Draft Minutes Automation/Drive Interface (ADI) Working Group Ad Hoc Meeting T10/04-199r0 12 July 2004 9:00 AM – 7:00 PM MDT

1. Introductions: Group

Paul Suhler called the meeting to order at 9:10 AM MDT on 12 July 2004. He thanked LSI for hosting the meeting. A table of the attendees appears at the end of these minutes.

2. Approval of the agenda:

Paul Suhler

Paul Suhler discussed the order of the discussion items.

Susan Gray made a motion for acceptance of the modified agenda. David Hawks seconded the motion. In the absence of objections or abstentions, the group passed the motion unanimously.

3. Approval of previous meeting minutes:

Paul Suhler

3 May 2004 meeting

04-120r0

Paul Suhler requested comments for the minutes of the 3 May 2004 meeting – 04-120r0.

Erich Oetting made a motion for acceptance of the minutes. Rod Wideman seconded the motion. In the absence of objections or abstentions, the group passed the motion unanimously.

4. Review of action items:

Kevin Butt

- a. Michael Banther will send Paul Suhler a request for investigation of the improvement described in Unscheduled Business item (f) of 04-080r0. *Closed*.
- b. Kevin Butt will investigate writing a proposal against IBM's ADT letter ballot comment 27. *Carryover*
- c. Kevin Butt will verify that the response to IBM's ADT letter ballot comment 30 is acceptable within IBM. *Closed*. Acceptable.
- d. Michael Banther will write a proposal to place all of the IU statements associated with entry into a state in the state description sub-clause and to remove such statements from the transition sub-clauses (remembering to rationalize incomplete statements). He will produce this proposal for the September or November 2004 meeting. *Carryover*
- e. Kevin Butt will write a proposal against IBM's ADT letter ballot comment 48. Carryover
- f. Paul Suhler will write a proposal against Seagate ADT letter ballot comment 23. *Carryover*
- g. Paul Entzel will publish a first revision of the letter ballot comments and a revision (a) of ADTr11. *Closed*. Published as ADTr12 and 04-162r0.

5. Discussion items:

a. ADI Prevent/Allow behaviour [Hawks].

David showed and discussed an email that was sent to the T10 reflector. The question becomes how do you prevent the media from being ejected? Susan Gray mentioned that we need a method to inform the library of what prevent state is in the DTD.

Proposal: make bit 7 of byte 8 of the VHF data to be PAMR and to indicate the status of Prevent/Allow in RMC device server. The Prevent/Allow Medium Removal bit shall be set to one when removal of the medium in the DT device is prevented as the result of the RMC device server processing a Prevent/Allow Medium Removal command (see SPC-2). The PAMR bit shall be set to zero when removal of the medium in the DT device is allowed as defined by the Prevent/Allow Medium Removal command.

Rod Wideman made a motion to recommend incorporation of the proposal stated above into ADC. David Hawks seconded the motion. In the absence of objections or abstentions, the group passed the motion unanimously.

b. ADI Bridging Questions [Hawks].

David Hawks asked how a local SMC device server can determine the direction of data flow for a task sent to its logical unit. Doesn't it have to look at the CDB? The group concluded that the device server does indeed have to look at the CDB for the direction even though we've gone to some length to make the amount of data requested visible outside of the CDB (i.e., via the Transfer Ready IU).

Action Item: David Hawks will write a proposal to allow a non-zero first burst length field for all commands to leave determination of data direction to the target port with without using direction bits.

c. Change ADT to allow DTD to send Port Logout IU before reset (<u>04-194r1</u>) [Entzel]. The group made many modifications to Paul Entzel's proposal.

Kevin Butt made a motion recommending incorporation of <u>04-194r1</u> as modified (<u>04-194r2</u>) into ADT as resolution to ADT letter ballot comment ADIC-137. Rod Wideman seconded the motion. In the absence of objections or abstentions, the group passed the motion unanimously.

d. Modify ADT ACK and NAK to differentiate Initiate Recovery acknowledgements (<u>04-200r0</u>) [Bondurant].

