

P1685

Submitter Email: skrolikoski@gmail.com

Type of Project: Revision to IEEE Standard 1685-2009

PAR Request Date: 26-Sep-2013

PAR Approval Date: 11-Dec-2013

PAR Expiration Date: 31-Dec-2017

Status: PAR for a Revision to an existing IEEE Standard

1.1 Project Number: P1685

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: Standard for IP-XACT, Standard Structure for Packaging, Integrating, and Reusing IP within Tool Flows

Changes in title: ~~IEEE~~ Standard for IP-XACT, Standard Structure for Packaging, Integrating, and Reusing IP within Tool Flows

3.1 Working Group: C/DA/IPXACT IP-XACT Standardization Working Group (C/DA/IP-XACT)

Contact Information for Working Group Chair

Name: Mark Noll

Email Address: mnoll@synopsys.com

Phone: 5035476371

Contact Information for Working Group Vice-Chair

None

3.2 Sponsoring Society and Committee: IEEE Computer Society/Design Automation (C/DA)

Contact Information for Sponsor Chair

Name: Stanley Krolikoski

Email Address: skrolikoski@gmail.com

Phone: 925-336-9343

Contact Information for Standards Representative

None

4.1 Type of Ballot: Entity

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 01/2014

4.3 Projected Completion Date for Submittal to RevCom: 05/2014

5.1 Approximate number of entities expected to be actively involved in the development of this project: 8

5.2 Scope: This standard describes an eXtensible Markup Language (XML) schema for meta-data documenting intellectual property (IP) used in the development, implementation, and verification of electronic systems. This schema provides both a standard method to document IP that is compatible with automated integration techniques and a standard method (generators) for linking tools into a system development framework, enabling a more flexible, optimized development environment. Tools compliant with this standard will be able to interpret, configure, integrate, and manipulate IP blocks that comply with the IP meta-data description. The standard is independent of any specific design processes. It does not cover those behavioral characteristics of the IP that are not relevant to integration.

Changes in scope: This standard describes an eXtensible Markup Language (XML) ~~schema~~**schema** for meta-data documenting intellectual property (IP) used in the development, implementation, and verification of electronic systems~~and an application programming interface (API) to provide tool access to the meta data.~~ This schema provides **both** a standard method to document IP that is compatible with automated integration techniques.~~The API~~**and** provides a standard method (**generators**) for linking tools into a system development framework, enabling a more flexible, optimized development environment. Tools compliant with this standard will be able to interpret, configure, integrate, and manipulate IP blocks that comply with the IP meta-data description.~~The standard is based on version 1.4 IP XACT of The SPIRIT Consortium.~~ The standard is independent of any specific design processes. It does not cover those behavioral characteristics of the IP that are not relevant to integration.

5.3 Is the completion of this standard dependent upon the completion of another standard: No

5.4 Purpose: This standard enables the creation and exchange of IP in a highly automated design environment.

5.5 Need for the Project: As designs get larger and more complex, the electronics industry is using more IP blocks in those designs. The lack of a standard description of those blocks makes their use difficult, error-prone, and costly to implement. This revision will further address these issues and will update IEEE Std 1685-2009 based on learning from the use of the standard.

5.6 Stakeholders for the Standard: Stakeholders for this standard include Electronic Design Automation (EDA) vendors, IP vendors, electronic systems builders and IC manufacturers.

Intellectual Property

6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: Yes

If yes please explain: The standard will be based on material developed by The Accellera Systems Initiative. They have agreed to transfer the copyright of this material to the IEEE for use in this proposed revision.

6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

7.1 Are there other standards or projects with a similar scope?: No

7.2 Joint Development

Is it the intent to develop this document jointly with another organization?: No

8.1 Additional Explanatory Notes (Item Number and Explanation): 5.2, 5.5: This revision will update IEEE Std 1685-2009 based on learning from the use of the standard.