

## IEEE-SA Standards Board Project Authorization Request (PAR) Form (1999-Rev 1)

Note: For use with help hyperlinks offline, download guide.html and parsgn99.html into the same directory.

**1. Sponsor Date  
of Request  
1999 Apr 14**

**2. Assigned Project  
Number  
P1450.1**

**3. PAR Approval  
Date  
26 June 1999**

{Copyright release must be submitted with [appropriate signatures](#) by postal mail or FAX (1-732-562-1571)}

[X] PAR Signature Page received {IEEE Staff to check box}

### 4. Project Title, Recorder and Working Group/Sponsor for this Project

Document type and title: {Place an X in only one option below}

- **Standard for**{document stressing the verb "shall" }
- **Recommended Practice for**{document stressing the verb "should" }
- **Guide for** {document in which good practices are suggested}

**Title: Standard for Extensions to Standard Test Interface Language (STIL) (IEEE Std. 1450-1999) for Semiconductor Design Environments**

Name of Working Group:		STIL Extensions Working Group	
Name of Official Reporter (usually the W.G. Chair) who must be IEEE/Affiliate AND Standards Association (SA) members.		Tony Taylor	
Title in WG:	Chairman	IEEE/Affiliate Member #	40243923
Company:	Fluence Technology	Telephone:	831-768-9224
Address:	2661 Beach Rd., P58	FAX:	831-768-9224
City/State/Zip:	Watsonville, CA. 95076	Email:	t.taylor@ieee.org

Name of Working Group Chair (if different):		[...]	
		IEEE/Affiliate Member #	[...]
Company:	[...]	Telephone:	[...]
Address:	[...]	FAX:	[...]
City/State/Zip:	[...]	Email:	[...]

Name of Sponsoring Society and Committee:	Computer Society/Test Technology
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			Test Technology Standards committee
Name of Committee Sponsor Chair:			Pat McHugh
		IEEE/Affiliate Member #	[02712842]
Company:	[Lockheed Martin-EPI]	Telephone:	[609-338-5969]
Address:	[PO Box 14066]	FAX:	[609-338-2967]
City/State/Zip:	[Philadelphia, PA 19122]	Email:	patrick.f.mchugh@lmco.com

**5. Describe This Project; Answer each of four questions below:**

- a. [Update an existing PAR](#) [NO ]

If YES, indicate PAR Number/Approval Date  
 If YES, attach a cover letter indicating changes/rationale for changes.  
 If YES, is this project in ballot now? [ ]

- b. [Choose](#) one from the following:

[Yes] New Standard  
 [...] Revision of existing Standard {number and year} [...]  
 [...] Amendment (Supplement) to an existing standard {number and year} [...]  
 [...] Corrigenda to an existing standard {number and year} [...]

- c. [Choose](#) one from the following:

[X] Full Use (5-year life cycle)  
 [...] Trial Use (2-year life cycle)

- d. [Choose](#) one from the following:

[X] Individual Sponsor Balloting  
 [...] Entity Sponsor Balloting

- e. Fill in [Target Completion Date](#) to IEEE RevCom : [Q1/2000]

**6. [Scope](#) of Proposed Project:**

Define structures in STIL to support usage as semiconductor simulation stimulus; including: 1) mapping signal names to equivalent design references, 2) interface between Scan and BIST , and the logic simulation, 3) data types to represent unresolved states in a pattern, 4) parallel or asynchronous pattern execution on different design blocks, and 5) expression-based conditional execution of pattern constructs.

Define structures in STIL to support the definition of test patterns for sub-blocks of a design (i.e., embedded cores) such that these tests can be incorporated into a complete higher-level device test.

Define structures in STIL to relate fail information from device testing environments back to original stimulus and design data elements.

**7. [Purpose](#) of Proposed Project:**

Enhance the STIL language definition to support the usage of STIL in the design environment. This includes extending the execution concept to support STIL as a stimulus language, to allow STIL to be used as an intermediate form of data, and to allow STIL to capture design information needed to port simulation data to device test environments.

In addition, define extensions to support the definition of sub element tests, and to define the mechanisms to integrate those tests into a complete device test. This effort is to be done in conjunction with IEEE P1500 which is defining standards for the definition and integration of embedded cores.

Finally, define the constructs necessary to correlate test failure information back to the design environment, to allow debug and diagnosis operations to be performed based on failure information in STIL format.

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## 8. Intellectual Property {Answer each of the questions below}

- a. Are you aware of any [patents](#) relevant to this project?

[No] { Yes, with detailed explanation below / No}  
[...] {Explanation}

- b. Are you aware of any [copyrights](#) relevant to this project?

[No] { Yes, with detailed explanation below / No}  
[...] {Explanation}

- c. Are you aware of any [trademarks](#) relevant to this project?

[No] { Yes, with detailed explanation below / No}  
[...] {Explanation}

- d. Are you aware of any [registration](#) of objects or numbers relevant to this project?

