To:        T10
From:      Bill Ham, Compaq
Date:      September 15, 1998
Subject:   Resolution of letter ballot comments relating to EPI


The following list summarizes the ballot results:

Voting Results on T10 Letter Ballot 98-014r0 on forwarding EPI to first
public review

| Organization | Name | S | Vote | Add'l Info |
|---|---|---|---|---|
| Adaptec, Inc. | Larry Lamers | P | Yes | |
| AMP, Inc. | Chuck Brill | P | Yes | |
| Amphenol Interconnect | Michael Wingard | P | Yes | |
| Ancot Corp. | Bart Raudebaugh | P | Yes | |
| Apple Computer | Ron Roberts | A | Yes | |
| Berg Electronics | Douglas Wagner | P | Yes | |
| Cable Design Technologies | Richard Wagner | P | Yes | |
| Ciprico Inc. | Gerry johnsen | P | Yes | |
| Circuit Assembly Corp. | Ian Morrell | P | Yes | |
| Compaq Computer Corp. | Bill Ham | A | YesC | Cmnts |
| Congruent Software, Inc. | Peter Johansson | P | Yes | |
| Dallas Semiconductor | Charles Tashbook | P | Yes | |
| Data General / Clariion | Gary S. Peterson | P | Yes | |
| Distributed Processing Tech. | Roger Cummings | P | Yes | |
| Eastman Kodak Co. | Robert Reisch | P | Yes | |
| ENDL | I D Allan | P | Yes | |
| Exabyte Corp. | Tom Jackson | P | Yes | |
| Fujitsu (FCPA) | Don Vohar | A | Yes | |
| Harting, Inc. of N. America | Marcos Barrionuevo | P | Yes | IV |
| Hewlett Packard Co. | J. R. Sims, III | P | Yes | |
| Hitachi Cable Manchester,Inc | Zane Daggett | P | Yes | |
| Hitachi Storage Products | Yang, Anthony | P | Yes | |
| Honda Connectors | Thomas J Kulesza | P | Yes | |
| IBM Corp. | George Penokie | P | No | Cmnts |
| Iomega Corp. | Tim Bradshaw | P | Yes | |
| KnowledgeTek, Inc. | Dennis Moore | P | Yes | |
| Linfinity Micro | Louis Grantham | P | Yes | |
| LSI Logic Corp. | John Lohmeyer | P | YesC | Cmnts |
| Madison Cable Corp. | Robert A. Bellino | P | Yes | |
| Maxtor Corp. | Pete McLean | P | Yes | |
| Methode Electronics, Inc. | Bob Masterson | P | Yes | |
| Molex Inc. | Joe Dambach | P | Yes | |
| Mylex Corp. | Brian Mckean | P | Yes | |
| Ophidian Designs | Edward A. Gardner | P | Yes | IV |
| Philips Electronics | Bill McFerrin | P | Yes | |
| QLogic Corp. | Skip Jones | P | Yes | |
| Quantum Corp. | James McGrath | P | Yes | |
| Seagate Technology | Gene Milligan | P | YesC | IV Cmnts |
| Silicon Systems, Inc. | Dave Guss | P | Yes | |
| Sony Electronics, Inc. | Janek Rebalski | A | Yes | |
| Storage Technology Corp. | Erich Oetting | P | Yes | |
| Sun Microsystems Computer Co | Vit Novak | A | YesC | Cmnts |
| SyQuest Technology, Inc. | Pat Mercer | P | Yes | |
| Toshiba America Elec. Comp. | Tokuyuki Totani | P | Yes | |
| UNISYS Corporation | Ken Hallam | P | Yes | |
| Unitrode Corporation | Paul D. Aloisi | P | YesC | Cmnts |

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Western Digital Corporation      Jeff Williams        P Yes
Woven Electronics                Doug Piper           P Yes


Key:
P       Voter indicated he/she is principal member
A       Voter indicated he/she is alternate member
O       Voter indicated he/she is observer member
?       Voter indicated he/she is not member or does not know status
YesC    Yes with comments vote
Abs     Abstain vote
DNV     Organization did not vote
IV      Individual vote (not organizational vote)
Cmnts   Comments were included with ballot
NoCmnts No comments were included with a vote that requires comments
DUP     Duplicate ballot (last ballot received from org. is counted)
PSWD    The password was not correct (vote not counted)
ORG?    Organization is not voting member of T10 (vote not counted)

Ballot totals:
 47 Yes
  1 No
  0 Abstain
  0 Organization(s) did not vote
 48 Total voting organizations
  6 Ballot(s) included comments

This 2/3rds majority ballot passed.

