Accredited Standards Committee X3, Information Processing Systems

Doc:X3T10.1/97a101r1Date:January 30, 1997Project:X3T10.1/1147DRef Doc.:SSA-TL2 rev 4Reply to:John Scheible

To: X3T10.1 Membership From: John Scheible

Subject: Letter ballot comment resolution on SSA-TL2 rev 4

BACKGROUND

This proposal documents the responses to the X3T10 letter ballot for SSA-TL2 rev 4. Revision 1 is my attempt to address the concerns and does not represent the agreement of the X3T10.1 group.

Ballot totals:

- 43 Yes
- 2 No
- 0 Abstain
- 1 Organization(s) did not vote
- 46 Total voting organizations
- 3 Ballot(s) included comments

This 2/3rds majority ballot passed.

Comments attached to YesC ballot from John P. Scheible of IBM Corp.:

RESPONSE: Accept all as written

I consider all comments editorial (E) except for 9, 18, 19, and 20.

- IBM-1) Global: Change "((" to "[(" and ")]" to"))". Also "(s).)" to "(s)]."
- IBM-2) Change "<any letter>("to "<any letter> (" to add a space.
- IBM-3) Table of tables: Change heading from "Table" to "Tables" (plural).
- IBM-4) Table of tables: Table numbers for 41-60 should be bold.
- IBM-5) Introduction: Change "Clause 4 contains" to "Clause 4 defines" for consistency.
- IBM-6) 3.2: Add abbreviation OUI (Organizationally Unique Identifier).
- IBM-7) 4, last paragraph: Change "Figures and tables (highest) take precedence over text (lowest)." to "In case of conflict, figures take precedence over tables and both figures and tables take precedence over text."
- IBM-8) end of 6.2: Change "(see 0)" to "(see 9.5)". Also applies to end of 7.2.7 and 7.2.8.
- IBM-9) 9.3, paragraph after psuedocode: Change "Channels 0- 127 are addressed one byte. Channels 129- 16 383 ..." to "Channels 0 127 are addressed one byte. Channels 128 16 383..." (128 was left out).
- IBM-10) 10.2.3, fifth para, end first sentence: change ".)." to ")."
- IBM-11) Table 20, first column: Change small caps to all caps (values, not field names).
- IBM-12) 10.3, add semicolon to d) first list, add period to e) of second list.
- IBM-13) 10.4.1, c): Change "Ready State" to "Ready state" (lower case "S").

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IBM-14) 10.6: Change TL2 to SSA-TL2 (global).

- IBM-15) 11.1.3, element h): Change "mod" to "modulo" (two places) to match I).
- IBM-16) Table 29, sixth row from end: Should not be bold.
- IBM-17) Table 32, bottom of byte 12: should be solid line, not dotted.
- IBM-18) Table 37, version 00h: Change "SSA-TL1 implementations before standardization" to "Implementations prior to standardization." Since version 00h is not SSA-TL1.
- IBM-19) Table 37, version 04h: Change "SSA-IA/96PH" to either "reserved" or "SSA-IA/97PH" depending on whether the SSA-IA plans to document this version. Confusion will occur since someone may try to obtain the non-existent document.
- IBM-20) 12.2.7, SSA-TL paragraph: Correct name, add "if possible" and add examples, by changing: "The SSA-TL field defined in Table 37 identifies the version of SSA-TL being used by the sender. If multiple levels of SSA-TL are supported, then highest value shall be reported that is equal to or less than the SSA-TL field in the associated QUERY NODE SMS." to:

"The SSA-TL VERSION field defined in Table 37 identifies the version of SSA-TL being used by the sender. If multiple levels of SSA-TL are supported and any are numerically less that the SSA-TL VERSION field of the QUERY NODE SMS, then highest value shall be reported in the QUERY NODE REPLY SMS that is equal to or less than the SSA-TL VERSION field in the associated QUERY NODE SMS. The following are examples:

a) An SSA-TL1/SSA-TL2 Configutor sends a QUERY NODE SMS indicating an SSA-TL version of SSA-TL2. An SSA-TL1 only node responds with a QUERY NODE REPLY SMS indicating SSA-TL1. The Configutor now knows to use SSA-TL1 to communicate with the node.

