



Technical Working Group

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Date: November 5, 1999
Reply to: charles.tashbook@dalsemi.com

To: Membership of STA
From: Charles Tashbook
Subject: Minutes of SCSI Harbor Meeting
November 4, 1999 – Monterey, CA

Agenda

1. Opening Remarks and Introductions
2. Approval of Agenda
3. Attendance and Membership
4. Approval of Minutes - September 16, 1999 Huntington Beach, CA (99s027r0)
5. Document Distribution
6. Patent Issues
7. Review of Old Action Items
8. SCSI Harbor Status
9. Harbor Thermal Testing
10. SCSI Harbor Design Review
11. SCSI Plug and Play
12. Old Business
13. New Business
14. Review of Action Items
15. Meeting Schedule
16. Adjournment

Results of Meeting

1. Opening Remarks and Introductions

Paul Aloisi opened the meeting at 1:30 pm. He thanked Larry Lamers of Adaptec for hosting the meeting. As is customary, the people present introduced themselves. An attendance sheet was circulated.

The voting rules for participants in STA Tech meetings are contained in 97s109r0.

Paul Aloisi's email address has changed to paul_aloisi@ti.com

2. Approval of Agenda

The agenda was approved as written.

3. Attendance and Membership

The following people attended the meeting:

Name	Organization	Electronic Mail Address
Mr. Lawrence J. Lamers	Adaptec, Inc.	ljlamers@ix.netcom.com
Mr. Gregg Neely	Andataco	greggn@andataco.com
Mr. Michael Grant	Ciprico Inc.	mgrant@ciprico.com
Mr. Dennis Lang	Circuit Assembly Corp.	dennisl@ca-online.com
Dr. William Ham	Compaq	bill_ham@ix.netcom.com
Mr. Charles Tashbook	Dallas Semiconductor	charles.tashbook@dalsemi.com
Mr. Keith W. Parker	Diogenes SCSI	diogenes@europa.com
Mr. Paul Remley	Fujitsu (FCPA)	premley@fcpa.fujitsu.com
Mr. Kazuo Sakai	Hitachi, Ltd.	k-sakai@str.hitachi.co.jp
Mr. J. A. Jones	Intel Corporation	james.a.jones@intel.com
Mr. John Lohmeyer	LSI Logic Corp.	lohmeier@t10.org
Mr. Jay Neer	Molex Inc.	jneer@molex.com
Mr. Alvin Cox	Seagate Technology	alvin_cox@notes.seagate.com
Mr. Benjie Sun	Silicon Graphics	bsun@engr.sgi.com
Mr. Paul D. Aloisi	Texas Instruments Inc.	paul_aloisi@ti.com
Mr. John Kan	IBM	jckan@us.ibm.com
Mr. Koichi Ono	Hitachi	konichi.ono@hal.hitachi.com
Mr. Bill Gintz	Seus, Inc	wcgintz@ix.netcom.com
Dr. William Dawkins	Dell	bill_dawkins@dell.com

19 People Present

4. Approval of Minutes - September 16, 1999 Huntington Beach, CA (99s027r0)

The minutes of the last meeting (see 99s027r0) were approved as written.

5. Document Distribution

All SCSI Harbor documents are available at the ftp and web sites:

<ftp://ftp/scsita.org/pub/harbor>

<http://www.scsita.org/harbor>

Documents will be put on these sites in PDF format. Additionally, the meeting minutes will be distributed on the Harbor reflector (harbor@scsita.org). To be added to the Harbor Reflector, please send an email

to info@scsita.org. In the email, please mention that you wish to be added to the Harbor reflector and include your full contact information (organization, address, phone, fax, and email).

6. Patent Issues

Intermac patent litigation issue went to patent attorneys who are still reviewing. The patent requires the connector in the disk drive, where Harbor has a direct connect. STA has an outside attorney. He says the InterMac patent doesn't apply to what Harbor is doing. We seem to be in the clear.

7. Review of Old Action Items

- 1) SGI or Fujitsu will do thermal testing and present results plus anticipated future needs. *Carry over.*
- 2) Each drive vendor to provide SGI and Intel a total of 40 1.0-inch and 30 1.6-inch drives for testing 68-pin drives for thermal test will be provided to Mark Olsen and 80-pin drives for vibration test will be provided to Benjie Sun. *Partially complete.*
- 3) Charles DeJesus (Quantum) will provide Benjie with thermal and vibration contact information for his company. He will also provide NDA information to Tom Irvine and Benjie Sun. *Partially complete--missing NDA info.*
- 4) John Kan (IBM) will provide Benjie with thermal and vibration contact information for his company. He will also provide NDA information to Tom Irvine and Benjie Sun. *Carry over.*
- 5) Parvis Rahmany (Intel) will provide design personnel 4Q99. *Carry over.*

8. SCSI Harbor Status

Presentation by Benji Sun, SGI.

See handout in 99s030r0.

Issues:

- January meeting date will be Wed Feb 9th 9am-1pm in Huntington Beach
- Drive proprietary info. Quantum and IBM must still supply
- RV spring force variations cause dock deflections from 1X to 3X
- IP and licensing issues are now covered by STA patent policy

Goals for next review (Feb 9 Huntington Beach):

Hold design review that incorporates thermal and RV results into re-design
Thermal results to include backplane.

9. Harbor Thermal Testing

Data presented on transparencies (see 99s031r0).

Airflow required to cool tested drives

Collect & summarize data for remaining drives; characterize airflow impedance with reference backplane and hardware

10. Shock Test

Presentation by Diep Ngo, SGI

See handout in 99s032r0.

11. Server Structure Infrastructure (SSI)

Presented by J.A. Jones (see 99s033r0).

12. Rev2 Wrapper/Dock Design

Presentation by Benji Sun, SGI.

Rev 2 entails a redesign of the dock and the wrapper that changes the locking to one side of the dock, as opposed to the dual side locking in rev 1. This may add a \$0.15-0.20 piece of sheet metal to chassis, between each drive, to obtain stiffness.

13. SCSI Harbor Design Review

This item was deferred to the next meeting.

14. SCSI Plug and Play Revision

Larry Lamers said that he is working on a proposal for an updated SCSI Plug and Play document. He is in contact with Microsoft to find out their interest in supporting such a revision.

15. Old Business

None.

16. New Business

None.

17. Review of Action Items

None.

Note: Contact information is:

Mark Olsen
Silicon Graphics
1050 Lowater Road
Chippewa Falls, WI 54729

Benjie Sun
Silicon Graphics
2011 N. Shoreline Blvd.
Mountain View, CA 94043
(650) 933-5573
bsun@engr.sgi.com

18. Meeting Schedule

The next STA Technical meeting will be on Wednesday February 9, 2000 beginning at 9:00 am in Huntington Beach, CA. The meeting hotel is the Hilton Waterfront (714-960-7873). See 99s034r0.pdf on the Harbor Web site for details.

March 9, 2000 in Dallas, TX 1:30pm - 6:00 pm. The meeting hotel is the Crowne Plaze Suites (972-233-7600). See 99s035r0.pdf on the Harbor Web site for details.

19. Adjournment

The meeting was adjourned at 3:44 pm on Thursday, November 4, 1999.