Accredited Standards Committee*
NCITS, Information Technology

Doc. No.:	T10/00-376r0
Date:	October 30, 2000
Project:	SDV 1378-DT
Ref. Doc.:	
Reply to:	John Lohmeyer
	Bill Ham

To: Membership of T10

From: John Lohmeyer, chair SDV working group
            Bill Ham, Secy SDV working group

Subject: Draft minutes of T10 SDV working group on October 30, 2000

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Agenda

1. Opening remarks and introductions
2. Attendance and membership
3. Approve agenda
4. Document distribution
5. Review minutes of previous meeting
6. Review old action items
7. Old Business
  7.1 Margin Control (99-264) [Roberts]
  7.2 SDV working draft review [Roberts]
8. New Business
  8.1 Controlling Targets with ECP (00-391) [Elliott]
  8.2 Reporting deskew values with ECP (00-392) [Elliott]
  8.3 Reporting AAF values with ECP (00-393) [Elliott]
  8.4 Mode pages equivalents for ECP commands (00-396) [Elliott]
  8.5 Reporting currently negotiated settings (00-397) [Elliott]
  8.6 Other issues
9. Review action items
  9.1 Action items from previous meetings
  9.2 New action items from this meeting
10. Next meetings
11. Adjourn

Results of Meeting

1. Opening remarks and introductions

John Lohmeyer led the meeting. He opened the meeting at 9:00 a.m. and
thanked Larry Lamers of Adaptec for hosting this meeting. Bill Ham took
these minutes.

2. Attendance and membership

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Name                  S Organization             Electronic Mail Address
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Mr. Lawrence J. Lamers P Adaptec, Inc              ljlamers@ieee.org
Mr. Ron Roberts       A Adaptec, Inc.             Ron_Roberts@adaptec.com
Mr. Edward Haske      P CMD Technology                 haske@cmd.com
Mr. Robert C. Elliott P Compaq             Rob_Elliott@compuserve.com
Dr. William Ham       A Compaq                   bill_ham@ix.netcom.com
Mr. Titkwan Hui       A.Dallas Semiconductor      tk.hui@dalsemi.com
Mr. Eugene Lew        P Fujitsu               elew@fcpa.fujitsu.com
Mr. Nathan Hastad     P General Dynamics     nathan.j.hastad@gd-is.com
Mr. Bill Troop        V IBM Corp                  troop@us.ibm.com
Mr. Jeffrey J. Gauvin V LSI Logic Corp.       jeff.gauvin@lsil.com
Mr. Terry Gibbons     V LSI Logic Corp       Terry.gibbons@lsil.com
Mr. John Lohmeyer     P LSI Logic Corp.          lohmeyer@t10.org
Mr. William Petty     A LSI Logic Corp.       william.petty@lsil.com
Mr. Jay Neer          P Molex Inc.                jneer@molex.com
Mr. Mark Evans        P Quantum Corp          mark.evans@quantum.com
Mr. Gene Milligan     P Seagate Technology Gene_Milligan@notes.seagate.com
Mr. Gerry Houlder     A Seagate Technology  gerry_holder@notes.seagate.com
Mr. Vit Novak         A Sun Microsystems            vit.novak@sun.com
Mr. Paul D. Aloisi    P Texas Instruments        Paul_Aloisi@ti.com
Mr. Donald Getty      A# Texas Instruments       donald_getty@ti.com
Mr. Mike Kocso        V Texas Instruments       Mike@mvbuilders.com
Mr. George Penokie    P Tivoli                      gop@us.ibm.com
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22 People Present

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Status Key:  P   -  Principal
             A,A# -  Alternate
             O   -  Observer
             L   -  Liaison
             V   -  Visitor
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3. Approve agenda

After removing the item relating to multiline addressing per request of
the item sponsor, Ron Roberts, the modified agenda was approved without
objection.

4. Document distribution

Documents are distributed electronically by means of the T10 web site:
www.t10.org.

5. Review minutes of previous meeting

Bill Ham moved and Ron Roberts seconded that the draft minutes as
modified be approved from the last meeting. Motion passed without
objection.

6. Review old action items

The action items from the last meeting were reviewed and the status is noted in the action items section.

