Draft Minutes Automation/Drive Interface (ADI) Working Group Ad Hoc Meeting T10/05-408r1 7 November 2005 9:00 AM – 12:00 PM CST Austin, Texas

1 Introductions:

Paul Suhler called the meeting to order at 9:05 CST. He thanked Dell for hosting the meeting. A table of the attendees appears at the end of these minutes.

2 Approval of the agenda:

Paul Suhler reviewed the order of the discussion items.

Kevin Butt made a motion for acceptance of the agenda as written. Rod Wideman seconded the motion. In the absence of objections or abstentions, the group passed the motion unanimously.

3 Approval of previous meeting minutes:

12 September 2005 meeting

05-329r1

Paul Suhler requested corrections for the minutes of the 12 September 2005 meeting, <u>05-329r1</u>. No one provided comments or corrections.

Michael Banther made a motion for acceptance of the minutes as written. Rod Wideman seconded the motion. In the absence of objections or abstentions, the group passed the motion unanimously.

4 Review of action items:

- a. 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). This proposal will also change the description of each state machine to clearly indicate what state it is in upon activation. He will produce this proposal for the September or November 2004 meeting. *Carryover*.
- b. Kevin Butt will write a proposal against SPC-3 to add automation type MAM attributes (reference ADC letter ballot <u>04-197r1</u>, comment IBM Roberts 2). *Carryover*.
- c. Paul Suhler will write a proposal based on discussion item (c) of <u>04-385r0</u>. *Closed*, <u>05-409r0</u>.
- d. Susan Gray will investigate Automation mediated R/W diagnostics (reference item 4 in <u>04-263r5</u>). *Closed*, dropped.
- e. Paul Entzel will investigate Density Override in the RMC LU descriptor (reference item 16 in <u>04-263r5</u>). *Closed*, dropped.

- f. Michael Banther will bring in a proposal to standardize the HP vendor-specific connector for ADT-2. *Closed*, <u>05-265r0</u>.
- g. Paul Entzel will incorporate <u>05-124r0</u> into ADT-2. *Closed*.
- h. Michael Banther will bring in a proposal to allow negotiation of additional link parameters. *Closed*, <u>05-377r0</u>.
- i. Paul Entzel will incorporate <u>05-261r0</u> into ADC-2. *Closed*.
- j. Halvard Eriksen to revise 05-292r0 per discussion item 5.3 in 05-329r1. Closed.
- k. Paul Entzel will incorporate <u>05-292r0</u> as revised into ADT-2 and will search out and replace instances of 'buffer offset' with 'data offset' where appropriate. *Closed*.
- 1. Paul Entzel will incorporate 05-302r0 into ADC-2. Closed.
- m. Paul Entzel will incorporate 05-303r0 into ADC-2. Closed.
- n. Michael Banther will revise <u>05-304r0</u> per discussion item 5.6 in <u>05-329r1</u>. *Closed*, <u>05-304r1</u>.
- o. Michael Banther will revise <u>05-310r0</u> per discussion item 5.7 in <u>05-329r1</u>. *Closed*, <u>05-310r2</u>.
- p. Paul Suhler will revise <u>04-263r7</u> per discussion item 5.8 in <u>05-329r1</u>. *Closed*, <u>04-263r8</u>.

5 Discussion items:

5.1 ADI ADC-2 Target Device Serial Number subpage (05-155r2) [Wideman]

Rod Wideman started by clarifying the progress made in September. Paul Suhler read out the minutes of the September discussion.

Rod Wideman asked for someone to take the SSC-3 specific portions into the SSC-3 working group. Kevin Butt noted that Ralph Weber had requested moving from a mode parameter-based solution to a command-based solution.

Rod Wideman made a motion for incorporation of <u>05-155r2</u> into ADC-2. Paul Suhler seconded the motion.

Noud Snelder asked if a simpler method did not exist to accomplish this goal. He objected to the need for the drive to save the serial number given to it by the automation. Paul Entzel, Kevin Butt, and Rod Wideman replied that nothing in the proposal required that the drive save the parameter. We debated what information the drive has to save to allow quick enabling after power-on in all cases.

Noud Snelder stated his opposition to the drive tracking two serial numbers. He doesn't like the complexity. Paul Entzel pointed out the need for the drive to use the manufacturer assigned serial number to track drives with bad components and the need for the automation to use the automation assigned serial number to prevent re-inventory by applications.

In the absence of objections or abstention, the group passed the motion unanimously.

5.2 ADC-2 Vendor-specific VHF Data Bits (<u>05-304r1</u>) [Banther]

Michael Banther introduced the revised proposal. He's reduced the vendor-specific fields to one bit and included guidance information in a note.

Rod Wideman stated that he did not like adding an acronym for vendor-specific. He also noted that guidance does not follow the form for a bit description used elsewhere in ADC-2. Finally he noted that the bit could be standardised with the information presented elsewhere

remaining vendor-specific. The group debated Rod's concerns. Eventually he retracted them.

Kevin Butt asked about the intention of the note with regards to vendor-specific parameters in standard log pages. The discussion drifted off into what will and will not pass letter ballot.

