T10/04-110r0

Voting Results on T10 Letter Ballot 04-109r0 on Forwarding ADT to First Public Review Ballot closed: 2004/04/26 12:00 noon MDT

Organization	Name	S	Vote	Add'l Info
Adaptec, Inc.	Tim Symons	P	Yes	
Agilent Technologies	Pat Thaler	Р	Yes	
AMCC			DNV	
Amphenol Interconnect	Michael Wingard	Ρ	Yes	
Brocade	Robert Snively	Ρ	Yes	Cmnts
Cisco Systems, Inc.	Claudio DeSanti	Ρ	Yes	
Crossroads Systems, Inc.	Dexter Anderson	А	Yes	
Dallas Semiconductor	James A. Lott, Jr.	Ρ	Yes	
Dell, Inc.	Kevin Marks	Ρ	Yes	
EMC Corp.	Gary S. Robinson	Ρ	Yes	
Emulex	Robert H. Nixon	P	Abs	Cmnts
ENDL	Ralph O. Weber	Ρ	Yes	
FCI	Douglas Wagner	Ρ	Yes	
Fujitsu	Mike Fitzpatrick	Ρ	Yes	
General Dynamics	Nathan Hastad	Ρ	Yes	
Hewlett Packard Co.	Rob Elliott	Ρ	Yes	Cmnts
Hitachi Cable Manchester	Zane Daggett	Ρ	Yes	
Hitachi Global Storage Tech.	Dan Colegrove	Ρ	Yes	
IBM Corp.	George O. Penokie	Ρ	No	Cmnts
Intel Corp.	Robert Sheffield	P	Abs	Cmnts
Iomega Corp.	David Hawks	Ρ	Yes	Cmnts
LSI Logic Corp.	John Lohmeyer	Ρ	No	Cmnts
Madison Cable Corp.	Ashlie Fan	Ρ	Yes	
Maxtor Corp.	Mark Evans	Ρ	Yes	
Microsoft Corp.	Emily Hill	Ρ	Yes	
Molex Inc.	Jay Neer	Ρ	Yes	
Panasonic Technologies, Inc	Terence J. Nelson	Ρ	Yes	
Philips Electronics	William P. McFerrin	Ρ	Yes	
Pivot3, Inc.	Bill Galloway	P.	Abs	Cmnts
QLogic Corp.	Skip Jones	Ρ	Yes	
Quantum Corp.	Paul Entzel	Ρ	Yes	Cmnts
Seagate Technology	Gerald Houlder	Ρ	No	Cmnts
Storage Technology Corp.	Erich Oetting	Ρ	Yes	
Sun Microsystems, Inc.	Vit Novak	Ρ	Yes	
Texas Instruments	Paul D. Aloisi	Ρ	Yes	Cmnts
Toshiba	Hiroshi Suzuki	Ρ	Yes	
UNISYS	Ron Mathews	Ρ	Yes	
Veritas Software	Roger Cummings	P	Abs	Cmnts

Ballot totals: (30:3:4:1=38)

- 30 Yes
- 3 No

4 Abstain

1 Organization(s) did not vote

38 Total voting organizations

4/26/2004

04-110r0.TXT

12 Ballot(s) included comments This 2/3rds majority ballot passed. 30 Yes are more than half the membership eligible to vote minus abstentions [greater than 17] AND 30 Yes are at least 22 (2/3rds of those voting, excluding abstentions [33]) AND 30 Yes are equal to or exceed a quorum [12] Key: Р Voter is principal member Voter is alternate member Α Abstain vote Abs DNV Organization did not vote Cmnts Comments were included with ballot NoCmnts No comments were included with a vote that requires comments ***** Comments attached to Yes ballot from Robert Snively of Brocade: Brocade 001 (E) Page: xvii Location: Foreword, 2nd par Problem Description: "group address" s/b "group addressed" or "group addresses" Suggested Solution: Make requested change Brocade 002 (E) Page: 15 Location: 4.3.1 Problem Description: "while and the others" s/b "while the others" Suggested Solution: Make requested change ***** Comments attached to Abs ballot from Robert H. Nixon of Emulex: My organization is not directly or materially affected by the subject of this standard.

Comments attached to Yes ballot from Rob Elliott of

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Hewlett Packard Co.: HPQ #1 PDF Page 1 Editorial: Replace with 'Working Draft' on two lines. HPQ #2 PDF Page 1 Editorial: Replace with 'T10 Project 1557-D' on two lines with the line break after T10. HPQ #3 PDF Page 1 Editorial: Replace with 'InterNational'. HPQ #4 PDF Page 2 Editorial: Change to 'IBM'. HPQ #5 PDF Page 2 Editorial: Change to 'gop@us.ibm.com'. HPQ #6 PDF Page 2 Editorial: Change to 'INCITS'. HPQ #7 PDF Page 2 Editorial: Change IINCITS to INCITS. Bold the first line. HPQ #8 PDF Page 2 Editorial: Bold and underline. HPQ #9 PDF Page 2 Editorial: SeeSAM3r13. Below Document Distribution add: INCITS Online Store<next column>http://www.techstreet.com/INCITS.html managed by Techstreet<next column>Telephone: 1-734-302-7801 or 1327 Jones Drive<next column>1-800-699-9277 Ann Arbor, MI 48105<next column>Facsimile: 1-734-302-7811 or HPQ #10 PDF Page 2 Editorial: Add http://global.ihs.com/ and move all telephone numbers down one line.

HPQ #11 PDF Page 2 Delete footer here and other pages. HPQ #12 PDF Page 2 Editorial: Make page number show up in Acrobat page field on status bar, e.g., ii (2 of 111) instead of 2 of 111. HPQ #13 PDF Page 3 Editorial: Move Revision Information to after List of Figures and before Forward. HPQ #14 PDF Page 3 Editorial: Add Approved Documents Included section. See SAM3r13. HPQ #15 PDF Page 3 Editorial: Change to 'ESC'. HPQ #16 PDF Page 3 Editorial: Change to 'subclause' here and 11 other places. HPQ #17 PDF Page 4 Editorial: Change to 'it'. HPQ #18 PDF Page 5 Editorial: Change to '5d'. HPQ #19 PDF Page 5 Editorial: Change to '5f'. HPQ #20 PDF Page 6 Editorial: Change to 'changes'. HPQ #21 PDF Page 7 Editorial: Change to 'definitions'. HPQ #22 PDF Page 8 Editorial: Change to 'InterNational' and bold the entire line. HPQ #23 PDF Page 8 Editorial: Change to 'device' here and in the next sentence. SPC-x defines Device Type as a field in the standard INQUIRY data. We don't want to refer to that field here.

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HPQ #24 PDF Page 8 Editorial: Singular-plural mis-match. Either use 'device' and 'its use' or 'devices' and 'their use'. HPQ #25 PDF Page 8 Editorial: delete. HPQ #26 PDF Page 8 Editorial: delete. HPQ #27 PDF Page 8 Editorial: delete. HPQ #28 PDF Page 8 Editorial: center on page. HPQ #29 PDF Page 9 Editorial: Change to '2004'. HPQ #30 PDF Page 9 Editorial: Center on page. HPQ #31 PDF Page 10 Editorial: align with page numbers below. HPQ #32 PDF Page 11 Editorial: Incorrect capitalization. HPQ #33 PDF Page 11 Editorial: 'Retryable' is not a word in the English language. Replace with 'Rectifiable' meaning 'to make right, correct, or amend'. HPQ #34 PDF Page 17 Foreword (and global) IINCITS should be INCITS. Do a case-insensitive search. HPQ #35 PDF Page 18 Foreword Fix Vit's name

HPQ #36 PDF Page 21 1 Scope (and global) Change to a) ; b) ; and c) format with: semicolons at the end of most lines "; and" or "; or" at the end of the second to last line HPQ #37 PDF Page 22 1 Scope Delete the list of other standards that is immediately out of date and incomplete HPQ #38 PDF Page 24 2.3 References under development Future ISO numbers are available in T10/03-146 HPQ #39 PDF Page 24 2.3 References under development Change 1476 to 14776 (twice on page) HPQ #40 PDF Page 29 3.3.6 obsolete : Delete extra space HPQ #41 PDF Page 34 4.1 Architecture After "Data Transfer Devices" add "(DTDs)". HPQ #42 PDF Page 35 4.2 Default operating parameters ISO-ize 9600. HPQ #43 PDF Page 35 4.2 Default operating parameters for the link Define "link" before use, either here or in 4.1 - perhaps label the links in the figure. Add to 3.1 too. Mention that it's full duplex (aka dual simplex), and what communication rates it supports. HPQ #44 PDF Page 37 4.3.2.2.1 State description Not clear at this stage there are more than one. Change "or acknowledgement IU" to "acknowledgement IU (e.g., ACK IU or NAK

IU)."

HPQ #45 PDF Page 37 4.3.2.2.1 State introduction Change "are" to "shall be"

HPQ #46

PDF Page 37 4.3.2.3.4 P1 to P3 Without splitting hairs, this statement appears to contradict 6.5.5 Port Logout Information Unit which states, 'Only automation ports may send this IU.' The problem being that 4.3.2.3.4 places a 'shall' clause on every port regardless of whether it belongs to automation or DT. Of course since since 4.3.2.3.4 goes on to state, 'and sends the corresponding ACK IU' and since an automation port should never respond to a Port Logout IU with an ACK, one can argue that the 'shall' clause only applies to DT device ports. However I don't know of a place in the text that actually states that an automation port shall respond to receipt of a Port Logout IU with a NAK IU.

HPQ #47 PDF Page 37 4.3.2.3.1 State description Change PROCESS to PROGRESS to match 6.5.3.3

HPQ #48 PDF Page 37 4.3.2.2.1 State description Change value to code

HPQ #49 PDF Page 38 4.3.2.5.1 State description Change value to code

HPQ #50 PDF Page 39 4.3.3.1 Link negotiation state machine overview N1: Negotiating; Delete space

HPQ #51 PDF Page 41 4.3.3.2 Precedence After IU add .

HPQ #52 PDF Page 42 4.3.3.5.3 N2 to N1 Change value to code HPQ #53 PDF Page 47 4.3.6.3.1 State description Change status to status code HPQ #54 PDF Page 47 4.3.6.3.1 R1 State description ACK and NAK frames should also be allowed HPQ #55 PDF Page 48 4.5.1 Frame Number Counters overview change to a) ; b) ; and c) . format HPQ #56 PDF Page 49 4.5.3 Expected Frame Number counter format frame number with smallcaps HPQ #57 PDF Page 49 4.5.3 Expected Frame Number counter Make frame number smallcaps HPQ #58 PDF Page 52 4.6.2.5.3 Non link service IUs Make frame number smallcaps HPQ #59 PDF Page 52 4.6.2.5.1 Port Login IU Change "and transition to P1:Login, sub state NO:Idle." to ", the Port state machine shall transition to P1:Login, and the Link negotiation state machine shall transition to NO:Idle." if this is the correct place for such rules (the state machines should themselves describe that). HPQ #60 PDF Page 53 4.7 Hard reset Change "described SAM-2" to "described in SAM-2" HPQ #61 PDF Page 53 4.7 Hard reset After SAM-2 add . HPQ #62 PDF Page 53

4.6.2.6.1 Port Login IU Change "and transition to P1:Login, sub state N0:Idle." to ", the Port state machine shall transition to P1:Login, and the Link negotiation state machine shall transition to N0:Idle." if this is the correct place for such rules (the state machines should themselves describe that).

HPQ #63

PDF Page 53 4.8 I_T nexus loss Change to a) ; b) ; and c) . format

HPQ #64

PDF Page 56 5.1.3 Sense connection Technical: Definition of asserted state missing.

HPQ #65

PDF Page 56 5.1.3 Sense connection Change to a) ; b) ; and c) . format

HPQ #66

PDF Page 57 5.1.4 Signal connection Change to a) ; b) ; and c) . format

HPQ #67

PDF Page 62 6.3 ADT frame header Change may not to shall not

HPQ #68

PDF Page 62 6.3 ADT frame header Format "2 - 3 PAYLOAD SIZE" as two rows with an (MSB) and (LSB)

HPQ #69

PDF Page 62 6.3 ADT frame header Describe that recipients shall NAK frames with PAYLOAD SIZE mismatches with OVER-LENGTH or UNDER-LENGTH status codes. Describe the precedence of

HPQ #70

PDF Page 62 6.3 ADT frame header Describe returning NAK (UNEXPECTED PROTOCOL)

HPQ #71 PDF Page 63

6.4 Checksum Change CRC to checksum HPQ #72 PDF Page 63 6.5.3.1 Acknowledgement information units introduction Change "a valid SOF and EOF character" to "valid SOF and EOF characters" HPQ #73 PDF Page 63 6.5.1 and global What is the difference between a frame and an IU? Use terms like NAK IU or NAK frame consistently. HPQ #74 PDF Page 64 6.5.3.3 NAK information unit Table 14 After "value" add autoincrementing "(part n of n)" HPQ #75 PDF Page 64 Describe the precedence of these when multiple conditions can exist: e.g. OVER-LENGTH vs MAXIMUM PAYLOAD SIZE EXCEEDED vs UNEXPECTED PROTOCL HPQ #76 PDF Page 64 6.5.3.3 NAK information unit When is OUT OF RESOURCES returned? Describe in the appropriate section elsewhere in the document Note b seems a bit redundant

HPQ #77 PDF Page 64 6.5.3.2 ACK Change 0 to zero

HPQ #78 PDF Page 65 6.5.3.3 NAK information unit When is ILLEGAL OPERATION FOR CURRENT OPERATING PARAMETERS returned? Describe in the appropriate section elsewhere in the document

HPQ #79 PDF Page 65 6.5.3.3 NAK information unit Table 14 Note b does not seem correct for MAXIMUM ACK OFFSET. I assume this is sent if a port advertised N but N+m arrive, but is not returned if only N frames arrive.

