

1. Identification of Proposed Project

1.1 Title: SCSI-3 ATA Protocol (ATP)

1.2 Proposer

This project is proposed by the X3T10 Technical Committee. For additional information, please contact John B. Lohmeyer, X3T10 Acting Chair, at NCR Corporation, 1635 Aeroplaza Dr., Colorado Springs, CO 80916, (Phone: 719-573-3362 FAX: 719-597-8225) or Dal Allan, X3T10 Acting Vice-Chair at ENDL, 14426 Black Walnut Ct., Saratoga, CA 95070 (Phone: 408-867-6630 Fax: 408-867-2115).

1.3 Date Submitted: [Proposed] January 1994 (X3T10 to X3/OMC)

1.4 Project Type: Development

2. Justification of Proposed Standard or Technical Report

2.1 Needs

AT Attachment disk drives are widely accepted for personal computing applications. However, the lack of command sets for other device types has inhibited wider application of this interface. This project would address this need by providing a method to map SCSI command sets to the ATA physical interface.

2.2 Recommended Scope of Standard or Technical Report

The SCSI-3 ATA Protocol standard is intended to provide a transport protocol to permit SCSI-3 command sets to be delivered over the ATA-2 physical interface.

Functions which will be considered for incorporation include:

- a) Mapping of the SCSI-3 command sets to the ATA physical interface.
- b) Protocol support for SCSI-3 Architecture Model functions and features.
- c) Other capabilities which fit within the general scope of implementing the SCSI-3 ATA Protocol on a broad range of applications, and other capabilities that may be proposed during the development phase by the participants in the project.

2.3 Existing Practice in Area of Proposed Standard or Technical Report

Existing practice for ATA devices only includes an ATA-specific command set for magnetic disk drives. Command sets for other device classes are vendor specific. The ATP standard would provide a means to map all SCSI command sets to the ATA physical interface.

2.4 Expected Stability of Proposed Standard or Technical Report with Respect to Current and Potential Technological Advance

The nature of the proposed project is to define the SCSI-3 ATA Protocol in a manner which expands the alternatives available to host system manufacturers while maintaining a high degree of compatibility with the ATA physical interface and the SCSI-3 command sets.

3. Description of Proposed Project

3.1 Type of Document (Standard or Technical Report): Standard

3.2 Definition of Concepts and Special Terms (if any): none

### 3.3 Expected Relationship with Approved X3 Reference Models (e.g., DBMS, OSI)

The SCSI-3 ATA Protocol standard is for use in closed systems.

### 3.4 Recommended Program of Work

The following program of work is planned for the SCSI-3 ATA Protocol standard:

- Solicit participation from present and future SCSI participants through X3T10 procedures and through press releases. Invite comments by end-user organizations and invite proposals from organizations that may have a contribution to a viable SCSI-3 ATA Protocol standard.
- Establish functional requirements for SCSI-3 ATA Protocol functional additions.
- Prepare a draft standard based on proposals submitted and other information gathered during the initial investigation.
- Consider the results of SCSI-3 ATA Protocol testing as may be available to the committee through the voluntary efforts of the various participants in X3T10.
- Submit the draft proposed standard to X3 for further processing.

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

The current membership of X3T10 includes representatives from all parts of the computer industry from semiconductor chip manufacturers to large mainframe system manufacturers as well as Government agencies. The members of X3T10 have expressed their desire to participate and cooperate in the development of this proposed standard.

There are sufficient resources to complete the development of this standard without delaying work on other standards.

### 3.6 Recommended X3 Development Technical Committees (Existing or New)

It is recommended that the development work be done in Technical Committee X3T10.

### 3.7 Anticipated Frequency and Duration of Meetings

Technical Committee X3T10 meets for two days bi-monthly. Specific task ad hoc groups are called as may be required for one to three days between the regular meetings but their results are not binding.

