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# ISO/IEC 14776-341

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## Information technology – Small Computer System Interface-3 (SCSI-3) –

## Part 341: Controller Commands (SCC)

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## Foreword

ISO (the International Organization of Standardization) and IEC (the 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 standard through technical committees established be the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

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.

International Standard ISO/IEC 14776-341 was prepared by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology.

## Introduction

The SCSI command set is designed to provide efficient peer-to-peer operation of input/output devices (disks, tapes, printers, etc.) by an operating system. The SCSI command set assumes a command-response protocol. Action on SCSI commands shall not be deemed completed until a response is received. The response shall include a status that indicates the final disposition of the command.

The SCSI command set provides multiple operating systems concurrent control over one or more input/output devices. However, the multiple operating systems must properly coordinate their actions or data corruption will result. This standard defines commands that assist with coordination between multiple operations systems. However, details of the coordination are beyond the scope of the SCSI command set.

This standard defines a device model for SCSI-3 storage arrays. This standard defines the SCSI commands that may apply to SCSI-3 storage arrays and the SCSI commands that are uniquely for SCSI-3 storage arrays.

The SCSI-3 Controller Commands (SCC) standard is divided into six clauses:

- Clause 1 is the scope;

- Clause 2 enumerates the normative references that apply to this standard;

- Clause 3 describes the definitions, symbols and abbreviations used in this standard;

- Clause 4 describes the conceptual relationship between this document and the SCSI-3 Architecture Model;

- Clause 5 describes the command model for SCSI-3 storage array devices;

- Clause 6 defines the commands that may be implemented by an SCSI-3 storage array device.

The annexes provide information to assist with implementation of the SCSI-3 Controller Commands standard. Annex A is normative and is considered part of this standard. Annexes B and C are for information only.

Figure 0 is intended to show the relationship of this document to other SCSI-3 standards. The figure is not intended to imply a relationship such as a hierarchy, protocol stack, or system architecture. It indicates the applicability of a standard to the implementation of a given transport.

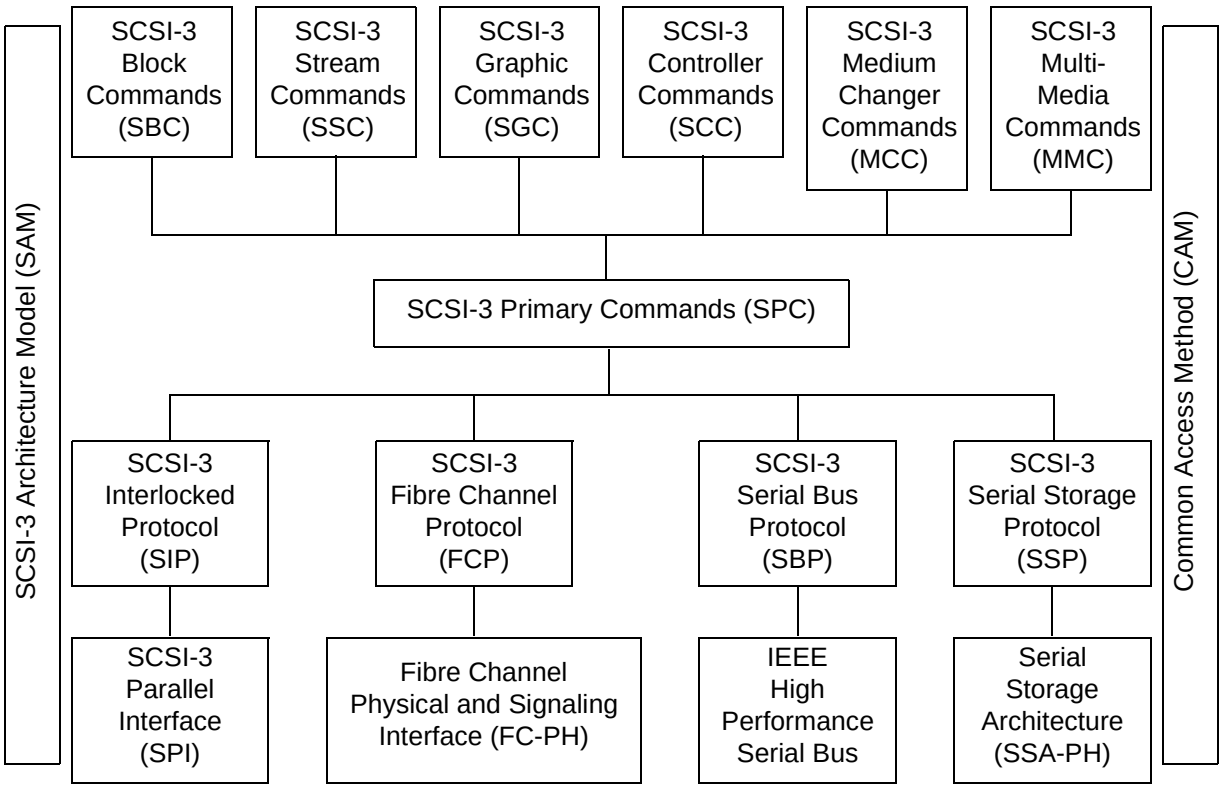


**Figure 0 - SCSI-3 document road map**

# 1 Scope

This International Standard defines the command set extensions for SCSI-3 storage array devices; commonly known as RAID devices. This standard is principally intended to be used in conjunction with, not as an alternate to, any of the SCSI-3 command standards and the SCSI-3 Architecture Model Standard (ISO/IEC IS 14776-411). The resulting commands facilitate the control and configuration of SCSI-3 storage arrays and thus provide a common command specification for both system integrators and suppliers of SCSI-3 storage array devices.

The clause(s) of this standard pertaining to the SCSI-3 storage array device class, implemented in conjunction with the applicable clauses within any of the SCSI-3 command standards, shall specify the standard command set available for SCSI-3 storage arrays.

The objectives of the SCSI-3 Controller Commands is to provide the following:

a) Transfer commands unique to SCSI-3 Controller Command devices;
b) Control commands to manage the operation of an SCSI-3 Controller Command device;
c) Optional device mapping and pass-through support.

# 2 Normative references

## 2.1 Normative references

The following standards contain provisions which, through reference in the text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed below.

Members of IEC and ISO maintain registers of currently valid standards.

## 2.2 Approved references

SCSI-3 Architecture Model Standard (ISO/IEC 14776-411)

## 2.3 References under development

At the time of publication, the following referenced standards were still under development. For information on the current status of the document, or regarding availability, contact the relevant standards body or other organization as indicated.

SCSI-3 Interlocked Protocol Standard (ISO/IEC 14776-211)
SCSI-3 Primary Commands Standard (ISO/IEC 14776-311)