HPQ #80 PDF Page 65 6.5.3.3 NAK information unit When is MAXIMUM OFFSET EXCEEDED returned? Describe in the appropriate section elsewhere in the document HPQ #81 PDF Page 65 6.5.3.3 NAK information unit When is MAXIMUM PAYLOAD SIZE EXCEEDED returned? Describe in the appropriate section elsewhere in the document HPQ #82 PDF Page 65 6.5.3.4 Define terminate. Does this mean add the checksum first or just send EOF? HPQ #83 PDF Page 66 6.5.4 Port login IU "Ports claiming compliance with this standard at draft revision shall set the MAJOR REVISION field to 0. Ports claiming compliance with this standard at INCITS approved version shall set the MAJOR REVISION field to 1." Could you just use the version descriptor as defined by SPC-3? That will track draft versions, ANSI versions, and ISO versions. I don't think the above statement will make it through ISO standardization. HPQ #84 PDF Page 66 6.5.4 Port login information unit Delete value HPQ #85 PDF Page 67 6.5.5 Port logout IU Change P7:Logged-out to P3:Logged-Out state HPQ #86 PDF Page 67 6.5.4 Port login information unit "A port shall be capable of supporting a frame payload size of 256 bytes" to "The maximum payload size shall be at least 256." HPQ #87 PDF Page 67 6.5.4 Port login information unit Reword "All ports shall be capable of supporting a Maximum Ack Offset value of one." as "The MAXIMUM ACK OFFSET field shall be set to at least one."

HPQ #88

PDF Page 67 6.5.4 Port login information unit What if the frame is received with a Maximum Ack Offset of 0? HPQ #89 PDF Page 67 6.5.4 Port login information unit What if the frame is received with a Maximum Payload Size smaller than 256? HPQ #90 PDF Page 67 6.5.4 Port login information unit What if the frame is received with a Baud Rate of O? HPQ #91 PDF Page 67 6.5.4 Port login information unit Is it safe to allow all baud rates in increments of 100 Baud? Some UARTs cannot run (or run as reliably) at certain baud rates, depending on their clock and clock divisor implementation. This seems to let one port request 19200 and the other reply with 19100, when the first might only support fallback to 9600. Consider just supporting the common baud rates (multiples of 9600 rather than 100). 5.1.5 implies a set of preferred rates at the physical layer. HPQ #92 PDF Page 68 6.5.7 NOP IU Define that other than un-pausing, this performs no operation. HPQ #93 PDF Page 70 7.1.1 SCSI encapsulation overview (and global) Change Queue Tag to task tag HPQ #94 PDF Page 70 7.1 SCSI Encapsulation Add a section detailing allowable IU sequences. For example, it appears that ADT requires a Transfer Ready be received before Data is sent (for both data-in and data-out). This is not obvious, though, since it differs from FCP and SAS. HPQ #95 PDF Page 71 7.1.2 SCSI Command IU Rename "FIRST BURST LENGTH field" to "FIRST READ BURST LENGTH field" to avoid confusion with the SAM-3 "first burst" HPQ #96 PDF Page 72 7.1.3 SCSI Task Management IU

"and may perform a hard reset." Either mandate that this generate a hard reset or drop TARGET RESET. If it's just a shortcut for running LOGICAL UNIT RESETs, let those be done one at a time.

HPQ #97

PDF Page 73 7.1.4 SCSI Response information unit Table 22 response code should be small caps

HPQ #98

PDF Page 73 7.1.4 SCSI Response information unit "00h or 06h" should be "00h or 05h". Better yet, use the names.

HPQ #99

PDF Page 73 7.1.4 SCSI Response information unit After OOh add "or O5h". Better yet, use their names.

HPQ #100

PDF Page 73
7.1.4 SCSI Response information unit (and global)
Response code 05h is troublesome, because most places that refer to value
O0h also need to refer to 05h since they both mean
command complete.
Consider
a) dropping it. Define that a value 00h plus a non-zero sense length has
the additional meaning.
b) dropping it but adding an extra bit to communicate the additional
meaning
c) changing the encoding so it's somehow related to 00h (e.g. 00h - 0Fh for
the command complete responses, 10h-FFh for the
rest)

HPQ #101 PDF Page 74 7.1.5 SCSI Transfer Ready IU Is it not too burdensome to support offsets that are not 4-byte aligned and lengths for other than the last Transfer Ready of each exchange that are not 4-byte aligned? Other transport protocols shy away from this since it tends to requires barrel shifters in hardware.

HPQ #102 PDF Page 74 7.1.6 SCSI Data information unit This section needs to mention that Data is never sent unless a Transfer Ready was previously received.

HPQ #103

PDF Page 75 7.1.7 SCSI encapsulation exchange lifetime Change nexus loss to I T nexus loss (twice on page) HPQ #104 PDF Page 79 8.1 SCSI Transport protocol services overview Table 26 The confirmation for Data-Out Received needs to be receipt of the last data for the Transfer Ready, not receiving the ACK for the Transfer Readv HPQ #105 PDF Page 79 8.1 SCSI Transport protocol services overview Table 26 indication to the target port is just the receipt of a valid Command IU. The target chooses to send an ACK at that time, but the ACK is not the indication to the target port. (same comment for all Indications and confirmations in this table) HPQ #106 PDF Page 79 8.1 SCSI Transport protocol services overview Table 26 If it remains (not that I'm encouraging that) TARGET RESET must be added to this list HPQ #107 PDF Page 80 8.2 Transport Layer Protocol Services Change I T L x to I T L Q throughout the command section. When untagged command support was removed from SAM-3, that eliminated the concept of I T L only nexuses for commands. HPQ #108 PDF Page 80 8.2 Transport Layer Protocol Services Delete [Autosense Request] throughout When SAM-3 mandated autosense, it no longer became necessary to include an Autosense argument in the protocol services. It's alwavs true. HPQ #109 PDF Page 80 8.1 SCSI Transport protocol services overview (and elsewhere) Rather than adding initiator side protocol services for data transfers. I think ADT is really upgrading the 2-step set of calls in SAM that only involve the target (request/confirmation) into a 4-step set of calls involving both the initiator and target (request/indication/response/confirmation). For Data-In, this should be modeled as 4 steps:

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1) Request from initiator port - Receive Data-In - causes Transfer Ready IU to be sent 2) Indication to target port - indicates the device server is free to call Send Data-In 3) Response from target port - Send Data-In - causes Data IUs to be sent 4) Confirmation to initiator port - indicates to the application that all the requested data has arrived. For Data-Out, this should be modeled as 4 steps: 1) Request from target port - Receive Data-Out - causes Transfer Ready IU to be sent 2) Indication to initiator port - indicates the application client is free to call Send Data-In 3) Response from initiator port - Send Data-Out- causes Data IUs to be sent 4) Confirmation to target port - indicates to the device server that all the requested data has arrived. HPQ #110 PDF Page 80 8.2.1 Send SCSI Command (and elsewhere) The "first [read] burst size" sent in the COMMAND IU needs to be included in the model. Perhaps add an optional argument to Send SCSI Command and SCSI Command Received. In the data-in protocol services, mention that if a non-zero value was delivered, that serves the same role as the initiator sending a Transfer Ready. HPQ #111 PDF Page 82 8.2.3 Send Command Complete transport protocol service The RESPONSE CODE value of 05h needs to be included almost everywhere (e.g. table 30 row a and row b) that the value of 00h is referenced HPQ #112 PDF Page 83 8.2.4 Command Complete Received transport protocol service The RESPONSE CODE value of 05h needs to be included almost everywhere (e.g. table 31row a and row b) that the value of 00h is referenced HPQ #113 PDF Page 83 8.2.5 Send Data-In transport protocol service Table 32 After arguments add (part n of n) or keep table on one page HPQ #114 PDF Page 83 8.2.5 Send Data-In Does this have to wait for the initiator to send a Transfer Ready before sending the data?

HPQ #115 PDF Page 89 8.3.3 Task Management Function Executed transport protocol service Table 42 Add INCORRECT LOGICAL UNIT NUMBER service response mapping HPQ #116 PDF Page 89 8.3.4 Received Task Management Function-Executed Table 43 Keep on one page HPQ #117 PDF Page 90 8.3.4 Received Task Management Function-Executed transport protocol service Table 43 Add INCORRECT LOGICAL UNIT NUMBER service response mapping HPQ #118 PDF Page 91 A.2 SCSI command with no data phase Change "may be" to "are" since there are no options for this simple sequence HPQ #119 PDF Page 91 8k to 8 KB and define KB in the list of acronyms. Is it 1000 or 1024 bytes? If it's 1024 bytes you may need to use Ki-Bytes and reference ISO/IEC 60027-2-am2 (1999-01), Letter symbols to be used in electrical technology -Part 2: Telecommunications and electronics (Amendment 2). HPQ #120 PDF Page 96 B.1 Introduction The red line either does not represent an IU with a checksum error, or figures B.3 and B.4 need to use red lines HPQ #121 PDF Page 96 B.1 Introduction Table B.1 Change NTFS to NFTS (to match Next Frame To Send). It's correct in all the figures that follow. HPQ #122 PDF Page 96 B.1 Introduction Table B.1 Add: FN - Frame Number in the IU

16

HPQ #123 PDF Page 107 C.3 DTD Initiates a login after power-up Table C.3 maximum to Maximum

Comments attached to No ballot from George O. Penokie of IBM Corp.:

IBM-001

PDF pg 2, pg ii, Points of Contact:

My E-mail address should be changed from << gpenokie@tivoli.com >> to <<

gop@us.ibm.com >>

IBM-002

PDF pg 3, pg iii, Revision Information

The revision history needs to be removed before this standard can go to letter $% \left({{{\left[{{{\rm{s}}} \right]}}_{{\rm{s}}}}_{{\rm{s}}}} \right)$

ballot.

