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. <u>Sponsor Date</u> | 2. Assigned Project | 3. <u>PAR Approval</u> |
|------------------------|---------------------|------------------------|
| of Request | Number | Date |
| 1999 Apr 16 | P1450.3 | <u>26 June 1999</u> |

{Copyright release must be submitted with <u>appropriate signatures</u> 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}

<u>Title:</u> Standard for Extensions to Standard Test Interface Language (STIL) (IEEE Std. 1450-1999) for Tester Target Specification

| 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 Me | mber # | 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 |
|-------------------------------------------|----------------------------------|
|-------------------------------------------|----------------------------------|

| Name of Committee Sponsor Chair: | | | Test Technology Standards committee Pat McHugh | |
|----------------------------------|--------------------------|------------|------------------------------------------------------|-------------------------------|
| | | | | |
| 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. <u>Choose</u> 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. <u>Choose</u> one from the following:

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

d. <u>Choose</u> one from the following:

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

e. Fill in <u>Target Completion Date</u> to IEEE RevCom : [Q3/2000]

6. <u>Scope</u> of Proposed Project:

Define structures in STIL for the specification of resource mapping of ATE hardware architectures. An example of resource mapping is the assignment of tester resources to waveform characters that are used in STIL-vectors.

Define structures in STIL for including ATE specific instructions in-line with the STIL data.

Define structures in STIL that allow for 'incremental processing' whereby, a set of STIL files may be targeted to multiple ATE systems by allowing separately identified ATE data to co-exist.

Define structures in STIL for defining tester rules checks to ensure that the set of generated STIL files conform to the selected resources on one or more ATE systems.

Define structures in STIL for the specification of the resources required for the execution of a set of STIL files on a given ATE system.

7. Purpose of Proposed Project:

Transferring "tester independent" test program / pattern data as represented in STIL to a specific ATE system is a desired

capability. It is required to be able to completely and unambiguously specify how the STIL program / patterns are mapped onto a specific tester's resources. Due to the various different use models for the creation and consumption of test data, it is necessary to enable certain operations (such as rules checking) very early in the process. Likewise it is desirable to allow other operations (such as resource allocation) to be done very late in the process. The STIL language extensions are to enable the user / creator a standard way of specifying and controlling the application of test program / pattern data to specific ATE systems to the extent necessary for each use model scenario.

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.

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.

IEEE Std. 993-1997 (TEDL) addresses a general-tester description language. The effort of this PAR is focused on identifying the relationship of STIL (1450) to the tester, and not of specifying or describing the tester.

P1226.11 defines standard test resource information as part of the ABBET effort. P1226.11 has a very broad scope; this PAR is constrained to the relationship of STIL to semiconductor testers only.

P1226.9 defines a software interface for control of resource classes as part of the ABBET effort. P1226.9 specifies tester operating system structures and is of much broader intent than the effort of this PAR, which is to make use of existing software interfaces on ATE.

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 DR afts} |
| IEEE Staff Editorial Review by | | by DR |
| SCC 14 (Quantities, Units and Letter symbols | 5) | by DR |
| b. <u>Coordination</u> requested by Sponsor: | | |
| 1450/STIL Working Group | by Greg Maston | { CO mmon memb} |
| P1500/Core Test Language Working Group | by Rohit Kapur | {LIaison memb} |
| [] | by [] | {circulation of DR afts/ LI aison memb/ CO mmon memb} |
| [] | by [] | {circulation of DR afts/ LI aison memb/ CO mmon memb} |
| c. <u>Coordination Requested by Others</u> : | | |
| [] {added by staff} | | |

Additional Explanation Notes: {Item Number and Explanation}

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

The <u>PAR Copyright Release and Signature Page</u> 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_3

3. PAR Approval Date 26 Tro 1999

4. Project Title: Extensions to STIL (IEEE Std. 1450-1999) for Tester Target Specification

Copyright Release/Offical 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 _ Vary Vary In

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 9507 | 6 Email: | t.taylor@icce.org |

Sponsor Approval Signature Submitted by:

(This MUST be the Sponsor's Liaicon 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

4/30/99 10:06 AM

APR 30 '99 13:31 F.06/11

lof2

17212325578 01 7362 866 603

Name of Committee Sponsor Chair: Pat McHugh

| | IEEE/Affiliate Member# 02712842 |
|----------------------------------|--------------------------------------|
| Company: Lockheed MARTIN-EPI | Telephone: 609-338-5969 |
| Address: PD Box 14066 | FAX: (609) 338-2967 |
| City/State/Zip: Dhile., PA 19122 | Email: patrick f. mchugh @lmco i Com |

hit file ale Jone 1999 Signature by IEEE Officer: Title:

.

2 of 2

1

ŝ

4/30/99 10:06 AM

APR 30 '99 13:32