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Reply to: Gene Milligan

To: Membership of T13
From: Gene Milligan, Chair T13
Subject: Minutes of T13 Plenary #12
August 18-19, 1998 : Boulder, CO

Start 0900

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Results of Meeting

1 Opening Remarks

Gene Milligan, the T13 Chairman, called the plenary meeting to order at 9:00 a.m., Tuesday, August 18, 1998. He thanked Pete McLean of Maxtor for hosting the meeting.

The Chair briefly reviewed the meeting rules. Discussion is open to all attendees. Principal Membership requires attendance at two out of three successive meetings and a letter to the Chair on organizational letterhead requesting membership, stating expertise and material interest in the scope of the technical committee. Votes are only allowed to Principal Membership organizations. Membership also requires payment of NCITS administration fees.

Current NCITS memberships fees for Observer, Principle, or additional Alternate are \$300 (the first alternate is free). A T13 subscription is available to Principal, Alternate, or Observer Members at a fee of \$350 with \$240 for each additional CD. On an experimental basis this year, a corporate membership of \$2500 is being offered which allows one Principal and an unlimited number of Alternates and Observers, with two CD subscriptions, and also includes the International participation fee. However since T13 is not currently participating in International Standards work, there is no International participation fee and the Corporate membership is harder to justify than with T10 and T11.

Persons with questions or requests regarding membership fees and/or subscriptions should contact Judy Gales at 202-626-5741, or fax her at 202-638-4922, or by Email at jgales@itic.nw.dc.us.

2 Approval of Agenda

Several new business items were added as reflected in these minutes and the modified agenda was approved without objection.

Item 7.1 Editorial Items

Item 11.1 Address Offset Feature

Item 11.2 Cable, connector, and mechanical items

3 Attendance and Membership

3.1 Members in Jeopardy

Members in Jeopardy for failure to attend two out of three successive meetings were not yet notified of their jeopardy. Consequently none were terminated (changed from Principal Members to Observer Members) leaving the Principal Members to 22.

The chair reviewed the NCITS list of members in terminated for non-payment of fees: OR Technology, Western Digital, and Quantum.

3.2 Attendance

Lawrence	Lamers	Adaptec, Inc.	P
Ron	Roberts	Apple Computer	A
Bob	Salem	CMD Technology	G
Ben	Chang	Cirrus Logic Inc.	O
Hale	Landis	Consultant	P
Robert	Liu	Fujitsu Computer Products	P
Tony	Goodfellow	GSI	P
Anthony	Yang	Hitachi America Ltd.	P
Adge	Hawes	IBM	G
Dan	Colegrove	IBM Corp.	P
Renee	Depew	LSI	P
Pete	McLean	Maxtor Corp.	P
Mike	Christensen	Phoenix Technologies	A
Greg	Elkins	QLogic Corp.	P
Mark	Evans	Quantum Corp.	?
Gene	Milligan	Seagate Technology	P
Marc	Noblitt	Seagate Technology	A
Tasuku	Kasebayashi	Toshiba America Electr Comp	O
Tokuyuki	Totani	Toshiba America Electr Comp	P
Tom	Hanan	Western Digital Corp.	?

4 Document Distribution

The following documents were distributed:

T13 1998 Current Document Register

Dang12r1 Agenda

D97150r2 Proposal for Power-up in Standby Feature Set McLean

D98101r2 State diagram proposal McLean

D98105r2 Clarification of nIEN and interrupt pending McLean

D98112r1 New ID Word Landis

D98113r1 New Text/Figures/Tables for ATA/ATAAPI-5 Landis

D98121r1 Proposed amendment to ATA/ATAPI-4 McLean

D98123r1 Proposal for an Address Offset Feature Colegrove

D98122r0 Cable, Mechanical and Connectors Proposal McLean

D98124r0 Draft New Energy Star MOU McLean

5 Approval of prior plenary minutes (D98107R0)

The minutes were approved as written.

6 Review of Old Action Items

62) Tom Hanan to correct remaining reflector, ftp and web site issues. Carried over (see 13.2)

78) Gene Milligan to write project proposal for addendum to ATA/ATAPI-4. Overtaken by events (see 7.1)

79) Gene Milligan to advise secretariat on disposition of ATA1 reaffirmation. Carried over.

7 NCITS 317-199x ATA/ATAPI-4 - Project 1153D

The chairman reported that the NCITS secretariat requested any editorial changes for the dpANS. This changes the approach to dealing with the editorial changes generated in T13. Instead of proposing an amendment the changes will be submitted to NCITS for inclusion.