IBM-003

PDF pg 19, pg xix, Introduction

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Does this standard reference << SAM-2. >> as stated or should it reference <<
```

SAM-3>>. Unless it this standard has a need to address functions that are only $% \left({{{\left[{{{\left[{{{S}_{m}}} \right]}} \right]}_{m}}} \right)$

in SAM-2 (e.g., parallel) then all the references to SAM-2 should be changed

to SAM-3.

IBM-004

PDF pg 21, pg 1, 1 Scope, item a)

The statement << generic system hardware. >> should be << generic system hardware; and >>

IBM-005

PDF pg 21, pg 1, 1 Scope, item b)

The statement << Provision is made for the addition >> should be << To provide for the addition >>

IBM-006

PDF pg 21, pg 1, 1 Scope, 1st paragraph above figure 1

The statement << The figure is not >> should be << Figure 1 is not >>.

IBM-007

PDF pg 22, pg 2, 1 Scope

The information below figure 1 should all be deleted and replaced with the

statement << These standards specify the interfaces, functions and operations

necessary to ensure interoperability between conforming implementations. This

standard is a functional description. Conforming implementations may employ

any design technique that does not violate interoperability. >>

IBM-008

PDF pg 25, pg 5, 2.3 References under development, The standard titled << Standard Test Methods for Electrical Performance Properties of Insulations

and

Jackets for

Telecommunications Wire and Cable >> is in italics. Either all the standards

in section 2 are placed in italics (which is the correct ISO format) or they $% \label{eq:section}$

are not. But in any case they all have to be the same.

IBM-009

PDF pg 26, pg 6, 3.1.1 acknowledgement IU:

The statement << or NAK IU. See 6.5.3.>> should be << or NAK IU (see 6.5.3). >> $\!\!\!\!>$

IBM-010

PDF pg 26, pg 6, 3.1.1 acknowledgement IU:

There are more than one way of formatting the cross references used in this

section. They all have to be the same. Some examples that are used:

<< See x.x.x. >>, << (See ADC) >>, << See ADC. >>, << See xxx for a detailed

definition of xxx >>, etc. They should all be one format. I would pick

either: << sentence. See xxx. >> or << sentence (see xxx)>. In any case they

all have to have the same format. For the rest of my comments on this section $% \left({{{\left[{{{\left[{{{c_{{\rm{m}}}}} \right]}} \right]}_{\rm{max}}}} \right)$

I will pick the one I like which is << sentence (see xxx). >>

IBM-011

PDF pg 26, pg 6, 3.1.6 application client:

The statement << commands. Further definition of an application client is

found in SCSI Architecture Model-2 standard >> should be << commands (see

SAM-2). >>

IBM-012

PDF pg 26, pg 6, 3.1.7 auto-contingent allegiance:

The statement << status. See SCSI Architecture Model-2 standard for a detailed $% \left[{{\left[{{{\rm{SCS}}} \right]}_{\rm{T}}}} \right]$

definition of auto-contingent allegiance. >> should be << status (see SAM-2). >> $\ensuremath{\mathsf{>>}}$

IBM-013

PDF pg 26, pg 6, 3.1.8 automation device:

The statement << device primary ports (See ADC). >> should be << device primary ports (see ADC). >>

IBM-014

PDF pg 26, pg 6, 3.1.12 device server:

The statement << management as described in SCSI Architecture Model-2

standard. >> should be << management (see SAM-2). >>

IBM-015

PDF pg 26, pg 6, 3.1.14 exchange:

The statement << Exchange ID. See 6.3. >> should be << Exchange ID (see 6.3). >> $\!\!\!\!\!$

IBM-016

PDF pg 27, pg 7, 3.1.25 login process:

The statement << Port Login IUs. See 4.3.3. >> should be << Port Login IUs

(see 4.3.3). >>

IBM-017

PDF pg 27, pg 7, 3.1.32 reset event:

The statement << from a device as described in clause 4.7. >> should be <<

from a device (see 4.7). >>

IBM-018

PDF pg 28, pg 8, 3.1.46 transmission error:

The statement << the transport layer. See 4.6. >> should be << the transport

layer (see 4.6). >>

IBM-019

PDF pg 28, pg 8, 3.2 Symbols and abbreviations

 $\ensuremath{\mathsf{DTD}}$ should be added to the definitions list with a reference to a place either

in this standard or another standard as to where it is defined in detail.

IBM-020

PDF pg 30, pg 10, 3.2 Symbols and abbreviations, 9th paragraph The statement << item 1 must occur or complete >> should be << item 1 shall occur or complete >>

IBM-021

PDF pg 32, pg 12, 3.6.1 State machine conventions overview, Figure 2 The font size in this figure in not 10 point. All text in the standard

should

be 10 point except inline notes which is 9 point. This needs to be fixed.

IBM-022

PDF pg 34, pg 14, 4.1 Architecture, 1st paragraph

The statement << media changer containing 2 Data Transfer Devices. >> should

be << media changer containing two DTDs. >> as that is the way it is

referenced in the reset of this standard.

IBM-023

PDF pg 35, pg 15, 4.2 Default operating parameters for the link, item a)

The statement << shall be set to 9600. >> should be << shall be set to 9600; >>

IBM-024

PDF pg 35, pg 15, 4.2 Default operating parameters for the link, item b) The statement << shall be set to 1. >> should be << shall be set to 1; and >>

IBM-025

PDF pg 35, pg 15, 4.3.2.1 Port state machine, 3rd paragraph

The statement << The port shall transition to P1:Login after receiving a Port

Login IU. >> should be in the description of the PO state not here. If it

already is then deleted in if not move it.

IBM-026

PDF pg 36, pg 16, 4.3.2.1 Port state machine, Figure 4

The statement << to any state, causing transition >> should be << to all

states, causing transition >>. This is in two places.

IBM-027 Technical

PDF pg 36, pg 16, 4.3.2.1 Port state machine, Figure 4

 $(\ensuremath{\mathsf{KB}})\ensuremath{\mathsf{It}}$ is very difficult to follow the state machine since there are actions

are different depending on if the device is Automation or DTD, Split the state $% \left({{{\left[{{L_{\rm{B}}} \right]}}} \right)$

machine into one for automation and one for DTD

IBM-028

PDF pg 37, pg 17, 4.3.2.2.1 State description, Last paragraph

The statement << can transition >> should be << is allowed to transition >>.

IBM-029 Technical

PDF pg 37, pg 17, 4.3.2.2.3 Transition PO:Initital to P3:Logged-Out

(KB) This needs to indicate it only applies to DTD, If the state machines are

not split by automation vs. DTD add a parenthetical here indicating DTD only

IBM-030 Technical

PDF pg 37, pg 17, 4.3.2.3.1 State description

(KB) Last sentence of last paragraph talks about AOE bit related to exchanges,

but no mention is made of what happens to the state machines when AOE bit is

set, Add a statement in the appropriate place to indicate that when the AOE is

set the state machines are reset

IBM-031

PDF pg 37, pg 17, 4.3.2.3.1 State description, last paragraph

A reference to the AOE bit should be added to this statement $<\!<$ setting of the

AOE bit in the Port Login IU (see x.x.x). >>

IBM-032

PDF pg 38, pg 18, 4.3.2.5.1 State description, Last paragraph The statement << port can receive a Logout IU, only a drive port can transition to this state after >> should be << port is able to receive a Logout IU, only a drive port transitions to this state after >>

IBM-033 Technical

PDF pg 39, pg 19, 4.3.3 Link negotiation state machine

(KB) General to all Negotiation States, No statement is made with respect to

receiving ACCEPT bit and parameters do not match, Add statement to each state

saying - if a Port Login IU is received with the ACCEPT bit set and the parameters do not match your last parameters sent NAK and transition to N1.

IBM-034

PDF pg 40, pg 20, 4.3.3.1 Link negotiation state machine overview, Figure 5 The statement << (to any state) >> should be << (to all states) >> in three

places.

IBM-035

PDF pg 40, pg 20, 4.3.3.1 Link negotiation state machine overview, Figure 3 The statement << (from any state >> should be << (from all states >>.

IBM-036

PDF pg 40, pg 20, 4.3.3.2 Precedence of port login exchanges, item b) The statement << exchange that has not yet completed; or >> should be << exchange that has not yet completed; >>

IBM-037

PDF pg 41, pg 21, 4.3.3.3.1 State description
(KB) The second paragraph is incorrect, Remove the paragraph since the
referred to states now transition to the login complete state

IBM-038

PDF pg 41, pg 21, Global

When describing transitions 99% of the time when a << when >> is used it would

be better stated as << if >>. That change should be made throughout this

standard.

IBM-039

PDF pg 41, pg 21, 4.3.3.3.2 Transition NO:Idle to N1:Negotiating, 1st paragraph

The term << unacceptable, >> is unacceptable because there is no clear

definition of what is unacceptable. A clear list of the unacceptable things

needs to be here or a reference to were those unacceptable things are listed.

IBM-040

PDF pg 41, pg 21, 4.3.3.3.2 Transition NO:Idle to N1:Negotiating

This transition list two ways it can occur. They should be stated as an a, $\ensuremath{\mathsf{b}}$

list with an << or >> between them. It should be stated as << This transition

shall occur when:

a) xxxxxxx; or

b) xxxxxxx. >>

IBM-041

PDF pg 41, pg 21, 4.3.3.3.3 Transition NO:Idle to N2:Accept Sent

The term << acceptable, >> is unacceptable because there is no clear

definition of what is acceptable. A clear list of the acceptable things needs

to be here or a reference to were those acceptable things are listed.

IBM-042

PDF pg 41, pg 21, 4.3.3.4.1 State description, 1st paragraph

The statement << to this state due to an Initiate Login message, >> should be

<< to this state as the result of an Initiate Login message, >>

IBM-043

PDF pg 41, pg 21, 4.3.3.4.1 State description, 1st paragraph The statement << If the AOE bit is set, the Port Login >> is not clear as there is no indication as to what the AOE bit needs to be set to. If set to one or if set to zero which is it? This needs to be fixed.

IBM-044

PDF pg 41, pg 21, 4.3.3.4.1 State description, 2nd paragraph The statement << to this state due to a negotiation error, >> should be << to

this state as a result of a negotiation error, >>

IBM-045

PDF pg 41, pg 21, 4.3.3.4.1 State description, 4th paragraph Again with the acceptable and unacceptable with no indication as to what it means to be acceptable or unacceptable. This needs to be fixed.

IBM-046

PDF pg 42, pg 22, 4.3.3.4.3 Transition N1:Negotiating to N2:Accept Sent The term << acceptable, >> is unacceptable because there is no clear definition of what is acceptable. A clear list of the acceptable things

needs

to be here or a reference to were those acceptable things are listed.

IBM-047

PDF pg 43, pg 23, 4.3.3.7.2 Transition N4:Agreed to N0:Idle

(KB) This transition no longer exists with addition of 4.3.3.7.4, Remove this

clause.

IBM-048 Technical

PDF pg 43, pg 23, 4.3.3.8 N5:Login Complete state

(KB) The delay indicated in item 2 of the numbered list is incorrect, Move the

delay from item 2 of the numbered list to a delay on entry into P2:Logged-In

state after allowing receive but before allowing send. This would add an additional state to the transmitter state machine that is turn on receiver then delay time then transition to TO:Active.

IBM-049

PDF pg 43, pg 23, 4.3.3.8 N5:Login Complete state, item 1

The statement << negotiated values, >> should be << negotiated values; >>

IBM-050

PDF pg 43, pg 23, 4.3.3.8 N5:Login Complete state, item 2) The statement << 100 milliseconds, and >> should be << 100 milliseconds; and >>

IBM-051

PDF pg 44, pg 24, 4.3.4.1 Transmitter state machine overview, Figure 6 The statement << (to any state) >> should be << (to all states) >>

IBM-052 Technical

PDF pg 45, pg 25, 4.3.5 Transmitter error recovery state machine (KB) Incorrect states are listed due to the recent state modifications (P5 and

P2), Change the states from P5:Recovering to R2 and P2:Active to P2:Logged-In.

The entire document needs to be swept for these old state numbers and names $% \left({{{\boldsymbol{x}}_{i}}} \right)$

and updated to current.

IBM-053

PDF pg 45, pg 25, 4.3.5.1 Transmitter error recovery state machine overview,

Figure 7

```
The statement << (to any state) >> should be << (to all states) >>
```

IBM-054 Technical

PDF pg 46, pg 26, 4.3.5.3.2 Transition TE1:Initiating Recovery to TE0:Idle (KB) It is not clear that this causes the transmission of the frame that failed, Add in << This shall cause the transmission of the frame that had

failed. >>

IBM-055 Technical

PDF pg 46, pg 26, 4.3.5.4.2 Transition TE2:Retry Initiate Recovery to TE0:Idle

(KB) It is not clear that this causes the transmission of the frame that

failed, Add in << This shall cause the transmission of the frame that had

failed. >>

IBM-056

PDF pg 48, pg 28, 4.3.6.4.2 Transition R2:Recovering to R0:Idle

The statement << the RO:Idle state and continue with normal operations. >>

should be << he RO:Idle state. >> as I'm sure the device would not continue with abnormal operations.

IBM-057 Technical

PDF pg 48, pg 28, 4.4 ACK Offset, 1st paragraph

The statement << By default, the link operates such that a port must wait for

an acknowledgement IU for every frame >> should be << By default, the link

operates such that a port shall wait for an acknowledgement IU for every frame

>>. The term << must >> shall not be used in this standard.

IBM-058

PDF pg 48, pg 28, 4.5.1 Frame Number Counters Overview, Item a)

The statement << with a specific frame. >> should be << with a specific frame; >>

IBM-059

PDF pg 48, pg 28, 4.5.1 Frame Number Counters Overview, item b)

The statement << detect missing frames. >> should be << detect missing frames;

and >>

IBM-060 Technical

PDF pg 49, pg 29, 4.5.1 Frame Number Counters Overview, last paragraph

The statement << To accomplish all of this, each port must keep two counters,

>> should be << To accomplish this, each port shall keep two counters, >>

4/26/2004

IBM-061 Technical

PDF pg 50, pg 30, 4.6.1.2 Error detection by the frame sender (KB) There is no description of Retryable Error, Add a clause describing

Retryable Error.

IBM-062 Technical

PDF pg 50, pg 30, 4.6.1.2.1 Errors detected by the frame sender overview

(KB) All retryable errors are not listed, Add << c) ACK received out of order

and add recovery action (see 4.6.2.4.4). >>

IBM-063 Technical

PDF pg 50, pg 30, 4.6.1.3 Error detection by the frame receiver

(KB) There is no description of Symbol Framing Error, Add a description for

Symbol framing Error.

IBM-064

PDF pg 51, pg 31, 4.6.2.3 Recoverable error

The statement << the port that sent the frame in error can initiate recovery

steps. >> should be << the port that sent the frame in error is able to

initiate recovery steps. >>

IBM-065

PDF pg 51, pg 31, 4.6.2.3 Recoverable error, 1st paragraph

(KB) Incorrect state name is used, Change P3:Pending Recovery to R1:Pending

Recovery.

IBM-066

PDF pg 51, pg 31, 4.6.2.3 Recoverable error, 2nd paragraph

The statement $<\!\!<$ accommodate the recovery process. >> should be $<\!\!<$ accommodate

the recovery process: >>

IBM-067

PDF pg 51, pg 31, 4.6.2.3 Recoverable error, item a)

The statement << receipt of the Initiate Recovery IU. >> should be << receipt

of the Initiate Recovery IU; >>

IBM-068

PDF pg 51, pg 31, 4.6.2.3 Recoverable error, item b)

The statement << with normal operations. >> should be << with normal operations; and >>

IBM-069

PDF pg 52, pg 32, 4.6.2.4.4 Non link service IUs, 1,2,3 list All the entries in the list need to end in << ; >> not << . >> except the last. The second to the last (item 4) should end in << ; and >>.

IBM-070

The statement << zero and appropriate status code and discard the frame. >>

should be << zero and appropriate status code then discard the frame. >>

IBM-071

PDF pg 53, pg 33, 4.6.2.6.2 Port Logout, NOP, Initiate Recovery and Pause IUs,

1st paragraph

The statement << bit set to zero and discard the frame. >> should be << bit

set to zero then discard the frame. >>

IBM-072

PDF pg 53, pg 33, 4.8 I_T nexus loss, a,b,c list

All the items in the list except the last need to end in << ; >> not << , >>.

IBM-073

PDF pg 53, pg 33, 4.8 I_T nexus loss, item c)

The statement << absence (Sensea for DTD port and Senseb for automation port),

>> should be << absence (i.e., Sensea for DTD port and Senseb for automation

port), >>

IBM-074

PDF pg 54, pg 34, 4.9 Transport protocol variations from SAM-2, 2nd paragraph

The statement << One of the intended uses for the ADT transport protocol

involves bridging SCSI traffic from the primary interface of the data transfer $% \left({{{\left[{{T_{\rm{s}}} \right]}}} \right)$

device to the automation device. To facilitate this function, the data

transfer >> should be << The ADT transport protocol involves bridging SCSI traffic from the primary interface of the data transfer device to the automation device. To facilitate this function, the data transfer >>

IBM-075

PDF pg 54, pg 34, 4.9 Transport protocol variations from SAM-2, 5th paragraph

The statement << An application client that does wish to make use of the transport protocol service extensions may >> should be << An application client that does make use of the transport protocol service extensions may >>

IBM-076

PDF pg 56, pg 36, 5.1.3 Sense connection, a,b,c list

All the items in the list except the last need to end in << ; >> not << , >>.

IBM-077

PDF pg 57, pg 37, 5.1.4 Signal connection, a,b,c list

All the items in the list except the last need to end in << ; >> not << , >>.

IBM-078

PDF pg 57, pg 37, 5.1.4 Signal connection, 3rd paragraph

The statement << A device that negates a signal shall refrain from driving the

signal to either state. >> should be << \mbox{A} device that negates a signal shall

not drive the signal to either state. >>

IBM-079

PDF pg 57, pg 37, 5.1.4 Signal connection, Table 5

The is no header row on this table. That needs to be fixed.

IBM-080

PDF pg 58, pg 38, 5.1.4 Signal connection, Figure 10

The figure title goes under the figure not on top of the figure. This needs to

be fixed.

IBM-081

PDF pg 58, pg 38, 5.1.4 Signal connection, Figure 10

The text in this figure in not the same font type as is used in the reset of

the standard (i.e., Arial). This needs to be fixed.

IBM-082

PDF pg 58, pg 38, 5.1.5 Transmit-receive connection, a,b,c list

