TA Document 2002006
Point-to-Point Private Plugfest Guidelines
Revision 1.0

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Abstract:
This document provides guidelines for the Point-to-Point Private Plugfest Test Suite.

Keywords:
Style, Formatting, Template.

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1. Overview

The 1394 Trade Association (1394TA) Compliance Logo Program provides a structure whereby a product containing an IEEE-1394 interface is able to earn the right to use the 1394TA Compliance Logo[1]. Within the structure, a set of tests have been defined to quantify a products potential for interoperability with other products within the industry and thus provide the user with the best possible experience. The tests have been grouped into four (4) 'test suites':

- Point-to-Point Private Test Suite(s) (Plugfests)
- Base 1394 Test Suite
- Network Interoperability Test Suite
- Functional Operability Test Suite

Corresponding to this structure there are a growing number of test specifications and procedural documents each of which define specific tests or test suite operation.

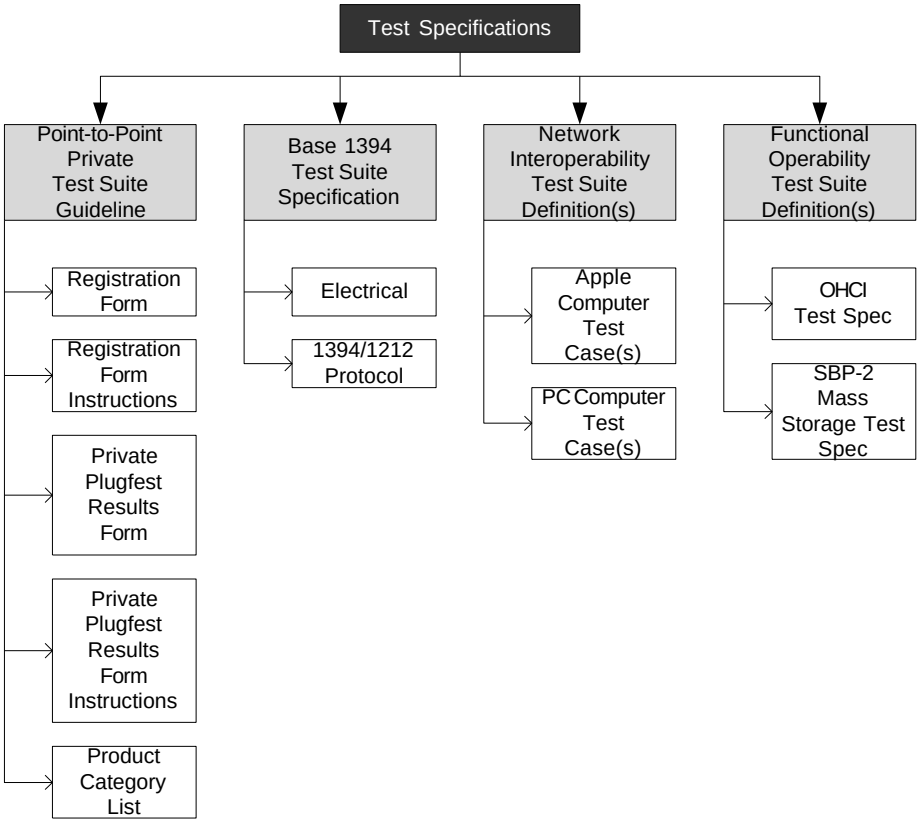

Figure 1: Compliance Logo Program Document Structure.

[1] Please see the 1394TA document xxx for specific guidelines as to the use of the 1394TA Compliance Logo.

1.1 Purpose

The 1394TA has developed a compliance logo program. To obtain a license to use the logo, a product must pass a set of test criteria. This document defines the criteria for the Point-to-Point Private Plugfest Test Suite.

1.2 Scope

This document is intended to provide guidance to participants of the 1394TA Compliance Logo Program and it's Point-to-Point Private Plugfest test suite.

The test suite will be implemented at 1394TA-sponsored Compliance and Interoperability (C&I) Workshops and given the time scale (approximately 30 minutes) allowed by these events, the level of testing must be limited to fit this constraint yet provide the maximum indication of interoperability and where appropriate proper functionality. Too facilitate this process the 1394TA has developed a set of documents intended to help set the expectation for each participate as to the level of interoperability and functionality that should be expected. These documents are:

- 1394TA Interoperability Workshop Private Plugfest Results Form (PPFv2)
- 1394TA Interoperability Workshop Private Plugfest Results Form Instructions (PPFDv2)
- 1394TA Interoperability Workshop Registration Form (IWRv2)
- 1394TA Interoperability Workshop Registration Form Instructions (IWRDv2)
- Product Category List (PCLv4)

2. References

The following standards contain provisions, which through reference in this document, constitute provisions of this standard. All the standards listed are normative references. Informative references are given in Annex A. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

[R1] 1394TA Interoperability Workshop Private Plugfest Results Form (PPFv2)

[R2] 1394TA Interoperability Workshop Private Plugfest Results Form Instructions (PPFDv2)

[R3] 1394TA Interoperability Workshop Registration Form (IWRv2)

[R4] 1394TA Interoperability Workshop Registration Form Instructions (IWRDv2)

[R5] Product Category List (PCLv4)

3. Definitions

3.1 Conformance Levels

3.1.1 expected: A key word used to describe the behavior of the hardware or software in the design models *assumed* by this Specification. Other hardware and software design models may also be implemented.