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The following pages detail the comments and responses to the comments
approved by the working group on September 14, 1998.


Comments attached to YesC ballot from Bill Ham of
Compaq Computer Corp.:

All comments are editorial

1. pg6 1.  implementOrs is the preferred spelling per spellweb.com

Response: accepted

2. pg7 2.3 change "from a FAX access" to (fax) like other fax numbers

Response: partially accepted – FaxAccess is a term used by SFF to
describe a type of connection that faxes back to the caller information.
The new wording is "from FaxAccess".

3. pg8 3.1.1 [] should be () or not there at all.  This occurs several
   places in the spec.

Response: accepted

4. pg8 3.1.1 remove comma after initiators

Response: accepted

5. pg8 3.1.1 remove space after expanders
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Response: accepted

6. pg8 3.1.1 added ; before "see SAM-2"

Response:  accepted

7. pg8 3.1.1 segmentS

Response: error not found in rev 15.

8. pg8 3.1.1 pick "bus-path" or "bus path"

response: accepted will use "bus-path"

9. pg9 3.1.1 add : after "(media)"

response: accepted

10. pg9 3.1.1 add period at end of paragraph - "connector."

Response: accepted

11. pg9/10 3.1.1 add : after "description)" several places

Response: accepted

12. pg9/10 3.1.1 add period at end of several paragraphs

Response: accepted by making the section uniform with respect to the format

13. pg9 3.1.1 make lowercase "(see"

Response:  accepted

14. pg10 3.1.1 the end of definitions is not clear - it looks like
      Other physical placement... is a definition

Response:  accepted: wording added in the form of a note.

15. pg10 3.1.1 the footnote isn't appearing as a footnote

Response:  accepted, changed to a footnote

16. pg11 3.1.2 Lmax is defined on pg14 as "maximum domain length"

Response:  accepted: changed the word segment to domain on page 11

17. pg12 3.1.2 Isn't SFF "small form factor"

Response:  rejected, SFF is the complete name as presently accepted by
the SFF group.

18. pg12 3.1.2 pg14 uses "i"th not ith

Response:  accepted used "i"th everywhere

19. pg12 3.1.2 add Tdd definition from pg14

Response:  accepted

20. pg12 3.2 add colons after expander two places

Response:   accepted

21. pg14 6.1.1.1 pg12 used ith not "i"th

Response:   accepted used "i"th everywhere

22. pg14 6.1.1.1 is the multiplication obvious here or should an x
    be added?

Response: accepted, added an "x" to indicate multiplication

23. pg15 6.1.1.2 add those - "such as those used"

Response:   accepted

24. pg15 6.1.1.2 previous defs used Vp, now the document is using
    Vp^-1.  Consistency might be better.

Response: the document consistently uses the correct units.  Velocity is
measured in length per time.  Most of the timing specifications use
nanoseconds.  Therefore, in order to get the basic units in nanoseconds
per something one must use Vp^-1.  Previous revisions of EPI were
incorrect in calling out Vp as nanoseconds per meter.

The symbol "V" may be confused with voltage and will be changed to "$v$"
which is an italicized "v".  The inverse propagation velocity will the
represented as "$v_P^{-1}$".

25. pg15 6.1.3 usable is the preferred spelling per spellweb.com

Response:   accepted

26. pg16 6.1.3 rewrite sentence using "he" (3rd paragraph)

Response:   accepted by deleting "one is"

27. pg16 6.1.3 use dash - in backplane applications - instead of
    ().  This is important wording.

Response:   accepted

28. pg17 7 change "This relates" to "These relate"

Response:   accepted

29. pg17 7 change independent to independently (it's an adverb)

Response:   accepted

30. pg18 7.1 change "Very significant...by" to "Significant...from"

Response:   accepted

31. pg21-23 table 1 has mixed case, tables 2 & 3 do not

Response:  accepted

32. pg21 table 1 "h" in fast-20 label

Response:  accepted

33. pg22-23 table 1 used "m" everywhere, tables 2 & 3 imply it

Response:  accepted table 1 now the same as table 2,3

34. pg22 table 2 doesn't use NR so doesn't need the description

Response:  accepted

35. pg22-23 tables 2 & 3 add is to "data is in meters"

Response:  accepted

36. pg21 8.2 remove one from "devices one the"

Response:  accepted

37. pg30 9.1 add period at end of each item

Response:  accepted by removing the verb in the bulleted items

38. pg32 9.1.1 add period "repeater."

Response:  accepted

39. pg32 9.1.2 move period inside quotes "converters."