7. Old Business

Note that the previous agenda item titled "Multi-line Addressing (99-250 & SDV-R02, 00-256r0) [Lamers/Roberts]" was removed from the agenda per request of Ron Roberts.

7.1 Margin Control (99-264) [Roberts]

Ron noted that some of the content of 00-99-264 has been included into the SDV working draft. Other issues are expected to be discussed in other agenda items sponsored by Robert Elliott. Discussion of this specific item is therefore deferred until an unspecified future time.

After consideration of the items relating to margin control presented, as modified, by Robert Elliott Ron Robert recommended that further discussion this topic be tabled pending resolution of the other proposals aimed at going into SPI-4.

7.2 SDV working draft review [Roberts]

Ron had prepared a new rev of the SDV document which was reviewed in detail. There are still several sections that are not complete but there was no significant objection to the material as presented. One section still needed involves specification of how to use the mechanisms defined in a practical system.

8. New Business

8.1 Controlling Targets with ECP (00-391) [Elliott]

Robert went through 00-391r0 which requires targets that implement margining to use ECP as the communication mechanism. After some discussion where it was pointed out that mode pages can be used on an I/T basis. Further, the folks who make the disk drives all objected to having to introduce another (new) scheme to communicate the devices. After more discussion Bill Ham (acting for J. Lohmeyer who was out of the room) called for a straw poll for who wants ECP to NOT be used as the means for communicating margining controls.

Straw poll results: 6 in favor, 1 against, 1 abstain

This straw poll indicates that ECP is not the way to communicate margining information to targets.

8.2 Reporting deskew values with ECP (00-392) [Elliott]

This and the following agenda item met with significant resistance due to the specific parameters proposed and not necessarily mapping to different implementations. There was support for specifying a very limited vendor unique format where the vendor reports whatever he likes and in the form he likes. There is no agreed set of parameters that can be used to compare different implementations so one should not expect to be able to directly compare different saved training configuration values.

A proposal to use 256 bytes split evenly between target and initiator modes in this mode page was agreed.

A revised proposal containing this scheme will be prepared by Robert. This new proposal will use the 00-392 document number and will incorporate the revised material from 00-393.

It is the intention, at this point, to aim this work at SPI-4.

8.3 Reporting AAF values with ECP (00-393) [Elliott]

This topic was discussed under agenda item 8.2.

8.4 Mode pages equivalents for ECP commands (00-396) [Elliott]

Robert went through 00-396. He pointed out the using mode pages for margining controls will consume all the presently available reserved bits.

Therefore the port control mode page (number 19) will be used and subpages behind mode page are used for the details.

It is the intention, at this point, to aim this work at SPI-4.

Persistence issues were discussed.

8.5 Reporting currently negotiated settings (00-397) [Elliott]

In order to provide for a standard way for targets and expanders to report the negotiated settings to a management system or other part of the overall system using ECP document 00-397 was developed. Similar information is also available for use in a mode page. It was pointed out that the initiator already knows all this information, however, if other parts of the system need to know.

Some parameters only belong in a mode page and others belong in ECP. In the next version the mode page.

Target suppliers reluctantly accepted the concept of using mode pages for this function.

It is the intent, at this point, to aim this proposal at SPI-4.

8.6 Other issues

What detail is available concerning margin parameters? The margin parameters are presently documented only in 00-264 or in ECP (00-257). The nominal value has the value of "0" with the intensity of the deviation being monotonically related to the parameter value. (Monotonic means not changing as well as increasing in the same direction as the parameter.)

Robert Elliott is actioned to document the details of the default/nominal etc. margin parameter values in 00-396r1.

9. Review action items

9.1 Action items from previous meetings

Ron Roberts to incorporate LSI logic comments into SDV.
Status: carried over

John Lohmeyer to create 00-257r3 containing all the changes agreed at this meeting.
Status: done

9.2 New action items from this meeting

Robert Elliott to document the details of the default/nominal etc. margin parameter values in 00-396r1.
Status: new

10. Next meetings

The next meeting will be on January 15, 2001 9:00 a.m. to 5:00 p.m in Orlando, FL.

No interim meeting presently planned.

11. Adjourn

The meeting adjourned at 4:15PM on Monday October 30, 2000.