

Draft Minutes
Automation/Drive Interface (ADI) Working Group
Ad Hoc Meeting
T10/07-405r0
17 September 2007
9:05 AM – 3:15 PM PDT

1 Introductions:

Paul Suhler called the meeting to order at 9:05 AM PDT. He thanked PMC-Sierra for hosting the meeting.

2 Approval of the agenda:

Paul Suhler reviewed the agenda with the group. No one requested additions or changes.

Michael Banther made a motion for acceptance of the agenda. Geoff Barton seconded the motion. In the absence of objections or abstentions, the group approved the agenda unanimously.

Kevin Butt subsequently pointed out that Curtis Ballard had an item of new business for ADC-3 that did not appear on the agenda.

Kevin Butt made a motion to amend the agenda to include 07-164r0 as new business. Curtis Ballard seconded the motion. In the absence of objections or abstentions, the group approved the motion unanimously.

3 Attendance and Membership:

Paul Suhler briefly discussed T10 attendance and membership rules as they apply to this meeting.

The listing below captures the attendance at this meeting:

| Name | S | Organization |
|--------------------------|---|---------------------|
| Mr. Curtis Ballard | V | Hewlett Packard Co. |
| Mr. Michael Banther | A | Hewlett Packard Co. |
| Mr. Christopher Williams | V | Hewlett Packard Co. |
| Mr. Kevin Butt | A | IBM Corp. |
| Mr. Robert Payne | P | Iomega Corp. |
| Mr. Geoffrey Barton | V | Overland Storage |
| Dr. Paul Suhler | A | Quantum Corp. |
| Mr. Georg Boasson | V | Tandberg Storage |

8 People Present

Status Key: P - Principal
A,A# - Alternate
AV - Advisory Member
E - Emeritus
L - Liaison

V - Visitor

4 INCITS Patent Policy:

Paul Suhler briefly discussed the INCITS patent policy and directed interested individuals to the T10 short summary at <http://www.t10.org/patpol.htm>.

5 Approval of previous meeting minutes:

9 July 2007 meeting [07-319r0](#)

Paul Suhler requested corrections for the minutes of the 9 July 2007 meeting, [07-319r0](#). No one could remember any comments or corrections.

Michael Banther made a motion for acceptance of [07-319r0](#) as written. Kevin Butt seconded the motion. In the absence of objections or abstentions, the group approved the motion unanimously.

6 Call for Secretary:

Paul Suhler noted that Michael Banther will relinquish the secretarial responsibilities after the January, 2008 meeting. He issued a call for someone to accept the secretarial responsibilities thereafter. No one answered the call.

Paul Suhler also noted that it is unclear who will edit ADC-3. Paul Entzel may or may not have time to do this work. Geoff Barton has explored whether he could take the role and concluded that he did not have sufficient time available. Paul Suhler asked if anyone objected to proceeding with ADC-3 discussions under these circumstances. No one objected.

7 Review of action items:

- 07-046 Michael Banther will revise [07-292r0](#) per New Business item 8.1 of [07-319r0](#).
Closed, [07-292r1](#).
- 07-047 Curtis Ballard will revise [07-289r0](#) per New Business item 8.2 of [07-319r0](#). *Closed, [07-289r1](#).*
- 07-048 Rod Wideman will revise [07-303r0](#) per New Business item 8.3 of [07-319r0](#). *Closed, [07-303r1](#).*
- 07-049 Paul Entzel will revise [06-475r5](#) per Old Business item 7.2 of [07-319r0](#). *Closed, [06-475r6](#).*
- 07-050 Paul Entzel will issue ADC-2 revision 8 containing all resolved letter ballot comments from [06-475r5](#) as revised. *Closed.*
- 07-051 Michael Banther will revise [07-321r0](#) per New Business item 8.4 of [07-319r0](#).
Closed, [07-321r1](#).

8 Old business:

8.1 **ADC-2 Working List for ISV feedback (SMC/SSC/ADC/SPC) ([05-315r3](#)) [Butt]**

Kevin Butt stated that nothing has changed since the last review. The working group is waiting on some work in SSC-3 before resolving the last work item in this document.

8.2 ADT-2 Negotiation state machine ([07-321r1](#)) [Banther]

Michael Banther introduced the proposal and reviewed its background and purpose.

Michael Banther realized that [07-321r1](#) as present in the T10 document archive did not match the latest revision of the proposal. He agreed to upload [07-321r2](#) and all subsequent discussion occurred using this revision.

The working group discussed the changes to the proposal since the last review. The working group also improved the text that re-instates a requirement to lower link parameters during the negotiation process.

Michael Banther made a motion to incorporate [07-321r1](#) as revised into ADT-2. Robert Payne seconded the motion. In the absence of objections or abstentions, the group approved the motion unanimously.