```
All the items in the list except the last need to end in << ; >> not << , >>.
```

IBM-083

PDF pg 59, pg 39, 5.1.5 Transmit-receive connection, Figure 11

The figure title goes under the figure not on top of the figure. This needs to

be fixed.

IBM-084

PDF pg 59, pg 39, 5.2 Bus composition, Table 7 The << 0 >> and << M >> are not defined in this table. Add a footer that tells what that are.

IBM-085

PDF pg 59, pg 39, 5.2 Bus composition, table 7

The statement << A Vendor Unique sense connection. >> is redundant with the

statement << This standard does not define the use of this connection. >> one

of those statements has to be removed.

IBM-086

PDF pg 59, pg 39, 5.2 Bus composition, table 7

The statement << A Vendor Unique sense connection. >> is redundant with the

statement << This standard does not define the use of this connection. >> one

of those statements has to be removed.

IBM-087

PDF pg 60, pg 40, 5.3 Connector pin-out, 1st paragraph The term << ADT device >> is not defined in this standard. It needs to be defined or a pointer to a place where it is defined or deleted.

IBM-088

PDF pg 61, pg 41, Global

When figure x and table x are used within a sentence they should not be

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capitalized. This needs to be fixed.

IBM-089

PDF pg 61, pg 41, 6.1 Basic frame format, Figure 12

The figure title goes under the figure not on top of the figure. This needs to

be fixed.

IBM-090

PDF pg 61, pg 41, 6.2 Encoding, 1st paragraph

The term << byte stuffing >> and $\,<<\,$ escape >> should be not in quote. Remove

the quotes.

IBM-091 Technical

PDF pg 62, pg 42, 6.3 ADT frame header

(KB) here is no description of what the response should be if Exchange IDs

overlap, 1-Add a NAK code for overlapped $\ensuremath{\mathsf{Exchange}}\xspace;$ 2-Abort all processes with

Exchange ID and respond to the 2nd command with the new NAK code. An

examination of what happens if one or both of the exchanges is a SCSI command

needs to be made and the exchange lifetimes in this scenario needs to be

clarified.

IBM-092

PDF pg 62, pg 42, 6.3 ADT frame header, 2nd paragraph below table 11

T(KB) This uses may instead of shall, Change << An originator of an

exchange may not re-use an exchange ID value during the lifetime of that exchange >> to << << An originator of an exchange shall not re-use an exchange ID value during the lifetime of that exchange >>

IBM-093

PDF pg 63, pg 43, 6.4 Checksum, a,b,c list

All the items in the list except the last need to end in << ; >> not << , >>.

IBM-094

PDF pg 63, pg 43, 6.5.3.1 Acknowledgement information units introduction

The statement << See clause 4.4 for other rules governing >> should be << See

4.4 for other rules governing >>

IBM-095

PDF pg 64, pg 44, 6.5.3.3 NAK information unit, Table 14

Because table 14 is split across multiple page it need to have the << (x of x) $% \left(x^{2}\right) =\left(x^{2}\right) \left(x$

>> notation on the table title. This can be set up to automatically generate

in frame.

IBM-096

PDF pg 64, pg 44, 6.5.3.3 NAK information unit, Table 14

The statement << OVER-LENGTH (more bytes received than PAYLOAD SIZE field

indicated) >> should be << OVER-LENGTH (i.e., more bytes received than $\ensuremath{\mathsf{PAYLOAD}}$

SIZE field indicated) >>

IBM-097

PDF pg 64, pg 44, 6.5.3.3 NAK information unit, Table 14 The statement << UNDER-LENGTH (fewer bytes received than PAYLOAD SIZE field indicated) >> should be << UNDER-LENGTH (i.e., fewer bytes received than PAYLOAD SIZE field indicated) >> s

IBM-098

PDF pg 64, pg 44, 6.5.3.3 NAK information unit, Table 14 The statement << HEADER RESERVED BIT SET (for the version of ADT that the receiving port supports) >> should be << HEADER RESERVED BIT SET. Applies to

the version of ADT that the receiving port supports. >>

IBM-099

PDF pg 65, pg 45, 6.5.3.3 NAK information unit, Table 14

(KB) Code 44h is not understood, Please give some examples of what this would be.

IBM-100 Technical

PDF pg 65, pg 45, 6.5.3.3 NAK information unit, Table 14

(KB) Code 4Ah-Invalid Buffer Offset does not belong here but in upper layer,

Remove it from table

IBM-101

PDF pg 65, pg 45, 6.5.4 Port login information unit, 1st paragraph

The statement << Clause 4.3.3 describes the use of the Port Login IU. >> should be << See 4.3.3 for a description of the Port Login IU. >>

IBM-102 Technical

PDF pg 66, pg 46, 6.5.4 Port login information unit, Table 15

Putting revision level in standards never works therefore the MAJOR REVISION

and MINOR REVISION fields should be deleted from this standard.

IBM-103

PDF pg 66, pg 46, 6.5.4 Port login information unit, 2nd paragraph under table 15 $\,$

The statement << Ports claiming compliance with this standard at draft

revision shall set the MAJOR REVISION field to 0. >> does not make good

English sense. This needs to be fixed.

IBM-104

PDF pg 66, pg 46, 6.5.4 Port login information unit, 3rd paragraph under table 15 $\,$

The statement << value it can support and >> should be << value it is able to

support and >>

IBM-105

PDF pg 66, pg 46, 6.5.4 Port login information unit, 3rd paragraph under table 15 $\,$

The statement << revision it can support for >> should be << revision it is

able to support for >>

IBM-106

PDF pg 66, pg 46, 6.5.4 Port login information unit, 3rd paragraph under table 15

The statement << a port that can not support the revision >> should be << a

port that is not able to support the revision >>

IBM-107

PDF pg 66, pg 46, 6.5.4 Port login information unit, 1st item a) under table 15

The statement << highest it can support that is lower >> should be << highest

it is able to support that is lower >>

IBM-108

PDF pg 66, pg 46, 6.5.4 Port login information unit, 1st item a) under table 15 $\,$

The statement << the major revision level. >> should be << he major revision

level; and >>

IBM-109

PDF pg 67, pg 47, 6.5.4 Port login information unit, 2nd item a) under table 15 $\,$

The statement << hard reset condition. >> should be << hard reset condition; >>

IBM-110

PDF pg 67, pg 47, 6.5.4 Port login information unit, 2nd item b) under table 15 $\,$

The statement << one or more exchanges. >> should be << one or more exchanges;

and >>

IBM-111

a.b.c list

The statement << See subclause 6.5.4 for Port Login exchange >> should be $<\!\!<$

See 6.5.4 for Port Login exchange >>

IBM-112

PDF pg 67, pg 47, 6.5.4 Port login information unit, 2nd to last paragraph

The statement << payload of a frame that the port can accommodate. >> should

be << payload of a frame that the port is able to accommodate. >>

IBM-113

PDF pg 67, pg 47, 6.5.4 Port login information unit, last paragraph

The statement << default to operating at 9600 Baud at power-up >> should be

default to operating at 9 600 Baud at power-up >>

IBM-114

PDF pg 67, pg 47, 6.5.5 Port logout information unit, a.b.c list All the entries in the list need to end in << ; >> not << . >> except the last. The second to the last should end in << ; and >>.

IBM-115

PDF pg 67, pg 47, 6.5.5 Port logout information unit, 2nd paragraph The statement << may be volatile, so a hard reset condition >> should be << may be volatile, as a result a hard reset condition >>

IBM-116

PDF pg 67, pg 47, 6.5.5 Port logout information unit, 4th paragraph The statement << See clause 4.3 for a definition of the port states. >> should be << See 4.3 for a definition of the port states. >>

IBM-117 Technical

PDF pg 68, pg 48, 6.5.6 Pause information unit, 1st paragraph (KB) << When a data transfer device port receives a Pause IU, it shall acknowledge the frame and then temporarily discontinue>> to << When a data transfer device port receives a Pause IU, it shall acknowledge the frame and

if the acknowledge is an ACK temporarily discontinue>>

IBM-118 Technical

PDF pg 68, pg 48, 6.5.6 Pause information unit

(KB) It is not clear when automation can consider DTD paused, Add a statement

indicating that the Automation shall not consider the DTD Paused until it has

received an ACK IU for the Pause IU.

IBM-119

PDF pg 68, pg 48, 6.5.6 Pause information unit, 1paragraph

```
The term << DTD device >> in all cases is just << DTD >> this needs to be fixed.
```

IBM-120 Technical

PDF pg 68, pg 48, 6.5.6 Pause information unit, 1st paragraph

The statement << must always be capable of receiving frames. >> should be <<

shall always be capable of receiving frames. >>

IBM-121

PDF pg 68, pg 48, 6.5.6 Pause information unit

(KB) It is not clear what occurs to error recovery related to a Pause, Add ${\rm a}$

statement clarifying that a Pause can occur at nay point during error recovery

and that the error recovery will resume @ point where it was Paused when $\ensuremath{\mathsf{dTD}}$

is unpaused.

IBM-122 Technical

PDF pg 68, pg 48, 6.5.7 NOP information unit (KB)NOP information unit does not provide for a test payload, Either add an optional payload to the NOP IU or add another IU to be used for a test payload. I suggest a TEST IU.

IBM-123

PDF pg 68, pg 48, 6.5.8 Initiate Recovery information unit

4/26/2004

The statement << See clause 4.6 for a full explanation of the error recovery

process. >> should be << See 4.6 for a full explanation of the error recovery $% \left({{{\left[{{{\left[{{{c_{{\rm{s}}}}} \right]}} \right]}_{\rm{s}}}}} \right)$

process. >>

IBM-124 Technical

PDF pg 70, pg 50, 7.1 SCSI Encapsulation

(KB) There is no indication of expected behavior related to payload size

consistency, Add a $\,\,$ << Payload size - type consistency >> clause for each IU

define if there is a minimum or if an exact match is needed.

IBM-125

PDF pg 70, pg 50, 7.1.1 SCSI encapsulation overview, 1st paragraph

The statement << Frame Header takes on the role of the Queue Tag from SAM-2.

>> is not correct as there is no such thing as a queue tag in SAM-2. This

needs to be fixed.

IBM-126 Technical

PDF pg 70, pg 50, 7.1.2 SCSI Command information unit

(KB) The behavior specified seems to contradict SPC with relation to standard

inquiry, Add a statement describing the behavior of standard inquiry to an

invalid LUN - should match SPC

IBM-127 Technical

PDF pg 70, pg 50, 7.1.2 SCSI Command information unit

(KB) No description of receiver behavior if FIRST BURST LENGTH does not contain zero on non-data commands, Suggest we add statement to the effect that

the receiver shall ignore this field in these cases.

IBM-128

PDF pg 71, pg 51, 7.1.2 SCSI Command information unit, last paragraph

The statement << the FIRST BURST LENGTH field shall contain zero. >> should be

<< the FIRST BURST LENGTH field shall be set to zero. >>

IBM-129 Technical

PDF pg 71, pg 51, 7.1.3 SCSI Task Management information unit

(KB) For TASK MANAGEMENT FUNCTION as written will search other protocols than

SCSI, Specify that only Exchange $\ensuremath{\text{ID}}\xspace's$ for the SCSI protocol shall be searched.

IBM-130

PDF pg 72, pg 52, 7.1.3 SCSI Task Management information unit, Paragraph above $% \left[{{\left[{{{\rm{D}}_{\rm{T}}} \right]}_{\rm{T}}} \right]$

table 20

(KB) The Reference to SAM-2 is incorrect since QUERY TASK is not part of

SAM-2, Change SAM-2 to SAM-3. (GOP note\

IBM-131

PDF pg 72, pg 52, 7.1.3 SCSI Task Management information unit, table 20

If you switch to SAM-3 the TARGET RESET task management function is deleted.

IBM-132 Technical

PDF pg 73, pg 53, 7.1.4 SCSI Response information unit

(KB) There is behavior specified for when sense length doesn't match length of

Autosense Data, Specify the behavior - Suggest Protocol error NAK.

IBM-133 Technical

PDF pg 73, pg 53, 7.1.4 SCSI Response information unit

(KB) There is no description of the sense data if RESPONSE CODE is 06h,

specify what is returned if RESPONSE CODE is 06h.

IBM-134

PDF pg 73, pg 53, 7.1.4 SCSI Response information unit, 1st paragraph under

table 22

The statement << GOOD that will generate a unit attention to initiator ports

other >> should be << GOOD that generates a unit attention to initiator ports

other >>. Will is one of the forbidden words.

IBM-135

PDF pg 73, pg 53, 7.1.4 SCSI Response information unit, 3rd paragraph under

table 22

The statement << The SENSE LENGTH field indicates how many bytes of sense data

can be found in the IU. >> should be << The SENSE LENGTH field indicates the

number of bytes of sense data in the SCSI Response IU. >>

IBM-136

PDF pg 73, pg 53, 7.1.4 SCSI Response information unit, 3rd paragraph under

table 22

The statement << This field shall be set to 0 if the response >> should be $<\!\!<$

This field shall be set to zero if the response >>

IBM-137 Technical

PDF pg 74, pg 54, 7.1.6 SCSI Data information unit

(KB) No behavior specified for ${\tt Data}$ > ${\tt Burst}$ length, Specify the behavior when

