Date: Jun 13, 1993

To: X3T9.2 Committee (SCSI)

From: George Penokie (IBM)

Subject: Isochronous Queue Tag

Serial Bus Protocol requires a new queue tag to deal with Isochronous tasks. Isochronous tasks have a defined set of rules for fetching the tasks and for streaming data that do not follow any of the current task control rules.

The definition of the Isochronous task would be as follows:

Isochronous Task (Isochronous Tag)

An Isochronous Task is one that is tagged with an Isochronous Queue Tag. Any Isochronous Task may become a Current Task at any time permitted by a lower level protocol. Simple Tasks, Ordered Tasks, and Head of Queue Tasks shall not prevent Isochronous Tasks from becoming current.

7. Ordered Task (Ordered Tag)

When an Task is tagged as an Ordered Task any information the target has or accepts for the Ordered Task shall be suspended and the Ordered Task shall not complete until all Simple and Ordered Tasks which were accepted into the task set before the Ordered Task have completed.

If Simple or Ordered Tasks are accepted into the task set after an Ordered Task the target shall suspend any information accepted for the new Task and shall not complete any of the new Tasks before the Ordered Task completes.

8. Head Of Queue Task (Head of Queue Tag)

When an Task is tagged as a Head Of Queue Task the target shall suspend any information accepted for any simple or ordered tasks accepted into the task set after the Head Of Queue Task. The target shall not complete any of the new simple or ordered tasks before the most recent Head Of Queue Task completes.

Any Task which was accepted into the task set before a Head Of Queue Task may complete before the Head Of Queue Task completes.