3.1.2 may: A key word that indicates flexibility of choice with *no implied preference*.

3.1.3 shall: A key word indicating a mandatory requirement. Designers are *required* to implement all such mandatory requirements.

3.1.4 should: A key word indicating flexibility of choice with a strongly preferred alternative. Equivalent to the phrase *is recommended*.

3.1.5 reserved codes: A set of codes for a reserved field that are defined in this specification, but not otherwise used. Future specifications may implement the use of these codes. A product implementing this specification shall not generate, nor receive these codes.

3.1.6 reserved fields: A set of bits for a reserved field that are defined in this specification, but are not otherwise used. Products that implement this specification shall zero these fields and shall not check the reserved field's value. Products that implement future revisions of this specification may set these codes as defined by the specification.

NOTE —The IEEE is investigating whether the "may, shall, should" and possibly "expected" terms will be formally defined by IEEE. If and when this occurs, draft editors should obtain their conformance definitions from the latest IEEE style document.

3.2 Glossary of Terms

3.2.1 byte: Eight bits of data, used as a synonym for octet.

3.2.2 CSR Architecture: A convenient abbreviation of the following reference (see clause 2): ISO/IEC 13213 : 1994 [ANSI/IEEE Std 1212, 1994 Edition], Information Technology—Microprocessor systems—Control and Status Register (CSR) Architecture for Microcomputer Buses.

3.2.3 quadlet: Four bytes of data.

3.3 Acronyms and Abbreviations

1394TA	1394 Trade Association

4. Point-to-Point Private Plugfest

4.1 Overview

To help determine the potential interoperability and functionality of each product, C&I Workshops will have private, one-on-one, test sessions. These sessions have multiple purposes. Participates will try their products in as many combinations as time permits. The results of these test sessions will be recorded and used as one of the elements in determining a product's eligibility for the 1394TA compliance logo. The privacy of these sessions held in suites rented by one of participants, serves to enable openness and willingness to test products that may not be fully "market ready". A beneficial and planned side-effect is to have the vendors establish engineer-to-engineer contacts to either debug complex problems after the workshop or merely to help establish a strong 1394 engineering community aware of the large amount of 1394 activity happening at other companies. While providing the least rigorous portion of the testing, this aspect of the workshop has received such high praise in other forums that it alone probably justifies these events. This aspect of testing presents a valuable learning opportunity that is not gained through 3rd party testing.

4.2 Test Criteria

Although the specific interoperability tests used during a session will be determined by the participating company(ies), the following guidelines should be followed.

Bus Configuration: When the two products are connected they should successfully complete the 1394 bus initialization process, leaving each product in a proper operational condition. This is an excellent time to examine each vendor's cable (if provided with product) and connector compatibility. Please reference the registration form to determine if cables are supplied with the product.

Device Detected and Registered: Depending on the type of product it may be possible to determine if the attached product was successfully seen and registered as a 1394 device. If appropriate it may also be possible to observe an application(s) registration of the product.

Device Supplies/Consumed 1394 Cable Power: Cable power is another very important feature of IEEE-1394. 1394 cable power is loosely defined therefore special care must be taken to handle the full voltage range allowed by the standard. Therefore it is important that both companies exercise all possible power states during this session and verify that the observed behavior is correct. Please reference the registration form to determine the cable power specifications of the product.

Product Category Testing: Using information found in the registration form, determine which Product Categories are in common between the two products. Demonstrate each product works by running applications that utilize each other facilities.

Unplug & Plug: Multiple times do asynchronous disconnect/reconnect and re-verify that each item listed above functions correctly each time. If more than one port is available verify the each port behaves correctly.

5. Results

Before the Point-to-Point Private Plugfest sessions begin, the 1394TA will issue an exact number of 1394TA Interoperability Workshop Private Plugfest Results Forms as test sessions they registered for. Each form is uniquely numbered and must be returned to the appropriate workshop personnel to be eligible to receive 1394TA Compliance Logo license for the respective product.

While the results are subject to the integrity of the participates, it is expected maximum functionality will be tested during each test session. In particular, common Product Categories (please see the registration form for details) and associated applications will be verified. Ultimately the 1394TA will determine the success of the secession based on the Pass or Fail indication on line PP5 of the 1394TA Interoperability Workshop Private Plugfest Results Form.

6. Compliance Logo Requirements

To be eligible to receive a Compliance Logo License the product must pass 80% of all sessions against other products attempting to be logo'd. Testing against products not trying to get a Compliance Logo License (potential early proto-types) is highly encouraged therefore the results of those tests are not included in the 80% calculation.

To be eligible to receive a 1394TA Compliance Logo a product must test against a minimum of 10 devices with the following priority:

1) Products having common product categories (see Products Categories document for details).

2) If 10 products are not available with common product categories then 10 products in general.

3) If 10 products are not available then test against all devices present at that C&I Workshop (Please remember the product must be tested by the three 1394TA sponsored test suites to be eligible to receive a 1394TA Compliance Logo.)

Annexes

Annex A: Bibliography (informative)

A.1 Bibliography

[B1] Book Title. Publisher.