[No] { Yes, with detailed explanation below / No}  
[...] {Explanation}

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## 9. Are you aware of any other standards or projects with a [similar scope](#)?

[Yes] { Yes, with detailed explanation below / No}  
IEEE Std. 716-1995 (C/ATLAS) addresses test with very general capabilities, and has not been applied to digital testing in this domain. The issues of this PAR are not addressed by C/ATLAS.

IEEE Std. 1029.1-1998 (WAVES) has a focus on the support of VHDL and is not of sufficiently narrow scope to address the issues of this PAR.

IEEE Std. 1445-1998 (DTIF) is constrained to a capability that does not support the issues being addressed by this PAR. Fault information maintained by DTIF supports active failure diagnosis and traceback appropriate for board-test but which is not appropriate for IC test usage.

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## 10. [International Harmonization](#)

Is this standard planned for adoption by another international organization?  
[??] { Yes/No/?? if you don't know at this time }

If Yes: Which International Organization [...]  
If Yes: Include coordination in question 13 below  
If No: Explanation [...]

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**11. Is this project intended to focus on [health, safety or environmental issues](#)?**

[No] { Yes/No/?? if you don't know at this time }  
If Yes: Explanation [...]

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**12. Proposed Coordination/Recommended Method of Coordination**

a. [Mandatory Coordination](#)

SCC 10 (IEEE Dictionary)	by <b>DR</b> {Circulation of <b>DR</b> afts}
IEEE Staff Editorial Review by	by <b>DR</b>
SCC 14 (Quantities, Units and Letter symbols)	by <b>DR</b>

b. [Coordination](#) requested by Sponsor:

1450/STIL Working Group	by Greg Maston	{ <b>CO</b> mmun memb }
P1500/Core Test Language Working Group	by Rohit Kapur	{ <b>LI</b> aision memb }
[.....]	by [...]	{ circulation of <b>DR</b> afts/ <b>LI</b> aision memb/ <b>CO</b> mmun memb }
[.....]	by [...]	{ circulation of <b>DR</b> afts/ <b>LI</b> aision memb/ <b>CO</b> mmun memb }

c. [Coordination Requested by Others](#):

[...] {added by staff}

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**Additional Explanation Notes: {Item Number and Explanation}**

[...]{If necessary, these can be continued on additional pages}

The [PAR Copyright Release and Signature Page](#) must be submitted by FAX or physical delivery before this PAR will be sent on for NesCom and Standards Board approval.

## PAR Copyright Release and Signature Page

1. Sponsor Date of Request  
1999 Apr 30

2. Assigned Project Number  
P1450.1

3. PAR Approval Date  
126 June 1999

4. Project Title: Extensions to STIL (IEEE Std. 1450-1999) for Semiconductor Design Environments

### Copyright Release/Official Reporter Signature

I hereby acknowledge my appointment as Official Reporter (usually the WG Chair) to the STIL Extensions Working Group

In consideration of my appointment and the publication of the Standards Publication identifying me, at my option, as an Official Reporter, I agree to avoid knowingly incorporating in the Standards Publication any copyrighted or proprietary material of another without such other's consent and acknowledge that the Standards Publication shall constitute a "work made for hire" as defined by the Copyright Act, and, that as to any work defined, I agree to and do hereby transfer any right or interest I may have in the copyright to said Standards Publication to IEEE.

Signature of Official Reporter Tony Taylor

Name of Official Reporter (usually the W.G. Chair) who must be an IEEE/Affiliate AND Standards Association (SA) member. [Tony Taylor]

Title in WG:	Chairman	IEEE/Affiliate Member #	40243923
Company:	Fluence Technology	Telephone:	831-768-9224
Address:	2661 Beach Rd., P58	FAX:	831-768-9224
City/State/Zip:	Watsonville CA 95076	Email:	t.taylor@ieece.org

### Sponsor Approval Signature Submitted by:

(This MUST be the Sponsor Chair or the Sponsor's Liaison Representative to the IEEE Standards Board) who must be an IEEE/Affiliate AND Standards Association (SA) member. If the Sponsor chair is the submitter of the PAR by EMAIL and verifiable by his sender's Email address, this form does not need to be signed by the sponsor. The submitter will be notified in writing when the PAR is received and when the PAR will be considered for approval by the Standards Board. After the Standards Board meeting, the submitter will be notified in writing of the action taken.

Signature of Submitter [Signature]

Name of Committee Sponsor Chair: Pat McHugh

Company: Lockheed-MAREAN-EPI  
Address: ~~PO Box 14066~~  
City/State/Zip: Phila, PA 19122

IEEE/Affiliate Member# 2712842  
Telephone: (609) 338-5969  
FAX: (609) 338-2967  
Email: patrick.f.mchugh@lmco.com

Signature by IEEE Officer: Pat McHugh Date: 26 June 1999

Title: SASB Chair