Response: rejected

40. pg34 Table 4 Fast-80 sync not defined in any referenced specs

Response:  accepted, deleted Fast-80 and replaced with "higher speeds to be defined in future"

41. pg35 9.1.4.3 extra CR after "phase transactions"

Response:  accepted

42. pg36 9.1.4.4.1 change Wired-Or to Wired-or

Response:  accepted

43. pg39 9.1.4.6 change the to a "asserting a line"

Response:  accepted

44. pg40 9.1.4.7 change [] to () or remove

Response:  accepted, removed

45. pg40 9.1.4.7 add comma "is sent,"

Response:  accepted

46. pg40 9.1.4.7 add occurs "round trip time occurs"

Response:  accepted with wording modifications

47. pg40 9.1.4.7 remove "is required."

Response:  accepted

48. pg41 9.1.4.7 remove . from end of equation

Response:  accepted

49. pg41 table 6 Fast-80 not defined in any referenced specs

Response:  accepted, Fast 80 removed and replaced with a reference to possible future higher speeds

50. pg42 9.2 add - "two-port"

Response:  accepted

51. pg42 9.2 add - "address-enhancing"

Response:  accepted

52. pg42 9.2.1 add - "non-SCSI"

Response:  accepted

53. pg43 9.2.2 move period inside quotes "LUN Bridge."

Response:  rejected

54. pg44 9.2.2 lines 1 and 2 has to have

Response: accepted with modified wording

55. pg44 9.2.2 line 3 "busses" to "bus"

Response:  accepted

56. pg44 9.2.2 second paragraph change "ID5" to "ID 5"

Response:  accepted

57. pg44 9.2.2 third paragraph change to "targets.  However,"

Response:  accepted

58. pg44 9.2.2 fifth paragraph what process and what RESELECTION timing issue?  This reference may be obsolete.

Response:  accepted, modified wording is proposed

59. pg44/45 9.2.2 add periods at end of each list item

Response:  accepted, section reformatted to be consistent with others

60. pg44 9.2.2 2nd from bottom remove period "content. between"

Response:  accepted

61. pg44/45 9.2.2 Replace "REPORT LUN's" with "REPORT LUNS" (several
    other places too)

Response: accepted

62. pg47 9.2.4 replace [] with () or remove

Response:  accepted, removed

63. pg49 9.2.4 REPORT LUNS

Response:  accepted

64. pg50 10 add the "change the population"

Response: accepted

65. pg50 10.1.1.1 add colon at end of 1) and 2)

Response: accepted

66. pg50/51 10.1.1.1 add periods at end of each list item

Response:  rejected, not sentences

67. pg51 10.1.1.2 change useable to usable

Response: accepted

68. pg54/55 10.1.2.1 check underlines of (Figure 20) type phrases

Response:  accepted, errors caused by .pdf conversion issues

69. pg54/55 10.1.2.1 add periods to end of each item

Response:  rejected, list items are not sentences

70. pg56 10.1.2.1.1 remove comma after "alone," at end of stage 6

Response:  accepted

71. pg59 10.2.1 change "any time )providing" to "any time provided"

Response: accepted

72. pg60 12.1 change "one will need to" to "one needs to"

Response: accepted

73. pg61 add space to "Table 7shows"

Response: accepted

74. pg62 12.1.1 change "4.25V" to "4.25 V".  Similar changes may
    be needed elsewhere.

Response: accepted

75. pg63 12.1.2 remove extra period "100 mA. ."

Response: accepted

76. pg63 12.1.3 fix spaces "3.0V )" and change "4.0V" to "4.0 V"

Response: accepted

77. pg63 12.1.4 add be "1.0 A be delivered"

Response: accepted

78. pg63 12.2 add comma "TERMPWR lines, detailed"

Response: accepted

79. pg63 12.3 a special kind of defect?

Response:  accepted, wording changed to "an unusual defect"

80. pg64 12.3 change 3rd line to contain "initiator; more than three"

Response:  accepted

81. pg64 12.3 last paragraph against to for - "back up for expanders"

Response: accepted

82. pg64 13 reorder second sentence "The effects ... manifested when
    operating under extended configurations."

Response: accepted

83. pg69 13.4.2 move period inside quotes "fault." and "ground."

Response: rejected

84. pg69 13.4.2 remove unmatched ]

Response: accepted

85. pg75 font change is jarring

Response:  accepted, changed to a better match

86. pg86 table 21 add space in "see14.5.2"

Response: accepted

87. pg87 table 22 notes in a different font

Response: accepted

88. pg88-91 tables 23-26 add spaces "see14.5.2" and "also14.6"

Response: accepted

89. pg95 table 30 heading not bold

Response: accepted

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


Page 8

Note 1, George Penokie, 08/25/98 04:10:24 PM

(E) Section 3.1.1 Definitions; Why are the definition not in
alphabetical order?

