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**INCITS 452-2009 (R2019)**

American National Standard

*for Information Technology –*
# *AT Attachment 8 - ATA/ATAPI Command Set (ATA8-ACS)*

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**INCITS 452-2009**

American National Standard
for Information Technology –

# AT Attachment 8 - ATA/ATAPI Command Set (ATA8-ACS)

Secretariat

**Information Technology Industry Council**

Approved September 29, 2009

**American National Standards Institute, Inc.**

**Abstract**

This standard specifies the AT Attachment command set used to communicate between host systems and storage devices. This provides a common command set for systems manufacturers, system integrators, software suppliers, and suppliers of storage devices. The AT Attachment command set includes the PACKET feature set implemented by devices commonly known as ATAPI devices. This standard maintains a high degree of compatibility with the AT Attachment Interface with Packet Interface - 7 (ATA/ATAPI-7) volume 1 (see ANSI INCITS 397-2004).

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## Foreword (This foreword is not part of American National Standard INCITS 452-2009.)

This AT Attachment 8 - ATA/ATAPI Command Set (ATA8-ACS) standard is designed to maintain a high degree of compatiblity with the AT Attachment with Packet Interface - 7 (ATA/ATAPI-7) standard.

This standard contains five annexes. Annex A is normative and is considered part of the standard. Annexes B through E are informative and are not considered part of the standard.

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

This standard was processed and approved for submittal to ANSI by InterNational Committee for Information Technology Standards (INCITS). Committee approval of this standard does not necessarily imply that all committee members voted for its approval. At the time it approved this standard, INCITS had the following members:

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## Introduction

This standard encompasses the following:

Clause 1 describes the scope.

Clause 2 provides normative references for the entire standard.

Clause 3 provides definitions, abbreviations, and conventions used within the entire standard.

Clause 4 describes the general operating requirements of the command layer.

Clause 5 describes the ATA protocols used by the commands in this standard.

Clause 6 describes Normal and Error Output fields.

Clause 7 describes commands.

Clause 8 describes the SCT Command Transport.

Clause 9 describes command normal and error outputs.

Annex A describes logs.

Annex B provides command summaries.

Annex C describes considerations for using devices with non-512 byte sectors.

Annex D provides a tutorial on how to use SCT.

Annex E provides implementation guidelines for 1,024/4,096 byte sectors.

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American National Standard
for Information Technology –

# AT Attachment 8 - ATA/ATAPI Command Set (ATA8-ACS)

## 1 Scope

The set of AT Attachment standards consists of this standard and the ATA implementation standards described in AT Attachment - 8 ATA/ATAPI Architecture Model (ATA8-AAM). The AT Attachment ATA Command Set (ATA8-ACS) specifies the command set host systems use to access storage devices. It provides a common command set for systems manufacturers, system integrators, software suppliers, and suppliers of intelligent storage devices. Figure 1 shows the relationship of this standard to the other standards and related projects in the ATA and SCSI families of standards and specifications.

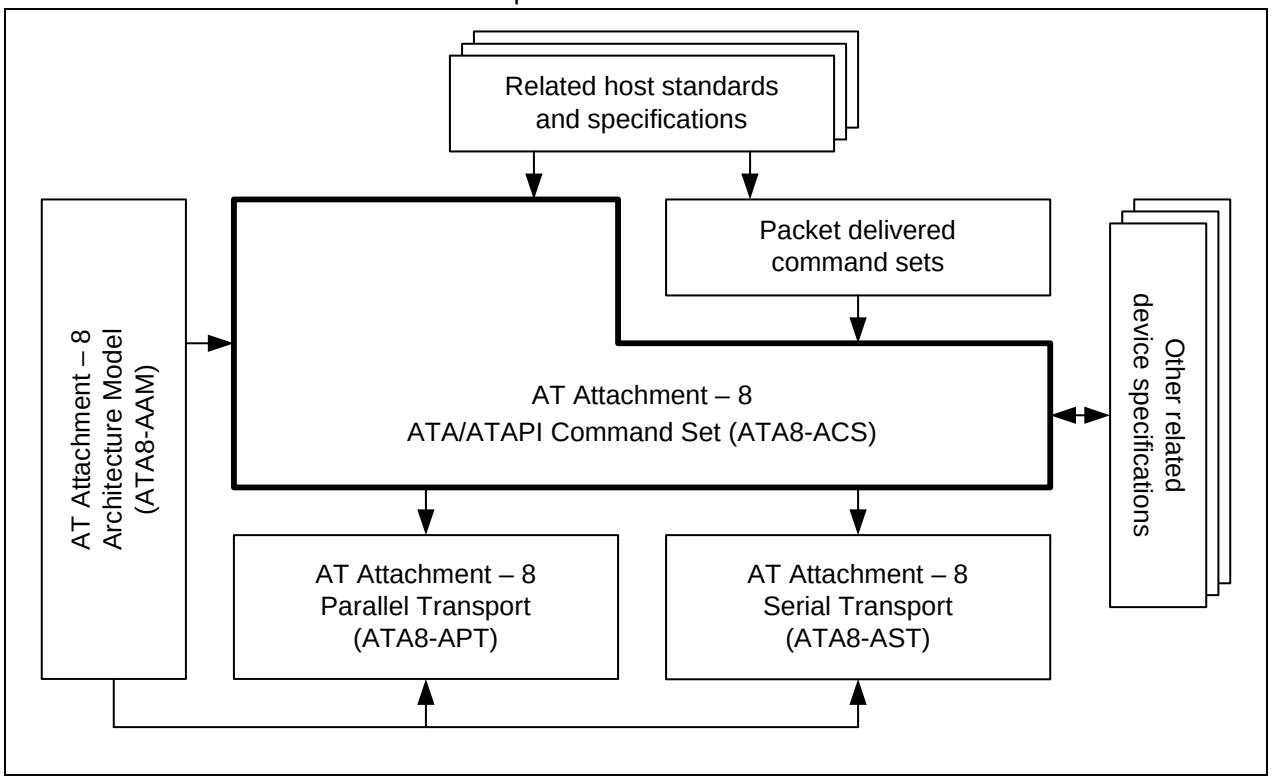


**Figure 1 — ATA document relationships**

ATA8-ACS maintains compatibility with the AT Attachment with Packet Interface - 7 standard (ATA/ATAPI-7), INCITS 397-2005 volume 1, while providing additional functions.