Date: January 15, 2003

To: T10 Committee (SCSI)

From: Jim Coomes (Seagate)

Subject:SBC, Data Protection Inforlmation for XPWRITE

1 Revision History

r0 - base document

r1 - Add paragraph break to third paragraph of new text

2 Overview

The SBC-2 definition of the XPWRITE command currently references the description of the XORPINFO bit in the XDREAD command description. XDREAD, however, only has a data transfer in one direction and does not comprehensively cover the XPWRITE behavior.

Changes to SBC-2 r11

5.2.48 XPWRITE (10) command

See 4.2.1.9 for reservation requirements for this command. See 5.2.8 for a definition of the DPO and FUA bits. ~~See the XDREAD (10) command (see 5.2.39) for a definition of the XORPINFO bit.~~

add new text

If the XOR protection information (XORPINFO) bit is set to zero, the device server supports protection information, and the medium has been formatted with protection information, the device server shall terminate the command with CHECK CONDITION status with a sense key of ILLEGAL REQUEST and an additional sense code of INVALID FIELD IN CDB.

If the XORPINFO bit is set to one, the device server supports protection information, and the medium has been formatted with protection information, the device server shall XOR the data and protection information transferred from the application client with the data and protection information on the medium and then write the XOR result to the medium. The device server shall not check any of the fields.

If the XORPINFO bit is set to one, the device server supports protection information, and the medium has not been formatted with protection information, the device server shall terminate the command with CHECK CONDITION status with a sense key of ILLEGAL REQUEST and an additional sense code of INVALID FIELD IN CDB.

If the XORPINFO bit is set to one and the device server does not support protection information, the device server should terminate the command with CHECK CONDITION status with a sense key of ILLEGAL REQUEST and an additional sense code of INVALID FIELD IN CDB.

~~Editor's Note 39: Why is there no WRPROTECT field to protect the application client to device server data being transferred?~~