Response:  This section was changed from definitions to "Bus Model"
thereby eliminating the desire for alphabetization.

Note 2, George Penokie, 08/25/98 04:10:14 PM

(E)-Section 3.1.1 Definitions- Bus segment types - Why is this not a
separate type of bus segment?

Response: accepted, wording modified

Page 10

Note 3, George Penokie, 08/25/98 04:30:38 PM

(E)-Section 3.1.1 Definitions- Special
Note for location of setup connection point; Is this part of the
definitions or what? If it is then what is being defined.

Response: Accepted, revised wording and formatting provided in rev 16.

Note 4, George Penokie, 08/25/98 04:31:12 PM

(E)-Section 3.1.1 Definitions- Special
Note for location of setup connection point; What is an *. A footnote? A
note?

Response:  accepted and changed to a footnote

Page 12

Note 5, George Penokie, 08/25/98 04:13:10 PM

(E) 3.2 SCSI domain related: Are these supposed to be glossary entries
or what. If they are then why are they not in the glossary?

Response:  Accepted, section 3 reorganized to clarify the presently
awkward presentation

Page 17

Note 6, George Penokie, 08/25/98 04:15:24 PM

(E) Section 7 Bus segment guidelines; Paragraph 3;This sounds bad. It
should be removed.

Response: rejected, this paragraph contains important explanations for the risk classes - removing it leaves significant confusion.  The notes in the tables are not adequate for understanding the risk classes.

Note 7, George Penokie, 08/25/98 04:14:55 PM

(E) Section 7 Bus segment guidelines; Paragraph 3; Are these classes the same as the classes in tables 1 and 2?

Response: partially accepted, a forward reference to the tables is now provided.

Page 18

Note 8, George Penokie, 08/25/98 04:57:15 PM

(E) Section 7.1; Everywhere in the document the dimensional values are in metric (as they should be). But for some reason the stub lengths are in inches. Those all need to be changed to metric values

Response: accepted

Page 19

Note 9, George Penokie, 08/25/98 04:18:22 PM

(E) Section 7.3; Everywhere in the document the dimensional values are in metric (as they should be). But for some reason the stub lengths are in inches. Those all need to be changed to metric values.

Response: accepted

Page 20

Note 10, George Penokie, 08/25/98 04:37:19 PM

(E) Section 7.4; Third paragraph; Is this the same case as talked about above?  Is it the same class the is in tables 1 and 2? If so then they should all be the same name.

Response: accepted

Note 11, George Penokie, 08/25/98 04:58:30 PM

(E) Section 7.3; Everywhere in the document the dimensional values are in metric (as they should be). But for some reason here lengths are in inches.  Those all need to be changed to metric values

Response:  accepted

Page 21

Note 12, George Penokie, 08/25/98 04:34:27 PM

(E) Section 7.5 Information under table 1; Everything from 'Risk classes to ** should be included within the table (i.e. as a footnote to the table).

Response:  accepted

Note 13, George Penokie, 08/25/98 04:59:18 PM

(E) Section 7.5; Table 1; Everywhere in the document the dimensional values are in metric (as they should be). But for some reason here lengths are in inches. Those all need to be changed to metric values

Response: accepted

Page 22

Note 14, George Penokie, 08/25/98 04:38:05 PM

(E) Section 7.5; table 2; Is this a rule class or a risk class? Table 1 says risk table 2 says rule. Footnotes say risk.

Response: accepted, changed to risk

Note 15, George Penokie, 08/25/98 04:36:27 PM

(E) Section 7.5 Information under table 2; Everything from 'Risk classes to 'all length data in meters' should be included within the table (i.e. as a foot Note to the table).

Response:  accepted

Note 16, George Penokie, 08/25/98 04:59:31 PM

(E) Section 7.5; Table 2; Everywhere in the document the dimensional values are in metric (as they should be). But for some reason here lengths are in inches. Those all need to be changed to metric values

Response: accepted

Page 23

Note 17, George Penokie, 08/25/98 04:36:44 PM

(E) Section 7.5 Information under table 2; Everything from 'Risk classes to 'all length data in meters' should be included within the table (i.e. as a foot Note to the table).

Response: accepted

Note 18, George Penokie, 08/25/98 04:59:45 PM

(E) Section 7.5; Table 3; Everywhere in the document the dimensional values are in metric (as they should be). But for some reason here lengths are in inches. Those all need to be changed to metric values

Response: accepted

Page 24

Note 19, George Penokie, 08/25/98 11:32:05 AM
Can a technical report have a shall?

