<div align="center">
Draft Minutes
Automation/Drive Interface (ADI) Working Group
Ad Hoc Conference Call
T10/02-310r0
August 14, 2002
8:30 – 10:20 AM PDT
</div>

The meeting was called to order at 8:35 AM.  The following people participated:

| Name | Organization | email |
|------|--------------|-------|
| Rod Wideman | ADIC | rod.wideman@adic.com |
| Robert Griswold | Crossroads Systems | rgriswold@crossroads.com |
| Michael Banther | Hewlett Packard | michael_banther@hp.com |
| Kevin Butt | IBM | kdbutt@us.ibm.com |
| Lee Jesionowski | IBM | ljesion@us.ibm.com |
| Paul Entzel | Quantum | paul.entzel@quantum.com |
| Paul Suhler | Seagate Technology | paul.a.suhler@seagate.com |
| Tuong Vu | Sony | tuong.vu@am.sony.com |
| Susan Gray | Quantum | susan.gray@quantum.com |

There were no volunteers to be permanent secretary.  Rod Wideman volunteered to be acting secretary for this meeting.

# Agenda Additions

ADT Proposal
Revision to Paul Entzel's TapeAlert document

# Action Item Review

1. Michael Banther will produce a proposal for additional MAM attributes. This will incorporate some of the additional data called for by 02-097r1. *Withdrawn.  Additional discussion within HP indicated preference towards log pages or diagnostic pages.  Thought is that content is relatively well-structured, lending itself to multi-field data.  Closed.*
2. Michael Banther will produce a proposal for the physical layer signals for ADP based off of 02-148r0. The proposal will include a recommended connector on the back of the drive. *Carryover.*
3. Paul Entzel will write a proposal to obsolete Tape Alert Flags 28h through 2Eh and removing the commands to support attached medium changers from SSC-2. *T10/02-301r0.  Closed.*
4. Everyone should submit other proposed changes for Tape Alert flags to Paul Entzel before the conference call for inclusion in the proposal. *Closed.*
5. Paul Suhler will produce a revision 4 of 02-106 with the changes agreed to in this meeting. *Closed.*
6. Paul Entzel will update 02-253 to revision 1 based on decisions at this meeting and post it to the T10 web site.  He will also provide Bob Griswold with word format source for this proposal. *Closed.*
7. Bob Griswold will create revision 0 of ADC using his skeleton and the proposals approved in this meeting and last by 7 August 2002. *Some progress; new due date 16 August.  Carryover.*
8. Paul Suhler will schedule a conference call and post a message to the T10 reflector announcing it 2 weeks ahead of it. *Closed.*

# Agenda Items

## ADC Mode Pages                    T10/ 02-253r1    Paul Entzel

Discussion of changes based on previous meeting minutes. Comment to reference WWN type specifically (Node, Port) where "WWN" is used. Suggestion is to always use "WWNN" for Node names and "WWPN" for Port names. Question as to whether there is current standard or convention to follow. One convention appears to be to spell everything out (e.g., "World Wide Port Name").

Minor typographical errors to be directed to Bob Griswold.

Paul gave overview of background and approach.

Section 2.1 – No comments.

Section 2.2 – Why not a descriptor for ADT? Assumed point to point topology, also thought is that transport layer would address. Any need to make the values visible to SCSI layer? None noted.

Section 2.2.4 – Other fields to consider – do we want any of these? Interest now expressed in Maximum allowable negotiated transfer rate, mode of operation. Need to create proposal for ADC.

Section 2.2.5 – Discussion again around UHA. Question is whether Require Hard Address behavior is implied or not. Suggestion is to add RHA bit field directly and to change UHA to mean Hard Address Valid. Need a proposal for ADC.

Question as to whether address is AL_PA or Assigned Loop Identifier. Should be the latter.

Discussion as to ability to limit frame size outside of login. Consensus is to not include it.

Note that paragraph referencing Automatic Port Enable is to be removed.

Section 2.3 – No comments.


## TapeAlert Changes                    T10/02-301r0    Paul Entzel

Paul Entzel reviewed proposed changes. To be added to next SSC agenda. No additions or changes noted.


## ADC State Diagram                    T10/02-257r0    Rod Wideman

Discussion of meaning of "initial mechanical load of drive"

Discussion of need for Unload Complete, Load Complete bits, suggest just use Access Allowed, suggest rename of Load Complete to Data Accessible.

Further discussion tabled until September meeting, call for additional feedback from group in advance.

## Review of Assumptions for ADT Proposal          Paul Entzel

Paul Entzel gave an overview of a proposal he's working on as a continuation of T10/02-274r0.

1. Physical interface is point to point
2. Recipient shall acknowledge all frames except ACK
3. ACK frames should be kept short because of frequency
4. Several Upper Level Protocols used on this layer

- Link layer (ACK, login)
- Encapsulated SCSI
- Access polling frame
- Vendor specific
5. Short frame header with protocol specific header payload

Discussion of whether ADT should be able to coexist with legacy protocols.  Consensus was that this is still desirable, multiple ways to accomplish.  At a minimum should try to avoid using any SOF characters currently in use.  Everyone to send SOF characters used or preferred to Paul Entzel.

What would the discovery process be, should there be one?  Probably not a requirement but needed as reference annex.

# New Action Items

1. (Carryover) Michael Banther will produce a proposal for the physical layer signals for ADP based off of 02-148r0.  The proposal will include a recommended connector on the back of the drive.
2. (Carryover) Bob Griswold will create revision 0 of ADC using his skeleton and the proposals approved in this meeting and last by 16 August 2002.
3. Paul Suhler – Find out approved method of referencing another standard.
4. Bob Griswold – Research naming convention for different World Wide Names (Node, Port, LUN).
5. Kevin Butt – Create proposal for ADC to add RHA field and change definition of UHA to only indicate address field valid.  Also to clarify whether address is AL_PA or Assigned Loop Identifier.
6. Everyone – Review T10/02-257r0 and provide feedback to Rod Wideman
7. Michael Banther – Proposal against ADC for Parallel SCSI descriptor in 0253r1
8. Paul Suhler – Investigate call-in availability for Sept. meeting.
9. Everyone – Send to Paul Entzel currently used or preferred SOF characters.

# Adjournment

The meeting was adjourned at 10:20 AM.