

1. Identification of Proposed Project

1.1 Title: SCSI-3 Primary Commands (SPC)

1.2 Proposer

This project is proposed by the X3T9 Technical Committee. For additional information, please contact John B. Lohmeyer, X3T9.2 Chairman, at NCR Corporation, 1635 Aeroplaza Dr., Colorado Springs, CO 80916, (Phone: 719-596-5795 Fax: 719-597-8225) or Dal Allan, X3T9.2 Vice-Chairman at ENDL, 14426 Black Walnut Ct., Saratoga, CA 95070 (Phone: 408-867-6630 Fax: 408-867-2115).

1.3 Date Submitted: October 1992 (X3T9.2 to X3T9)

1.4 Project Type: Development

2. Justification of Proposed Standard or Technical Report

2.1 Needs

The rich command set defined by the Small Computer System Interface (SCSI-2) has resulted in a standard which is too large and unwieldy to be revised in toto. By separating the command sets into multiple standards it will be possible to maintain the SCSI-3 command sets without having to coordinate revisions to each command set with every other command set.

Splitting the SCSI command sets creates one obvious problem: What should be done with the commands that are common to more than one SCSI device type? If these commands are documented in each command set standard, there is a vulnerability to divergence, intended or unintended. The SCSI-3 Primary Commands standard is intended to solve this problem by including those commands that are either essential to all SCSI devices or may be defined consistently for more than one SCSI command set.

2.2 Recommended Scope of Standard or Technical Report

The SPC is intended to provide a definition of those commands absolutely necessary to function in an SCSI environment plus those commands that are defined consistently for more than one command set. This command set will provide the means to identify the device type and hence identify which command set is appropriate for the device.

Functions which will be considered for incorporation include:

- a) Essential commands for all SCSI device types.
- b) Optional commands that are defined for more than one SCSI device type (common to more than one command set).
- c) Other capabilities which fit within the general scope of implementing the SCSI-3 Primary Commands 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

Other efforts exist within X3T9.2 to broaden the application of SCSI.

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 Primary Commands in a manner which expands the alternatives available to host system manufacturers and peripheral suppliers.

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 SPC is for use in closed systems.

3.4 Recommended Program of Work

The following program of work is planned for the SPC standard:

- Solicit participation from present and future SCSI participants through X3T9.2 procedures and through press releases. Invite comments by end-user organizations and invite proposals from organizations that may have a contribution to a viable SPC standard.
- Establish functional requirements for SPC functional additions.
- Prepare a draft standard based on proposals submitted and other information gathered during the initial investigation.
- Consider the results of SPC 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.

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): June 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 SPC 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 SPC 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 SPC 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 in accordance with accepted X3 patent policies.

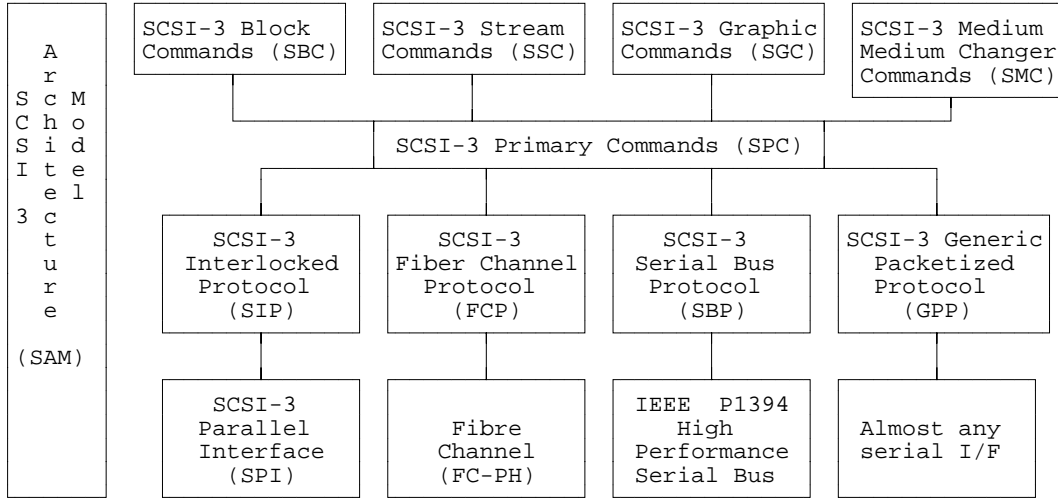
5. Closely Related Standards Activities

This standard extends and enhances the SCSI-2 (X3.131-199x) and is a member of the SCSI-3 family of standards (see 5.2, below).

5.1 Existing Standards: none

5.2 X3 Standards Development Projects

The SCSI-3 Primary Command standard is one part of the overall SCSI-3 family of standards:



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