Accredited Standards Committee[*]
X3, Information Processing Systems

To: Membership of X3T10

From: Lamers/Finch

Subject: Minutes of X3T10 ATA Working Group May 19, 1994

Agenda

<u>**Results of Meeting**</u>

1.   Opening Remarks

Steve Finch convened the meeting at 9:00 am. Steve thanked Charles Brill of AMP 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 X3T10 and would be conducted under the X3 rules. Ad hoc meetings take no final actions, but prepare recommendations for approval by the X3T10 task group. The voting rules for the meeting are those of the parent committee, X3T10. 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, Introductions

Attendance at working group meetings does not count toward minimum attendance requirements for X3T10 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.

Alan Olson	3M Company	usmmm5cd@ibmmail.com
Richard Kalish	Adaptec	rkalish@rahul.net
Lawrence J. Lamers	Adaptec	ljlamers@adaptec.com
Norm Harris	Adaptec	nharris@adaptec.com
John Lohmeyer	AT&T/NCR Microelectronics	john.lohmeyer@ftcollinsco.ncr.com
John Geldman	Cirrus Logic	johng@cirrus.com
Joseph Chen	Cirrus Logic	chen@cirrus.com
Ken Hallam	ENDL	khallam@endlas.com
Dal Allan	ENDL	250-752@mcimail.com
Edward Hu	Future Domain	
Rene Macare	Future Domain	renem@fdc.mhs.compuserve.com
Nancy Cheng	Hitachi Computer Products	n.chen@hitachi.com
Dan Colegrove	IBM	colegrove@vnet.ibm.com
Dean Wallace	Linfinity	
Pete McClean	Maxtor	pete_mcclean@maxtor.com
Ray Heineman	Maxtor	ray_heineman@maxtor.com
Jay Neer	Molex	
Bruce Anderson	NEC Technologies	banderson@nectech.com
Skip Jones	Qlogic	sk_jones@qlc.com
Mike Carpenter	Qlogic	m_carpenter@qlc.com
Jim McGrath	Quantum Corp	JMCGRATH@QNTM.COM
John Masiewicz	Seagate Technology	masiewicz@notes.seagate.com
Hale Landis	Seagate Technology	landis@notes.seagate.com
Gene Milligan	Seagate Technology	Gene_Milligan@notes.seagate.com
Stephen Finch	Silicon Systems	5723283@mcimail.com
Paul Aloisi	Unitrode Integrated Circuit	Aloisi@uicc.com
Tom Hanan	Western Digital	t_hanan@dt.wdc.com

3.   Approval of Agenda

The agenda was approved as proposed.

4.   Document Distribution

Copies of ATA-2 Proposed Working Draft revision 2c was distributed.
X3T10/94-115r0 "Comments on ATA-2" was distributed.

5.   Old Business

5.2   16.6 MB/s Issues [94-045r3] (Hanan/Finch)

Jim McGrath stated that his understanding of the PIO timing diagram was that a device cannot begin deassertion of IORDY until DIOR/DIOW is asserted instead of after the address is stable. He stated that he believed that this was not the intent of the group.

The conclusion was to put 'xxx' from Addr Valid to DIOR/DIOW asserted for IORDY (1-2) and (1-3).

Jim McGrath stated that his understanding was that a device does not want to validate use of IOCS16- in higher speed modes.

Tom wants a * next to IOCS16 and t7 removed and the note stating the signal is optional and shown for reference only. John Geldman stated this should be for both mode 3 and mode 4. Jim McGrath stated that he wants it to be a do not connect line. Larry Lamers pointed out that the wording should be constructed with a view to the future use of this line for error detection.

The following note will be added 'IOCS16- is shown for modes 0,1,2. For other modes this signal is not valid. The timings t7 and t8 only apply to modes 0,1,2.'

Dal Allan requested that the t8 timing indicating IOCS16 negation be extended so that it is not confused with data transitions. Agreed. Add note on t7 and t8 to table on PIO timing parameters as note 5. The values should be delete also for Mode 4 table.

5.1   Identify Drive for Over 528 MB [94-089r2] (Landis)

A question of what the disposition of SFF-8019 should be vis-a-vis the X3T10 document. The problem stems from having two editors.

Technically this is still an SFF document. Hale withdrew the proposal from ATA until the SFF completes its review.

6.   New Business

6.1   Project Proposals Comment Resolution [94-019,94-020,94-021,94-022] (Finch)

John Lohmeyer presented the results of the letter ballots on the ATA-3 project proposals.

ATA3-PH Letter Ballot Results: 44:6:0:9 = 59
No: Cirrus Logic, Hewlett Packard, IBM, Quantum, Milligan (Seagate), Unitrode
Did not respond: AMD, Apple, Compaq, DPT, Future Domain, Harbor Electronics, Maxtor, P.E. Logic, Samsung

ATA3-XPT Letter Ballot Results: 44:6:0:9 = 59
No: Cirrus Logic, Hewlett Packard, IBM, Quantum, Milligan (Seagate), Unitrode
Did not respond: AMD, Apple, Compaq, DPT, Future Domain, Harbor Electronics,

Maxtor, P.E. Logic, Samsung

ATA3-PI Letter Ballot Results: 45:5:0:9 = 59
No: Hewlett Packard, IBM, Quantum, Milligan (Seagate), Unitrode
Did not respond: AMD, Apple, Compaq, DPT, Future Domain, Harbor Electronics,
Maxtor, P.E. Logic, Samsung

ATA3-BC Letter Ballot Results: 44:6:0:9 = 59
No: Cirrus Logic, Hewlett Packard, IBM, Quantum, Milligan (Seagate), Unitrode
Did not respond: AMD, Apple, Compaq, DPT, Future Domain, Harbor Electronics,
Maxtor, P.E. Logic, Samsung

The basic Issues raised include:

Is it 4, 2, or 1 project.
Relationship to SCSI-3; SAM compliance; use of SCSI-3 commands.
Clarity of division; define transport more clearly; define packet interface;
Should the ATA-PI specifically state that SCSI Block Commands are not to be used?

6.1   Comments on ATA-2 [94-115] (Geldman)

Defered to next meeting.

7.   Meeting Schedule

June 1, 1994 at Adaptec in Milpitas, CA.
June 29, 1994 at Western Digital in Irvine, CA.
July 21, 1994 at Sheraton in Manchester, NH.

8.   Adjournment

The meeting adjourned at approximately 1:00 PM.