED2	2012-06-21	2020	WG 15	IEEE1232 Artificial Intelligence Exchange and Service Tie to All Test System (AI-ESTATE) SCC20

Review of Stability Date 3

Publication Number	Publication Date	Stability Date	Maintenance Team	Description
IEC 62525:2007 ED1	2007-11-07	2021	WG 15	IEEE1450 Standard Test Interface Language (STIL) for Digital Test Vector Data TTStanCom/CS
IEC 62526:2007 ED1	2007-11-07	2021	WG 15	IEEE1450.1 Standard for Extension to Standard Test Interface Language (STIL) for Semiconductor Design Environments TTStanCom/CS
IEC 62527:2007 ED1	2007-11-07	2021	WG 15	IEEE1450.2 Standard for Extension to Standard Test Interface Language (STIL) for DC Level Specification TTStanCom/CS
IEC 62528:2007 ED1	2007-11-07	2021	WG 15	IEEE1500 Standard Testability method for Embedded Core-Based Integrated System TTTC/CS
IEC 62529:2012 ED2	2012-06-21	2020	WG 15	IEEE1641 Standard for Signal and Test Definition (STD) SCC20

Review of Stability Date 4

Publication Number	Publication Date	Stability Date	Maintenance Team	Description
IEC 63004 ED1	2015-12-14	2021	WG 15	IEEE1505-2010 Receiver Fixture Interface SCC20
IEC 63003 ED1	2015-12-14	2021	WG 15	IEEE1505.1-2008 Common Test Interface Pin Map Configuration for High-Density, Single Tier Electronics Test Requirements SCC20

Stability date update

IEC 62525:2007 Ed.1.0: Standard Test Interface Language (STIL) for Digital Test Vector Data

IEC 62526:2007 Ed.1.0: Standard for Extension to Standard Test Interface Language (STIL) for Semiconductor Design Environments

IEC 62527:2007 Ed.1.0: Standard for Extension to Standard Test Interface Language (STIL) for DC Level Specification

- These 3 are Dual Logo originated from IEEE TTSC(CS)

IEC 62528:2007 Ed.1.0: Standard Testability method for Embedded Core-Based Integrated System

- This is Dual Logo originated from IEEE TTTC(CS)

Dual Logo counterpart

IEEE TTTC(CS) is the counterpart of IEC 62528.

IEEE TTSC(CS) is the counterpart of IEC 62525, 62526, 62527.

Adam Cron of Synopsys is Chair of TTSC, chartered by IEEE CS Standards Activities Board. He responded back to me on this issues in mid April. Will wait the progress soon.

He confirmed the current stability date of IEC62528 is End of 2021.

WG15 is waiting the update from TTSC/TTTC.

WG15 next meeting

WG15 will hold the meeting at IEC 2019 General Meeting in Shanghai, China, on 24 October 2019

WG15 will hold the meeting at Hitachi, Kokubunji, JAPAN, in early June, 2020

Thank you