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Information technology –
Small computer system interface-3 (SCSI-3) –

Part 351:
Medium changer commands (SMC)

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Part 351: Medium changer commands (SMC)

FOREWORD

1) ISO (International Organization for Standardization) and IEC (International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards. Their preparation is entrusted to technical committees; any ISO and IEC member body interested in the subject dealt with may participate in this preparatory work. International governmental and non-governmental organizations liaising with ISO and IEC also participate in this preparation.

2) In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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International Standard ISO/IEC 14776-351 was prepared by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology.

The list of all parts of 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 title page.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

INTRODUCTION

This International Standard defines the SCSI commands and model for independent medium changer devices and attached medium changer functions integrated into other SCSI devices.

The SCSI-3 Medium Changer Commands (SMC) standard specifies the commands and external behavioural characteristics of a device server that declares itself a medium changer in the device type field of the INQUIRY command response data. This standard also specifies the behaviour of the attached medium changer commands available when the medium changer MCHNGR bit is set to one in INQUIRY command response data.

SMC is specified independent of any service delivery subsystem used to carry commands, command parameter data, command response data and status. The SMC standard conforms to the requirements specified in the SCSI-3 Architecture Model (SAM) standard.

This International Standard forms part of the series of SCSI standards as shown in Figure 1.

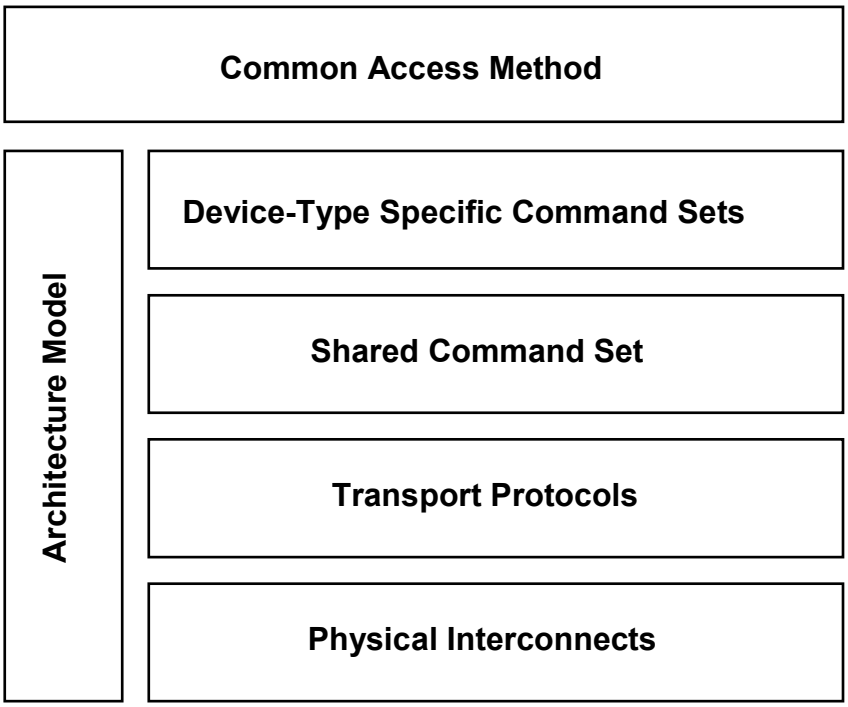

Figure 1 – General structure of SCSI standards

Figure 1 shows the general structure of SCSI-3 standards. The figure is not intended to imply a relationship such as a hierarchy, protocol stack or system architecture.

At the time this standard was generated examples of the SCSI-3 general structure included:

Physical Interconnects

Fibre Channel – Physical and Signalling Interface

SCSI-3 Parallel Interface

SCSI-3 Fast-20 Parallel Interface

SCSI Parallel Interface – 2 [ISO/IEC 14776-112]

Transport Protocols

SCSI-3 Interlocked Protocol [ISO/IEC 14776-211]

SCSI-3 Fibre Channel Protocol Version 3 [ISO/IEC 14776-223]

SCSI Serial Bus Protocol – 2 [ISO/IEC 14776-232]

Shared Command Set

SCSI-3 Primary Commands-2 [ISO/IEC 14776-452]

Device-Type Specific Command Sets

SCSI-3 Block Commands [ISO/IEC 14776-321]

SCSI-3 Enclosure Services [ISO/IEC 14776-371]

SCSI-3 Stream Commands [ISO/IEC 14776-331]

SCSI-3 Medium Changer Commands (this standard)

SCSI-3 Controller Commands [ISO/IEC 14776-341]

SCSI-3 Controller Commands – 2 [ISO/IEC 14776-342]

SCSI-3 Multimedia Command Set

SCSI-3 Multimedia Command Set – 2 [ISO/IEC 14776-362]

Architecture Model

SCSI-3 Architecture Model [ISO/IEC 14776-411]

Common Access Method

SCSI Common Access Method [ISO/IEC 9316-2]

NOTE See bibliography for full references and availability of the documents.

The term SCSI is used wherever it is not necessary to distinguish between the versions of SCSI. The Small Computer System Interface–2 [ISO/IEC 9316:1995] is referred to herein as SCSI–2. The term SCSI-3 in this standard refers to versions of SCSI defined since SCSI–2.

The SCSI-3 Medium Changer Command Set (SMC) standard is divided into seven clauses and a bibliography, as follows.

Clause 1 Scope

Clause 2 enumerates the normative references that apply to this standard.

Clause 3 describes definitions, symbols, abbreviations and conventions used in this standard.

Clause 4 is an overview of this standard.

Clause 5 describes the model for this device class.

Clause 6 describes the commands and responses.

Clause 7 describes the parameters.

Bibliography.

INFORMATION TECHNOLOGY – SMALL COMPUTER SYSTEM INTERFACE-3 (SCSI-3) –

Part 351: Medium changer commands (SMC)

1 Scope

This part of ISO/IEC 14776 defines the command set extensions for operation of SCSI medium changer devices and command set extensions that allow medium changer functions in other types of SCSI devices.

This SCSI-3 Medium Changer Commands standard

- permits an application client to communicate with a logical unit that declares itself to be a medium changer device in the DEVICE TYPE field of the INQUIRY command response data over a SCSI service delivery subsystem,
- permits an application client to access the medium changer functions in a logical unit that sets the MCHNGR bit in INQUIRY command response data,
- defines commands to manage the operation of SCSI medium changer devices.

2 Normative references

The following referenced documents are indispensable for the application 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 14776-411, *Information technology – Small Computer System Interface – Part 411: SCSI-3 Architecture Model (SCSI-3 SAM)*

ISO/IEC 14776-452, *Information technology – Small Computer System Interface (SCSI) – Part 452: Primary Commands-2 (SPC-2)*