TO: X3T10
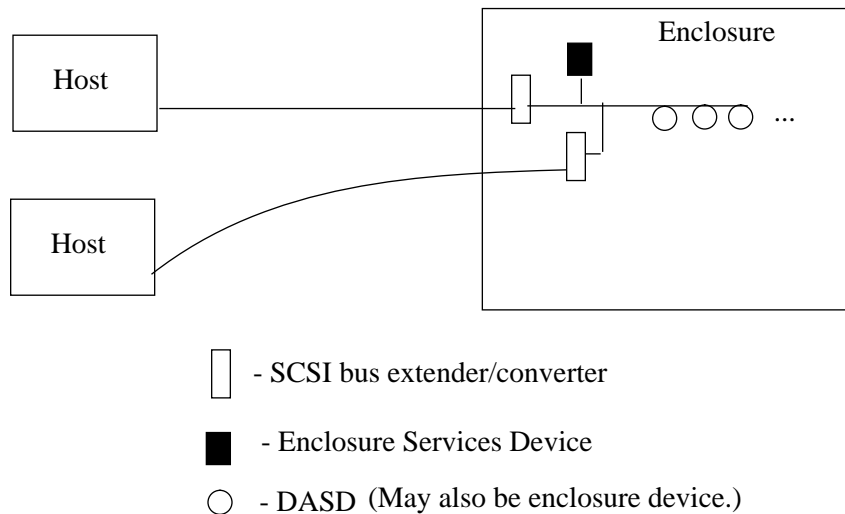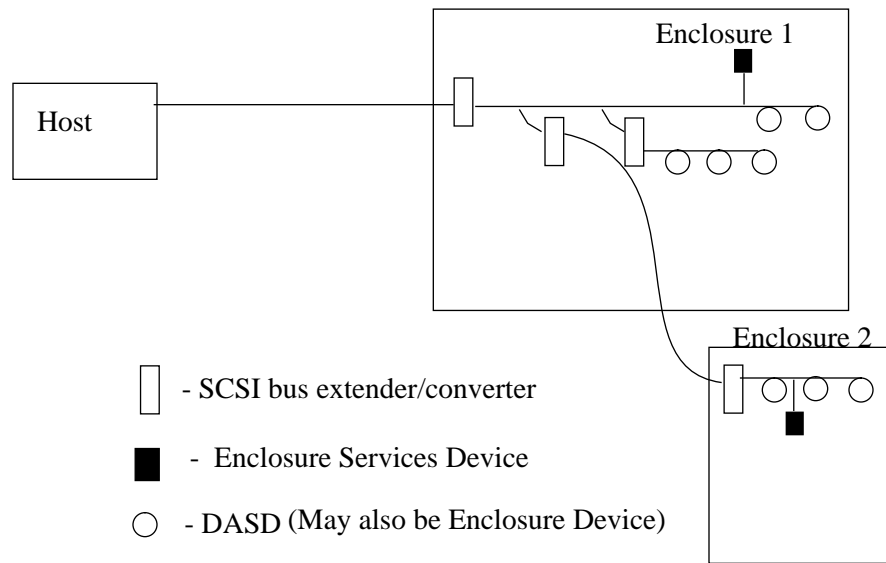
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Bus Extender/ConverterControl and Status Elements

This proposal extends SES to support paralles SCSI bus extenders. These extenders convert between LVDS, SE, and DE SCSI, and they allow configurations such as those below.

Problem: A host needs a method of determining the physical bus on which a parallel SCSI bus extender resides. One reason that it needs this information is to keep from cutting itself off when it disables a converter to remove a section of a bus with a problem. These converters may convert between LVDS, single ended, and differential SCSI.

□ - SCSI bus extender/converter

■ - Enclosure Services Device

○ - DASD (May also be Enclosure Device)

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Solution: Provide Bus Converter elements for Control and Status pagers.

TABLE 1. SCSI Converter Element for Enclosure Control Page

Bits Bytes	7	6	5	4	3	2	1	0
0	Select	PredFail	Disable	Reserved				
1 - 2	Reserved							
3				Disable				

This element is identical to the SCSI Port/transceiver enclosure element for the control page.

TABLE 2. SCSI Converter Element for Enclosure Status Page

Bits Bytes	7	6	5	4	3	2	1	0
0	Reserved	PredFail	Disable	r	r	Status Code		
1 - 2	Reserved							
3				Disabled		Active		

This element is an extension of the SCSI Port/transceiverelement for the enclosure status page.

Disabled. A 1 indicates that the converter has been disabled. (Same as Port/Transceiver element)

Active. A 1 indicates that the ES device received the Request Diagnostics command through this converter.

Note: One way in which the ES device determines that a given converter is active is by checking the converter during the time it is selected or during the time it reselects the initiator to return data for the RECEIVE DIAGNOSTICS command.