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To: Membership of STA  
From: Lawrence J. Lamers  
Louis Grantham  
Subject: Minutes of SCSI Harbor Meeting  
November 6, 1997 - Palm Springs, CA

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### Agenda

1. Opening Remarks and Introductions
2. Approval of Agenda
3. Attendance and Membership
4. Approval of Minutes - October 15, 1997 Meeting in Denver (97s101r1)
5. Document Distribution
6. Review of Old Action Items
7. Old Business
  - 7.1 Document Structure
  - 7.2 Selection of Document Editor
8. New Business
  - 8.1 Show & Tell of Existing Solutions
9. Review of Action Items
10. Meeting Schedule
11. Adjournment

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### Results of Meeting

#### 1. Opening Remarks and Introductions

Louis Grantham, Chair of STA Tech, opened the meeting at 9:00am. As is customary, the participants introduced themselves.

Louis noted that 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:

Mr. Lawrence J. Lamers	Adaptec, Inc.	ljlammers@ix.netcom.com
Mr. Thomas W. Martin	Adaptec, Inc.	tmartin@corp.adaptec.com
Mr. Charles Brill	AMP	cebrill@amp.com
Mr. Michael Wingard	Amphenol Interconnect Prod.	mikwingard@aol.com
Mr. Douglas Wagner	Berg Electronics	wagnerdl@bergelect.com
Mr. Dennis Lang	Circuit Assembly Corp.	dennisl@ca-online.com
Mr. Charles Tashbook	Dallas Semiconductor	charles.tashbook@dalsemi.com
Mr. Greg McSorley	Data General Corp.	greg_mcsorley@dgc.ceo.dg.com
Mr. Keshava Srivastava	Digital Equipment Corp	keshava.srivastava@digital.com
Mr. Doug Hagerman	Digital Equipment Corp.	hagerman@mail.dec.com
Dr. William Ham	Digital Equipment Corp.	Bill_ham@ix.netcom.com
Mr. Keith W. Parker	Diogenes SCSI	diogenes@europa.com
Mr. I. Dal Allan	ENDL	dal_allan@mcimail.com
Mr. Don Vohar	Fujitsu (FCPA)	dvohar@fcpa.fujitsu.com
Mr. Marcos Barrionuevo	Harting Inc. of N. America	marcos.barrionuevo@harting.com
Mr. Dominique Desourteaux	Harting Interface Conn. Div.	d.desourteaux.harting@wanatop.fr
Mr. Anthony Yang	Hitachi America, Ltd.	anthony.yang@halsp.hitachi.com
Mr. Zane S. Daggett	Hitachi Cable Manchester	zdaggett@hcm.hitachi.com
Mr. Francesco Liburdi	Hollingsworth Corp.	liburdi@hollingsworth.com
Mr. Tom Kulesla	Honda Connectors	tkulesza@hondaconnectors.com
Mr. Dale Anderson	IBM	da@us.ibm.com
Mr. Tom Winsemius	IBM	twinsemi@us.ibm.com
Mr. George Penokie	IBM Corp.	gop@us.ibm.com
Mr. Louis Grantham	Linfinity Micro	lgdatcom@ix.netcom.com
Mr. Alan Littlewood	LSI Logic	alanl@lsil.com
Mr. Bob Masterson	Methode Electronics Inc.	rwmast@methode.com
Mr. Jay Neer	Molex Inc.	jneer@molex.com
Mr. Alex Shih	Mylex Corp.	alexs@mylex.com
Mr. Skip Jones	QLogic Corp.	sk_jones@qlc.com
Mr. Jon P. Baker	Seagate Technology	jon_baker@notes.seagate.com
Mr. Alvin Cox	Seagate Technology	alvin_cox@notes.seagate.com
Mr. Gene Milligan	Seagate Technology	Gene_Milligan@notes.seagate.com
Mr. Dave Guss	Silicon Systems, Inc.	dave.guss@tus.ssi1.com
Mr. Bob Snively	Sun Microsystems	bob.snively@sun.com
Mr. John Lohmeyer	Symbios Logic Inc.	john.lohmeyer@symbios.com
Mr. Harry Mason	Symbios Logic Inc.	harry.mason@symbios.com
Mr. Henry Tseng	Tandem Computers	htseng@loc100.tandem.com
Mr. Arlan P. Stone	UNISYS Corporation	arlan.stone@unisys.com
Mr. Paul D. Aloisi	Unitrode Corporation	aloisi@unitrode.com
Mr. Steven Alfred	Western Digital	steven.j.alfred@wdc.com
Mr. Greg Weir	Western Digital	gregory.a.weir@wdc.com
Mr. Jeff Williams	Western Digital	Jeffrey.L.Williams@wdc.com
Mr. Doug Piper	Woven Electronics	doug.piper@internetmci.com

### 4. Approval of Minutes - October 15, 1997 Meeting in Denver (97s101r1)

The chair reviewed the minutes of the last meeting. They were approved.

## 5. Document Distribution

Louis Grantham described the SCSI Harbor ftp and web sites:

ftp://ftp/scsita.org/pub/harbor  
http://www.scsita.org/harbor

All 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

None.

## 7. Old Business

### 7.1 Document Structure

Pat McGarrah (pmcgarra@tdh.qntm.com) reviewed the document structure. In particular he requested input for the measurement metrics. The plan is to use the metrics that disk drive folks use unless there is other input. There is a need for specs from the system side for the enclosure. System vendors should supply Pat with a copy of their specs if possible.

Metrics for measurements

Vibration – towards and from, sweeping, random, operating, non-operating, rotational, transfer function.

Cooling – temperature rise, humidity gradient, case temperature, ambient, airflow, dry bulb, wet bulb.

Shock – damage boundary, newton pounds @ xx milliseconds, transfer function modeling.

Electrical – ESD if plastic, additional requirements beyond SCA-2, EMI provided by wrapper or envelope?, at 1 GHz holes must be less than 4mm.

Retention –

Locking – mechanism should be in envelope.

Acoustics – power, outgassing.

Altitude – operating and non-operating.

Indicators – use light pipes, should be in envelope.

Insertion – speed, cam loading, no handles.

Related standards - ISO 779, ECMA, and others exist.

### 7.2 Selection of Document Editor

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

## 8. New Business

### 8.1 Show & Tell of Existing Solutions

Unisys, IBM, and Silicon Graphics brought examples of existing wrappers.

Dale Anderson (IBM) presented a list of considerations for the wrapper design (see 97s108r0).

Tom Wiensemius (IBM) stated that he would develop sketch design ideas for a wrapper to provide a focal point for the specification.

## **9. Review of Action Items**

- 1) Vendors are advised that it is the intent of the December meeting to select one sample of an existing wrapper as a starting point. Sanitized (proprietary information removed) documentation is requested for review at the meeting.

## **10. Meeting Schedule**

The next meeting is planned for:

Tuesday, December 2, 1997 hosted by QLogic starting at 1:00pm in Irvine, CA.

Follow-on meetings are planned for:

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

The group agreed to decide at the December 2<sup>nd</sup> meeting, whether or not to hold another meeting on January 8<sup>th</sup> in conjunction with the STA meeting on January 9<sup>th</sup> in Denver.

## **11. Adjournment**

The meeting adjourned at 12:30pm.