Response:  The non-binding status of a technical report exists by the understanding with NCITS that all material contained therein is non normative.  The word "shall" is part of the normal English language and

therefore is permissible in this document.  The use of the word "shall"
does not make any part of this document normative.  That
notwithstanding, an attempt was made to reduce the usage of "shall".

A section describing the technical report modified from that used in the
GPP document will added.

Page 27

Note 20, George Penokie, 08/25/98 11:38:32 AM
Another Shall.

Response: see note 19

Page 28

Note 21, George Penokie, 08/25/98 04:20:03 PM

(E) Many places in the document - The are no references to many of the
figures and table throughout the document. All figures and table need to
be referenced.

Response: accepted

Page 30

Note 22, George Penokie, 08/25/98 11:41:54 AM
Another shall

Response: see note 19

Page 31

Note 23, George Penokie, 08/25/98 04:20:38 PM

(E) Many places in the document - The are no references to many of the
figures and table throughout the document. All figures and table need to
be referenced. No reference to figures 7 and 8.

Response: accepted

Page 33

Note 24, George Penokie, 08/25/98 11:46:28 AM
Another shall.

Response: see note 19

Note 25, George Penokie, 08/25/98 11:46:58 AM
Another shall.

Response: see note 19

Note 26, George Penokie, 08/25/98 11:47:29 AM
Another shall.

Response: see note 19

Note 27, George Penokie, 08/25/98 11:47:50 AM
Another shall.

Response: see note 19

Page 34

Note 28, George Penokie, 08/25/98 11:48:23 AM
Another shall.

Response: see note 19

Note 29, George Penokie, 08/25/98 11:48:56 AM
Another shall.

Response: see note 19

Note 30, George Penokie, 08/25/98 11:49:15 AM
Another shall.

Response: see note 19

Note 31, George Penokie, 08/25/98 04:39:36 PM

(E) Section 9.1.4.1 last paragraph; last sentence; What is 'ultra'?

Response: accepted, ultra deleted

Note 32, George Penokie, 08/25/98 04:44:01 PM

(T) Section 9.1.4.3; table 4; Fast-80 is nowhere else in this document
it should be removed from here.

Response: accepted, done

Page 35

Note 33, George Penokie, 08/25/98 04:23:41 PM

(E) Section 9.1.4.3; First sentence after figure 10; There is a hard
carriage return here that should not be here.

Response: accepted

Note 34, George Penokie, 08/25/98 04:25:07 PM

(E) Section 9.1.4.3; 3rd paragraph after figure 10; 3rd sentence. 'Can'
is not a word that should be used.

Response: accepted, can deleted

Page 39

Note 35, George Penokie, 08/25/98 04:41:08 PM

(E) Section 9.1.4.4.4; 1st paragraph after figure 12; 2nd sentence; L
and D have "" but S does not.

Response: accepted, added "" to the S

Page 41

Note 36, George Penokie, 08/25/98 05:02:24 PM

(T) Section 9.1.4.7; table 6; Fast-80 is nowhere else in this document
it should be removed from here.

Response: accepted, done

Page 44

Note 37, George Penokie, 08/25/98 01:38:16 PM
Another shall.

Response: see note 19

Note 38, George Penokie, 08/25/98 04:48:01 PM

(E) Section 9.2.2; 5th bullet; text in ()s; This looks like an editors
Note to me.

Response: accepted, this relates to a comment by LSI Logic that this
code should be defined.  My official response is to include the actual
code since it has now been reserved.

Note 39, George Penokie, 08/25/98 01:39:02 PM
Another shall.

Response: see note 19

Note 40, George Penokie, 08/25/98 01:39:22 PM
Another shall.

Response: see note 19

Page 45

Note 41, George Penokie, 08/25/98 01:40:05 PM
Another shall.

Response: see note 19

Note 42, George Penokie, 08/25/98 01:40:17 PM
Another shall.

Response: see note 19

Note 43, George Penokie, 08/25/98 01:40:48 PM
Another shall.

Response: see note 19

Page 46

Note 44, George Penokie, 08/25/98 04:20:48 PM

(E) Many places in the document - The are no references to many of the
figures and table throughout the document. All figures and table need to
be referenced. There is no reference to this figure.

Response: rejected, this figure is referenced in 9.2.2 second paragraph

Page 47

Note 45, George Penokie, 08/25/98 04:21:01 PM

(E) Many places in the document - The are no references to many of the figures and table throughout the document. All figures and table need to be referenced. There is no reference to this figure.

Response: rejected, this figure is referenced in 9.2.2 second paragraph

Note 46, George Penokie, 08/25/98 04:46:05 PM

(E) Section 9.2.4; 4th paragraph; last sentence; Yes they are but this is already defined elsewhere.

