

Doc. No.: X3T9.2/93-100 R0
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Project: 791-D
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Reply to: S. Finch

To: Membership of X3T9.2
From: Lawrence J. Lamers
Subject: Minutes of Disk Drive Working Group

Agenda

1. Opening Remarks
2. Attendance and Membership
3. Approval of Agenda
4. AT Attachment Status
5. ATA Extensions
- 5.1 Extensions Versus Enhancements or Both
- 5.2 Local Bus
6. Meeting Schedule
7. Adjournment

Results of Meeting

1. Opening Remarks

Dal Allan, the Chair, called the meeting to order at 1:00 p.m., Monday May 17, 1993. He thanked Don Tolmie of Los Alamos Labs 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.

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:

Disk Drive Working Group Meeting Attenders

Name	S	Organization	Electronic Mail Address
Mr. Jan V. Dedek	P	Ancot Corp.	
Mr. John Geldman	A	Cirrus Logic Inc.	john@gcirrus.com
Mr. Nicos Syrimis	A	Cirrus Logic Inc.	
Ms. Erin Shelby	O	Conner Peripherals	
Mr. Lane Lee	O	Conner Peripherals	

3. Approval of Agenda

The draft agenda was approved.

4. ATA Revision 4.0

ATA version 4a sent to X3T9 for second public review.

5. ATA Extensions

5.1 Extensions Versus Enhancements or Both

Steve Finch reported that he had incorporated the JEDEC approach to 3 volt operation. John Geldman stated that Martin Rausch had done some extensive modeling and he would attempt to get that information for use in the committee.

What constitutes ATA extensions?

Steve enumerated the list of ATA issues awaiting input.

- lock and unlock commands - WD
- 68-pin ATA - WD
- Enhanced power mode - Zenith
- Download microcode - Quantum

- Lock and Unlock Commands
- Format Track LBA
- 3v/5v
- improved timing

- adding other device types (CD-ROM and Tape)

What is needed is a draft document that incorporates the above ideas so that people can see there is work actively going on. Steve promised to attempt this.

5.2 Local Bus

Tom recapped the minutes of the last local bus working group. It was noted that the DMA timing values were not included in the minutes. A revised minutes will be issued.

The latest proposal 93s015r1 was available. Further changes are expected as a result of this meeting.

There was considerable debate over whether or not the protocol in Tom's document is forward compatible with ATA extensions.

Since there was time available the group went into the two latest revisions of John Geldman's proposals (93s005r3, 008r3). There was extensive debate on invoking and reporting the higher performance modes.

Agreements:

Word 64	Advanced PIO Mode
15-8	Active
7-0	Supported
	Bit 0 mode 3
	Bit 1 mode 4
	Bit 2-7 Reserved
	Bit 8 3 active
	Bit 9 4 active

MW DMA exits and cannot go away. The interim choices are pseudo-DMA or IORDY PIO.

The next meeting of the Disk Drive Working Group is planned for July 19, 1993 from 2:00 p.m. to 8:00 p.m. at the Sheraton Tara Inn, Bedford, MA.

8. Adjournment

The meeting was adjourned at 4:30 p.m. on Monday, May 17, 1993.