

1. Identification of Proposed Project

1.1. Title: ATA-2 (Enhanced ATA Attachment Interface)

1.2. Proposer

This project is proposed by the X3T9 Technical Committee. For additional information, please contact:

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1.3. Date Submitted

March, 1993.

1.4. Project Type

Development.

2. Justification of Proposed Standard or Technical Report

2.1. Needs

The draft standard for AT Attachment has been completed. The ATA Extensions project will add command extensions to the draft standard.

The draft standard has a number of limitations which now need to be addressed. ATA-2 is intended to modify the ATA interface allowing faster data transfer rates through a standard interface.

2.2. Recommended Scope of Standard or Technical Report

The proposed ATA-2 standard shall add a high degree of compatibility and enhanced capabilities for use in new generation systems. ATA-2 will provide documentation for new capabilities including the following candidates:

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a) To provide a means of supporting higher speed data transfers.

- b) To provide a means of supporting the ATA-2 protocol on other physical interfaces, such as that of the newly-emerging local buses.
- c) To improve transfer protocols.
- d) To improve reliability of data transfers.
- e) To provide a means to increase the number of devices on the interface.
- f) To eliminate obsolete functionality.
- g) To reduce the command overhead by introducing the concept of queuing.
- h) Other capabilities which fit within the general scope of implementing the ATA-2 on a broader range of applications.
- i) An effort will be made to maintain compatibility.

2.3. Existing Practice in Area of Proposed Standard or Technical Report

The proposed project involves evolutionary expansion of the draft AT Attachment standard to provide additional capabilities.

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 insure that the AT Attachment has an upward, highly compatible growth path.

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 ATA-2 standard is for use in closed systems.

3.4. Recommended Program of Work

The following program of work is planned for the ATA-2 standard:

- Solicit continuing participation by the present AT Attachment participants through X3T9.2 procedures and new participants through press releases. Invite comments by end-user organizations and invite proposals from organizations that may have a contribution to a viable ATA-2 standard.
- Establish functional requirements for ATA-2 functional additions along with downward compatibility requirements.
- Prepare a draft standard based on proposals submitted and other information gathered during the initial investigation.
- Consider the results of ATA-2 testing as may be available to the committee through the voluntary efforts of the various participants in X3T9 and its assigned task group.
- Submit the draft proposed standard to X3 for further processing.

3.5. Resources - Individuals and Organizations Competent in Subject Matter

The current membership of X3T9.2 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 X3T9.2 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 task group X3T9.2 which was responsible for developing the draft AT Attachment standard.

3.7. Anticipated Frequency and Duration of Meetings

Task group X3T9.2 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 ATA-2 standard will provide an upward growth path complementary to the 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 ATA-2 standard will provide an upward growth path complementary to the 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 ATA-2 testing as may be available to the committee through the voluntary efforts of the various participants in X3T9 and its assigned task group. 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 attendant with AT Attachment and in accordance with accepted X3 patent policies.

5. Closely Related Standards Activities

5.1. Existing Standards

None.

5.2. X3 Standards Development Projects

X3T9.2/90-143 AT Attachment Interface.

5.3. X3/SPARC Study Groups

None.

5.4. Other Related Domestic Standards Efforts

None.

5.5. ISO 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.