7.1 Editorial Items (D98111r1) [McLean]

Pete McLean reviewed the proposed amendment (see D98121r0). There was no objection to approving these changes as editorial in nature.

Tony Goodfellow moved and Tokuyuki Totani seconded that document D98121r1 as amended, be approved as editorial changes and instruct the technical editor to incorporate those changes producing a revision 18 of dpANS 317, and provide that to the NCITS secretariat for submission to BSR. The motion carried 14 yes 0 no 5 absent.

Charles	Brill	AMP, Inc.	P	AB
Larry	Lamers	Adaptec, Inc.	P	Y
Ron	Roberts	Apple	A	Y
Hale	Landis	Consultant	P	Y
Paul	Raikunen	Digital	P	AB
Robert	Liu	Fujitsu Computer Products	P	Y
Tony	Goodfellow	GSI	P	Y
Anthony	Yang	Hitachi America Ltd.	P	Y
Dan	Colegrove	IBM Corp.	P	Y
Darrell	Redford	Iomega Corp.	P	AB
Pete	McLean	Maxtor Corp.	P	Y
Curtis	Stevens	Phoenix Technologies	P	Y
Greg	Elkins	QLogic Corp.	P	Y
Gene	Milligan	Seagate Technology	P	Y
Paresh	Sheth	Silicon Systems Inc.	P	AB
Alan	Longo	SyQuest Technology Corp	P	AB
Mike	Winchell	LSI	P	Y
Tokuyuki	Totani	Toshiba America Electr Comp	P	Y
Bob	Salem	CMD Technology	A	Y

8 NCITS 316-1998 -1394 to AT Attachment - Tailgate- Project 1248D

The chairman reported that NCITS 316 is approved for publication.

9 ATA/ATAPI-5 Project Proposal

The chair reported that it is approved as project 1321D.

10 Old Business

10.1 Power-up in Standby [McLean] (D97150r1)

Pete McLean presented a revised proposal including the comments from the last meeting.

Pete McLean moved and Greg Elkins seconded that D97150r2 as amended for incorporation into ATA/ATAPI-5. The motion carried unanimously.

10.2 T13 Reflector, ftp, and Web Site Setup [Hanan]

Due to reorganization Tom Hanan suggested that the committee members reassess reflector and ftp site alternatives for the October meeting.

10.3 Items from the Open Issues List [] ()**10.4 nIEN Definition (D98105r2) [McLean]**

Pete McLean reviewed the revised proposal.

Pete McLean moved and Ron Roberts seconded that D98105r2 as amended for incorporation into ATA/ATAPI-5. The motion carried unanimously.

10.5 ATA/ATAPI State Diagrams Introduction and Review [McLean] (D98101R1)

Pete McLean reviewed the current revision. Pete proposed adding a top-level state diagram that would tie all the 'subroutine' state diagrams together. The group agreed.

Ron Roberts moved and Larry Lamers seconded to replace clause 9 in ATA/ATAPI-5 with the state diagrams as presented in D98101. The motion carried unanimously.

10.6 EDD V3.0 New technical project proposal [Stevens]

Mike Christensen reported that progress is temporarily halted due to more significant events.

10.7 New ID Word (98112r1) [Landis]

Hale Landis reviewed the revised proposal.

Mike Christensen moved and Mark Evans seconded to incorporate D98112r2 in ATA/ATAPI-5. The motion carried unanimously.

10.8 New Text/Figures/Tables for ATA/ATAPI-5 (D98113r1) [Landis]

Hale Landis reviewed the changes made as a result of the review at the prior meeting. The intent is to document those things we have always done but never specified.

Hale will put together a list of all things affected by saying that device 0 shall never respond for device 1.

Hale intends to generate a revision 2.

10.9 Sleep mode to standby: () [McLean]

After receiving a reset the device shall return to the mode it was in except if it was in sleep mode, then it shall return to standby. This change was approved unanimously.

10.10 Requirement to exit sleep mode with DEVICE RESET command () [Landis]

Hale Landis will define the issue in D98126 and post it to the reflector.

10.11 Recommendation to withdraw ATA with the Five Year Review () []

The chair's action on this is pending.

10.12 32-bit ATA (D98115r0) [Goodfellow]

Tony Goodfellow reported that work is ongoing, but he was not prepared to discuss it at this meeting. Ron Roberts requested that a 32 bit ATA not be included in ATA/ATAPI-5.

