



**Technical Working Group**

**Doc. No.:** STA/99s0o5r0  
**Date:** March 11, 1998  
**Reply to:** lohmeier@ix.netcom.com

To: Membership of STA  
From: John Lohmeyer  
Subject: Minutes of SCSI Harbor Meeting  
March 11, 1999 – Harrisburg, PA

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**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. Document Review [Benjie Sun] (98s004r5)
8. Old Business
  - 8.1 Testing Strategy [Ham]
9. New Business
10. Review of Action Items
11. Meeting Schedule
12. Adjournment

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**Results of Meeting**

**1. Opening Remarks and Introductions**

Paul Aloisi opened the meeting at 2:30 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.

**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. Elwood Parsons	AMP, Inc.	etparson@amp.com
Mr. John Bauer	Amphenol	john.bauer@amphenol-usa.com
Mr. Paul Chang	Amphenol Taiwan	paul.chang@amphenol.com.tw
Mr. Johnson Chen	Amphenol Taiwan	johnson.chen@amphenol.com.tw
Mr. Bill Mable	Amphenol Interconnect	bmable@spectra.net
Mr. Charles Brill	Brill Consulting	cebrill@ix.netcom.com
Mr. Francesco Liburdi	Circuit Assembly Corp.	liburdi@circuitassembly.com
Mr. Rob Elliott	Compaq	relliott@compaq.com
Dr. William Ham	Compaq Computer Corp.	bill_ham@ix.netcom.com
Mr. I. Dal Allan	ENDL	dal_allan@mcimail.com
Mr. Paul Remley	Fujitsu (FCPA)	premley@fcpa.fujitsu.com
Mr. Nathan Hastad	General Dynamics Info. Sys.	nathan.j.hastad@gd-is.com
Mr. Marcos Barrionuevo	Harting Inc. of N. America	marcos.barrionuevo@harting.com
Mr. George Penokie	IBM Corp.	gop@us.ibm.com
Mr. John Lohmeyer	LSI Logic Corp.	lohmeier@ix.netcom.com
Mr. Ralph Weber	LSI Logic Corp.	roweber@acm.org
Mr. Jay Neer	Molex Inc.	jneer@molex.com
Mr. Brian McKean	Mylex	brianm@mylexboulder.com
Mr. Charles DeJesus	Quantum Corp.	charles.dejesus@qntm.com
Mr. Alvin Cox	Seagate Technology	alvin_cox@notes.seagate.com
Mr. Gene Milligan	Seagate Technology	Gene_Milligan@notes.seagate.com
Mr. Benjie Sun	Silicon Graphics	bsun@enr.sgi.com
Mr. Bob Snively	Sun Microsystems	bob.snively@sun.com
Mr. Paul D. Aloisi	Unitrode Corporation	aloisi@unitrode.com

25 People Present

### 4. Approval of Minutes

The minutes of the last meeting (see 99s001r0) 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

- 6.1 Tom Winsemius will complete the open issues in sections 2.6 (EMI), 2.10 (Shock and Vibration), 2.11 (Thermal Management) and 6.0 (Handling, ref IDEMA). *Only EMI section still needed..*
- 6.2 Pat McGarrah will edit sections 1.1 through 1.3. *Carry over.*
- 6.3 Pat McGarrah will provide prototype wrappers to other drive vendors for thermal testing. Overcome by events.

- 6.4 The other drive vendors will do thermal testing present results and anticipated future needs. *Carry over.*
- 6.5 Jay Neer and Dean Wallace will design an SCA-2 backplane for testing the shock and vibration. *Carry Over.*

Jay Neer presented foils showing a mechanical backplane design for 10 and 15 drive configurations (see 99s006r0). Dean Wallace has agreed to do an electrical layout. The goal is to make a test bed for Benjie to do testing. Larry Lamers suggested that Dean design the backplane for LVD and that he attempt to include an LSI LVD-to-LVD expander to avoid any electrical issues.

## **7. Document Review [Benjie Sun] (98s004r5)**

Benjie did not have a new version of the draft document this time. He presented 99s004r0 on the SCSI Harbor project status. The design phase of the project is currently on hold until mid-April when the testing phase begins. The schedule for first prototypes is March 31st.

Benjie estimated that it would cost \$9300 to build each prototype (not including the backplanes). The prototype backplanes will probably cost another \$1000. SGI and Intel are committed to paying for one prototype each. Benjie solicited volunteers to pay for additional prototypes.

According to Larry Lamers' new math, the drive vendors should budget \$25,000 for each turn of the testing, which includes the cost of replacing everything (docks and wrappers) each time. This number assumes that complete sets of both the 1-inch and 1.6-inch wrappers are needed. Assuming that 3 turns are really needed, this would total \$75,000.

Larry Lamers was concerned that the testing schedule appeared very aggressive. He felt that there is only enough time for 2 turns.

Benjie discussed the Rotational Vibration testing document from Tom Irvine (STA/98s008r0.pdf).

Benjie described some thermal testing done at Intel. He plans to provide the Intel document for posting on the web site.

## **8. Old Business**

### **8.1 Testing Strategy [Ham]**

Bill Ham asked that this agenda item be removed from future agendas since testing is being addressed by Benjie.

## **9. New Business**

None.

## **10. Review of Action Items**

- 1) Tom Winsemius will complete the open issues in sections 2.6 (EMI).
- 2) Pat McGarrah will edit sections 1.1 through 1.3.
- 3) SGI, Intel, and each drive vendor will build prototypes (both 10-inch and 1.6-inch) for testing.
- 4) Each drive vendor to provide SGI and Intel a total of 40 1.0-inch and 30 1.6-inch drives for testing.
- 5) Drive vendors will provide testing procedure feedback to Benjie Sun, Tom Irvine, and Robin Steinbrecker.
- 6) Drive vendors will schedule testing time.
- 7) John Bauer will provide cabled SCA-2 connector assemblies to Benjie.

### **11. Meeting Schedule**

The next SCSl Harbor meeting will be on Thursday, May 6, 1999 beginning 1/2 hour after the T10 meeting, but no sooner than 2:30 p.m. in Manchester, NH. The meeting hotel is the Holiday Inn "The center of NH" (603-625-1000). See 99s007r0.pdf on the Harbor Web site for details.

### **12. Adjournment**

The meeting was adjourned at 5:30 pm on Thursday, March 11, 1999.