1. Sponsor Date of Request
   1999 Apr 14

2. Assigned Project Number
   P1450.5

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}
   • [X] 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 Test Method Specification

<table>
<thead>
<tr>
<th>Name of Working Group:</th>
<th>STIL Extensions Working Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Official Reporter (usually the W.G. Chair) who must be IEEE/Affiliate AND Standards Association (SA) members.</td>
<td>Tony Taylor</td>
</tr>
<tr>
<td>Title in WG:</td>
<td>Chairman</td>
</tr>
<tr>
<td>Company:</td>
<td>Fluence Technology</td>
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<td>Address:</td>
<td>2661 Beach Rd., P58</td>
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</tr>
</tbody>
</table>

   Name of Working Group Chair (if different):

   | Company: | [...] |
   | Address: | [...] |
   | City/State/Zip: | [...] |
   | IEEE/Affiliate Member # | [...] |
   | Telephone: | [...] |
   | FAX: | [...] |
   | Email: | [...] |

Name of Sponsoring Society and Committee:

Computer Society/Test Technology
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: [Q2/2001]

6. Scope of Proposed Project:

Define the set of test methods common enough across the semiconductor industry to be standardized and define the parameters for each of the test methods.

Define the structures in STIL for specification of the test method and the parameters to the test method. Examples of test method parameters are: debug options, characterization options, test algorithm options, throughput optimizing options, and data logging options.

Define in device terms the operation that is to be performed by each test method. Note1 - It may be necessary to describe a sequence of operations that are to be done by the test method and to completely explain the expected algorithm. Note2 - This definition of test methods is to be part of the STIL documentation.

Provide examples of how user defined test methods can be created using the defined STIL structures.

7. Purpose of Proposed Project:

Whereas the test flow extensions to STIL (P1450.4) define the structure for creating the test flow, this standard is to define a set
of test methods that are to fit within the STIL framework to address the most commonly needed test functions for digital integrated circuits.

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]

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. Working PARs P716/P716a define a high-order language for test equipment operation. This effort defines the relationship and support of STIL for this operation, which is not part of the scope of the 716 effort.

   P1545 defines a standard for parametric data log format. This effort is outside the scope of this PAR.

   P1226.12 defines a formal representation and exchange of test requirements, which is a much broader scope of effort than the efforts of this PAR.

   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.
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 [...]

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 [...]  

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

a. **Mandatory Coordination**

SCC 10 (IEEE Dictionary)  
by DR {Circulation of DRafts}

IEEE Staff Editorial Review by  
by DR

SCC 14 (Quantities, Units and Letter symbols)  
by DR

b. **Coordination requested by Sponsor:**

1450/STIL Working Group  
by Greg Maston {COmmon memb}

P1500/Core Test Language Working Group  
by Rohit Kapur {LIaison memb}

[.........................]  
by [...]  
{circulation of DRafts/LIaison memb/COmmon memb}

[.........................]  
by [...]  
{circulation of DRafts/LIaison memb/COmmon memb}

c. **Coordination Requested by Others:**

[...] {added by staff}

**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
   P1450.5

3. PAR Approval Date
   1 Jun 1999

4. Project Title: Extensions to STIL (IEEE Std. 1450-1999) for Semiconductor Test Method Specification

Signature

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 ________________________________

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
Company: Fluence Technology
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FAX: 831-768-9224
Email: t.taylor@ieee.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

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Signature by IEEE Officer: [Signature]

Date: 6/6 June 1999

Title: SASP Chair