adaptec, inc.

X3T9.2/87-55

Memo to: John Lohmeyer, ANSI X3T9.2 Chairman
NCR Corp.
3718 N. Rock Road
Wichita, KS 67226

Memo from: Robert N. Snively
Adaptec
580 Cottonwood
Milpitas, CA 95035

Date: March 10, 1987

Subject: Proposed Clarification of Bus Free Definition

Dear Mr. Lohmeyer:

Adaptec proposes the following wording to clarify the intent of the modifications included in section 5.1.1 as a result of X3T9.2/86-123. These words are also included in the new sections provided by Ralph Schultz dated 1/9/87.

The fourth and fifth paragraphs of section 5.1.1 beginning "BUS FREE is expected..." and ending ".... valid sense information is available." is replaced with the following text.

> BUS FREE phase is not expected to begin because of the target's drop of BSY except after one of the following occurrences:
>
> 1. after a RESET condition is detected.
> 2. after an ABORT message is successfully received by a target.
> 3. after a BUS DEVICE RESET message is successfully received by a target.
> 4. after a DISCONNECT message is successfully ~~transmitted~~ received by from a target. _the initiator._
> 5. after a COMMAND COMPLETE message is successfully ~~transmitted from a target.~~ received by the initiator.
>
> The BUS FREE phase may also be entered after an unsuccessful selection or reselection, although in this case it is the drop of SEL rather than the drop of BSY that first establishes the BUS FREE phase.
>
> If an initiator detects the drop of BSY by the target at

any other time, an error condition is being indicated to the initiator by the target. The initiator shall manage this condition as an unsuccessful command termination. The target terminates the command by clearing all pending data and status information for the effected logical unit. The target may optionally prepare sense bytes that could be read by a REQUEST SENSE command. When an initiator detects an unexpected BUS FREE condition, it is recommended that a REQUEST SENSE command be attempted to obtain any valid sense information that may be available. If the error that caused the BUS FREE termination of the command is still present, the REQUEST SENSE command may not be successful.

This text should clarify when BUS FREE is expected and allowed. Thank you for you acceptance of this proposal.

Robert N. Snively

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