T10/00-136

Comments of FCP-2 Rev 04 Carl Zeitler, Compaq Computer Corporation January 28, 2000 CommentID:1 PDFPage: 46 Document Page: 30 ClauseSubclause:7.1 Paragraph number: 1 Line: 2 CommentType: E Title: Comment: Remove the "a" , first word on line 2. CommentEnd: ------CommentID:2 PDFPage: Document Page: 31 ClauseSubclause:8.1 Paragraph number: last Line: CommentType: T Title: Comment: Restarting Sequence Count is fine for Class 3. It doesn't work for Class 2 since any frame with a Sequence Count value within the range of the Recovery Qualifier will be discarded. So reword: For Class 3, the Sequence Count..... For Class 2, The Sequence Count must be one greater than the last Sequence Count used in the Exchange. CommentEnd: _____ CommentID:3 PDFPage: Document Page: 31 ClauseSubclause:8.1 Paragraph number: Last on the page Line: Last on the page CommentType: e Title: Comment: Is the period missing on the last sentence or is text missing? CommentEnd: -----CommentID:4 PDFPage: Document Page: 37 ClauseSubclause:9.1.1.3 ORDERED_Q Paragraph number: Line:

CommentType: T Title: Comment: Sequential delivery by the fabric does not insure task order in either Class 2 or 3 if a frame gets busied off and resent or if the frame is discarded in Class 3. There are 2 solutions that I can see. One is CRN, so everything is in order or can be put back in order. If CRN is not used, then waiting for some response for each previous command or a GOOD response to a REC on each command preceding the command requiring ordering should suffice. The "ordered" command must also get a response or good response back on its REC, before issuing the next command, to insure that no frames pass it by for the out-of-order case. CommentEnd: ------CommentID:5 PDFPage:75 Document Page: 59 ClauseSubclause: 11 Paragraph number: Table 35 Line: CommentType: T Title: R_A_TOV/2 support for out-of order Comment: R_A_TOV/2 is required for out-of-order recovery In Table 35, qualify current Default Value for REC_TOV for in-order-delivery. Add a new line, for REC_TOV, qualified by out-of-order delivery where Default Value is R_A_TOV/2. _____ CommentID:6 PDFPage:78 Document Page:62 ClauseSubclause:12.1.2 Paragraph number: 3 Line: CommentType: T Title: Remove paragraph Comment: For out of order, the error detection and recovery procedures are different. Even for in-order, recovery is different-i.e., reuse/non-reuse of SEQ_CNT for Classes 3 and 2 respectively for data. Comment End CommentID:7 PDFPage:78 Document Page:62 ClauseSubclause: 12.1.2 Paragraph number:4 Line: CommentType:T Title: Remove Comment: Remove to cover out-of-order. Comment End _____

CommentID: 8 PDFPage:80 Document Page:64 ClauseSubclause:12.3.1 Paragraph number: Line: CommentType: T Title: Don't understand intent of paragraph Comment: Need ladder diagram to help explain the text. Comment End _____ CommentID: 9 PDFPage:80 Document Page:64 ClauseSubclause: 12.3.3 Paragraph number: 2 Line: 6 CommentType: T Title: Addition for Class 2 Comment: Recovery Qualifier is established. The Target needs to use the next higher SEQ_CNT value, one greater than used in ABTS. Add qualifying sentence just prior to the last sentence in the paragraph: For Class 2, the Sequence count used in the new Sequence, shall be one greater than that used to transmit the ABTS. Comment End CommentID: 10 PDFPage:80 Document Page:64 ClauseSubclause: 12.3.4 Paragraph number: 3 Line: 3 CommentType: T Title: Qualifier for Class 2 Comment: Add sentence to end of paragraph: For Class 2, the Sequence count used in the new Sequence, shall be one greater than that used to transmit the ABTS. _____ CommentID:11 PDFPage: 81 Document Page: 65 ClauseSubclause:12.3.5 Paragraph number: 2 Line: Last sentence. CommentType: T Title: Add in a new Sequence Comment: Change the sentence to read: After transmitting the ACC for the SRR, the Target transmits an FCP_XFER_RDY, in a new Sequence, with the Relative Offset... CommentEnd:

CommentID: 12 PDFPage: 81 Document Page:65 ClauseSubclause: 12.3.5 Paragraph number: 3 Line: 1 CommentType: T Title: Qualifier for Class 2 Comment: Add new Sequence and Class 2 qualifier for Sequence count. Suggested change for paragraph 3: FCP_DATA shall be retransmitted in a new Sequence. For Class 3, the Sequence count shall start at zero, even if continuously increasing sequence count is used. For Class 2, the Sequence count shall be one greater than that used to transmit the ABTS. CommentEnd: ------CommentID:13 PDFPage: 81 Document Page:65 ClauseSubclause:12.3.6 Paragraph number: 3 Line: 1 CommentType:T Title: Qualifier for Class 2 Comment: Add Class 3 qualifier to sentence: The Sequence count for retransmitted FCP_DATA, in class 3, shall start..... Add additional sentence: For Class 2, the starting Sequence count shall be one greater than that used to transmit the ABTS. CommentEnd: CommentID:14 PDFPage: 82 ClauseSubclause:12.3.7 Document Page:66 Paragraph number: Line: CommentType: T Title: Separate recovery procedures for Classes 2 and 3 Comment: Trying to mimic Class 3 for this case doesn't work. Solution: Put text currently in 12.3.7 into 12.3.7.1 FCP-CONF Recovery for Class 3. Replace 2nd paragraph with: After the transmission of FCP_RESP and no FCP_CONF is received within R_A_TOV, the Target shall issue REC. At end of subclause add: See D.? for an example. Add 12.3.7.2 FCP_CONF Recovery for Class 2 If E_D_TOV expires prior to receiving the ACK to FCP_CONF, the Initiator issues ABTS. Receipt of BA_RJT indicates that FCP_CONF was received, and no

recovery is necessary. If BA_ACC indicates that FCP_CONF was not received, then it is retransmitted in a new Sequence with a Sequence count one greater than used in ABTS.

Upon expiration of R_A_TOV following the receipt of BA_ACC or BA_RJT, the Initiator issues RRQ to free up the Recovery Qualifier and associated resources in the Target, if necessary. See D.?? and D.??? for examples. CommentEnd: ------CommentID:15 PDFPage: 83 ClauseSubclause:12.4 Document Page:67 Paragraph number: 2 Line: C) CommentType: T Title: Remove option b) and c). Comment: These options are inconsistent with the rest of the error procedures for Class 2. The a) option is all that is required. CommentEnd: -----CommentID:16 PDFPage: 83 ClauseSubclause:12.4 Document Page:67 Paragraph number: 3 Line: CommentType: T Title: Abort Perform ABTS doesn't work for out of order Comment: Delete the paragraph. Error detection is done by the Sequence initiator. CommentEnd: -----CommentID:17 PDFPage: 83 ClauseSubclause:12.4 Document Page: 67 Paragraph number: last Line: CommentType: T Title: Change text Comment: Examples of recovery for acknowledged services are shown throughout Appendix D. for acknowledged service. Change paragraph to: Examples of recovery for acknowledged services are shown in Appendix D. ------CommentID:18 PDFPage: 85 ClauseSubclause:12.6.2 Document Page:69 Paragraph number: 1 Line: a) CommentType: T Title: Change ABTS to ABTS (LS) Comment: To be more precise, change ABTS to ABTS (LS) Same is also true for 16.6.3 SRR in the same respective place.

(Note that in the Ladder diagrams, D.13 and D.14, I changed $\texttt{E}_{D}_{\text{TOV}}$ to 2 * R_A_TOV to agree with your text in these sections.) CommentEnd: CommentID:19 PDFPage: 85 ClauseSubclause:12.7 Document Page:69 Paragraph number: last Line: CommentType: E Title: Needs to be removed Comment: Add text if applicable. CommentEnd: -----CommentID:20 PDFPage:87 ClauseSubclause:A.1 Document Page:71 Paragraph number: 4 Line: last CommentType: E Title: Change though to through in line c) Comment: CommentEnd: