



Doc. No.: STA/97s112r0
Date: December 2, 1997
Ref. Doc.:
Reply to: ljlamers@ix.netcom.com

To: Membership of STA
From: Lawrence J. Lamers
John Lohmeyer
Subject: Minutes of SCSI Harbor Meeting
December 2, 1997 - Newport Beach, CA

Agenda

1. Opening Remarks and Introductions
2. Approval of Agenda
3. Attendance and Membership
4. Approval of Minutes
5. Document Distribution
6. Review of Old Action Items
7. Old Business
 - 7.1 Show & Tell of Existing Solutions
 - 7.2 Selection of Document Editor
8. Technical issues
 - 8.1 Taxonomy proposal [Ham]
 - 8.2 General design principles (97s110r0) [Anderson]
 - 8.3 Technical goodies (97s104r0) [McGarrah]
9. New Business
 - 9.1 Design performance verification strategy [Ham]
 - 9.2 Straw horse document review
10. Review of Action Items
11. Meeting Schedule
12. Adjournment

Results of Meeting

1. Opening Remarks and Introductions

Louis Grantham, Chair of the STA Technical group, was unable to attend. Skip Jones, STA vice-Chair, opened the meeting at 1:00 pm. As is customary, the participants introduced themselves. After getting the meeting launched, Skip skipped, asking John Lohmeyer to chair the remainder of the meeting. In keeping with Skip's example, John turned the meeting over to Pat McGarrah to lead the technical discussions (beginning with Old Business).

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

2. Approval of Agenda

The agenda was approved as modified.

3. Attendance and Membership

The following people attended the meeting:

Name	Organization	Electronic Mail Address
Mr. Lawrence J. Lamers	Adaptec, Inc.	ljlammers@ix.netcom.com
Mr. Thomas W. Martin	Adaptec, Inc.	tmartin@corp.adaptec.com
Mr. Ian Morrell	Circuit Assembly	ianm@ca-online.com
Mr. Dennis Lang	Circuit Assembly Corp.	dennisl@ca-online.com
Dr. William Ham	Digital Equipment Corp.	bill_ham@ix.netcom.com
Mr. I. Dal Allan	ENDL	dal_allan@mcimail.com
Mr. Tom Winsemius	IBM	twinsemi@us.ibm.com
Mr. George Penokie	IBM Corp.	gop@us.ibm.com
Mr. Bob Masterson	Methode Electronics Inc.	rwmast@methode.com
Mr. Jay Neer	Molex Inc.	jneer@molex.com
Mr. Skip Jones	QLogic Corp.	sk_jones@qlc.com
Mr. Patrick McGarrah	Quantum Corp.	pmcgarra@tdh.qntm.com
Mr. Benjie Sun	Silicon Graphics	bsun@engr.sgi.com
Mr. Frank Miyahira	Sun Microsystems	frank.miyahira@sun.com
Mr. Dennis Hahn	Symbios, Inc.	dennis.hahn@symbios.com
Mr. John Lohmeyer	Symbios, Inc.	john.lohmeyer@symbios.com
Mr. Arlan P. Stone	UNISYS Corporation	arlan.stone@unisys.com
Mr. Paul D. Aloisi	Unitrode Corporation	aloisi@unitrode.com

18 People Present

4. Approval of Minutes

The minutes of the last meeting (see 97s106r0) 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. Review of Old Action Items

Pat McGarrah reported that some vendors had submitted their specifications to him.

7. Old Business

7.1 Show & Tell of Existing Solutions

Pat McGarrah collected the recollections from the previous meeting summarizing the points made.

A cam mechanism is essential.

There was a discussion regarding intellectual properties. At present there is no explicit patent policy at STA. Louis Grantham was given an action item (in absentia) to request a policy from STA.

Dennis Hahn of Symbios presented their current wrapper design. The basic design is an aluminum casting to provide the rigidity to support a 10000 rpm drive. A spring is used to keep the wrapper held tightly in the envelope, which improves the RVI (Rotational Vibration Index) significantly. The handle snaps on so that custom handles can be provided for different customers.

There was general agreement that the design would make a good starting point for SCSI Harbor. Dennis agreed to ask his management on whether Symbios is willing to contribute the design.

Pat McGarrah noted that SCSI Harbor needs to work in all orientations.

The dimensions inside the wrapper are not the concern of this group. Note that drives do vary in actual width even though they may have the same nominal width.

Bill Ham presented a design for a wrapper that is used for a low-end Digital server. It was immediately apparent that the Digital design completely covers the drive PCB. Should this be a SCSI Harbor requirement? This is a trade off with cooling and cost. It was generally agreed that the cover could be an optional component.

Tom Winsemius lead a discussion about additional needs for the wrapper design.

Where does the shock mounting go – on the drive or on the wrapper? Putting springs on the rails to provide compliance is a good idea.

Larry Lamers took pictures of the Symbios and Digital wrappers (see 97s114r0 and 97s115r0, respectively).

7.2 Selection of Document Editor

The need for a volunteer to edit the document was re-iterated. Anyone wishing to volunteer should please contact Pat McGarrah or Louis Grantham.

8. Technical issues

8.1 Taxonomy proposal [Ham]

Bill Ham presented his taxonomy and architecture. The first debate was over the terminology. Bill suggested the word enclosure, a closed EMI barrier, for use as the place where the wrapper is installed instead of envelope. After a great deal of push back, it was agreed to change 'envelope' to 'dock' so as to stick with the nautical theme.

There were additional suggestions on terminology changes, none accepted.

There was a lengthy discussion on how much should the SCSI Harbor document specify.

Bill made several enhancements to his document which he provided as 97s113.

8.2 General design principles (97s110r0) [Anderson]

This topic was postponed until a choice is made on the starting design.

8.3 Technical goodies (97s104r0) [McGarrah]

Next meeting.

9. New Business

9.1 Design performance verification strategy [Ham]

This topic was postponed until a choice is made on the starting design.

9.2 Straw horse document review

No draft yet.

10. Review of Action Items

- 1) Louis Grantham will request a patent policy from STA.
- 2) Bill Ham will publish a revised taxonomy proposal.
- 3) Dennis Hahn will ask Symbios management on whether they are willing to contribute the Symbios design as a starting point design.
- 4) Pat McGarrah will map criteria from interface to options in Bill's taxonomy.
- 5) John Lohmeyer will check on co-locating a Feb '98 SCSI Harbor meeting with T13 in Fort Collins.

11. Meeting Schedule

The next meeting is planned for:

Tuesday, January 20, 1998 hosted by QLogic starting at 1:00pm in Irvine, CA.

Follow-on meetings are planned for:

Potential meeting the week of Feb. 16 in Fort Collins, CO.

Thursday, March 19, 1998 in San Diego, CA during the T10 meeting week.

12. Adjournment

The meeting adjourned at 4:30pm.