TEXAS INSTRUMENTS

D.W. (Bill) Spence
Project Engineer
Advanced Systems Division
Data Systems Group

P.O. Box 2909 • MS 2091 • Austin, Texas 78769 • 512 250-6627

MEMORANDUM

14 Apr 1988

TO: John Lohmeyer, Chairman X3T9.2

FROM: Bill Spence, Texas Instruments

SUBJECT: Synchronous ACK Edge Proposal (SDTR Message Clarification No. 7)

We think we have found that certain devices which comply with X3.131 are not compatible in synchronous data transfer with other devices which comply with X3.131 but with a different interpretation. SCSI-2 has language aimed at eliminating this possibility, but the fact is that a significant number of devices are in service with which many of the newer SCSI devices are not compatible. Accordingly, we submit the following

PROPOSAL:

Insert the following Implementors Note at the end of Scn 5.1.6.2:

> Implementors Note: Language in X3.131-1986 permitted the interpretation that, with a synchronous offset agreement of n, the leading edge of REQ pulse n+m will not occur before the trailing edge of ACK pulse m. Devices implementing this understanding may be subject to data destruction when in synchronous data exchange with devices which issue REQ pulse n+m as soon as the leading edge of ACK pulse m is received. Initiators using devices of the former type may insure data integrity by restricting the synchronous offset agreement to values smaller than the maximum nominally allowed by their device.

Although Scn 5.1.6.2 has been clarified to the point of eliminating the ambiguity referred to above, Scn 5.5.3.3 (Scn. 5.5.5 in Rev 3) may not yet be completely clean. To coordinate the two sections, we offer the following

PROPOSAL

In Rev 4, p 5-29, 2nd complete paragraph, make the first sentence read as follows (CAPS show new material and are not meant to appear in final text):

> The REQ/ACK offset is the maximum number of REQ pulses allowed to be outstanding before THE LEADING EDGE OF its corresponding ACK pulse is received at the target.

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