

To: Membership of X3T9.2

X3T9.2/93-031R1

From: Bill Spence, ENDL Consulting

Date: 16-FEB-93

Subject: PROPOSALS: Corrections and Additions in SPI Timing

This revision is based on the discussions at the 2/16 meeting.

1. In 9.10, "Receive Hold Time," it is proposed that the word "by" should be corrected to "at." This would make the defining statement for Receive Hold Time in 9.10 read as follows: "The minimum time required at the receiving device between the assertion of the REQ or REQQ signal or the ACK or ACKQ signal and the changing of the DATA BUS while using synchronous data transfers...."

2. In 9.11, "Receive Setup Time," it is proposed that the word "by" should be corrected to "at." Parallel to above.

3. Similarly to the relationship between Transmit Hold/Setup Time and Receive Hold/Setup Time, it is proposed that there is a similar relationship required between Transmit Assertion/Negation Period and Receive Assertion/Negation Period. [ Bill Galloway of COMPAQ points this out. ] So it is proposed that the title of 9.2, "Assertion Period," be changed to "Transmit Assertion Period," and that the title of 9.9, "Negation Period," be changed to "Transmit Negation Period."

4. It is proposed that a new time definition shall be added in Clause 9, as follows:

9.XX Receive Assertion Period

The minimum time required at a device receiving a REQ or REQQ signal for the signal to be asserted while using synchronous data transfers. Also, the minimum time required at a device receiving an ACK or ACKQ signal for the signal to be asserted while using synchronous data transfers. In single-ended operation, the time period is measured at the 0.8 volt level. The timings for the REQQ and ACKQ signals only apply to wide data transfers.

5. It is proposed that a new time definition shall be added in Clause 9, as follows:

9.XX Receive Negation Period

[ Wording the same as above except that the word "negated" is substituted for the word "asserted" and 2.0 is substituted for 0.8. ]

6. In Table 10 - SCSI bus timing values, it is proposed that two new items be added: "Receive Assertion Period" and "Receive Negation Period," and that the times for each be 22 ns for "fast" and 70 ns for "slow". Also, it is proposed that the word "Transmit" be added ahead of the existing items "Assertion Period" and "Negation Period."