```
[buffer offset+data length]>[xfer_rdy buffer offset + xfer_rdy burst length]
```

Suggest a NAK because this is a protocol error

IBM-138

PDF pg 75, pg 55, 7.1.7 SCSI encapsulation exchange lifetime, 1st item a)

The statement << set to zero in response to it; >> should be << set to zero in

response; >>

IBM-139

PDF pg 75, pg 55, 7.1.7 SCSI encapsulation exchange lifetime, 2nd item a)

The statement << set to zero in response to it; >> should be << set to zero in

response; >>

IBM-140 Technical

PDF pg 75, pg 55, 7.1.8 Reception of Encapsulated SCSI Information Units in

exceptional circumstances

(KB) It is not clear what unexpected is, Specify what unexpected SCSI Data $\ensuremath{\text{IU}}$

and unexpected SCSI Transfer Ready IU are.

IBM-141

PDF pg 75, pg 55, 7.2.1 Fast Access overview, 1st paragraph

The statement << layer and work around the slower speed of it. >> should be

<< layer and work around its slower speed. >>

IBM-142

PDF pg 75, pg 55, 7.2.1 Fast Access overview, a,b,c list

All the items in the list except the last need to end in << ; >> not << , >>.

IBM-143

PDF pg 76, pg 56, 7.2.6 AER Control information unit, 4th paragraph

The statement << Except as noted above, data transfer devices that support $\ensuremath{\mathsf{AER}}$

shall >> should be << \mbox{Except} as noted is this subclause, data transfer devices

that support AER shall >>

IBM-144

PDF pg 77, pg 57, 7.2.6 AER Control information unit, 5th paragraph

The statement << by the device shall contain all one bits. >> should be << by

the device shall contain all ones. >>

IBM-145

PDF pg 77, pg 57, 7.2.6 AER Control information unit, Last paragraph

(KB) The last paragraph states all AER control fields shall be set to zero at

start of port login process, This should state that they are reset only when

AOE is set.

IBM-146

PDF pg 77, pg 57, 7.2.7.3 AER Control exchange lifetime, 3rd paragraph

(KB) Wrong status code listed, Change << UNSUPPORTED FRAME TYPE FOR SELECTED

PROTOCOL >>to << INVALID EXHANGE ID >>.

IBM-147

PDF pg 78, pg 58, 8.1 SCSI Transport protocol services overview, 3rd paragraph

The statement << support of this remote procedure call. See 8.2 >> should be

<< support of this remote procedure call (see 8.2)

IBM-148

PDF pg 78, pg 58, 8.1 SCSI Transport protocol services overview, 6th paragraph

The statement << support of this remote procedure call. See 8.3 >> should be

<< support of this remote procedure call (see 8.3)

IBM-149

PDF pg 78, pg 58, 8.1 SCSI Transport protocol services overview, 7th paragraph

The statement << Refer to Annex A for specific examples >> should be<< See

Annex A for specific examples >>

IBM-150

PDF pg 79, pg 59, 8.1 SCSI Transport protocol services overview, Table 26

The << I >> and << T >> have no definition in this table. Add a footer row to

the table and list them.

IBM-151

PDF pg 79, pg 59, 8.1 SCSI Transport protocol services overview, Table 26 $\,$

The column heading << Clause >> should be << Subclause >>

IBM-152

PDF pg 80, pg 60, 8.1 SCSI Transport protocol services overview, 1st paragraph

below table 26

The statement << See subclause 4.2.9 for details of the use >> should be <<

See 4.2.9 for details of the use >>

IBM-153

PDF pg 80, pg 60, 8.1 SCSI Transport protocol services overview, Table 26

The << I >> and << T >> have no definition in this table. Add a footer row

to

the table and list them.

IBM-154

PDF pg 80, pg 60, 8.1 SCSI Transport protocol services overview, Table 27 The column heading << Clause >> should be << Subclause >>

IBM-155

PDF pg 80, pg 60, 8.2.1 Send SCSI Command transport protocol service, Table 28

This table is split across multiple pages when it will fit on one page. This

needs to be fixed. Or the << (x of x) >> needs to be added.

IBM-156

PDF pg 80, pg 60, 8.2.1 Send SCSI Command transport protocol service, table $\mathbf{28}$

a.b.c list

All the entries in the list need to end in << ; >> not << . >> except the

last. The second to the last should end in << ; and >>.

IBM-157

PDF pg 81, pg 61, 8.2.2 SCSI Command Received transport protocol service,

table 29 a.b.c list

All the entries in the list need to end in << ; >> not << . >> except the

last. The second to the last should end in << ; and >>.

IBM-158

PDF pg 82, pg 62, 8.2.3 Send Command Complete transport protocol service,

table 30 1st a.b.c list

All the entries in the list need to end in <<; >> not << . >> except the

last. The second to the last should end in << ; and >>.

IBM-159

PDF pg 82, pg 62, 8.2.4 Command Complete Received transport protocol service,

Table 31

This table is split across multiple pages when it will fit on one page. This

needs to be fixed. Or the << (x of x) >> needs to be added.

IBM-160

PDF pg 82, pg 62, 8.2.4 Command Complete Received transport protocol service,

table 31 1st a,b,c list

All the entries in the list need to end in << ; >> not << . >> except the

last. The second to the last should end in << ; and >>.

IBM-161

PDF pg 83, pg 63, 8.2.5 Send Data-In transport protocol service, Table 32

This table is split across multiple pages when it will fit on one page. This

needs to be fixed. Or the << (x of x) >> needs to be added.

IBM-162

PDF pg 83, pg 63, 8.2.5 Send Data-In transport protocol service, table 32

1st

a,b,c list

All the entries in the list need to end in <<; >> not << . >> except the

last. The second to the last should end in << ; and >>.

IBM-163

PDF pg 84, pg 64, 8.2.6 Data-In Delivered transport protocol service, table 33

1st a,b,c list

All the entries in the list need to end in << ; >> not << . >> except the

last. The second to the last should end in << ; and >>.

IBM-164

PDF pg 85, pg 65, 8.2.7 Receive Data-Out transport protocol service, table 34

1st a,b,c list

All the entries in the list need to end in << ; >> not << . >> except the last. The second to the last should end in << ; and >>.

IBM-165

PDF pg 87, pg 67, 8.2.11 Receive Data-In transport protocol service, table 38

1st a,b,c list

All the entries in the list need to end in <<; >> not << . >> except the

last. The second to the last should end in << ; and >>.

IBM-166

PDF pg 87, pg 67, 8.2.12 Data-In Received transport protocol service

The statement << request where the Data-In buffer size is non-zero. >> is in a

different font than the rest of the standard. This needs to be fixed.

IBM-167

PDF pg 88, pg 68, 8.3.1 Send Task Management Request transport protocol

service, Table 40

The TARGET RESET (Nexus argument specifies an I_T Nexus) entry will go away if

SAM-3 is referenced.

IBM-168

PDF pg 89, pg 69, 8.3.3 Task Management Function Executed transport protocol

service, Table 42 item b)

The statement << MANAGEMENT FUNCTION COMPLETE, or >> should be << MANAGEMENT

FUNCTION COMPLETE; or >>

IBM-169

PDF pg 89, pg 69, 8.3.4 Received Task Management Function-Executed transport

protocol service, Table 43

This table is split across multiple pages when it will fit on one page. This

needs to be fixed. Or the << (x of x) >> needs to be added.

IBM-170

PDF pg 90, pg 70, 8.3.4 Received Task Management Function-Executed

55

transport

protocol service, Table 43 item b)

The statement << MANAGEMENT FUNCTION COMPLETE, or >> should be << MANAGEMENT

FUNCTION COMPLETE; or >>

IBM-171

PDF pg 91, pg 71, Annex A

The term << (Informational) >> should be << (informative) >>

IBM-172

PDF pg 91, pg 71, A.1 Introduction, 1st paragraph

The statement << This informative annex provides specific examples >> should

be << This annex provides specific examples >>

IBM-173

PDF pg 91, pg 71, A.3 SCSI Command with data in, 1st paragraph

The statement << shown in this figure in an effort to make it more readable.>>

should be << << shown in figure A.2 in an effort to make it more
readable.>>

IBM-174

PDF pg 93, pg 73, A.3 SCSI Command with data in, Figure A.2

(KB) Missing ACK IU's, Add note that only ACK IU's that trigger an action are

shown.

IBM-175

PDF pg 94, pg 74, A.4 SCSI Command with data out, 1st paragraph The statement << are not shown in this figure in an effort to make it >> should be << are not shown in figure A.3 in an effort to make it >>

IBM-176

PDF pg 94, pg 74, A.4 SCSI Command with data out, note

The note in this section needs to be numbered in the same manner as the main $% \left({{{\boldsymbol{x}}_{i}}} \right)$

body. (e.g., note 23)

IBM-177

PDF pg 96, pg 76, Annex B

The term << (Informational) >> should be << (informative) >>

IBM-178

PDF pg 96, pg 76, Annex B

(KB) All diagrams need clarified, Add Transmitter label and Receiver label

IBM-179

PDF pg 96, pg 76, Annex B

(KB) The states listed are old states, Check all figures for correct state numbers and names.

IBM-180

PDF pg 96, pg 76, Annex B

(KB) Most diagrams have Retryable Error where it should have Recoverable

Error, Clean up diagrams to have correct labels.

IBM-181

PDF pg 96, pg 76, B.1 Introduction, 1st paragraph

The statement << This informative annex diagrams various >> should be << This

annex diagrams various >>

IBM-182

PDF pg 96, pg 76, B.1 Introduction, 1st paragraph The term << ADT device >> is not defined in this standard. It needs to be defined or a pointer to a place where it is defined or deleted.

IBM-183

PDF pg 96, pg 76, B.1 Introduction, Table B.1

(KB) << NTFS >> should be << NFTS >>.

IBM-184

PDF pg 97, pg 77, B.1 Introduction, Figure B.1

(KB) Missing Label, Add << Enter TE1: NFTS = k >>.

IBM-185

PDF pg 102, pg 82, B.7 Lost NAK with recovery driven by timeout, 1st paragraph

The statement << In the example in figure B.6 - unlike the previous ones - the

sender does not use >> should be << In the example in figure B.6, unlike

the

previous ones, the sender does not use >>

IBM-186

PDF pg 106, pg 86, C.1 Introduction, 1st a,b,c list All the entries in the list need to end in << ; >> not << . >> except the last. The second to the last should end in << ; and >>.

IBM-187

PDF pg 106, pg 86, C.1 Introduction, 1st item c)
The statement << sizes up to 1024 bytes. >> should be << sizes up to 1 024
bytes. >>

IBM-188

PDF pg 106, pg 86, C.1 Introduction, 1st item d) The statement << 115K, 38.4K, 19.2K, and 9600. >> should be << 115K, 38,4K, 19,2K, and 9 600. >>

IBM-189

PDF pg 106, pg 86, C.1 Introduction, 2nd a,b,c list All the entries in the list need to end in << ; >> not << . >> except the last. The second to the last should end in << ; and >>.

IBM-190

PDF pg 106, pg 86, C.1 Introduction, 2nd item d) The statement << Baud rates of 57.6K, 19.2K, and 9600. >> should be << Baud

rates of 57,6K, 19,2K, and 9 600. >>

IBM-191

PDF pg 107, pg 87, C.3 DTD Initiates a login after power-up, item 1) The statement << Port Login IU at 9600 Baud with the >> should be << Port Login IU at 9 600 Baud with the >>

IBM-192

PDF pg 107, pg 87, C.3 DTD Initiates a login after power-up, 1,2,3 list All the entries in the list need to end in << ; >> not << . >> except the last. The second to the last should end in << ; and >>.

IBM-193 Technical

PDF pg 107, pg 87, C.3 DTD Initiates a login after power-up, Table C.2

The statement << Must be zero on the first IU of an exchange. >> should be $<\!\!<$

Is zero on the first IU of an exchange. >> remember there can be no requirements in an informative annex.

IBM-194

PDF pg 107, pg 87, C.3 DTD Initiates a login after power-up, item 3)

The statement << Port Login IU at 9600 Baud with a >> should be << Port Login

IU at 9 600 Baud with a >>

IBM-195 Technical

PDF pg 107, pg 87, C.3 DTD Initiates a login after power-up, Table C.3

The statement << Must be zero on the first IU of an exchange. >> should be <<

Is zero on the first IU of an exchange. >> remember there can be no

requirements in an informative annex.

IBM-196

PDF pg 108, pg 88, C.4 Automation device initiates login after power-up, item 1)

The statement << Port Login IU at 9600 Baud with the >> should be << Port

Login IU at 9 600 Baud with the >>

IBM-197 Technical

PDF pg 108, pg 88, C.4 Automation device initiates login after power-up, Table C.4 $\,$

The statement << Must be zero on the first IU of an exchange. >> should be $<\!\!<$

Is zero on the first IU of an exchange. >> remember there can be no

requirements in an informative annex.

IBM-198

PDF pg 108, pg 88, C.4 Automation device initiates login after power-up, 1,2,3 $\,$

list

All the entries in the list need to end in << ; >> not << . >> except the

last. The second to the last should end in << ; and >>.

IBM-199

PDF pg 108, pg 88, C.4 Automation device initiates login after power-up, Table c.4 $\,$

The term << 1024 >> and << 1152 >> should be << 1 024 >> and << 1 152 >>.

IBM-200

PDF pg 109, pg 89, C.4 Automation device initiates login after power-up, Table C.6 $\,$

The statement << ADT port can support this value. >> should be << ADT port is

able to support this value. >>

IBM-201

PDF pg 109, pg 89, C.4 Automation device initiates login after power-up, Table C.6 $\,$

The statement << ADT port can support this value. >> should be << ADT port is

able to support this value. >>

Comments attached to Abs ballot from Robert Sheffield of Intel Corp.:

Not materially affected by this proposal.

Comments attached to Yes ballot from David Hawks of Iomega Corp.:

IOM-1

On pages 12, 16, 20, 24 and 25, the inside solid border should completely encompass the white background of the figures.

IOM-2
On page 15 section 4.3.1, the sentence "These state machines reside in
ADC
devices." seems unnecesary. The last sentence should be split into the
following two sentences: "The port state machine is the primary machine

and is always active. The other state machines are only active to manage specific operations."

IOM-3

On page 21 sections 4.3.3.3.2 and 4.3.3.4.1, the Port Login IU is being sent on both the NO to N1 transition and on arriving at state N1.

IOM-4

On page 22 section 4.3.3.7, the title should be N4:Agreed state.

IOM-5

On page 23 sections 4.3.3.7.2 and 4.3.3.7.4, both transitions have the same condition: "After receiving an ACK IU for the Port Login IU it sent...".

IOM-6

In sections 4.3.5.2.1 and 4.3.6.2.1, 'states' should be 'state'.

IOM-7

On page 27 section 4.3.6.2.3, 'a' should be 'an' and 'received' should be capitilized.

IOM-8

On page 31 section 4.6.2.3, in the sentence "...recoverable error on a frame...", 'on' should be 'with' to match other occurrences.

IOM-9

On page 33 section 4.7, "...described SAM-2." should be "...described in SAM-2.".

IOM-10

On page 41 section 6.1, "...layout of the ADT frame..." should be "...layout of an ADT frame...".

IOM-11

On page 44 section 6.5.3.3, the text states that "...a port shall send a NAK IU for every frame that it receives in error." This contradicts section 4.6.2.3, which states that corrupted frames are not NAK'ed.

IOM-12

On page 47 section 6.5.5, list item d) should be 'transmission' instead of 'receipt'. Also, list item d) and the first sentence of the last paragraph of the section repeat the same point.

IOM-13

On pages 47 and 48, after the word 'volatile', the word 'so' should be removed.

IOM-14

On page 53, the last paragraph should state codes "OOh and O5h", not

"00h and 06h".

TOM-15

On page 56 section 7.2.2, in the sentence that contains "...receiver of an Fast Access protocol IU...", 'an' should be 'a'.

IOM-16

On page 42 table 10, "PAYLOAD SIZE" should be split into two rows like table 15 so (MSB) and (LSB) markers can be shown.

IOM-17

Pages 29, 31, 44 and 47 contain references to incorrect states: respectively, "P5:Recovering", "P2:Active", "P3:Pending Recovery" and "P7:Logged-out".

IOM-18

On page 18 section 4.3.2.4.1 the sentence containing "...the ports permission..." should be "...the port's permission...".

IOM-19

Either consistently use "sub-state machine" or drop the "sub". See 4.3.2.4.1 for an example of inconsistent use.

Comments attached to No ballot from John Lohmeyer of LSI Logic Corp.:

I agreed to include Rod Wideman's comments in my ballot since his organization

is not a voting member of T10:

ADIC-1 (E) Page: 2 Location:

[RW]

I believe George has a different e-mail address

ADIC-2 (E) Page: 2 Location: [RW]

The even numbered roman numeral page numbers are right-facing instead of

left (through TOC section)

ADIC-3 (E) Page: 3 Location: [RW]

The revision history shouldn't be included in te ballot draft

ADIC-4 (E) Page: 8 Location: 1st P [RW] "standards" s/b "standard"

ADIC-5 (E) Page: 8 Location: 2nd P [RW] "which is used" s/b "that is used"

ADIC-6 (E) Page: 8 Location: 2nd P, last sentence [RW] I would suggest the reference just be to ADC. This standard is the transport doc.

ADIC-7 (E) Page: 17 Location: last P, last sentence [RW] "At the time of it" s/b "At the time it" (if we need to keep this list)

ADIC-8 (E) Page: 19 Location: Clause 4 desc. [RW] "It also describe" s/b "It also describes"

ADIC-9 (T) Page: 21 Location: item a [RW] This seems to be describing a model of a media changer that contains something called a library controller and data transport [sic] devices. Where is this model defined?

ADIC-10 (E) Page: 21 Location: [RW] three occurrences of "data transport devices" on this page s/b "DT device"

Note however that throughout the standard, there is inconcsisten use of "data transfer device" and "DTD" that also need correcting.

ADIC-11 (E) Page: 24 Location: subclause 2.3 [RW] Add ADC

ADIC-12 (E) Page: 26 Location: 3.1 [RW] Add definition for information unit (IU) by itself, then throughout the standard use "IU" for information unit (several places)

ADIC-13 (E) Page: 26 Location: 3.1.10 [RW] s/b "awithin an automation device (see ADC)."

ADIC-14 (E) Page: 26 Location: 3.1.13 [RW] s/b "adevice server (see ADC)."

ADIC-15 (E) Page: 26 Location: 3.1.14 [RW] s/b "The basic mechanism that transfers information consisting of one or more related information units that may flow in the same or opposite directions. An exhanage is identified by its X_Origin and Exchange ID (see 6.3).

ADIC-52 (T) Page: 26 Location: [RW] Need a definition for a "data transfer device port" (an ADT port on a data transfer device).

ADIC-16 (E) Page: 27 Location: 3.1.19 [RW] Delete the last sentence.

ADIC-17 (E) Page: 27 Location: 3.1.20 [RW] Delete the last sentence.

ADIC-18 (E) Page: 27 Location: 3.1.25 [RW] s/b "ausing Port Login Ius (see 4.3.3).

ADIC-19 (E) Page: 27 Location: 3.1.32 [RW] s/b "adescribed in 4.7."

ADIC-20 (E) Page: 27 Location: 3.1.35 [RW] missing period at end of last sentence.

ADIC-21 (E) Page: 28 Location: 3.1.41 [RW] "Symbol" s/b "symbol"

ADIC-22 (E) Page: 28 Location: 3.1.46 [RW] s/b "atransport layer (see 4.6)."

ADIC-23 (E) Page: 28 Location: 3.2 [RW] delete unused symbols (plus or minus, AWG)

ADIC-24 (E) Page: 28 Location: 3.2 [RW] add symbols (ADC, IU, AER) 4/26/2004

ADIC-25 (E) Page: 29 Location: 3.3.7 [RW]

"standards" s/b "standard"

ADIC-26 (E) Page: 34 Location: 4.1 [RW]

"2" s/b "two"

ADIC-27 (E) Page: 35 Location: 4.2 [RW] The lettered list should be of the form: a) an item; b) another item; and c) last item. ADIC-28 (E) Page: 35 Location: 4.3.1 [RW]

 $\ensuremath{\mathsf{s}}\xspace/\ensuremath{\mathsf{s}}\xspace$ s/b "The port state machine is the primary state machine and always active. The othersa"

ADIC-29 (E) Page: 37 Location: 2nd P [RW] "automation port" s/b "automation device port" This is a global change throughout the draft. There are also references to "ADT port on an automation device". These should all be "automation device port" since this is defined to be an ADT port. ADIC-30 (E) Page: 37 Location: 2nd P [RW]

There are two "can" words in this sentence. Are these "shall" or "may"? (I

think they are both "shall").

ADIC-31 (E) Page: 37 Location: 4.3.2.3.1, 1st P [RW] What is a "Port Logout condition"?

ADIC-32 (E) Page: 37 Location: 4.3.2.3.1, 1st P [RW] "information units" s/b "IUs" (this should be a global change)

ADIC-33 (E) Page: 38 Location: 4.3.2.4.1, 1st P [RW] "ports" s/b "port's"

ADIC-34 (E) Page: 38 Location: 4.3.2.4.1, 7th P [RW] R0:Idle s/b TE0:Idle

ADIC-35 (E) Page: 38 Location: 4.3.2.4.3 [RW] It shall also transition to P1 on receipt of a Port Login IU

ADIC-36 (E) Page: 38 Location: 4.3.2.5.1 [RW] "drive port" s/b "DT device port" (also needed as global change)

ADIC-37 (E) Page: 38 Location: 4.3.2.5.1 [RW] both occurrences of "can" s/b "shall"

ADIC-38 (E) Page: 41 Location: 1st P [RW] "Data Transfer Device" s/b "DT device" (global)

ADIC-39 (E) Page: 41 Location: 1st P [RW] missing period at end of first sentence. ADIC-40 (E) Page: 41 Location: 4.3.3.3.1 [RW] "states" s/b "state"

ADIC-41 (E) Page: 41 Location: 4.3.3.3.2, 1st P [RW] s/b "aare unacceptable. The port shalla" (break into two sentences).

ADIC-42 (E) Page: 41 Location: 4.3.3.3.2, 2nd P [RW] Suggest starting this para with "Additionally, this transitiona"

ADIC-43 (T) Page: 41 Location: 4.3.3.3.2 P [RW] What are "starting parameters?" Need definition.

ADIC-44 (E) Page: 41 Location: 4.3.3.3.3 [RW] s/b "...ACCEPT bit set to zeroa" (delete "is")

ADIC-45 (T) Page: 41 Location: 4.3.3.4.1, 1st P [RW] If the AOE bit is set to what? (one). What if it is set to zero?

ADIC-46 (E) Page: 41 Location: 4.3.3.4.1, 4th P [RW] delete "down"

ADIC-47 (T) Page: 41 Location: 4.3.3.4.2 [RW] This is ambiguous. What has the resource limitation error? The Port Login IU or the receiving port? Suggest "receives a Port Login IU protocol error or the port has a resource limitation error." ADIC-48 (E) Page: 42 Location: 4.3.3.5.1 [RW] "and unchanged parameters" s/b "and with parameters unchanged" (I think it sounds better). Three additional occurrences on this page.

ADIC-49 (E) Page: 42 Location: 4.3.3.5.1 [RW] s/b "(i.e., "

ADIC-50 (T) Page: 42 Location: 4.3.3.5.2 [RW] same issue as to what has the resource limitation error.

ADIC-51 (T) Page: 42 Location: 4.3.3.6 [RW] Do we really need the N3:Accept ACK Sent state? Couldn't N2 transition directly to N5? It's clear what the value of this state is.

ADIC-53 (E) Page: 42 Location: 4.3.3.6.1 [RW] If we keep this, then I would suggest the wording be "aACCEPT bit set to one

and with parameters unchanged, and has receiveda"

ADIC-54 (E) Page: 42 Location: 4.3.3.7.1 [RW] "and then sent" s/b "and then has sent". "In other words" s/b "a set to one (i.e., it is the seconda"

ADIC-55 (E) Page: 43 Location: 4.3.4.1 [RW]

"ports" s/b "port's"

ADIC-56 (E) Page: 44 Location: 4.3.4.2.1 [RW] "information units" s/b "IUs" (this should be a global change)

ADIC-57 (E) Page: 45 Location: 4.3.5.2.1 [RW] "states" s/b "state"

ADIC-58 (E) Page: 46 Location: 4.3.5.3.2 [RW] s/b "ashall send a Recovery Succeeded message to the port state machine anda"

ADIC-59 (E) Page: 47 Location: 4.3.6.2.1 [RW] "states" s/b "state"

ADIC-60 (E) Page: 47 Location: 4.3.6.2.3 [RW] s/b "an Initiate Recovery IU Received"

ADIC-61 (E) Page: 47 Location: 4.3.6.3.1, 2nd P [RW] s/b "R1:Pending Recovery state"

ADIC-62 (T) Page: 47 Location: 4.3.6.3.1, 1st P [RW] This seems to be more RO:Idle than R1 (the message is received and NAK sent from R0)

ADIC-63 (T) Page: 48 Location: 4.4, 1st P [RW] What is the "ADT link?"
```
ADIC-64 (E) Page: 48 Location: 4.4, 1st P [RW]
"must" s/b "shall"
```

ADIC-65 (E) Page: 48 Location: 4.4, 1st P [RW] Delete last two sentences (starting with "This modea"). They don't specify anything.

ADIC-66 (E) Page: 48 Location: 4.4, last P, last sentence [RW] s/b "asuccessfully complete the Port Login processa"

ADIC-67 (E) Page: 48 Location: 4.5.1 [RW]

The lettered list should be of the form: a) an item; b) another item; and c) $% \left(\left({{{\mathbf{x}}_{i}}} \right) \right)$

last item.

ADIC-68 (E) Page: 49 Location: first sentence after c) [RW] s/b "To accomplish these, each port shall keep two counters: one to track the frame number in the next frame to send, and one to track the frame number in the next frame to receive."

ADIC-69 (E) Page: 49 Location: 4.5.2 [RW] Four occurrences of "AOE" on this page s/b small caps(?)

ADIC-70 (E) Page: 49 Location: 4.6.1.1 [RW] s/b "the sender of a frame, the receiver of a frame"

ADIC-71 (E) Page: 50 Location: 4.6.1.2.2 [RW] "aEOF of the frame is sent." s/b "aof the frame has been sent."

ADIC-72 (E) Page: 50 Location: Figure 9 [RW] last sentence "For example" s/b "e.g.,"

ADIC-73 (E) Page: 50 Location: 4.6.1.2.3 [RW] delete "also"

ADIC-74 (E) Page: 50 Location: 4.6.1.3 [RW] The first sentence s/b restructured as a lettered list: "..by the frame receiver: a)a"

ADIC-75 (E) Page: 51 Location: 1st P [RW] s/b "Protocol errors are detectable errors for which no rety process is defined by this standard."

ADIC-76 (E) Page: 51 Location: 2nd P [RW] s/b "Resource limitation errors are due to lack of resources sufficient to process the request, and retransmission may succeed when resource usage has changed."

ADIC-77 (E) Page: 51 Location: 3rd P [RW] s/b "Recoverable errors are those thata" (note also that "e.g." s/b "e.g.,")

ADIC-78 (E) Page: 51 Location: 4.6.2.2 [RW] "AOE" s/b small caps?

ADIC-79 (E) Page: 51 Location: 4.6.2.3 [RW] s/b "aand the PR bit set to one so that the port that sent the frame in error can initiate recovery." (PR in small caps?)

ADIC-80 (T) Page: 51 Location: 4.6.2.3, 2nd P [RW] Should "aattempting to recover from a retyable error." actually be "afrom a recoverable error."?

ADIC-81 (T) Page: 51 Location: 4.6.2.3, list [RW] Should this be a numbered list?

ADIC-82 (E) Page: 52 Location: 4.6.2.4.4, item 1 [RW] last sentence s/b "aIU contains the Nexta"

ADIC-83 (E) Page: 52 Location: 4.6.2.5.2 [RW]

"PR" s/b small caps? Would also suggest reference to table 14 after "appropriate status codes." (also delete "codes", and add reference to other

places where this statement is made.)

ADIC-84 (E) Page: 52 Location: 4.6.2.5.3 [RW]

delete "Pending Recovery" and just leave PR (small caps?).

ADIC-85 (E) Page: 53 Location: 4.6.2.6.2 [RW] same comment as ADIC 83.

ADIC-86 (E) Page: 53 Location: 4.6.2.6.3 [RW] first sentence, "is" s/b "it", delete "codes", PR smal caps.

ADIC-87 (E) Page: 53 Location: 4.8 [RW] The lettered list should be of the form: a) an item; b) another item; or c) last item.

ADIC-88 (E) Page: 53 Location: 4.8 [RW] "DTD port" s/b "DT device port"

ADIC-89 (E) Page: 54 Location: 4.9, 2nd P [RW] "data transfer device" s/b "DT device". "(See ADC)" s/b "(see ADC)"

ADIC-90 (E) Page: 56 Location: 5.1.3 [RW] The lettered list items should all start lower case; each list item should end in a semi-colon.