Response: accepted, revised wording in place

Page 49

Note 47, George Penokie, 08/25/98 01:56:36 PM
Another shall.

Response: see note 19

Note 48, George Penokie, 08/25/98 01:56:48 PM
Another shall.

Response: see note 19

Note 49, George Penokie, 08/25/98 01:56:54 PM
Another shall.

Response: see note 19

Note 50, George Penokie, 08/25/98 01:57:06 PM
Another shall.

Response: see note 19

Note 51, George Penokie, 08/25/98 01:57:14 PM
Another shall.

Response: see note 19

Page 50

Note 52, George Penokie, 08/25/98 02:01:24 PM
Another shall.

Response: see note 19

Page 56

Note 53, George Penokie, 08/25/98 02:09:16 PM
Another shall.

Response: see note 19

Page 58

Note 54, George Penokie, 08/25/98 02:12:38 PM
Another shall.

Response: see note 19

Note 55, George Penokie, 08/25/98 02:13:01 PM
Another shall.

Response: see note 19

Note 56, George Penokie, 08/25/98 02:14:12 PM
Another shall.

Response: see note 19

Note 57, George Penokie, 08/25/98 02:14:28 PM
Another shall.

Response: see note 19

Page 59

Note 58, George Penokie, 08/25/98 02:31:57 PM
Another shall.

Response: see note 19

Note 59, George Penokie, 08/25/98 02:32:39 PM
Another shall.

Response: see note 19

Page 60

Note 60, George Penokie, 08/25/98 04:26:44 PM

(E)- The entire document - There are several requirements in this
technical report listed as shalls. Is this allowed?

Response: see note 19

Note 61, George Penokie, 08/25/98 04:27:57 PM

(E) Section 12.1 4th paragraph 2nd sentence; The ) at the end of the
sentence should be deleted.

Response: accepted

Page 61

Note 62, George Penokie, 08/25/98 04:28:49 PM

(E) Section 12.1; paragraph above table 7, There should be no space
between 7 and shows.

Response: accepted

Page 63

Note 63, George Penokie, 08/25/98 04:42:50 PM

(E) Section 12.3; 2nd paragraph; 3rd sentence; What is a 'very special kind of defect'?

Response: accepted, changed to "an unusual defect"

Page 66

Note 64, George Penokie, 08/25/98 04:21:09 PM

(E) Many places in the document - The are no references to many of the figures and table throughout the document. All figures and table need to be referenced. This figure is not referenced anywhere.

Response: accepted, reference added and figure moved to a more appropriate place

Page 67

Note 65, George Penokie, 08/25/98 04:21:26 PM

(E) Many places in the document - The are no references to many of the figures and table throughout the document. All figures and table need to be referenced.

Response: accepted, reference added

Page 75

Note 66, George Penokie, 08/25/98 04:21:41 PM

(E) Many places in the document - The are no references to many of the figures and table throughout the document. All figures and table need to be referenced.  None of the remaining tables have references.

Response: partially accepted for the figures (all corrected now) rejected for the tables, the tables are referenced in Table 9.  Is there a problem with using a table to reference other tables?

Note 67, George Penokie, 08/25/98 04:29:26 PM
Section 14.7 All tables: Is there any way that these table can be made to look like they belong to this document?

Response:  accepted, changes have been made to improve on the font matching

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Comments attached to YesC ballot from John Lohmeyer of
LSI Logic Corp.:

Editorial changes are identified with an (E); Technical changes are identified with a (T).  In several cases (E/T) is used because the comment may be editorial, technical, or both.

1. (E) Patent statement at the bottom of page 2.  There appears to be an extraneous carriage return in the second paragraph.

Response: accepted

2. (E) 3.1.1 Definition of device, second sentence.  Change
'(The ... initiators see SAM-2)' to
'The ... initiators (see SAM-2).'

Response: accepted but fixed by using a semicolon instead of ().

3. (E) 6.1.3, fifth paragraph.  Avoid usage of the gender-specific
pronoun 'he'.  Consider changing this sentence to:  "For example if the
3 meter limit for Fast-10 SCSI is exceeded, then it should be expect
that reflections would need to be under very good control or some other
features would need to be better than minimally required."

Response: accepted, revised wording in place

4. (E) 6.1.3, seventh paragraph.  The abbreviations, FEP, TPE, and PTFE,
should be added to the list in 3.1.2.

Response: accepted

5. (E) 7.1, category 2).  Consider changing 'very electrically friendly'
to a more standards-friendly wording.  Perhaps the sentence should be
changed to: "This case, which works well electrically, is commonly ...".

