Draft Minutes
Automation/Drive Interface (ADI) Working Group
Ad Hoc Teleconference
T10/08-269r0
18 June 2008
8:05 am – 09:59 am PDT

1 Introductions:

Paul Suhler called the meeting to order at 8:05 AM PDT. He thanked HP for hosting the meeting.

2 Approval of the agenda:

Paul Suhler reviewed the agenda with the group.

Paul Suhler requested that old business items 9.1 and 9.3 be deferred.

Kevin Butt made a motion for acceptance of the agenda as modified. Geoffrey Barton seconded the motion. The group approved the motion unanimously.

3 Attendance and Membership:

Paul Suhler discussed the attendance, membership, and voting rules for this meeting.

The listing below captures the attendance at this meeting:

Name	S	Organization
Mr. Curtis Ballard	A	Hewlett Packard Co.
Mr. Kevin Butt	P	IBM Corp.
Mr. Geoffrey Barton	V	Overland Storage
Dr. Paul Suhler	P	Quantum Corp.
Mr. Halvard Ericksson	AV	Tandberg Storage

5 People Present

Status Key:
- P - Principal
- A - Alternate
- AV - Advisory Member
- E - Emeritus
- L - Liaison
- V - Visitor

4 INCITS Patent Policy:

Paul Suhler reviewed the INCITS patent policy.

5 INCITS Antitrust Guidelines

Paul Suhler reviewed the guidelines around avoidance of antitrust issues.

6 Approval of previous meeting minutes:

5 May 2008 meeting	08-223r0
4 June 2008 Meeting	08-256r0

Paul Suhler requested comments for the minutes of the 5 May 2008 meeting and the 4 June 2008 meeting (see above). No one provided comments or corrections.

7 Call for secretary [Suhler]:

Paul Suhler noted that ADI remains without a permanent secretary. He asked if anyone wished to volunteer to fill this role. No one volunteered, so Paul encouraged participants to consider taking up the role. Rod Wideman agreed to serve as secretary for this meeting.

8 Review of action items:

08-006 Rod Wideman will revise 08-021r0 per Old Business item 8.3 of 08-104r0. *Carryover*

08-011 Curtis Ballard to revise and post 08-195r0 per new business item 10.2 of 08-223r0. *Complete [closed by 08-195r2]*

08-012 Paul Stone to incorporate 08-195r1 into ADC-3. *Complete [closed by ADC3r00c]*

08-013 Curtis Ballard to revise and post 08-200r0 per new business item 10.3 of 08-223r0. *Complete [closed by 08-200r1]*

08-014 Paul Stone to incorporate 08-200r1 into ADC-3. *Complete [closed by ADC3r00c]*

08-016 Paul Suhler to revise 07-469r4 and post per old business item 9.2 of 08-256r0 *Complete [closed by 07-469r5]*

9 Old business:

9.1 ADC-3 Automation Device Serial Number subpage (08-021r0) [Wideman]

This item was deferred at Paul Suhler's request.

9.2 ADT-2: Internet ADT (iADT) (07-469r5) [Suhler]

The group discussed that a diagram was needed above figure 4 to show the ports.

Kevin Butt asked what the difference was between dashed lines and solid lines Paul indicated that the dashed lines were used when multiple layers were discussed in a single section. Paul said that he was also trying to use a solid box to show an entire port so one solid box was an ADT port and one was an interconnect port. Halvard Erikson asked if we wanted Electrical signals and physical medium both being shown. Kevin Butt indicated that he felt that having both was fine but logical connections like the electrical signals should be dotted lines.

Figure 5 was discussed. Paul decided that it should move to the end of the model clause and then Kevin Butt asked about text to reference it. Further discussion pointed out that figure 4 was the more general picture with figure 5 being an expansion of one side of that figure so figure 4 should be an introduction followed by the description of the ports and then figure 5 presented for use in the more detailed section.

Paul moved on to the interconnect layer and the acknowledgement time-out period. A time-out period of 2.5 seconds was proposed. Kevin Butt asked whether a timeout of 2.5 seconds was appropriate when the TCP timeout is several minutes long. Kevin pointed out that if the TCP timeout was minutes and we specified a shorter timeout he felt we would create a problem. The group discussed whether the timeout could be shorter than the TCP timeout or if the TCP timeout had to be shorter than our timeout. Curtis recommended that we check with networking experts as he felt that the timeouts could be shorter. Paul requested that people that had access to a network expert check with them.

