

American National Standard

INCITS 522-2014

*for Information Technology –
ATA/ATAPI Command Set - 3 (ACS-3)*

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American National Standard
for Information Technology –

ATA/ATAPI Command Set - 3
(ACS-3)

Secretariat

Information Technology Industry Council

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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 ATA/ATAPI Command Set - 2 (ACS-2).

American National Standard

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Foreword

(This foreword is not part of American National Standard INCITS 522-2014.)

This standard is designed to maintain a high degree of compatibility with the ACS-2 standard.

This standard contains five annexes. Annex A is normative and is considered as 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 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 provides a tutorial on how to use SCT.
- Annex D provides implementation guidelines for 1 024/4 096 byte sectors.
- Annex E is the bibliography.

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**American National Standard
for Information Technology –**

ATA/ATAPI Command Set - 3 (ACS-3)

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 ATA/ATAPI Command Set - 3 (ACS-3) standard 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.

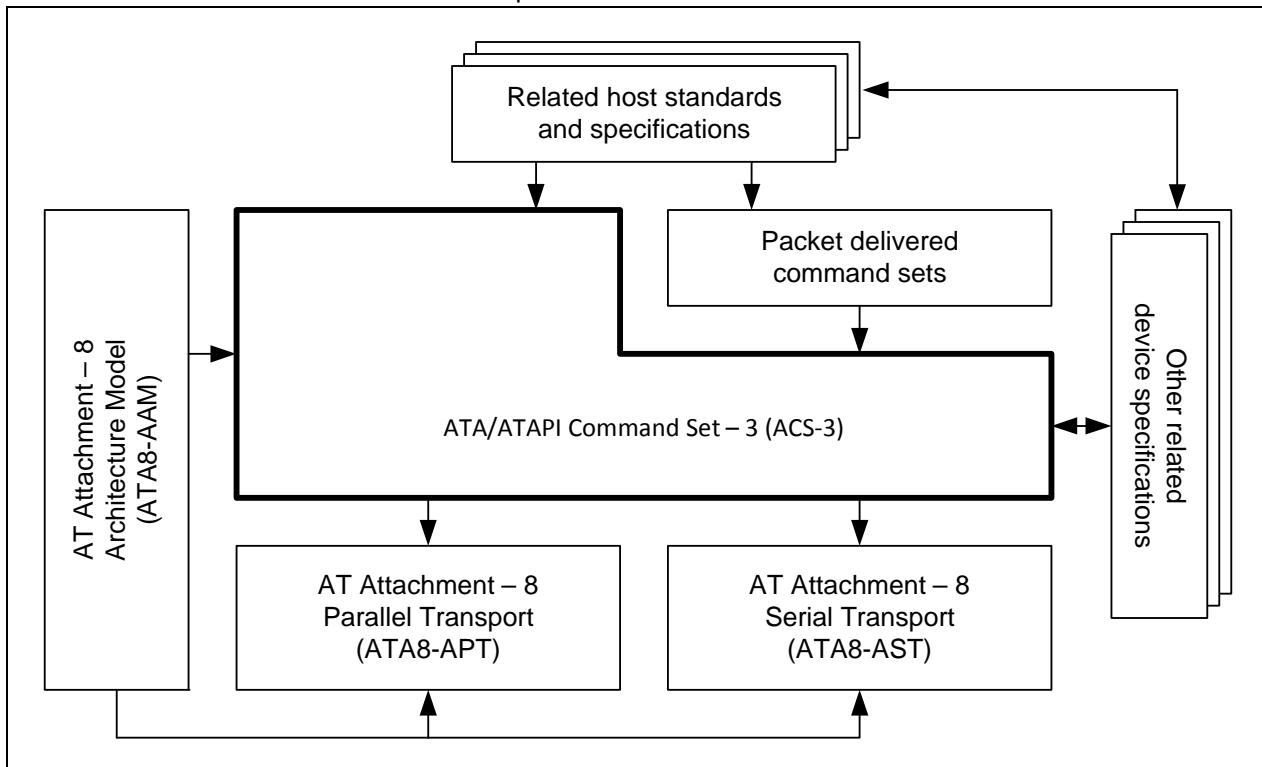


Figure 1 — ATA document relationships

This standard maintains compatibility with the ACS-2 standard, INCITS 482-2012, while providing additional functions.