Response: accepted, reworded

6. (E) 8.1.1, First paragraph under Figure 2.  Change '16-but' to
'16, but'.

Response: accepted

7. (E) 8.2. Several places.  Change 'negation' or 'negated' to 'false'.

Response: partially accepted, revised wording used of the form false
(negated)

8. (E) 8.2. Second paragraph.  While SCSI devices are quite complex,
I doubt that they 'think'.  Consider changing the three sentences to:
"If the upper bits are not set to the false state the 16-bit devices may
incorrectly observe that other 16-bit devices are arbitrating for the
bus (since the upper data bits may be true) and may fail.  Some
electrical means for biasing these bits to the false state should be
employed.  One simple way for SE devices is to add a high-value resistor
(say 100 K Ohms) to the 5V or 3V supply."

Response: accepted with slightly different wording

9. (T) Figure 3.  This figure implies that more than one 16-bit device
is permitted.  If so, won't these devices negotiate for a wide data
path, then fail when they actually attempt wide data transfer.  How is
this different from Figure 6, which disallows multiple wide data paths?

Response:  partially accepted, figure 3 and figure 6 are illustrating
two different points and clearly neither is capable of wide transfers.
The difference is that in figure 3 the devices will never get through
the arbitration process to try a wide transfer while in figure 6
arbitration could happen normally and failure only happens when the wide
transfer is attempted.  Wording is added to further explain that figure
3 wide devices must be constrained to narrow transfers only (if the
upper bits are adequately set to the false state and arbitration
actually happens). Similarly, the prohibition of the configuration of

figure 6 may be lifted if the wide devices are constrained to narrow
transfers only.

10. (E) 9.1.1, third paragraph.  The period '.' is missing at the end of
the paragraph.

Response: accepted

11. (E) 9.1.4.1, rule 4. Delete '(not considered in this technical
report)'

Response: accepted

12. (E) 9.1.4.3, just below Figure 10.  There appears to be an
extraneous carriage return in the second line.

Response: accepted

13. (E) 9.1.4.3, Second paragraph after Figure 10.  Delete 'sitting like
good SCSI citizens'.

Response: accepted

14. (E) 9.1.4.4.3, last paragraph.  Change 'a lot of margin built into'
to 'adequate margin included in'.  In the same paragraph, last sentence,
change 'excessive' to 'excessively'.

Response: accepted

15. (E) 9.1.4.4.4, first paragraph, second sentence. This sentence
should be reworded as 'In Figure 12 parameters whose first letter is 'L'
are physical lengths, 'D' refers to differential segments, and S refers
to single ended segments'.

Response: accepted

16. (E/T) 9.1.4.7. This clause includes several instances of phrases
such as 'ACK (REQ)'.  In several places this seems to imply that the
initiator may send ACK pulses before receiving REQ pulses.  In point of
fact, the target always sends the REQ pulses before the initiator sends
the corresponding ACK pulses.  (However, there are two REQ/ACK counters,
one at the target and another at the initiator.  Due to timing
differences, these two counters may have different values at any given
time.)

I suggest that the first sentence be changed from 'The REQ/ACK offset is
the difference between the number of ACK's(REQ's) sent and the number of
REQ's(ACK's) received in a synchronous data phase transmission.' to 'The
REQ/ACK offset is the difference between the number of REQ pulses
sent(received) and the number of ACK pulses received(sent) in a
synchronous data phase transmission.'.

The third paragraph should be changed to: 'When the target sends the
first REQ pulse there is a minimum of one round trip time before the
first ACK pulse can be received from the initiator.  This round trip
time includes the data processing time at the initiator.  Meanwhile, the
target may continue to issue REQ pulses until the offset counter reaches
the maximum REQ/ACK offset level that was negotiated.'

The fourth paragraph should be changed to: 'If the maximum offset level
is reached, the target waits until it receives a decrementing ACK pulse
before issuing another REQ pulse. When the maximum REQ/ACK offset is
reached it means that the initiator has stalled the transfer because it
is not ready to send or receive another transfer.  Initiators designed
for maximum performance avoid this condition.'

Either delete the fifth paragraph (since it is redundant with SCSI-2,
SPI, and SPI-2 requirements) or change it to: 'The receiving device is
required to accept up to at least the maximum REQ/ACK offset level of
data phase transfers in its buffers.'.

Response: accepted and changed per suggestions

17. (E/T) 9.2.2, eighth paragraph.  This paragraph claims that LUN
bridges may use the arbitration process used in simple expanders
described in 9.1.  I did not find the arbitration process described in
9.1 (searching for the string 'arbitration').  Were words lost in 9.1?

