**Western Digital Corporation**
**5863 Rue Ferrari**
**San Jose, CA, 95138**


**To:**      **T10 CAP Working Group**
**Contact:**  **Mark Evans**
            **Phone: 408.363.5257**
            **Email:  mark.evans@wdc.com**
**Date:**    **18 June 2007**

**Subject:  SPC-4, SBC-3, "Except INQUIRY, REPORT LUNS, and REQUEST SENSE"**


# 1 Related documents

SPC-4r11, SCSI Primary Commands – 4 (SPC-4) revision 11
SBC-3r10, SCSI Block Commands – 3 (SBC-3) revision 10

# 2 Introduction

While reviewing the text for the FORMAT UNIT command in SBC-3r10 I found a paragraph that reads, "While performing a format operation, the device server shall respond to commands attempting to enter into the task set, except INQUIRY commands, REPORT LUNS commands, and REQUEST SENSE commands, with CHECK CONDITION status with the sense key set to NOT READY and the additional sense code set to LOGICAL UNIT NOT READY, FORMAT IN PROGRESS."

However, there is nothing specified about how the device server shall respond to those three commands.  In addition, I found two similar instances of this sentence in SPC-4.  The following proposes modifications to define how a device server shall respond to these commands in each case.

# 3 Proposal

1) In SPC-4r11, change the second paragraph in 5.5.3.2 Foreground mode to be as follows:

While performing a self-test in the foreground mode, the device server shall ~~respond to~~terminate all commands except INQUIRY, REPORT LUNS, and REQUEST SENSE with CHECK CONDITION status with the sense key set to NOT READY and the additional sense code set to LOGICAL UNIT NOT READY, SELF-TEST IN PROGRESS.  If the device server receives an INQUIRY command, a REPORT LUNS commands, or a REQUEST SENSE commands while performing a self-test in the foreground mode, then the device server shall suspend the self-test, and process the command.  Suspension of the self-test to service the command shall occur as soon as practical and shall not take longer than two seconds.  The device server shall resume processing the self-test after completing the command.

2) In SPC-4r11, change the second paragraph in 8.3.1.12 Access controls information persistence and memory usage requirements to be as follows:

If the access control coordinator's nonvolatile memory is not ready and the access controls coordinator is unable to determine that access controls are disabled, then the device servers for all logical units shall terminate all commands except INQUIRY and REQUEST SENSE commands with CHECK CONDITION status with the sense key set to NOT READY and the additional sense code set as described in table 215 (see 6.36). If a device server in any logical unit receives an INQUIRY command or a REQUEST SENSE commands while the access control coordinator's nonvolatile memory is not ready and the access controls coordinator is unable to determine that access controls are disabled, then the device server shall process the command.


3) In SBC-3r10, change the fifth paragraph in 5.2.1 FORMAT UNIT command overview to be as follows:

While performing a format operation, the device server shall ~~respond to~~terminate all commands ~~attempting to enter into the task set~~, except INQUIRY commands, REPORT LUNS commands, and REQUEST SENSE commands, with CHECK CONDITION status with the sense key set to NOT READY and the additional sense code set to LOGICAL UNIT NOT READY, FORMAT IN PROGRESS. If the device server receives an INQUIRY command, a REPORT LUNS commands, or a REQUEST SENSE commands, then the device server shall process the command. The device server shall return data for an INQUIRY command based on the condition of the SCSI target device before beginning the FORMAT UNIT command (i.e., INQUIRY data shall not change until after successful completion of a format operation). ~~Handling~~The processing of commands ~~already~~ in the task set when a FORMAT UNIT command is received is vendor-specific.