

IEEE Standards
PROJECT AUTHORIZATION REQUEST (PAR)

IEEE

1. Date of Request: 02/04/92

2. Assigned Project #: P1285

3. Does this PAR revise a previously approved PAR? YES NO4. Description of Proposed Document Standard Recommended Practice New Revision of Std. _____ Trial Use Full Use

5. Project Title:

Standard for Scalable Storage Interface

6. Scope of Proposed Standard: (Use attachment sheet if necessary)

Define a new scalable interface for use with future physically small-sized, memory-mapped, non-volatile storage units; the interface to be suitable for direct attachment to printed circuit boards. The term "storage unit" can encompass rotating storage (such as a disk drive) or non-rotating, non-volatile storage (such as Flash memory). The interface is intended for use with either a single storage unit or with many coordinated storage units. Issues of concurrency, latency, bandwidth, extensibility, negotiation and partitioning, among others, will be addressed. Support is to be provided for deterministically scheduling data transfers, including data transfers spanning large numbers of units.

7. Purpose of Proposed Standard: (Use attachment sheet if necessary)

Small-sized storage units attached directly to printed circuit boards require a new interface architecture that allows elimination of today's connectors and cables, for reasons of cost, size, reliability, etc. An interface model in which storage units become part of main memory, rather than attachments to an I/O channel, represents a paradigm shift which simplifies the storage unit design and can support scheduling of data transfers spanning large numbers of units. The increasing demands placed on storage performance by real-time applications underscore the need for support in future systems of data transfer scheduling which may be deterministic.

8. SPONSOR: Society: Computer Society
Committee: Microprocessor and Microcomputer Standards Subcommittee

9. Name of group that will write the standard: C/MM P1285 Working Group

10. Target Completion Date: 4Q93

11. Proposed Coordination: (See instructions.)

SCC10 (IEEE Dictionary) & Editorial Staff Circulation of drafts
 ASC X3 (T9.2) by Circulation of Drafts
 IEC/ISO JTC1 SC 26 TAG by Circulation of Drafts
 IEEE Std 1212 by Circulation of Drafts
 ASC X3 (T9.2) by Liaison Appointment
 ASC X3 (T9.2) by Joint Meetings

12. Are you aware of any patent, copyright or trademark issues? YES NO
(If yes, attach a sheet with an explanation)Are you aware of any standards or projects with a similar scope? YES NO
(If yes, attach a sheet with a complete description of the impact of the similarities.)

The original PAR scope, purpose, and coordination have been changed to reflect discussions between X3T9.2 and IEEE MSC.

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(cont'd)

13. Copyright Agreement for IEEE Standards

I hereby acknowledge my appointment as Official Reporter to the P1285 Working Group Committee to write/revise a Standards Publication (entitled or to be entitled) Standard for Scalable Storage Interface

In consideration of my appointment and the publication of the Standards Publication identifying me, at my option, as an Official Reporter, I agree to avoid knowingly incorporating in the Standards Publication any copyrighted or proprietary material of another without such other's consent and acknowledge that the Standards Publication shall constitute a "work made for hire" as defined by the Copyright Act, and, that as to any work not so defined, I agree to and do hereby transfer any right or interest I may have in the copyright to said Standards Publication to IEEE.

Martin Freeman
 Name /s/ Martin Freeman
 (chair of working group)
 Title Principal Scientist
 Date 3/18/92

14. Person delegated to receive communications and conduct liaison with interested parties:

(This is normally the chair of the working group. If not, please indicate IEEE position.)

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15. Submitted by:

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