

## **Proposal for a Project to Develop a New Standard**

### **1. IDENTIFICATION OF PROPOSED PROJECT**

Development of a standard to define the specific commands and protocols for mass storage devices attached to the IEEE 1394-1995 bus.

**1.1 Title:** 1394 Mass Storage Device Standard

**1.2 Proposer:** T10

**1.3 Date Submitted:** 5/8/97

**1.4 Project Type:** D

### **2. Justification of Proposed Standard**

#### **2.1 Needs**

Within the Personal Computer industry, work has begun to attach storage devices such as hard disk drives, CD-ROMs, DVD, etc. via the IEEE 1394-1995 bus. Such devices will utilize the Serial Bus Protocol-2 (SBP-2) transport protocol currently under development in T10, and commands defined by Multi-Media Commands (MMC-2) currently under development in T10. The 1394 Mass Storage Device Standard will allow mass storage devices to be utilized in an industry standard manner on the 1394-1995 bus.

#### **2.2 Recommended Scope of Standard**

This standard will define for a variety of mass storage devices, e.g., hard disk, CD-ROM, DVD, etc.:

- the subset of the SBP-2 protocol to be utilized;
- the commands to be utilized by a variety of mass storage device types;
- the reset behavior;
- the security requirements;
- the configuration ROM and CSR requirements;
- the task management functions.

#### **2.3 Existing Practice in Area of Proposed Standard**

No standard exists today defining attachment protocol and command usage for mass storage devices on 1394-1995.

#### **2.4 Expected Stability of Proposed Standard with Respect to Current and Potential Technological Advance**

The useful life of the proposed standard is expected to be at least five years.

### **3. Description of Proposed Project**

**3.1 Type of Document:** Standard

**3.2 Definitions of Concepts and Special Terms:** None.

**3.3 Expected Relationship with Approved NCITS Reference Models (e.g., DBMS, OSI)**

The standard addresses closed systems and has no relationship to NCITS Reference Models.

#### **3.4 Recommended Program of Work**

Develop a set of goals for the standard; solicit additional participants for the development of the standard; solicit technical contributions for the standard; review the contributions for compatibility with the family of T10

standards and for logical expansions to those standards; format the standard in accordance with NCITS requirements; and forward the resultant standard to NCITS for further processing.

### **3.5 Resources - Individuals and Organizations Competent in Subject Matter**

T10 presently includes membership with the necessary technical expertise to complete the standard. However additional participation will be solicited to broaden the representation for the standard.

### **3.6 Recommended NCITS Development Technical Committee: T10**

### **3.7 Anticipated Frequency and Duration of Meetings**

T10 presently meets bimonthly and authorizes ad hoc meetings as warranted for the needs of the projects. It is anticipated that these meetings are adequate to address this project as one of the agenda items for these meetings.

### **3.8 Target Date for Initial Public Review (Milestone 4) : November 1997**

### **3.9 Estimated Useful Life of Standard**

It is estimated that the useful life of the standard will be at least five years.

## **4. Implementation Impacts**

### **4.1 Impact on Existing User Practices and Investments**

Since no 1394 storage products exist today but plans are underway to develop such products, timely development of this standard will ensure quick adoption and conformity within the industry. Without this standard incompatibilities will soon exist.

### **4.2 Impact on Supplier Products and Support**

See 4.1.

### **4.3 Techniques and Costs for Conformity Assessment**

It is intended that the standard will provide an unambiguous definition of the protocols so that suppliers, users, and others can readily determine product conformance.

### **4.4 Legal Considerations**

No additional items are known beyond those required for IEEE 1394-1995, but regular calls for patent will be made.

## **5. Closely Related Standards Activities**

### **5.1 Existing Standards**

- IEEE 1394-1995
- ISO/IEEE 13213

### **5.2 NCITS Standards Development Projects**

- SBP-2 (T10/1155D)
- MMC-2 (T10/1228D)

### **5.3 NCITS Study Groups: None**

### **5.4 Other Related Domestic Standards Efforts:**

- IEEE P1394A
- IEEE P1394B

**5.5 ISO/IEC JTC 1 Standards Development Projects:** None

**5.6 Other Related International Standards Development Projects:** None

**5.7 Recommendations for Coordinating Liaison:** None

**5.8 Recommendations for Close Liaison**

- IEEE P1394A
- IEEE P1394B