

Accredited Standards Committee*

InterNational Committee for Information Technology Standards (INCITS)

Doc. No.: T10/06-205r0

Date: April 21, 2006

Reply to: John Lohmeyer

To: T10 Membership
From: Ralph Weber and John Lohmeyer
Subject: SAS-2 Zoning Management WG -- April 20, 2006
Denver, CO

Agenda

1. Opening Remarks
2. Approval of Agenda
3. Attendance and Membership
4. Minor corrections/clarifications
 - 4.1 SAS-2 Change SMP ZONE VIOLATION code value (06-165) [Elliott]
 - 4.2 SAS-2 Filtering OPEN content based on ZONE PARTICIPATING bit (06-167) [Elliott]
 - 4.3 SAS-2 OPEN address frame SOURCE ZONE GROUP field definition (06-168) [Elliott]
 - 4.4 SAS-2 Zoning BROADCAST Events Correction (06-177) [Elliott and D'Avignon]
5. Minor new features
 - 5.1 SAS-2 Restrict access to SMP ZONED BROADCAST function (06-166) [Elliott]
 - 5.2 Add phy zone information to SMP DISCOVER (06-176) [Elliott and Symons]
 - 5.3 SAS-2: Zone group values after a link reset sequence (06-181) [Marks]
 - 5.4 SAS-2 Add expander change count to all SMP functions (06-197) [Elliott]
6. Self-configuration clarifications
 - 6.1 Discovery - Configuring bit (06-097) [Symons]
 - 6.2 Self configuring devices (06-098) [Symons]
 - 6.3 SAS-2 Self-configuring expander status (06-187) [Elliott]
7. Major new features
 - 7.1 SAS-2 Allow table-to-table expander attachment (06-189) [Elliott]
8. New SMP functions
 - 8.1 SAS-2 SMP Lists (DISCOVER LIST) (06-037) [Johnson]
 - 8.2 SAS-2 Expander Routing Table (REPORT ROUTE TABLE) (06-078) [Johnson]
 - 8.3 SAS-2 SMP CONFIGURE PHY ZONE function (06-201) [Symons]
 - 8.4 SAS-2 SMP CONFIGURE ZONE PERMISSION function (06-202) [Symons]
 - 8.5 SAS-2 SMP REPORT ZONE PERMISSION function (06-203) [Symons]
 - 8.6 SAS-2 SMP REPORT ZONE ROUTE TABLE function (06-204) [Symons]
9. Unsure about the status
 - 9.1 SAS-2 Zoning (06-019) [Symons, Laio and Grieff]
 - 9.2 SAS-2 Expander Configuration Supervisor and SMP CHANGE Request (06-029) [Weber and Johnson]
10. New Business
11. Review of Recommendations
12. Meeting Schedule
13. Adjournment

*Operating under the procedures of The American National Standards Institute.
INCITS Secretariat, Information Technology Industry Council (ITI)
1250 Eye Street NW, Suite 200, Washington, DC 20005-3922
Email: incits@itic.org Telephone: 202-737-8888 FAX: 202-638-4922

Results of Meeting

1. Opening Remarks

John Lohmeyer called the meeting to order at 9:30 a.m. Thursday, April 20, 2006. He thanked LSI Logic for hosting the meeting. As usual, the people present introduced themselves.

2. Approval of Agenda

The draft agenda was approved with no changes.