Response: accepted, wording added that explains the relationship between
LUN bridges and simple expanders

18. (E/T) 9.2.2, fifth point in the list of Case 1 LUN bridge features.
Included is a parenthetical statement that a new device type code is
required.  Assuming a new code was added to SPC-2, replace this
statement with the code value assigned.  If the new code value was not
added to SPC-2, we need to get one assigned before forwarding this
technical report.

Response: seems reasonable to put it in if it exists.  If not, then what
do we need to do to get one assigned?  Present changes have temporarily
removed this statement.

19. (E/T) 9.2.4, fifth paragraph.  "SCSI switches constitute a separate
SCSI device type" implies that yet another SCSI device type code value
needs to be added to SPC-2.  Has this value been added?  If so, it
should be reported here.  If not, we need to get one assigned before
forwarding this technical report.

Response: see response to comment 18

20. (E) Clause 14.  There is the potential that the pin assignment
tables in this clause might disagree with those in the referenced
standards and specifications.  There should be an explicit statement
early in clause 14 saying, "The pin assignment tables in this clause are
included for convenience, however should there be a conflict between
this technical report and the pertinent standard or specification, the
pin assignments in the pertinent standard or specification shall
prevail."

Response: accepted

21. (E) Clause 14.  For each pin assignment table in Clause 14, there
should be a reference as to which standard or specification currently
defines the pin assignment data.  If it is intended that EPI supersede
any of the SFF specifications, then it should be clearly stated that EPI
is the pertinent specification for that connector.

Response: accepted, references put in Table 9.

22. (E) Table 15. There is a space missing before the '+' for the first two signals.

Response: accepted

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Comments attached to YesC ballot from Gene Milligan of
Seagate Technology:

EPI comments:

1) The editor's note should be deleted from the cover page.

Response: accepted

2) The abstract would be clearer if "for formal compliance with standards" were deleted.

Response: accepted

3) The technical editor is to be congratulated on a very informative work product.

Response: accepted

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Comments attached to YesC ballot from Vit Novak of
Sun Microsystems Computer Co:

Figure 12 : Change all DF/SEs to DIFF/SE as more self-explanatory.

Response: accepted

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Comments attached to YesC ballot from Paul D. Aloisi of
Unitrode Corporation:

EPI Letter Ballot Comments

1. Section 6.1.2 2nd paragraph last sentence SE Ended device. Removed ended

Response: accepted

2. Section 7 first paragraph last sentence, a should be are.

Response: accepted

3. Section 7 3rd paragraph 1st sentence "system is used", add is.

Response: accepted

4. Class 3 description needs to be reworded. Last that to those?

Response: accepted

5. Section 7.3 3rd paragraph, second sentence Mv should be mV.

Response: accepted

6. Section 7.3 8th Paragraph Note tat this applies for positions near the terminators that are being used for bus termination.

Response: accepted

7. Table 1 there is a stray h in the Fast-20 block

Response: accepted

8. Tables 2 and 3 FAST-xx should be Fast-xx

Response: accepted

9. Section 8.1.1 3rd paragraph, 2 - 16 bit devices with 8 - 8 bit devices between them is an addressing problem. The 8 bit devices can not talk to the 16 bit devices if they are using all the 8 bit addresses.  2 - 16 bit devices with 6 - 8 bit devices will work.

Response: accepted and fixed

10.  EPI REV 14 appears on the 30 page on instead of rev 15.

Response: accepted

11. 9.1.4.3 3rd paragraph, first sentence has an extra carriage return.

Response: accepted

12. 9.1.4.4.3 2nd Paragraph 4th sentence last word should have "a" in front of it.

Response: accepted

13. 9.2.4 The paragraph before figure 18 should really be after figure 18, since it talks about figure 19.

Response: accepted

14. 12.1.1 SCSI-2 alternate allows for 2.63 volts as well as 2.85 volts (See note 2 in figure 10).

Response: accepted, with revised wording

15. Sentence above Table 7 is missing a space after Table 7

Response: accepted

16. Table 8 column headers don't explain that is the number of conductors and the wire gauge.

Response: accepted

17. Paragraph after table 8 should end with only 1 or 2 wires distributing termpwr.

Response: accepted

18. 13.4.1 Should that be braided shield is equivalent to 8 AWG wire?

Response: accepted

19. Complain about the words Stubbing connection and Bussing connection in section 14.2, better terms, stubbing connector means bending the pins or dislodging.  Stub connection and Bus connection are better terms.

Response: accepted, global changes made but used bus-path instead of bus

20. Table 15 Spaces missing on signal 1 & 2.

Response: accepted