The group discussed this proposal. After recessing for lunch, Paul Entzel made a motion to recommend incorporation of <u>04-200r0</u> as modified (<u>04-200r1</u>) into ADT as resolution to Quantum-81 ADT Letter Ballot comment. David Hawks seconded the motion. In the absence of objections or abstentions, the group passed the motion unanimously.

e. ADI - ADC Letter Ballot comment discussion items (04-197r0) [Wideman].

Rod Wideman led the group through a discussion about outstanding letter ballot comments. Several action items resulted fro this discussion.

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Action Item: Rod Wideman will update ADC Letter Ballot documents on the T10 website within 2 weeks. Refer to 04-197r1 for specifics.

Regarding Quantum-53, <u>03-171r0</u> 6.a.4) was referenced to respond to question about why bridging is single threaded.

Action Item: Kevin Butt will write a proposal to answer Quantum-104, FC Status Log Page LNPC. In it, LNPC will refer to link only (LIPped or Active state) and new field to be logged in with PRLI.

Action Item: Paul Suhler will recommend a disposition for Seagate-25.

Action Item: Regarding Seagate-41, Paul Suhler to add SAS protocol pages to the list of deferred items for ADI-2 (see 03-133r7).

Action Item: Kevin Butt to bring in proposal for IBM Butt -1 & 2 Drive Dump. Quantum suggested that perhaps ADC should provide a Log page that defines buffers etc.

Action Item: Rod Wideman write a proposal for ADIC-148.

Action Item: Rod Wideman write a proposal for ADIC-50.

Regarding our progress so far, Rod Wideman reported that we have completed 50% of 1200 comments. The group agreed for the need to go to bi-weekly teleconferences.

f. ADT Letter Ballot Comment Resolution [Entzel].

Except for the specific ADT discussions listed above, the group did not pursue ADT letter ballot comment resolution due to lack of time.

6. Unscheduled business:

No one raised unscheduled business.

7. Next meeting requirements:

Paul Suhler

Paul Suhler will try to schedule 3 conference calls before the next T10 week. The actual number will depend on availability.

Subject to approval by the T10 Plenary, the group will hold a meeting 13 September 2004 during T10 plenary week in Nashua, New Hampshire beginning at 9:00 AM and concluding at 7:00 PM EDT.

8. Review new action items:

Kevin Butt

- a. Matt Bondurant will revise 04-194r1 per discussion item (c).
- b. Matt Bondurant will revise <u>04-200r0</u> per discussion item (d).
- c. Paul Entzel to incorporate into ADT 04-194r2.
- d. Paul Entzel to incorporate into ADT <u>04-200r1</u>.
- e. David Hawks will write a proposal to allow a nonzero first burst length field for all commands to leave determination of data direction with the target port without using direction bits.
- f. Rod Wideman will update ADC Letter Ballot documents on the <u>T10 website</u> within 2 weeks
- g. Kevin Butt will write a proposal to answer ADC Letter Ballot comment Quantum-104, FC Status Log Page LNPC. In it, LNPC will refer to link only (LIPped or Active state) and new field to be logged in with PRLI.
- h. Paul Suhler will recommend a disposition for ADC Letter Ballot comment Seagate-25.
- i. Regarding ADC Letter Ballot comment Seagate-41, Paul Suhler to add SAS protocol pages to the list of deferred items for ADI-2 (see <u>03-133r7</u>)
- j. Kevin Butt to bring in proposal for ADC Letter Ballot comments IBM Butt 1 & IBM Butt 2 (Drive Dump)
- k. Rod Wideman write a proposal for ADC Letter Ballot comment ADIC-148
- 1. Rod Wideman write a proposal for ADC Letter Ballot comment ADIC-50

9. Adjournment:

Group

Rod Wideman made a motion for adjournment. Susan Gray seconded the motion. The group passed the motion unanimously. Paul Suhler adjourned the group at 6:35 PM MDT.

Attendees:

Name	Organization	E-mail
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