The following agenda additions and changes were made during the course of the meeting:

none

3. Attendance and Membership

Attendance at working group meetings does not count toward minimum attendance requirements for T10 membership. Working group meetings are open to any person or organization directly and materially affected by T10's scope of work. The following people attended the meeting:

Name	S	Organization
Mr. Kevin Marks	P	Dell, Inc.
Mr. Ralph O. Weber	P	ENDL Texas
Mr. Rob Elliott	P	Hewlett Packard Co.
Mr. George O. Penokie	P	IBM Corp.
Mr. Andrew Roy	V	LeCroy Corporation
Mr. Tyson Hartshorn	V	LSI Logic Corp.
Mr. Steve Johnson	V	LSI Logic Corp.
Mr. John Lohmeyer	P	LSI Logic Corp.
Mr. Tim Symons	P	PMC-Sierra
Mr. William Martin	P	Sierra Logic, Inc.
Mr. Ed D'Avignon	V	Vitesse Semiconductor
Mrs. Zenta Darnell	V	Vitesse Semiconductor

12 People Present

Status Key: P - Principal
 A,A# - Alternate
 AV - Advisory Member
 L - Liaison
 V - Visitor

4. Minor corrections/clarifications

4.1 SAS-2 Change SMP ZONE VIOLATION code value (06-165) [Elliott]

Rob Elliott presented a proposal to change the code value for ZONE VIOLATION (06-165r0). Rob Elliott moved that 06-165r0 be recommended for inclusion in SAS-2. Kevin Marks seconded the motion. In the absence of objections, the motion passed unanimously.

4.2 SAS-2 Filtering OPEN content based on ZONE PARTICIPATING bit (06-167) [Elliott]

Rob Elliott presented a proposal to update the usage of the ZONE PARTICIPATING bit (06-167r1). Rob Elliott moved that 06-167r1 be recommended for inclusion in SAS-2. Ed D'Avignon seconded the motion. In the absence of objections, the motion passed unanimously.

4.3 SAS-2 OPEN address frame SOURCE ZONE GROUP field definition (06-168) [Elliott]

Rob Elliott presented a proposal to clarify the usage of the SOURCE ZONE GROUP field in the OPEN address frame (06-168r1). Rob Elliott moved that 06-168r1 be recommended for inclusion in SAS-2. Ed D'Avignon seconded the motion. In the absence of objections, the motion passed unanimously.

4.4 SAS-2 Zoning BROADCAST Events Correction (06-177) [Elliott and D'Avignon]

Rob Elliott presented a proposal to update the definition of Broadcast to make it more consistent with the zoning changes (06-177r1). The group requested a few changes and Rob agreed to prepare a new revision for consideration at the next meeting.

5. Minor new features

5.1 SAS-2 Restrict access to SMP ZONED BROADCAST function (06-166) [Elliott]

Rob Elliott presented a proposal to restrict ZONED BROADCAST based on zone group 3 (06-166r3). The group requested a few changes and Rob agreed to prepare a new revision.

Rob Elliott moved that 06-166r4 (r3 as revised) be recommended for inclusion in SAS-2. Ed D'Avignon seconded the motion. The motion passed 5:0:3.

5.2 Add phy zone information to SMP DISCOVER (06-176) [Elliott and Symons]

Rob Elliott presented a proposal to provide means for returning zoning information in the SMP DISCOVER response (06-176r1). The group requested a few changes and Rob agreed to prepare a new revision.

Rob Elliott moved that 06-176r2 (r1 as revised) be recommended for inclusion in SAS-2. Steve Johnson seconded the motion. In the absence of objections, the motion passed unanimously.

5.3 SAS-2: Zone group values after a link reset sequence (06-181) [Marks]

Kevin Marks presented a proposal to clarify the application of link reset sequences to zoning (06-181r1). The proposal contained two options for stating the same requirements and the group expressed a preference for the second. Concerns were discussed and resolved related to not changing to the default zone group in some scenarios where the attached device really did not change. Other wording changes (both major and minor) were agreed upon.

Kevin agreed to prepare a new revision. Kevin Marks moved that 06-181r2 (r1 as modified) be recommended for inclusion in SAS-2. Rob Elliott seconded the motion. In the absence of any objections, the motion passed unanimously.

5.4 SAS-2 Add expander change count to all SMP functions (06-197) [Elliott]

Discussion of this topic was deferred due to a lack of time.