Subsequent to the motion passing, Paul Suhler noted that the motion should have been against [07-321r2](#) as revised. He asked if anyone in the group objected to a modification of the motion from [07-321r1](#) to [07-321r2](#). No one objected.

8.3 ADI: Features for ADC-2 and ADT-2 ([06-060r5](#)) [Suhler]

Paul Suhler walked the group through the list of work items. He noted that the group still has two work items open.

8.4 ADI: Features for ADC-3 and ADT-3 ([06-425r6](#)) [Suhler]

Paul Suhler walked the group through the list of work items. He asked if anyone wished to add an item.

Michael Banther requested addition of an item to transport ADT over some network protocol. Kevin Butt suggested that we reduce the scope of the work item to ADT over Ethernet. Paul Suhler asked if the new work item should replace work item 4 which seeks to transport the ADT Fast Access protocol over some other transport protocol. Michael requested that item 4 remain for the present.

9 New business:

9.1 ADT-2: Scheduling of call for final technical input [Suhler]

The group debated the options for when to call for final technical input. Both November, 2007 and January, 2008 were considered. The group agreed to final technical input at the November, 2007 working group meeting.

9.2 ADC-3: Automation control of encryption ([07-164r0](#)) [Ballard]

Curtis Ballard reviewed the background and history of the proposal. He noted that the revision he will present is a draft of revision 2. He will post it to the T10 document archive shortly after this meeting.

Curtis Ballard walked the group through the proposal accepting comments as he went. Kevin Butt suggested that Curtis present a high-level view of the purpose of the proposal. Robert Payne requested that Curtis and the working group steer the proposal to make it suitable for removable medium block devices as well as removable medium streaming devices.

Curtis Ballard discussed the purpose of the proposal at a high-level. Robert Payne, Chris Williams, Kevin Butt and Paul Suhler discussed standardization of security features in SSC-3

and SPC-4. Robert and Paul suggested striking the word 'tape' and replace it with 'RMC'. Curtis pointed out that he has previously received guidance to tie the ADC-3 proposal to the SSC-3 specific encryption features simply because only SSC-3 contains the level of detailed specification necessary for this proposal to reference.

After some further discussion, the group agreed that the proposal will inevitably have a streaming device focus due to the lack of interest in and consideration for security of data at rest within the block device community.

Geoff Barton and Paul Suhler noted that the text does not make clear the need for the ability to add and remove supported algorithms as opposed to simply not listing the algorithm in the list visible over the primary port.

The group moved on to a discussion of when the automation application client should have the ability to add or remove supported algorithms to the list visible over the primary port. Further technical discussions followed. Curtis Ballard suggested adding an informative annex to the draft standard that provides example message sequence charts of controlling encryption, and the group agreed that such an annex is justified. Kevin Butt pointed out a backwards compatibility issue with encryption control via the primary port locking out encryption control over the ADT port.

Robert Payne suggested that the proposal remove the tape-centricity from the ADI Tape Data Encryption services clause. Kevin Butt supported Robert's opinion.

The group continued review of the proposal until time was called.

Curtis Ballard agreed to bring back a revision based on comments received.

9.3 ADT-2: Plug and play ADT [Suhler]

Paul Suhler described a customer request for hot-plugging a connector into an ADT port. Geoff Barton asked if RS-422 support hot plugging. Kevin Butt replied that it does not. Paul responded that he will point out this problem to the customer and ask the customer's T10 representative to bring in a proposal for hot-plugging against ADT-3 if the customer really wants this feature.

10 Next meeting requirements:

Subject to approval by the September 2007 T10 Plenary, the group will hold a teleconference on 26 September 2007 beginning at 8:00 AM PDT and concluding at 10:00 AM PDT.

Subject to approval by the September 2007 T10 Plenary, the group will hold a teleconference on 10 October 2007 beginning at 8:00 AM PDT and concluding at 10:00 AM PDT.

Subject to approval by the September 2007 T10 Plenary, the group will hold a teleconference on 31 October 2007 beginning at 8:00 AM PDT and concluding at 10:00 AM PDT.

Subject to approval by the September 2007 T10 Plenary, the group will hold a meeting on 5 November 2007 during T10 plenary week in Las Vegas, Nevada beginning at 9:00 AM PST and concluding at 1:00 PM PST.

11 Review new action items:

07-052 Michael Banther will revise [07-321r2](#) per old business item 8.2.

07-053 Paul Entzel will incorporate [07-321r2](#) as revised into ADT-2.

- 07-054 Paul Suhler will revise [06-060r5](#) to show the work on the Link Negotiation state machine complete.
- 07-055 Paul Suhler will revise [06-425r6](#) per old business item 8.4.
- 07-056 Curtis Ballard will revise [07-164r0](#) per new business item 9.2.

12 Adjournment:

Michael Banther made a motion for adjournment. Geoff Barton seconded the motion. The group passed the motion unanimously. Paul Suhler adjourned the group at 3:15 PM PDT.