10.13 Ultra ATA Implementation Guide (D98109r0) [Evans]

Mark Evans reported that a revised version will be available by the October meeting. This is being considered as material for a technical report.

10.14 Identify Device Word 80 () []

There was no objection stated to making the ATA 1 bit in word 80 obsolete.

10.15 Schedule Review

The chair reviewed the schedule. The first draft of ATA/ATAPI-5 is planned for September. The working group meeting in September is based on proposals being submitted by 9/11 as well as item 11.1. Watch the reflector for an announcement.

11 New Business

11.1 Address Offset Feature (D98123r1) [Colegrove]

Craig Branson, and Tom Culligan, of Dell participated by telecon.

Dan Colegrove reviewed the proposal using D98127r0. He noted that the method used in the rev 0 document has been changed to use SET FEATURES.

Mike Christensen indicated that the proposal was too new to fully understand the implications of an alternate boot area and the impact on their plans for SET MAX.

Mark Evans and Tony Goodfellow favored using the existing SET MAX command. The suggestion is to make the BIOS able to boot from an LBA other than zero, or boot from the reserved area.

The proposal should be reassessed; the proponents of using current SET MAX should also develop a proposal with a similar impact on the BIOS. A discussion will ensue via the reflector and teleconference tentatively scheduled for August 27, 1998 at 9:00am. Additional follow-up is planned for the 9/22-23/98 working group meeting.

11.2 Cable, Mechanical, and Connectors (D98122r0) [McLean]

Pete McLean reviewed a proposal to incorporate the SFF cable and connector material. The 80-conductor cable connectors will change the 'molded out' to 'blocked' to allow a plastic insert.

Ron Roberts moved and Tony Goodfellow seconded that D98122r0 as amended be incorporated into ATA/ATAPI-5. The motion passed unanimously.

12 Liaison Reports

12.1 EPA report () [McLean]

Pete McLean reported that an MOU has been issued (see D98124r0) by EPA. The URL for downloading the document is provided as well as a request for comment. There is a proposed requirement to achieve active mode within 8 seconds. A counter proposal without this requirement is being drafted by ITI.

12.2 T10

The chair reported that the T10 liaison report will be forwarded to the reflector.

12.3 IEEE 1394 / IEC 61883

The chair reported that the letter ballot on 1394a closed with 73% in favor, this did not meet the minimum requirement to pass. A ballot resolution working group is being formed.

The chair noted that there is a new 1394 working group on power modes.

12.4 SFF

Pete McLean reported that there are three items, 40-pin connector, 4-pin power connector, and changes to the unitized connectors still being worked. There is also some work being done on server drive communication with the enclosure. The SFF 8070, 8080, and 8090 documents will be made obsolete. SFF 8070 has material that is not covered in any other standard; this is being investigated.

13 Call for Patents

The Chair explained the patent policy. A document is available from ANSI, "Procedures for the Development and Coordination of American National Standards", at no charge. This document is also on the WWW at ftp://www.ncits.org/help/ansi_sdo.html. Section 1.2.11 contains the ANSI patent policy. Amy Marasco manages patent issues for ANSI and can be contacted at amarasco@ansi.org or 212-642-4954.

The Chair then called for patents and/or patent applications that may be necessary to comply with the requirements in T13 standards, draft standards, technical reports, or draft technical reports. There was no response to the call for patents.

14 Open Issues List Summary

None.

15 Review of Action Items

- 80) Pete McLean to prepare revision 18 of ATA/ATAPI-4 and send it to the Chair for forwarding to NCITS.
- 81) Hale Landis to put together list of all things affected by saying that device 0 shall never respond for device 1.
- 82) Pete McLean to prepare the first draft of ATA/ATAPI-5.
- 83) Dan Colegrove to setup teleconference on address offset.

16 Meeting Schedule

16.1 Authorization of Working Group Meetings

A working group is scheduled for September 22-23, 1998 in Irvine, CA; watch the reflector for details.

