

StorageTek

Doc # X3T9.2/87-139 Rev 1

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TO: Accredited Standards Committee X3T9.2
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SUBJ: Additions to Read Position Command for Sequential Access Type Devices

The Read Position command as defined in SCSI-2 Revision 2 (8/1/87) returns the current position of the data blocks in the buffer and the position of the medium only as a product specific block location. The Locate command allows positioning the medium to either a logical block address or a product specific value. Equal addressing capability should be available in both commands. Therefore the Read Position command should be allowed to report the current position of data blocks in the buffer and the position of the medium as either a logical block address or as a product specific value. To accomplish this, the following changes need to be made to the Read Position command;

The "Product Specific First Block Location" field in Read Position data should be renamed "First Block Location". The "Product Specific Last Block Location" field should be renamed "Last Block Location".

Byte 1 Bit 0 (presently reserved) of the command descriptor block for the Read Position command should be defined to specify which type of location is to be returned. The bit should be named "block address type (BT)" because it has an identical function as the "BT" bit in the locate command.

The following paragraph should be added to the Read Position command to define the function of the BT bit.

The block address type (BT) bit when set to one, requests the target to return its current First Block Location and Last Block Location as a product specific value. If the BT bit is set to zero, the First Block Location and the Last Block Location shall be returned as a logical block address.

The first sentence of the first paragraph on page 9-38 should be changed to read;

First block location bytes indicate the relative position of the first data block within a partition.

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To incorporate this change and clarify the use of the information with the Locate command, the fourth sentence of the first paragraph on page 9-38 should be changed to read;

The information is provided to be used with the LOCATE command to place the medium at the appropriate logical block on another device in the case of unrecoverable errors on the first device.

The first sentence of the second paragraph on page 9-38 should be changed to read;

Last block location bytes indicate the relative position of the last data block within a partition.

To incorporate this change and clarify the use of the information with the Locate command, the fourth sentence of the second paragraph on page 9-38 should be changed to read;

The information is provided to be used with the LOCATE command to place the medium at the appropriate logical block on another device in the case of unrecoverable errors on the first device.

Allowing both methods of reporting position is important since some devices may address blocks in a non-contiguous fashion or not start addressing with address zero. SCSI specifies that the logical block address "shall begin with block zero and be contiguous up to the last logical block on that logical unit or within that partition".

Please consider incorporating these changes into the next revision of the SCSI-2 document.