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FOREWORD

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International Standard ISO/IEC 24739-3 was prepared by subcommittee 25: Interconnection of information technology equipment, of ISO/IEC joint technical committee 1: Information technology.

ISO/IEC 24739-3 is to be used in conjunction with ISO/IEC 24739-1 and ISO/IEC 24739-2.

The list of all currently available parts of the ISO/IEC 24739 series, under the general title *Information technology – AT attachment with packet interface-7,* 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.

The contents of the corrigendum of August 2013 have been included in this copy.

INTRODUCTION

The ISO/IEC 24739 series specifies the AT Attachment Interface between host systems and storage devices. It provides a common attachment interface for systems manufacturers, system integrators, software suppliers, and suppliers of intelligent storage devices.

ISO/IEC 24739-1 defines the register delivered commands used by devices implementing the standard. ISO/IEC 24739-2 defines the connectors and cables for physical interconnection between host and storage device, the electrical and logical characteristics of the interconnecting signals, and the protocols for the transporting of commands, data, and status over the interface for the parallel interface. ISO/IEC 24739-3 defines the connectors and cables for physical interconnection between host and storage device, the electrical and logical characteristics of the interconnecting signals, and the protocols for the transporting of commands, data, and status over the interface for the serial interface. Figure 1 shows the relationship of these documents. For devices implementing the PACKET command feature set, additional command layer standards are listed in Table 1 and described in Clause 2.

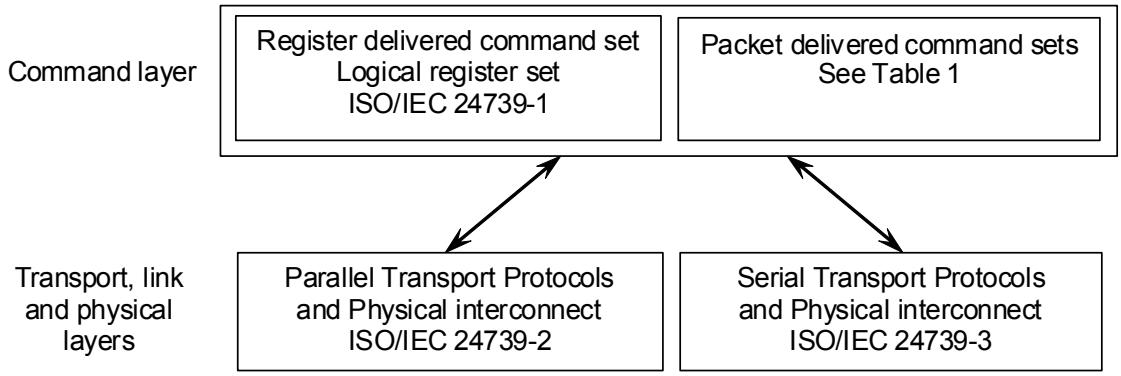

Figure 1 – ATA document relationships

Table 1 – PACKET delivered command sets

Standard
SCSI Primary Commands (SPC)
SCSI Primary Commands-2 (SPC-2)
SCSI Primary Commands-3 (SPC-3)
SCSI Block Commands (SBC-2)
SCSI Stream Commands (SSC)
Multimedia Commands (MMC)
Multimedia Commands-2 (MMC-2)
Multimedia Commands-3 (MMC-3)
Multimedia Commands-4 (MMC-4)
ATAPI for Removable Media
ATA Packet Interface (ATAPI) for Streaming Tape QIC-157 revision D

This standard maintains compatibility with the AT Attachment with Packet Interface - 6 standard (ATA/ATAPI-6) and while providing additional functions, is not intended to require changes to presently installed devices or existing software.

INFORMATION TECHNOLOGY – AT ATTACHMENT WITH PACKET INTERFACE-7 –

Part 3: Serial transport protocols and physical interconnect (ATA/ATAPI-7 V3)

1 Scope

This part of ISO/IEC 24739 specifies the connectors and cables for physical interconnection between host and storage device, the electrical and logical characteristics of the interconnecting signals, and the protocols for the transporting of commands, data, and status over the interface for the serial interface.

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.

The provisions of the referenced specifications other than ISO/IEC, IEC, ISO and ITU documents, as identified in this Clause, are valid within the context of this International Standard. The reference to a specification within this International Standard does not give it any further status within ISO/IEC. In particular, it does not give the referenced specification the status of an International Standard.

ISO/IEC 14776-331, *Information technology – Small computer system interface (SCSI) – Part 331: Stream Commands (SSC)*[1]

ISO 7779:1999, *Acoustics – Measurement of airborne noise emitted by information technology and telecommunications equipment*

ANSI INCITS 317-1998 (R2003) *AT Attachment with Packet Interface Extension (ATA/ ATAPI-4)*

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1 See also ANSI INCITS 335-2000 (PACKET command feature set commands)