16.2 Long term meeting schedule

Date	Location	Host	Contact
September 22-23, 1998	Irvine, CA	Phoenix	Curtis Stevens
October 27-30, 1998*	Wailea, Maui, HI	Quantum	Mark Evans
December 8-11, 1998*	Irvine, CA	Western Digital	Tom Hanan
February 23-26, 1999*	Placerville, CA	Sierra Pac	Ron Roberts
April 27-30, 1999*	Boulder, CO	Seagate	Marc Noblitt
June 22-25, 1999*	San Jose, CA	Phoenix	Mike Christensen
August 24-27, 1999*	Boulder, CO	Maxtor	Pete McLean
October 26-29, 1999*	Wailea, Maui, HI	Quantum	Mark Evans
November 30-December 3, 1999*	Irvine, CA	Western Digital	Tom Hanan

* indicates plenary meeting.

+ indicates this meeting is tentative and may be canceled.

As noted above the next plenary meeting of T13 is October 27-30, 1998 hosted by Quantum in Wailea, Maui, HI, at the Aston Wailea Hotel.

17 Adjournment

The meeting adjourned upon completion of all the agenda items.

T13 Attendance Database - Enclosure (1)

ORGANIZATIONAL ATTENDANCE AT LAST THREE MEETINGS				----	+
INDIVIDUAL ATTENDANCE				----	+
				v	v
Charles	Brill	AMP, Inc.	P	6	1
Lawrence	Lamers	Adaptec, Inc.	P	11	3
Ron	Roberts	Apple Computer	A	11	3
William	Benson	Avatar Systems Corp.	O	0	0
Jeff	Chen	Award Software Intl.	O	0	0
George	Huang	Award Software Intl.	O	0	0
Ben	Chang	Cirrus Logic Inc.	O	6	2
Ken	Bush	Compaq Computer Corp.	O		0
Hale	Landis	Consultant	P	12	3
Irv	Tjomsland	Consultant	G	2	0
Paul	Raikunen	Digital	P	9	1
Andy	Chen	Fujitsu	A	0	3
Robert	Liu	Fujitsu Computer Products	P	5	3
Tony	Goodfellow	GSI	P	9	3
Richard	Harcourt	GSI	A1	2	3
John	Moore	Hewlett Packard Co.	O	0	0
J. R.	Sims	Hewlett Packard Co.	O	4	0
Anthony	Yang	Hitachi America Ltd.	P	8	3
Hitoshi	Ogawa	Hitachi Ltd.	O	0	3
Quang	Vuong	Hitachi Storage Products	A	0	3
Dan	Colegrove	IBM Corp.	P	12	3
Duncan	Penman	IIX Consulting	O	3	0
George	Blattner	Imation	O	1	0
John	Blagaila	Integral Peripheral	O	0	0
Darrell	Redford	Iomega Corp.	P	1	1
Renee	Depew	LSI	P	2	3
Stan	Huyge	LSI		0	3
John	Lohmeyer	LSI	G	0	3
John	Mallory	LSI	G	1	3
LeRoy	Leach	Maxtor Corp.	A	1	3
Pete	McLean	Maxtor Corp.	P	12	3
Darrin	Bulik	Micro House Int.	O	3	0
Chris	Smith	NEC Systems Laboratory	O	0	0
Son	Ho	Neomagic Corp.	O	3	0
Christopher	Mayne	O.R. Technology	T	3	0
Joe	Chen	Oak Technology	O	2	0
Lam	Dang	Oak Technology	O	0	0
Dan	Salmonsens	Oak Technology	O	0	0
Stephen	Heil	Panasonic Technologies	O	0	0
Mike	Christensen	Phoenix Technologies	A	7	3
Curtis	Stevens	Phoenix Technologies	P	6	3
Skip	Jones	QLogic	A	0	3
Greg	Elkins	QLogic Corp.	P	10	3
Mark	Evans	Quantum Corp.	?	12	3
James	McGrath	Quantum Corp.	?	1	3
Kenichi	Kojima	Sanyo Electric Co Ltd	O	4	0
John	Masiewicz	Seagate Technology	A	1	3
Gene	Milligan	Seagate Technology	P	12	3
Marc	Noblitt	Seagate Technology	A	11	3
Paresh	Sheth	Silicon Systems Inc.	P	3	1
Yogi	Schaffner	Silicon Systems, Inc.	A	5	1
Rich	Wahler	Standard Microsystems Corp	O	0	0
Alan	Longo	SyQuest Technology Corp	P	1	0
Patrick	Mercer	SyQuest Technology Corp	A	4	0
Tokuyuki	Totani	Toshiba America Electr Comp	P	8	3
Ken	Hallam	Unisys Corp.	O	0	0
Tom	Hanan	Western Digital Corp.	?	12	3
Masa	Morizumi	Yamaha	O	1	0