Paul moved onto the discussion of whether a TCP loss should cause an I_T nexus loss. Kevin Butt indicated that he felt it was a requirement that the drive should be able to fail a command over to a different ADI path without failing a host command if it supported failover so the TCP connection loss should not cause an I_T nexus loss. Curtis agreed that he wanted that behavior possible for the primary port I_T nexus but would prefer that a TCP loss cause an ADI I_T nexus loss but that the ADI I_T nexus loss not force an I_T nexus loss on the primary port so that the bridging manager could attempt to establish a new ADI I_T nexus over another path and resend the command. Kevin said that he thought that would meet his needs as well and he would check.

The group moved on to the discussion of LED connections and the guidance on how the LEDs were asserted and deasserted. Halvard asked whether the guidance as written would cause a problem with some people meeting the standards if they purchased an Ethernet chip that didn't behave in the described manner. Curtis pointed out that the current description is open enough that he felt it describes the behavior of the Ethernet indicator LEDs he was familiar with and that there is a "may" at the introduction so that an implementation could use any behavior if it didn’t. Halvard agreed that the "may" was enough and Kevin asked whether this was the default behavior we wanted. Paul said that he felt it was as it described the LEDs he was familiar with. Nobody objected.

The group discussed the ADT signals tables. Kevin Butt commented that he thought we had decided to split the transport lines and the signal lines so that both models could share the signal lines. Paul Suhler pointed out that $Sense_d$ was mandatory in the existing table but we had chosen to make it optional for iADT. Curtis said that he felt we could change it to optional for all transports. The group discussed whether it could be made optional for all transports and concluded that it could.

The interconnect layer was discussed and Paul reported that Rod Wideman has indicated he felt the use of the term "encoded characters" was confusing. Paul indicated that he had found that term in section 6.2 under encoding and asked if it was too confusing. Kevin indicated that the term was fine as long as we referenced the section where it was defined but that not all characters were encoded so it might not be quite the right term. Geoffrey pointed out that encoded wasn't exactly wrong because a character didn't have to be changed to be encoded. Names were discussed and Paul agreed to bring back a proposal with a definition.

The Send service request was discussed and the state of the system at completion. Kevin pointed out that “accepted for delivery” didn't seem quite right and it should really be that the characters have been accepted by the interconnect layer. The group requested that the text specifying that the buffers could be reused be struck since it wasn't a necessary requirement, limited implementation, and wasn't testable. Paul agreed to strike that text.

For the receive service request Curtis pointed out that the ADT port requests to receive characters by invoking the receive service request rather than actually receives characters. Kevin commented that he felt the receive request and received service indicator were far enough apart that maybe they needed to be two paragraphs. Paul said that he tied them together because they were tied events used to perform a single function. Kevin asked that the pairing be made explicit. Kevin asked whether the text should include a ladder diagram.

Paul introduced the reset service request/response. Curtis pointed out that with the current description it was confusing who was doing the responding and requested a picture. Kevin Butt pointed out that we shouldn't specify the DT device at this level.

9.3 ADI: Features for ADC-3 and ADT-3 (08-147r1) [Suhler]

This item was deferred at Paul Suhler's request.

10 New Business

10.1 ADT-2: Support QUERY TASK SET Task Management Function (08-148r0) [Suhler]

This item was deferred.

10.2 ADC-3: Add Port and Node Name to Fibre Channel Port Status Data (08-226r0) [Suhler]

This item was deferred.

10.3 ADC-3: Remove Configure Encryption Policy mounted volume restriction (08-247r0) [Wideman]

This item was deferred.

11 Next meeting requirements:

The group will hold a meeting on 14 July 2008 during T10 plenary week in Anchorage, Alaska beginning when the SMC-3 working group adjourns and concluding at 6:30 PM PDT.

12 Review new action items:

08-017 Paul Suhler to revise 07-469r5 and post per old business item 9.2 of 08-269r0

13 Adjournment:

Kevin Butt made a motion for adjournment. Curtis Ballard seconded the motion. The group passed the motion unanimously. Paul Suhler adjourned the group at 9:59 AM PDT.