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Part 323: SCSI Block Commands – 3 (SBC-3)

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The list of all currently available parts of the ISO/IEC 14776 series, under the general title *Information technology – Small computer system interface (SCSI)*, can be found on the IEC web site.

This International Standard has been approved by vote of the member bodies and the voting results may be obtained from the address given on the second title page.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2, except as described in 3.5 and 3.6.

IMPORTANT - The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

General

The purpose of this standard is to define the model and command set extensions to be used in conjunction with the SCSI Primary Command Set standard - 4 (SPC-4) to facilitate operation of SCSI direct-access block devices (e.g., hard disk drives).

SCSI standards family

Figure 0 shows the relationship of this standard to the other standards and related projects in the SCSI family of standards as of the publication of this standard.

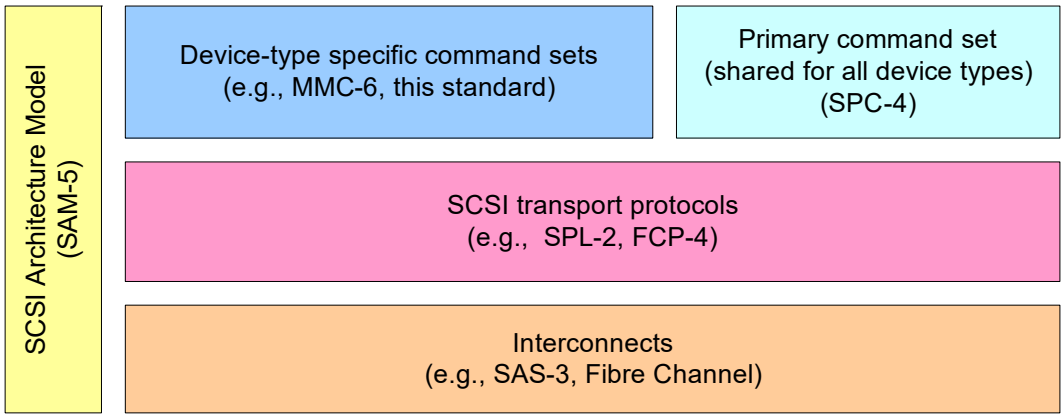

Figure 0 – SCSI document relationships

Figure 0 gives the general relationship of the documents to one another and is not intended to imply a relationship such as a hierarchy, protocol stack, or system architecture.

The set of SCSI standards specifies the interfaces, functions, and operations necessary to ensure interoperability between conforming SCSI implementations. This standard is a functional description. Conforming implementations may employ any design technique that does not violate interoperability. See SAM-5 for more information about the relationships between the SCSI standards.

This standard makes obsolete the following concepts from SBC-2:

a) linked commands;
b) the partial medium indicator (PMI) bit and the LOGICAL BLOCK ADDRESS field in the READ CAPACITY (10) command and the READ CAPACITY (16) command;
c) the READ (6) command and the WRITE (6) command;
d) the XDREAD (10) command, the XDREAD (32) command, the XDWRITE (10) command, and the XDWRITE (32) command;
e) the SYNC_NV bit in the SYNCHRONIZE CACHE commands;
f) the FUA_NV bit in read commands;
g) the FUA_NV bit in write commands;
h) the LBDATA bit and the PBDATA bit in the WRITE SAME commands;
i) the initialization pattern modifier (IP MODIFIER) field in the initialization pattern descriptor in the FORMAT UNIT command; and
j) the XOR Control mode page.

INFORMATION TECHNOLOGY – SMALL COMPUTER SYSTEM INTERFACE (SCSI) –

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1 Scope

This part of ISO/IEC 14776 defines the command set extensions to facilitate operation of SCSI direct access block devices. The clauses in this standard, implemented in conjunction with the applicable clauses of SPC-4, specify the standard command set for SCSI direct access block devices.

The objectives of this standard are to:

a) permit an application client to communicate over a SCSI service delivery subsystem (see SAM-5) with a logical unit that declares itself to be a direct access block device in the PERIPHERAL DEVICE TYPE field of the standard INQUIRY data (see SPC-4); and
b) define commands and parameters unique to the direct access block device type.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 14776-262, *Information Technology - Small Computer System Interface (SCSI) - Part 262: SAS Protocol Layer - 2 (SPL-2)*

ISO/IEC 14776-342, *Information Technology - Small Computer System Interface (SCSI) - Part 342: Controller Commands - 2 (SCC-2)*

INCITS 513-2015, *Information Technology - SCSI Primary Commands - 4 (SPC-4)*

INCITS 515-2016, *Information Technology - SCSI Architecture Model - 5 (SAM-5)*

INCITS 517-2015, *Information Technology - SCSI / ATA Translation - 3 (SAT-3)*

INCITS 448-2008, *Information Technology - SCSI Enclosure Services - 2 (SES-2)*