American National Standard

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for Information Technology –

Multi-Media Commands - 6 (MMC-6)

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INCITS 468-2010

American National Standard
for Information Technology –

Multi-Media Commands - 6 (MMC-6)

Secretariat

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Abstract

This standard defines a SCSI-based command set needed to access multi-media features. The applicable clauses of this standard, when used in conjunction with other standards and publications, define a full standard set of commands.

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Foreword (This foreword is not part of American National Standard INCITS 468-2010.)

This standard defines the command set to access multi-media features for all classes of SCSI devices. The applicable clauses of this standard when used in conjunction with SCSI Primary Commands and other applicable command set documents pertaining to the subject device class, define the full standard set of commands available for that device in a SCSI environment.

Requests for interpretation, suggestions for improvement and addenda, or defect reports are welcome. They should be sent to the INCITS Secretariat, National Committee for Information Technology Standards, Information Technology Institute, 1101 K Street NW, Suite 610, Washington DC 20005.

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American National Standard for Information Technology –

Multi-Media Commands – 6 (MMC–6)

1 Scope

This standard defines a set of SCSI command descriptor blocks that are useful in accessing and controlling devices with a peripheral device type set to 5.

This command set is transport independent and may be implemented across a wide variety of environments for which a SCSI transport protocol has been defined. To date, these include Parallel SCSI, ATA/ATAPI, Serial ATA, Universal Serial Bus, and High Performance Serial Bus.

The command set described has been selected for correct operation when the physical interface is ATA with the ATAPI command protocol. Although some commands are also described in [SPC-3], reduced descriptions are also in this standard for the purpose of profiling mandatory and optional command features as applied to multi-media devices.

The objective of this command set is to provide for the following:

1. A definition of the command formats and functions independent of delivery, protocol/signaling or transport mechanism. Architectural constraints regarding command functions, over the various transports, are addressed in the document specific to the physical transport;
2. Standardized access to common features of devices employed in multi-media applications;
3. System software/firmware independence across device classes and physical interfaces. Provision is made for the addition of special features and functions through the use of vendor-specific options;
4. Compatibility such that properly conforming devices may inter-operate with subsequent devices.

The Multi-Media Commands - 6 (MMC-6) standard is divided into several clauses:

Clause 1 (this clause) is the scope.

Clause 2 contains lists of documents that may be needed by the reader for the correct understanding of this standard.

Clause 3 contains Definitions, Symbols, Abbreviations, and Conventions. This is a glossary of terminology used in this standard.

Clause 4 describes modeling for the various media-oriented behaviors that the Host may witness from the device. This also provides an overview of internal drive operation to the Host application developer.

Clause 5 defines the features and profiles of MMC devices. Features describe Drive capability while profiles define a general device view.

Clause 6 defines commands that may be implemented by MMC device. Commands are described from the Host's point of view.

Clause 7 defines the parameter data formats that may be implemented by MMC devices. Inputs required by the drive are not always a part of a command. Inputs associated with mode of operation are readable and sometimes writable.

The annexes provide information to assist with implementation of this standard.