Michael Banther made a motion for incorporation of <u>05-304r1</u> into ADC-2. Kevin Butt seconded. In the absence of objections or abstention, the group passed the motion unanimously.

5.3 ADC-2 Add Identification Descriptors to SMC Logical Unit Descriptor Format (05-310r2) [Banther]

Michael Banther introduced the revised proposal. It requires the bridging manager to use the same LUN for the local and remote SMC device servers.

Paul Entzel pointed out that legacy implementations use separate LUN's for the local and remote SMC device servers. Hence this proposal will break legacy implementations.

Rod Wideman and Kevin Butt asked for clarification of the problem HP is attempting to solve. Michael Banther and Paul Entzel explained the rational. After much discussion, the group agreed that we do not like tying the local SMC LUN to the same value as the remote SMC LUN.

Michael Banther agreed to add a REMOTE SMC DEVICE SERVER LOGICAL UNIT NUMBER field to Table 53 and to rename the current LOGICAL UNIT NUMBER field to LOCAL SMC DEVICE SERVER LOGICAL UNIT NUMBER. He will alter the proposed text below Table 53 to require the bridging manager to use the value of the REMOTE SMC DEVICE SERVER LOGICAL UNIT NUMBER when addressing the remote SMC device server.

We moved on to a debate about the proposed changes to the model clause. After much debate, the group agreed to add 'when' to item (b) to correct the grammar and to change (a) to read, 'target device identification descriptors with identical IDENTIFICATION TYPE field values shall have identical IDENTIFICATION field values'.

Michael Banther will bring back a revised proposal based on comments received.

5.4 ADI: Features for ADC-2 and ADT-2 (04-263r8) [Suhler]

Paul Suhler reviewed the work list and we updated it.

Paul Suhler will revise 04-263r8 based on comments received.

5.5 ADC-2 Working List for ISV feedback (SMC/SSC/ADC/SPC) (05-315r0) [Butt]

The group decided to defer work on this item until SSC-3 sorts out whether it will add a VPD parameter and support tunneling.

5.6 ADT-2 Negotiable Time-Outs (05-377r0) [Banther]

The group did not discuss this item due to lack of time.

5.7 ADT-2 Additional Baud Rates (05-378r0) [Banther]

Michael Banther introduced the proposal.

Paul Entzel asked if the new values are standard ones. Michael Banther replied that they're exact multiples of the 115 200 standard baud rate.

Michael Banther made a motion for incorporation of <u>05-378r0</u> into ADT-2. Kevin Butt seconded the motion.

Rod Wideman asked if the proposed baud rates will solve the problem. Curtis Ballard replied that the proposed rates are the technically feasible ones.

In the absence of objections or abstention, the group passed the motion unanimously.

5.8 ADT-2 Smaller Connector (<u>05-265r0</u>) [Banther]

Michael Banther introduced the proposal. It seeks to standardize an additional smaller connector to ADT-2.

Rod Wideman asked if the referenced part is available from any source other than Molex. Michael Banther replied that only Molex sources it as far as he knows.

Paul Entzel asked for voltage tolerance, current requirements, and who sources the voltage? Paul Suhler and Rod Wideman asked if we should differentiate the names of the three auxiliary signal connections. Michael Banther noted that Table 7 will have to increase by two rows if we do use unique names. However he's willing to make this change.

Paul Suhler suggested bringing in a sample to the January meeting. Kevin Butt may bring in IBM's smaller connector.

Michael Banther agreed to bring back a revision.

6 Unscheduled business:

No one brought unscheduled business before the group.

7 Next meeting requirements:

Subject to approval by the T10 Plenary, the group will hold a meeting 9 January 2006 during T10 plenary week in Scottsdale, Arizona beginning at 9:00 AM and concluding at an unspecified time.

8 Review new action items:

- a. Paul Entzel will incorporate 05-155r2 into ADC-2.
- b. Paul Entzel will incorporate <u>05-304r1</u> into ADC-2.
- c. Michael Banther will revise 05-310r2 per discussion item 5.3.
- d. Michael Banther will revise 05-265r0 per discussion item 5.8.
- e. Paul Suhler will approach the SFF committee to begin the standardisation of the ADT-2 connector referenced in discussion item 5.8.
- f. Rod Wideman will review item 26 of <u>04-263r8</u> and post a summary to the T10 reflector.
- g. Paul Suhler will revise <u>04-263r8</u> per discussion item 5.4.

9 Adjournment:

Michael Banther made a motion for adjournment. Kevin Butt seconded the motion. The group passed the motion unanimously. Paul Suhler adjourned the group at 12:16 PM CST.

Attendees:

Name	Status	Organization
Mr. Rod Wideman	V	ADIC
Mr. Noud Snelder	V	BDT
Mr. Curtis Ballard	V	Hewlett Packard Co.
Mr. Michael Banther	V	Hewlett Packard Co.
Mr. Kevin Butt	A	IBM Corp.
Mr. Robert Payne	P	Iomega Corp.
Dr. Paul Suhler	A	Quantum Corp.
Mr. Paul Entzel	P	Quantum Corp.

Status Key: P - Principal

A,A# - Alternate

AV - Advisory Member

L - Liaison V - Visitor