# Accredited Standards Committee\*

X3, Information Processing Systems

**Doc. No.:** X3T9.2/93-0172 R0

**Date:** August 11, 2000

Project: Ref. Doc.:

Reply to: J. Lohmeyer

To: Membership of X3T9.2

From: Lamers/Lohmeyer

Subject: Minutes of X3T9.2 General Working Group November 9, 1993

## Agenda

- 1. Opening Remarks
- 2. Attendance and Membership
- 3. Approval of Agenda
- 4. Physical Topics
  - 4.1 SCSI-3 Physical Interface (Project 855 rev 12b) [Lamers]
    - 4.1.1 Relationship of SPI & SCSI-2 (93-175r0) [Ham]
    - 4.1.2 RAID Issues in SPI (93-149) [Aloisi]
- 5. Protocol Topics
  - 5.1 SCSI-3 Architecture Model SAM (X3T9.2/994D) [Monia]
  - 5.1.1 SCSI-3 Addressing (93-169) [Penokie]
  - 5.2 SCSI-3 Interlocked Protocol (Project 856D) [Lamers]
  - 5.3 SCSI-3 Generic Packetized Protocol (Project 991D) [Stephens]
  - 5.4 SCSI-3 Serial Bus Protocol (Project 992D) [Lamers]
  - 5.5 SCSI-3 Fibre Channel Protocol (Project 993D) [Snively]
- 6. Command Sets
  - 6.1 SCSI-3 Primary Commands (Project 995D) [Weber]
  - 6.2 SCSI-3 Block Commands (Project 996D) []
  - 6.3 SCSI-3 Stream Commands (Project 997D) [Stephens]
    - 6.3.1 Density Code (93-163) [Lappin]
  - 6.4 SCSI-3 Graphics Commands (Project 998D) [Stephens]
  - 6.5 SCSI-3 Medium Changer Commands (Project 999D) [Stephens]
- 7. General Working Group Items
  - 7.1 Faster than Fast SCSI (93-174r0) [Ham]
  - 7.2 Serial Storage Protocol project prosoal (93-xxxr0) [Scheible]
  - 7.3 Multi-Media Command Set project proposal () [Harris]
  - 7.4 AT Protocol project proposal () []
  - 7.5 Corrections to SCAM (93-173r0) [Gardner]
- 8. Meeting Schedule
- 9. Adjournment

### Results of Meeting

#### 1. Opening Remarks

John Lohmeyer the Chair, called the meeting to order at 9:00 a.m., Wednesday, November 10, 1993. He thanked NCR for hosting the meeting.

As is customary, the people attending introduced themselves. A copy of the attendance list was circulated for attendance and corrections.

It was stated that the meeting had been authorized by X3T9.2 and would be conducted under the X3 rules. Ad hoc meetings take no final actions, but prepare recommendations for approval by the X3T9.2 task group. The voting rules for the meeting are those of the parent committee, X3T9.2. These rules are: one vote per company; and any participating company member may vote.

The minutes of this meeting will be posted to the SCSI BBS and the SCSI Reflector and will be included in the next committee mailing.

John noted that X3.131 had passed the X3 letter ballot and was at ANSI for compliance review.

He also stated that OMC had recommended that X3T10 be established and an accelerated letter ballot will be done.

### 2. Attendance and Membership

Attendance at working group meetings does not count toward minimum attendance requirements for X3T9.2 membership. Working group meetings are open to any person or company to attend and to express their opinion on the subjects being discussed.

The following people attended the meeting:

X3T9.2 General Working Group Meeting Attenders

Name	S	Organization	Electronic Mail Address
45 people presen	 nt		

Status Key: P - Principal

A - Alternate O - Observer L - Liaison S,V - Visitor

## Approval of Agenda

The proposed agenda was approved.

## 4. Physical Topics

### 4.1 SCSI-3 Physical Interface (Project 855 rev 12b) [Lamers]

### 4.1.1 Relationship of SPI & SCSI-2 (93-175r0) [Ham]

Bill Ham presented a document he has developed that details the relationship of SCSI-3 physical to SCSI-2 physical. The document covers connectors, terminators, and cable assemblies.

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#### 4.1.2 RAID Issues in SPI (93-149) [Aloisi]

The capacitor on TERMPWR when using active terminators in a hot plug situation causes a voltage droop that results in data corruption.

Paul Aloisi requested that SPI be modified to included a maximum bypass capacitor fo  $5\ \mathrm{uF}$ .

Bill Ham raised the question fo whether or not 220/330 passive termination is allowed in SPI. The document does not specifically prohibit it; the question is can a passive terminated device meet the electrical requirements in SPI.

Paul requested an execption to RS-485 for differential that the common mode be limited to 0-5~v DC. This subject has been visited in the past and it was not possible to get consensus on reducing the common mode range.

- 5. Protocol Topics
- 5.1 SCSI-3 Architecture Model SAM (X3T9.2/994D) [Monia]
- 5.1.1 SCSI-3 Addressing (93-169) [Penokie]
- 5.2 SCSI-3 Interlocked Protocol (Project 856D) [Lamers]
- 5.3 SCSI-3 Generic Packetized Protocol (Project 991D) [Stephens]
- 5.4 SCSI-3 Serial Bus Protocol (Project 992D) [Lamers]
- 5.5 SCSI-3 Fibre Channel Protocol (Project 993D) [Snively]

Issues with AEN and Autosense and third party copy - John seeking advice.

- 6. Command Sets
- 6.1 SCSI-3 Primary Commands (Project 995D) [Weber]
- 6.2 SCSI-3 Block Commands (Project 996D) []
- 6.3 SCSI-3 Stream Commands (Project 997D) [Stephens]
- 6.3.1 Density Code (93-163) [Lappin]

Ed Lappin requested a density code for a new 8mm cartridge tape. A code of 27h was assigned.

Ed also presented a requested change to READ POSITION command to get a total current postion including partion, file, and set number.

6.4 SCSI-3 Graphics Commands (Project 998D) [Stephens]

#### 6.5 SCSI-3 Medium Changer Commands (Project 999D) [Stephens]

## 7. General Working Group Items

### 7.1 Faster than Fast SCSI (93-174r0) [Ham]

Doug Wagner introduced the topic of ultra-SCSI. At this stage it is only a timing change and needs further investigation by interested parties. It is intended only for the differential market.

Bill Ham presented a set of results from experiments perform in the DEC labs.

- 7.2 Serial Storage Protocol project prosoal (93-xxxr0) [Scheible]
- 7.3 Multi-Media Command Set project proposal () [Harris]
- 7.4 AT Protocol project proposal () []
- 7.5 Corrections to SCAM (93-173r0) [Gardner]

#### 8. Meeting Schedule

The next working group meetings will be January 10-13, 1994 at the Catamaran Hotel (619-488-1081) in San Diego, CA hosted by Vitro Corporation. The room rates are \$99.00 including tax. The reservation deadline for these rates is December 16, 1993. The group name is X3T9.2. The host contact is Rich Bailly at TEL: 619-569-1991, FAX: 619-569-0117, (rbailly@nosc.mil).

## 9. Adjournment

The meeting was adjourned at 5:00 p.m. on Wednesday November 10, 1993.