6. Self-configuration clarifications

6.1 Discovery - Configuring bit (06-097) [Symons]

Tim Symons presented a proposal to clarify/define/redefine the Configuring bit (06-097r2). The group discussed making the Configuring bit Obsolete and determined that the bit could be useful as a way to indicate the I_T Nexus Loss Timeouts should not be applied.

Tim agreed to work with Rob Elliott to revise the proposal for consideration at the next meeting.

6.2 Self configuring devices (06-098) [Symons]

The group discussed the general concept of route table configuration. It was agreed that the Discover Process included sending Discover and Report General SMP functions to develop an image of the topology. The Configuration Process, wherein Configure SMP functions are sent to table-routed expanders, can be viewed as a subroutine within the Discover Process.

The group requested corrections to several of the example configurations in the proposal and then requested two additional examples. Tim agreed to revise the proposal for consideration at the next meeting.

6.3 SAS-2 Self-configuring expander status (06-187) [Elliott]

Discussion of this topic was deferred due to a lack of time.

7. Major new features

7.1 SAS-2 Allow table-to-table expander attachment (06-189) [Elliott]

Rob Elliott presented a proposal to allow table-routed phys to be connected to table-routed phys (06-189r0). The group discussed the merits of the proposal, how it would simplify SAS configuration rules going forward in time, and possible removal of the term 'fanout expander'.

The group recommended several changes, including trying to more clearly differentiate between self-configuring expanders and configurable expanders. Rob agreed to prepare a new revision of the proposal for consideration at the next meeting.

8. New SMP functions

8.1 SAS-2 SMP Lists (DISCOVER LIST) (06-037) [Johnson]

Steve Johnson presented a proposal to define a new SMP function that returns information about multiple phys (06-037r3). The group requested several changes and Steve agreed to prepare a new revision for consideration at the next meeting.

8.2 SAS-2 Expander Routing Table (REPORT ROUTE TABLE) (06-078) [Johnson]

Discussion of this topic was deferred due to a lack of time.

8.3 SAS-2 SMP CONFIGURE PHY ZONE function (06-201) [Symons]

Discussion of this topic was deferred due to a lack of time.

8.4 SAS-2 SMP CONFIGURE ZONE PERMISSION function (06-202) [Symons]

Discussion of this topic was deferred due to a lack of time.

8.5 SAS-2 SMP REPORT ZONE PERMISSION function (06-203) [Symons]

Discussion of this topic was deferred due to a lack of time.

8.6 SAS-2 SMP REPORT ZONE ROUTE TABLE function (06-204) [Symons]

Discussion of this topic was deferred due to a lack of time.

9. Unsure about the status

9.1 SAS-2 Zoning (06-019) [Symons, Laio and Griefff]

Tim Symons asked that this topic be removed from this and future agendas.

9.2 SAS-2 Expander Configuration Supervisor and SMP CHANGE Request (06-029) [Weber and Johnson]

Ralph Weber asked that discussion of this topic be deferred to the next meeting.

10. New Business

No new business was presented.

11. Review of Recommendations

The following document was recommended for inclusion in SAS-2 during this meeting:

For inclusion in SAS-2:

06-181r2 (Zone group values after a link reset sequence) [Marks]

06-165r0 (Change SMP ZONE VIOLATION code value) [Elliott]

06-167r1 (Filtering OPEN content based on ZONE PARTICIPATING bit) [Elliott]

06-168r1 (OPEN address frame SOURCE ZONE GROUP field definition) [Elliott]

06-166r4 (Restrict access to SMP ZONED BROADCAST function) [Elliott]

06-176r2 (Add phy zone information to SMP DISCOVER) [Elliott and Symons]

12. Meeting Schedule

A teleconference call for SAS-2 Zoning will be held on Thursday April 27, 2006 and announced on the T10 reflector. Other teleconference calls will be announced on the T10 reflector as needed.

13. Adjournment

The meeting was adjourned at 4:40 p.m. on Thursday April 20, 2006.