b) An SSA-TL1/SSA-TL2 Configutor sends a QUERY NODE SMS indicating an SSA-TL version of SSA-TL2. An SSA-TL1/SSA-TL2 or SSA-TL2 only node responds with a QUERY NODE REPLY SMS indicating SSA-TL2. The Configutor now knows to use SSA-TL2 to communicate with the node.
c) An SSA-TL1 only Configutor sends a QUERY NODE SMS indicating an SSA-TL version of SSA-TL1. An SSA-TL1/SSA-TL2 node responds with a QUERY NODE REPLY SMS indicating SSA-TL1. The Configutor now knows to use SSA-TL1 to communicate with the node.

d) An SSA-TL1 only Configutor sends a QUERY NODE SMS indicating an SSA-TL version of SSA-TL1. An SSA-TL2 only node responds with a QUERY NODE REPLY SMS indicating SSA-TL2. The Configutor now knows it cannot communicate with the node, and does not register with it.

- IBM-21) 12.2.7, LONG bit paragraph: Remove the extraneous " (".
- IBM-22) Table 53, blank rows between byte 3 and 4 should be removed.

Comments attached to No ballot from Edward A. Gardner of Ophidian Designs:

OPH-1) I am uncomfortable with VLSI's negative vote remaining unresolved. I would like to see X3T10.1 respond to that vote and comment before forwarding this for review. If X3T10.1 has already responded to VLSI's vote, please refer me to the relevant document and I will amend my vote.

<u>RESPONSE: VLSI wanted a Unique ID in the Link Reset frame to aid in determining if a nodes nearest</u> neighbor has changed. This causes existing hardware to change to increase the size of the buffer dedicated to Link Reset frames. The X3T10.1 committee felt that it was wrong to invalidate all existing hardware. To add this feature to nodes with the Extended Distance Option would only help a small subset of devices, since most would not implement the Extended Distance Option (i.e., the node at the box going external could have the Extended Distance option, but non of the internal devices would need to. X3T10.1 voted this proposal down.

Comments attached to No ballot from Gene Milligan of Seagate Technology:

RESOLUTION: (see each comment)

- SEA-1) The ballot does not show what the response was to the X3T10.1 "NO" ballot. <u>RESPONSE: See OPH-1 above.</u>
- SEA-2) The ballot does not indicate why Rev 4 is being forwarded when X3T10.1 ballotted to forward Rev 3. <u>RESPONSE: X3T10.1 voted to forward Rev 3 as modified, and instructed the editor to create rev 4</u> with those modifications.
- SEA-3) The draft should have an editorial review checking at least for the appropriate use of key words (e.g. this drafts contains at least three musts and fifteen cans. RESPONSE: Replace the musts and cans with the appropriate terms (to be determined in r2.)
- SEA-4) If someone impliments SSA-TL2 and an appropriate selection of the other SSA drafts will they be interoperable with the defacto installed base of SSA subsystems? (This is a question and not the basis for the NO see comments 1-3.)
 RESPONSE: Yes, the different levels of PH1 / PH2, TL1 / TL2, and S2P / S3P are interoperable and can co-exist on the same loop simultaneously. The physical layers can connect to each other and speed matching is done on a link by link basis. The transport layers identify themselves in the QUERY NODE and QUERY NODE REPLY SMSs. This allows whichever transport layer to be used between any given source and destination pair synamically. Likewise the S2P and S3P layers identify themselves and whichever protocol layer is needed can be used between any given source and destination.

Comments outside the letter ballot from David M. MacRae from AMADATA Inc.

Steve Muccione has brought our attention to what looks to be a problem that has apparently escaped notice in the TL2 document. It has to do with the data transfer SMS's. It looks as if the descriptive text and table contents for the SMS structures got twisted along the way. His comments are as follows:

The DATA_READY, DATA_REPLY, and DATA_REQUEST SMS's as defined in 12.3 are either incorrect or the descriptive text with reguard to data flow is incorrect. As stated, the source sends a DATA_READY SMS to the destination. The destination replies with a DATA_REPLY SMS with the channel to receive the data. Unfortunately the DATA_READY SMS does not contain a return path, therefore the recepient of a DATA_READY SMS can not reply with a DATA_REPLY SMS as the sender is unknown to it. The problem is exacerbated by the fact that the return-path IS present in the DATA_REPLY SMS where it is not needed as the sender matches the REPLY with the corresponding READY by means of the TAG value. There is a similar problem with the DATA_REQUEST SMS not containing a return path for the recipient to send the data.

We thought you might want to fix this as soon as possible.

David MacRae AMADATA, INC. dmacrae@compuserve.com

RESPONSE:

Sincerely,

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