July 7, 1988

To: X3T9.2 Committee (SCSI) Document X3T9.2/88-80

SUBJECT: SCSI Device Connector Layout

INTRODUCTION

This proposal addresses the cabling of SCSI devices when installed in host systems. The intent is to define the general physical locations of the data and power connectors at the rear of the devices so that the most efficient cable designs may be implemented.

PROBLEM STATEMENT

The present SCSI standard defines the types of connectors that may be used for data and power on SCSI devices. However, no reference is made to the locations of the connectors on the devices nor is there a reference to where Pin #1 is located with respect to the rear of the device. As a result, implementation of SCSI devices in host systems is complicated from a cabling point of view. Depending on the specific vendor device(s) being installed, the data and power connectors may be either to the left side or to the right side on the rear of the device thus causing multiple cable folds and data/power cable crossovers.

These items detract from efficient & economical implementation of SCSI in systems. Excessive cable lengths are required to assure that all possible combinations of connector locations can be cabled. These cable lengths can also interfere with the cooling efficiency within the host system unless elaborate routing schemes are employed. Cross-talk / noise can also be introduced between devices.

SOLUTION

Define the preferred locations of the data and power connectors on the rear of the devices in the SCSI specification. Figure (1) defines the locations as proposed. In a rear view of a device; the power connector is to the left and the data connector is to the right. Connector pin #1 identification is also established as noted in figure (1).
Specifying both of the above parameters assures minimum cable folds & crossovers thereby enhancing the implementation of SCSI.

Sincerely,

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Enclosures
SCSI DEVICE CONNECTOR LAYOUT

FIGURE 1