### 3.8 Target Date for dpANS to X3 (Milestone 10): December 1994

### 3.9 Estimated Useful Life of Standard or Technical Report

It is anticipated that this standard will have a life of over 10 years.

## 4. Implementation Impacts

### 4.1 Impact on Existing User Practices and Investments

The proposed SCSI-3 ATA Protocol standard will provide an upward growth path which complements existing practices and investments. It is likely that any isolated negative impacts would occur in any case through non-standard evolution or revolution.

### 4.2 Impact on Supplier Products and Support

The proposed SCSI-3 ATA Protocol standard will provide an upward growth path

which complements existing practices and investments. It is likely that any isolated negative impacts would occur in any case through non-standard evolution or revolution.

4.3 Techniques and Costs for Compliance Verification

The committee will consider the results of SCSI-3 ATA Protocol testing as may be available to the committee through the voluntary efforts of the various participants in X3T10. With this method all costs are borne by the organizations of the various participants and have for the most part been mainly an adjunct of their normal development costs.

4.4 Legal Considerations

No new legal considerations are expected that are not already in accordance with accepted X3 procedures and the ANSI patent policy.

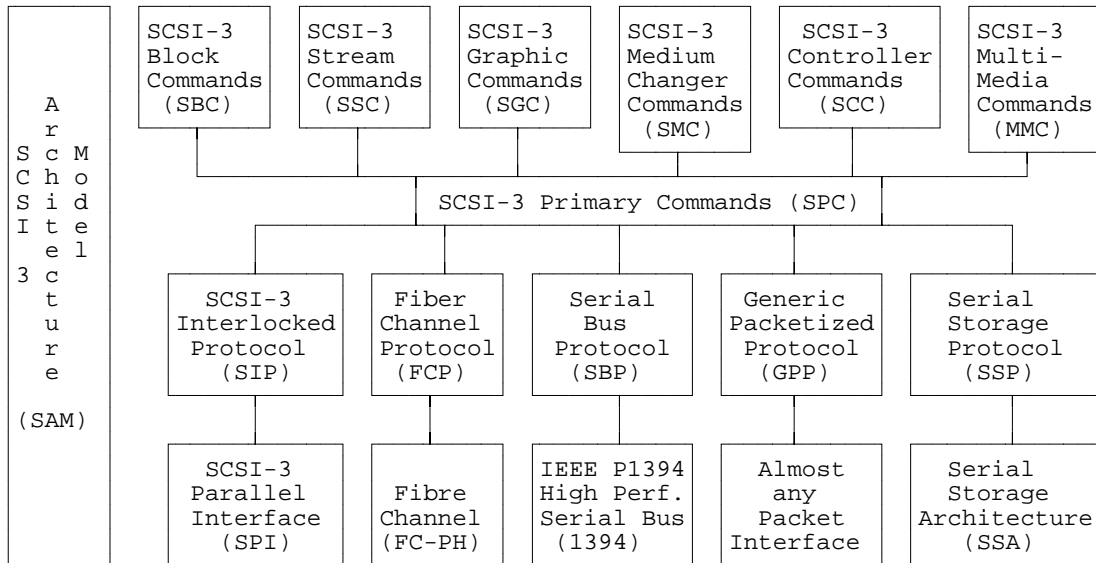
5. Closely Related Standards Activities

The standardization of both ATA and SCSI physical, transport, and command sets is being done in X3T10.

5.1 Existing Standards: none

5.2 X3 Standards Development Projects

The SCSI-3 ATA Protocol is one part of the overall SCSI-3 and ATA family of standards:



5.3 X3 Study Groups: none

5.4 Other Related Domestic Standards Efforts: none

5.5 ISO/IEC JTC 1 Standards Development Projects

It is anticipated that this standard will be proposed to JTC1/SC25/WG4.

5.6 Other Related International Standards Development Projects: none

5.7 Recommendations for Coordinating Liaison: none

5.8 Recommendations for Close Liaison: none