ADIC-91 (E) Page: 57 Location: 5.1.4 [RW] The lettered list items should all start lower case; each list item should end in a semi-colon.

ADIC-92 (E) Page: 57 Location: 5.1.4 [RW] "single ended" s/b "single-ended" (twice) ADIC-93 (E) Page: 58 Location: 5.1.5 [RW] The lettered list items should all start lower case; each list item should end in a semi-colon.

ADIC-94 (E) Page: 59 Location: 5.2, table 7 [RW] Define "O/M"

ADIC-95 (E) Page: 59 Location: 5.2, table 7 [RW] "automation port" s/b "automation device port"; "data transfer device" s/b "DT device"; "DTD port" s/b "DT device port"

ADIC-96 (E) Page: 60 Location: 5.3 [RW] "Data Transfer Device" s/b "DT device" (also in table 8 header - DTD s/b DT Device)

ADIC-97 (E) Page: 61 Location: 6.1 [RW] "a frame header, the frame payload" s/b "a frame header, a frame payload"

ADIC-98 (E) Page: 61 Location: 6.2 [RW] remove quotations; "outside of" s/b "other than"

ADIC-99 (E) Page: 61 Location: 6.2, 2nd P [RW] an example of byte stuffing would be very helpful I think.

ADIC-100 (E) Page: 62 Location: 6.3, 1st P [RW]

"Frame Header" s/b "frame header"

ADIC-101 (E) Page: 62 Location: table 10 [RW] Payload size does not indicate MSB/LSB

ADIC-102 (E) Page: 62 Location: 6.3, 2nd P [RW] "See the individuala" should list the actual subclauses by number instead.

ADIC-103 (E) Page: 62 Location: 6.3, 4th P [RW] "aframe that they are acknowledging." s/b "aframe they acknowldege."

ADIC-104 (E) Page: 62 Location: 6.3, 4th P [RW] delete "independent of the traffic the port is receiving"

ADIC-105 (E) Page: 62 Location: 6.3, 6th P [RW] "Automation" s/b "automation"; "Data Transfer Device" s/b "DT device"

ADIC-106 (E) Page: 62 Location: 6.3, 7th P [RW] lower case Frame, Header, Checksum, and Escape

ADIC-107 (E) Page: 62 Location: 6.3, 8th P [RW] s/b "A receiving port shall send a NAK IU for any frame, except an acknowledgement IU, that contains a reserved bit equal to one in the frame header."

ADIC-108 (E) Page: 63 Location: 6.4 [RW]

ADIC-109 (E) Page: 63 Location: Note 5 [RW] "CRC" s/b "checksum"

ADIC-110 (E) Page: 63 Location: 6.5.1 [RW] s/b "Table 12 defines the values for the FRAME TYPE field in the ADTa"

ADIC-111 (E) Page: 63 Location: 6.5.2 [RW] "information units" s/b "IUs" (this should be a global change)

ADIC-112 (T) Page: 63 Location: 6.5.2, last sentence [RW] What should the receiver do for non-missing fields? Change them?

ADIC-113 (E) Page: 63 Location: 6.5.3, 6.5.3.1 [RW] "information units" s/b "IUs" (this should be a global change)

ADIC-114 (E) Page: 64 Location: 6.5.3.2, 6.5.3.3 [RW] "information units" s/b "IUs" (this should be a global change)

ADIC-115 (E) Page: 64 Location: 6.5.3.2 [RW] "acknowledge" s/b "acknowledgement"; "0 bytes" s/b "zero bytes"

ADIC-116 (E) Page: 64 Location: 6.5.3.3 [RW] "ain the ADT Header" s/b "in the ADT frame header"; also s/b "set to the value" (same sentence)

ADIC-117 (E) Page: 64 Location: 6.5.3.3 [RW] I think the PR bit should be small caps.

ADIC-118 (E) Page: 64 Location: 6.5.3.3 [RW]

The order of describing the payload fields is reversed from the order used

for table 10. Since all other tables seem to be described in the same order $% \left({{{\left[{{{\rm{T}}_{\rm{T}}} \right]}}} \right)$

as table 13, it might be easier to change the description order for table

10, but either way they should be consistent.

ADIC-119 (E) Page: 64 Location: 6.5.3.3 [RW] period missing after "Table 14"

ADIC-120 (E) Page: 64 Location: Table 14 [RW] I suggest deleting footnote b altogether, and change the sentence following "OUT OF RESOURCES" into a paranthetical, like those preceeding.

ADIC-121 (E) Page: 65 Location: table 14, 46h [RW] I don't think max ack offset exceeded is due to lack of resources. Recommend dropping footnote.

ADIC-122 (E) Page: 65 Location: 6.5.3.4 [RW] delete "or it may complete the transmission" (implicit in "may terminate").

ADIC-123 (E) Page: 65 Location: 6.5.3.4 [RW]

last sentence, "frame type" s/b "frame"

ADIC-124 (T) Page: 65 Location: 6.5.3.4 [RW] The exception for Port Login, Port Logout, or Pause is for acknowledging them or for starting transmission of them? (i.e., it may not ack these, or it may start transmission of them before acking all frames?)

ADIC-125 (E) Page: 65 Location: 6.5.4 [RW] s/b "See 4.3.3 for a description of the use of the Port Login IU."

ADIC-126 (E) Page: 66 Location: Table 15 header [RW] s/b "Login"

ADIC-127 (E) Page: 66 Location: Table 15 [RW] "AOE" s/b small caps?

ADIC-128 (E) Page: 66 Location: 3rd P [RW] There are three "can" words in this para. Suggest "it can support" s/b "it supports" and "can not support" s/b "does not support"

ADIC-129 (E) Page: 66 Location: 4th P [RW] item a) "can support" s/b "it supports"; lettered list items should end in semi-colons, "; and" at end of item a).

ADIC-130 (E) Page: 67 Location: 1st-4th Ps [RW] AOE s/b small caps? ADIC-131 (E) Page: 67 Location: first list [RW] The lettered list items should start lower case; each item should end with a

semi-colon; item b) should end "; or"

ADIC-132 (E) Page: 67 Location: 2nd P [RW] delete "subclause"

ADIC-133 (T) Page: 67 Location: 4th P [RW] The first sentence appears to contradict 6.5.3.4 by saying "shall suspend transmission". 6.5.3.4 says may terminate (thus may not)

ADIC-134 (E) Page: 67 Location: 6th P [RW] "that the port can accommodate." s/b "that the port accommodates."

ADIC-135 (E) Page: 67 Location: 6th P [RW] What is "autosense?" (needs reference).

ADIC-146 (E) Page: 67 Location: 7th P [RW] s/b "indicates the speed at which the port"

ADIC-137 (T) Page: 67 Location: 6.5.5 [RW] s/b "Only automation device ports shall senda"

ADIC-138 (E) Page: 67 Location: 6.5.5 [RW] "the device" s/b "the DT device" ADIC-139 (T) Page: 67 Location: 6.5.5 [RW] the lettered list should be a numbered list; it also needs to conform to the standard list format (semi-colons, "; and" after third item).

ADIC-140 (T) Page: 67 Location: 6.5.5 [RW] Item d) cannot be done, since it received a Port Logout IU ("Upon receiving a Port Logout IUa" above), thus won't receive an ACK. This item is actually

covered instead in the last paragraph on this page.

ADIC-143 (E) Page: 68 Location: 6.5.6

ADIC-141 (E) Page: 67 Location: 6.5.5, 2nd P [RW] "automation port" s/b "automation device port"

ADIC-142 (E) Page: 67 Location: 6.5.5, last P [RW] "P7" s/b "P3"; delete "clause"

"Data transfer" s/b "DT"; "an ADT port on a DTD device" s/b "a DT device port"; "and ADT port on an automation device" s/b "an automation device port" (there are several other instances of this style too, so consider this a global change.

ADIC-144 (T) Page: 68 Location: 6.5.6 [RW] last sentence of main para; So the automation device port shall not be capable of receiving frames if it has placed the attached ADT port into

[RW1

paused state? Shouldn't this be "placed DT device port" (for starters), but what has the DT device being paused have to do with the automation device

port "capability"?

ADIC-145 (E) Page: 68 Location: 6.5.7 [RW] s/b "A NOP IU may be sent by a port to cause the other device's port to transition from the paused state." or something like it.

ADIC-146 (E) Page: 68 Location: 6.5.8 [RW] s/b "when it detects that and error"; "Frame Header" s/b lowercase; delete "clause"

ADIC-147 (E) Page: 68 Location: 6.5.9.2 [RW] "ACK IU or NAK IU" s/b "acknowledgement IU". There are several instances of this style, so consider this a global change. ADIC-148 (E) Page: 68 Location: 6.5.9.2 [RW] PR s/b small caps?

list items should all start lowercase.

ADIC-149 (E) Page: 68

ADIC-150 (E) Page: 70 Location: 7.1.1 [RW]

"information units" s/b "IUs" (this should be a global change)

Location: 6.5.9.3

[RW]

ADIC-151 (E) Page: 70 Location: 7.1.1 [RW] "Frame Header" s/b "frame header" (consider as global change)

ADIC-152 (E) Page: 70 Location: 7.1.1 [RW] "implies" s/b "conveys" perhaps?

ADIC-153 (E) Page: 70 Location: 7.1.2 [RW] "information unit" s/b "IU" (this should be a global change)

ADIC-154 (E) Page: 70 Location: 7.1.2 [RW] s/b "ashall contain the informationa"

ADIC-155 (E) Page: 70 Location: 7.1.2, 2nd P [RW] s/b "The LUN field indicates to which Logical Unit Number the command or task management function shall be routed within the SCSI target device."

ADIC-156 (E) Page: 71 Location: P below table 18 [RW] The wording in the first sentence of this paragraph is very awkward.

ADIC-157 (E) Page: 71 Location: 7.1.3 [RW] s/b IU

ADIC-158 (T) Page: 71 Location: table 19 [RW] "TAG OF TASK TO BE MANAGED" s/b "TASKTAG" instead (or something reasonable!)

ADIC-159 (E) Page: 72 Location: 2nd P [RW] name of tag field would also change here. "checked" s/b "gueried"

ADIC-160 (E) Page: 72 Location: 2nd P [RW] "information unit" s/b "IU" (this should be a global change)

ADIC-161 (T) Page: 73 Location: last P [RW] "sense data can be found" s/b "sense data shall be found"

ADIC-171 (E) Page: 74 Location: headers [RW] s/b IU

ADIC-172 (E) Page: 74 Location: 7.1.5 [RW] "within the exchange context to request the data a little bit at a time." s/b "within the same exchange to request the data."

ADIC-173 (E) Page: 75 Location: 7.1.7, first list [RW] item a) should start lowercase, delete "to it"

ADIC-174 (E) Page: 75 Location: 7.1.7 [RW]

"ACK IU or NAK IU" s/b "acknowledgement IU". There are several instances of

this style, so consider this a global change.

ADIC-175 (E) Page: 75 Location: 7.1.7 [RW]

PR s/b small caps?

ADIC-177 (E) Page: 75 Location: 7.1.8 [RW] s/b Ius

ADIC-178 (E) Page: 75 Location: 7.2.1 [RW] Delete entire first sentence (it doesn't specify anything)

ADIC-179 (E) Page: 75 Location: 7.2.1 [RW] the list needs to conform to the proper list format (e.g., semi-colons)

ADIC-180 (E) Page: 75 Location: 7.2.1 [RW] item b), "a device" s/b "a DT device"

ADIC-181 (E) Page: 76 Location: [RW] several s/b "IU" or "IUs"

ADIC-182 (E) Page: 76 Location: 7.2.2 [RW] s/b "a Fast Access"

ADIC-183 (E) Page: 76 Location: 7.2.3 [RW] s/b "automation devices"

ADIC-184 (E) Page: 76 Location: 7.2.4 [RW] s/b "DT device" or "DT devices" ADIC-185 (E) Page: 76 Location: 7.2.5 [RW] Need a definition for AER.

ADIC-186 (E) Page: 76 Location: 7.2.5 [RW]

delete "optionally"; delete "that may be of interest."; s/b "DT device"

ADIC-187 (E) Page: 76 Location: 7.2.6 [RW] delete "optionally"; s/b "DT device"; s/b "automation device" (several); s/b "an AER"

ADIC-188 (E) Page: 77 Location: 1st P [RW] "all one bits" s/b "bits set to one."

ADIC-189 (E) Page: 77 Location: [RW] several instances s/b "DT device"; "automation device port"; "DT device port" on this whole page.

ADIC-190 (E) Page: 77 Location: [RW] several instances of "ACK IU or NAK IU" s/b "acknowledgement IU" on this page

ADIC-191 (E) Page: 77 Location: [RW] several instances of PR s/b small caps.

ADIC-192 (E) Page: 77 Location: 7.2.7.2, 3rd P [RW] "in a nonexistant exchange" s/b "for a non existant exchange" (how can one receive something in an exchange if the exchange does not exist?)

ADIC-193 (E) Page: 78 Location: 8.1 [RW] "See 8.x" both are missing periods following.

ADIC-194 (E) Page: 80 Location: table 28 [RW] lettered list needs to use semi-colons, "; and" format.

ADIC-195 (E) Page: 81 Location: table 29 [RW] lettered list needs to use semi-colons, "; and" format.

ADIC-196 (E) Page: 82 Location: table 30 [RW] lettered list needs to use semi-colons, "; and" format.

ADIC-197 (E) Page: 82 Location: table 31 [RW] lettered list needs to use semi-colons, "; and" format.

ADIC-198 (E) Page: 83 Location: table 32 [RW] lettered list needs to use semi-colons, "; and" format.

ADIC-199 (E) Page: 84 Location: table 33 [RW] lettered list needs to use semi-colons, "; and" format.

ADIC-200 (E) Page: 85 Location: table 34 [RW]

lettered list needs to use semi-colons, "; and" format.

ADIC-201 (E) Page: 87 Location: table 38 [RW] lettered list needs to use semi-colons, "; and" format.

ADIC-202 (E) Page: 87 Location: 8.2.12 [RW] need to correc the font on the last sentence (Times mixed with Helvetica)

ADIC-203 (E) Page: 87 Location: 8.2.12, 2nd P [RW] missing period at end of paragraph.

ADIC-204 (E) Page: 89 Location: table 42 [RW] "ECXLUDES" s/b "EXCLUDES"

ADIC-205 (E) Page: 89 Location: table 42 [RW] item b) should end "; or"

ADIC-206 (E) Page: 90 Location: table 43 [RW] item b) should end "; or"

ADIC-207 (E) Page: 91 Location: [RW] "Informational" s/b "Informative"

ADIC-208 (E) Page: 96 Location: [RW] "Informational" s/b "Informative"

ADIC-209 (E) Page: 106 Location: C.1 [RW] "ADT port in the automation device" s/b "automation device port"; "ADT port in the DTD" s/b "DT device port"

ADIC-210 (E) Page: 106 Location: C.1 [RW] both lettered lists needs to use semi-colons, "; and" format.

ADIC-211 (T) Page: 37 Location: Table 3 [DB] There is no minimum Negated Output signal voltage level. Note a minimum valve IS given in Table 4 for the Negated Input signal voltage level.

ADIC-212 (T) Page: 40 Location: 5.3 [DB] Where is the SFF-8054 document referenced? (source location of document)

ADIC-213 (E) Page: 63 Location: 6.5.3.1 [RW] delete "clause"

ADIC-214 (E) Page: 42 Location: last P [DB] add reference to table 14 following "HEADER RESERVED BIT SET" (global request for all status code mentions).

ADIC-215 (E) Page: 12 Location: 3.6.1 [DB] Would it be clearer if the state transition diagram included the input causing the transition?

ADIC-216 (E) Page: 35 Location: 4.3.2.1 [KK]

need reference after "Port Login IU"

ADIC-217 (E) Page: 41 Location: 4.3.3.4.1 [KK] last para, second sentence, suggest that "It" be "The port" for clarity.

ADIC-218 (E) Page: 42 Location: 4.3.3.7 [KK] "Agree" s/b "Agreed"

ADIC-219 (E) Page: 43 Location: 4.3.3.7.2 [KK] suggest "After receiving an ACK IU for the Port Login IU the port sent, it shalla"

ADIC-220 (E) Page: 45 Location: 4.3.5.1 [KK] second sentence, this is a sub-state machine of the port state machine's P2:Logged-In state.

ADIC-221 (E) Page: 46 Location: 4.3.6.1 [KK] This state machine becomes active when the port state machine enter P2:Logged-In state.

ADIC-222 (T) Page: 51 Location: 4.6.2.3 [KK] Item c), what happens if a frame never comes having a frame number that matches the Expected Frame Number counter.

ADIC-223 (E) Page: 51 Location: 4.6.2.3 [RW] "Expected Frame Number" s/b "expected frame number" (global, several)

ADIC-224 (E) Page: 66 Location: 3rd P	[KK]
"Port claiming" s/b "Ports claiming"	
ADIC-225 (E) Page: 76 Location: 7.2.5	[KK]
add "(AER)" after first usage	
ADIC-226 (E) Page: 99 Location: B.4	[KK]
"is not further" s/b "is no further"	
ADIC-227 (E) Page: 17 Location: 2nd P	[CP]
"address" s/b "addresses"	
ADIC-228 (E) Page: 21 Location: item b)	[CP]
"Provision is made" s/b "To provide"	
ADIC-229 (E) Page: 24 Location: header 2	[CP]
"References" s/b "references" for consistency	
ADIC-230 (E) Page: 27 Location: 3.1.34	[CP]
"When used this" s/b "When used, this"	
ADIC-231 (E) Page: 27 Location: 3.1.35	[CP]
Need a comma either after "In all cases" or after "term is used"	
ADIC-232 (E) Page: 28 Location: 3.1.37	[CP]

"When used this" s/b "When used, this"

ADIC-233 (E) Page: 28 Location: 3.1.46 [CP] s/b "An error"

ADIC-234 (E) Page: 30 Location: 3.4 [CP] s/b "An alphanumeric listaof items indicates the itemsa"

ADIC-235 (T) Page: 35 Location: 4.2 [CP] Why use such a slow default baud rate? Isn't 19 200 better?

ADIC-236 (E) Page: 42 Location: 4.3.3.7.1 [CP]

The wording in the first sentence of this paragraph is very awkward.

ADIC-237 (E) Page: 49 Location: 4.5.3, 4b [CP] s/b "counter shall be incremented by one" (missing "be")

ADIC-238 (E) Page: 52 Location: 4.6.2.4.4, item 4 [CP] s/b "or a NAK IU"

ADIC-239 (E) Page: 53 Location: 4.8, item d [CP] Add reference to table 7 after Reset line

ADIC-240 (T) Page: 76 Location: 7.2.2, last sentence [CP] How long to wait for data? How does one know no more data is coming?

ADIC-241 (T) Page: 76 Location: 7.2.6, 3rd P [CP]

Having a DT device interpret a reserved bit set to one as set to zero is not

good.

ADIC-242 (E) Page: 76 Location: 7.2.6, 3rd P [RW] "equal" s/b "set"

ADIC-243 (E) Page: 85 Location: 8.2.9, 2nd P [CP] "received an Command" s/b "received a Command"

ADIC-244 (E) Page: 87 Location: 8.2.12 [CP]

The wording of both paragraphs is very awkward.

ADIC-245 (E) Page: 100 Location: B.5 [CP]

"as the original" s/b "that the original" (or something more readable)

Comments attached to Abs ballot from Bill Galloway of Pivot3, Inc.:

Not materially affected by this proposal.

Comments attached to Yes ballot from Paul Entzel of Quantum Corp.:

(E) page 20, remove blank page (PGE).
 (E) page 26, section 3.1.6. Replace "SCSI Architecture Model-2 standard" with "SAM-2" (PGE).

3. (E) page 26, section 3.1.6. Missing period. (SG) 4. (E) page 26, section 3.1.7. Replace "SCSI Architecture Model-2 standard" with SAM-2. (PGE). 5. (E) page 26, section 3.1.8. 'See' should be lower case. (PGE) 6. (E) page 26, section 3.1.14. Put "See 6.3" in parenthesis as part of the previous sentence. (PGE) 7. (E) page 28, section 3.1.46. Don't believe transmission error is used anywhere. (SG) 8. (E) page 28, section 3.2. Add abbreviations ADT, ADC, CDB, and CRN. (PGE) 9. (E) page 32, figure 2. The picture could be cleaned up. The small gray box in the bottom right should completely cover the white state machine box in the corner. (SG) 10. (E) page 34, section 4.1 first paragraph, replace '2' with 'two'. (SG) 11. (E) page 34, figure 3. Figure captions go below the figure. (PGE) 12. (E) page 35, section 4.3.1, first paragraph. "These state machines reside in ADC devices." makes no sense. Remove. (PGE) 13. (T) page 36, figure 4. Why does the Initiate Login message only go to PO and not all states? (SG) 14. (E) page 37, section 4.3.2.3.1, first paragraph. "The same X-Origin and Exchange ID values are used in all information units throughout the process (see 6.3)." Since this sentence is synonymous with the last phrase in the previous sentence, it should be converted to an (i.e.) phrase. (PGE) 15. (E) page 38, section 4.3.2.4.1, first paragraph. 'ports' SB 'port's'. (PGE) 16. (E) page 38, section 4.3.2.4.1, first paragraph, 'state' SB 'substate'. (SG) 17. (E) page 38, section 4.3.2.4.1, seventh paragraph. 'RO:Idle' SB 'TEO:Idle'. (PGE) 18. (E) page 38, section 4.3.2.5.1, second paragraph. "drive" SB "DTD" or "DT Device" (2 places) (PGE) 19. (E) page 40, section 4.3.3.2, first paragraph. "shall:" SB "shall perform one of the following actions:" (MB) 20. (E) page 41. first paragraph. Missing period. (SG) 21. (T) page 41, section 4.3.3.3.1, second paragraph. This sentence should have been deleted when N5 state was added. (SB) 22. (E) page 41. section 4.3.3.4.1. The 3rd and 4th paragraphs in this section should be combined. (PGE) 23. (T) page 41, section 4.3.3.4.1. There is no explanation of what to do if the parameters are acceptable. (PGE) 24. (T) page 43. section 4.3.3.7.2. This section should have been removed when N5 was added. (SG) 25. (E) page 45, section 4.3.5.2.2. Should these phrases be reversed? (i.e. transition and then send IU) (SG) 26. (E) page 46. section 4.3.5.3.2. Should these phrases be reversed? (i.e. transition and then send IU) (figure may need to be modified as well) (SG) 27. (E) page 46. section 4.3.5.3.3. Should these phrases be reversed? (i.e. transition and then send IU) (SG) 28. (E) page 46, section 4.3.5.4.2, first paragraph. Should these

phrases be reversed? (i.e. transition and then send IU) (SG) 29. (E) page 46, section 4.3.5.4.2, second paragraph. Should these phrases be reversed? (i.e. transition and then send IU) (SG) 30. (E) page 47, section 4.3.6.3.1, first sentence. Should this be here or in the description for P2? (SG) 31. (E) page 47, section 4.3.6.3.1, second paragraph. Is PR in the right font? If not, fix throughout whole document. (SG) 32. (E) page 48, section 4.4, third paragraph. This paragraph describes a software counter. Should this counter be in 4.5 as another frame counter? (SG) 33. (T) page 49. section 4.5.3. item 3). "P5:Recovering" SB "R2:Recovering". (PGE) 34. (T) page 49, section 4.5.3, item 4). "P2:Active" SB "P2:Logged-In" (PGE) 35. (E) page 51. section 4.6.2.2 heading. The term 'symbol framing error' should be defined in 4.6.1 (error detection). (SG) 36. (T) page 51, section 4.6.2.3, first paragraph. "P3:Pending" SB "R1:Pending Recovery". (PGE) 37. (T) page 51, section 4.6.2.3, the unordered list. "P2:Active" SB "R1:Idle" (3 places) "P3:Pending Recovery" SB "R1:Pending Recovery". "P5:Recovering" SB "R2:Recovering" (PGE) 38. (E) page 51, section 4.6.2.3, list item 2). The state machine is already in P2. It is no longer a transition since the recovery is a sub state machine. (SG) 39. (T) page 52, section 4.6.2.4.4, unordered list. "P4:Initiating Recovery" SB "TE1:Initiating Recovery", (2 places) (PGE) 40. (T) page 52. section 4.6.2.4.4. list item 3). "P2:Active" SB "TEO:Idle" (PGE) 41. (T) page 52, section 4.6.2.4.4, list item 4). "shall re-send" SB "transition to TE2:Retry Initiate Recovery state and re-send". (MB) 42. (T) page 52, section 4.6.2.4.4, list item 5). There is no description of the state changes for this step. (SG) 43. (E) page 52, Sections 4.6.2.5.1, .2, .3 and 4.6.2.6.1, .2 and .3 all say "send NAK IU" in a slightly different way. Make them all the same (SG) 44. (E) page 53. section 4.6.2.6.3. first paragraph. second sentence. 'The port' SB 'The initiator port'. (SG) 45. (E) page 53, section 4.8, item C). Add cross reference to 5.2 (PGE) 46. (E) page 58, figure 10. Figure caption should be below the figure. (PGE) 47. (E) page 59, Table 7. "O/M" is not defined. (SG) 48. (E) page 61, figure 12. Figure caption should be below the figure. (PGE) 49. (E) page 62, section 6.3, second paragraph after table 11. devices SB ports (PGE) 50. (E) page 64. section 6.5.3.2. "is sent by the transport layer to indicate that the port" SB "shall be sent by a port that" (PGE) 51. (E) page 64, section 6.5.3.3, first paragraph. "is sent by the transport layer to indicate that the port" SB "shall be sent by a port that" (PGE) 52. (E) page 64, section 6.5.3.3, first paragraph. Not EVERY frame shall cause a NAK to be sent. No NAK is sent for corrupted frames.

(SG)

53. (T) page 64, first paragraph after table 13. "P3:Pending Recovery" SB "R1:Pending Recovery" (PGE) 54. (E) page 66, third paragraph after table 15. Port s/b ports. (SG) 55. (T) page 67, last paragraph on the page. "P7:Logged-out" SB "P3:Logged-out" (PGE) 56. (E) page 67, last paragraph on the page. Remove the word 'clause' from the last sentence. (PGE) 57. (T) page 68, section 6.5.6. Question: What the effect of pause is on ACK timeouts. Should it pause the timers? Should the timers be reset after being unpaused? (MB) 58. (E) page 68, section 6.5.8. Remove the word 'clause' from the last sentence. (PGE) 59. (T) page 68, sction 6.5.9.3, item a). "and receives a Login IU with the ACCEPT bit set to one:" SB "and receives a Login IU with the ACCEPT bit sent to one and sends an ACK IU in response to it;" (MB) 60. (T) page 68, section 6.5.9.3, item b). "sends a Login IU with the ACCEPT bit set to one" SB "sends a Login IU with the ACCEPT bit set to one and receives and ACK IU in response to it" (MB) 61. (E) page 70, section 7.1.1, first paragraph. Remove the second sentence. (PGE) 62. (E) page 70. section 7.1.1. first paragraph. "headers" SB "contents" (PGE) 63. (T) page 70, section 7.1.2, first paragraph after table 17, Remove "or task management function" (PGE) 64. (T) page 71, first paragraph after table 18. Remove "for the first SCSI Data IU" (PGE) 65. (E) page 73, first paragraph after table 22. 'Additionally, the data cached.' SB 'Additionally, any data cached.'. (PGE) 66. (T) page 73, last paragraph on page, second sentence. Response code 06h is listed, it should be 05h. We should probably switch from code values to code names. (MB) 67. (E) page 76, section 7.2.4. Replace the last sentence with 'The payload of the VHF Data IU shall contain the VHF data as defined in ADC.' (similar to the wording in 7.2.5) (SG) 68. (T) page 76. section 7.2.4. Add: "The VHF Data IU shall use the same exchange ID as the Request for VHF Data IU used." (PGE) 69. (E) page 76, section 7.2.6. Move the third paragraph up and concatenate it with the first paragraph. (PGE) 70. (T) page 76. section 7.2.6. Add a sentence "Data Transfer Devices shall only send an AER Control IU in response to receiving an AER Control IU from an automation device." (MB) 71. (E) page 77. section 7.2.7.4. last paragraph. AER Data IU s/b AER IU (2 places) (SG) 72. (T) page 79, table 26. Add TARGET RESET to the list of TMFs. (PGE) 73. (T) page 82. table 30. Change I T L x nexus description to: "From the SCSI Command Received transport protocol service call that established the task." (MB) 74. (T) page 83. table 32. Change I T L x nexus description to: "From the SCSI Command Received transport protocol service call that established the task." (MB) 75. (T) page 84, table 33. Change I T L X nexus description to:

'I T L x nexus value passed to the Receive Data-Out transport layer protocol service request that initiated the transfer.' (MB) 76. (T) page 85, table 34. Change I T L X nexus description to: "From the SCSI Command Recieved transport protocol service call that established the task." (MB) 77. (T) page 87, table 38. Change I T L X nexus description to: "Used to set the X ORIGIN and EXCHANGE ID fields in the frame(s) header." (MB) 78. (E) page 96, table B.1. "NTFS" SB "NFTS" (MB) 79. (E) page 97, figure B.1. Upon receipt of the NAK it would be good to show entering the TE1 state and setting NFTS=k like in figure B.2. (MB) 80. (T) page 98, figure B.2. On the second NAK, Shouldn't PR = 1? (SG) 81. (T) page 101, figure B.5. 'P3:Pending Recovery' SB 'R1:Pending Recovery', "P4:Initiating Recovery" SB "TE1:Initiating Recovery", and "P2:Active" SB "R0:Idle" (2 places) (MB) 82. (E) page 104, figure B.8. On second ACK from the bottom of the figure, Remove "EFN = k+1". (MB)

Comments attached to No ballot from Gerald Houlder of Seagate Technology:

Comments are available in document 04-118.

Comments attached to Yes ballot from Paul D. Aloisi of Texas Instruments:

Figure 1 SPI-5 is the approved standard

Approved standards needs to be updated

2.2 Approved reference standards needs to be updated.

Comments attached to Abs ballot from Roger Cummings of Veritas Software:

Not within our organizations scope of concern