Project Proposal For a New INCITS Standard

MultiMedia Command Set - 6

(MMC-6)

Command Set

May 11, 2006

1. Source of the Proposed Project

1.1. Title

Multi-Media Command Set - 6 (MMC-6)

1.2. Date Submitted

May 11, 2006

1.1. Proposing Group

T10, 8 members of T10 are also members of INCITS

2. Process Description for the Proposed Project

2.1. Project Type

D - Development

2.2. Type of Document

Standard

2.3. Definitions of Concepts and Special Terms

None

2.4. Expected Relationship with Approved Reference Models, Frameworks, Architectures, etc.

None, it is expected that this standard will be used in closed systems.

2.5. Recommended INCITS Development Technical Committee

T10

2.6. Anticipated Frequency and Duration of Meetings

Technical Committee T10 meets on a regularly scheduled basis (see www.t10.org for the current meeting schedule). Specific task ad hoc groups are called as required between the regular meetings but their results are not binding.

2.7. Target Date for Initial Public Review (Milestone 4)

September 2007

2.8. Estimated Useful Life of Standard or Technical Report

5 Years

3. Business Case for Developing the Proposed Standard or Technical Report

3.1. Description

The Multi-Media Command set version 6 is based on Multi-Media Command set version 5 that provides for commands to implement CD, DVD, BD, and HD DVD devices.

This command set may be implemented on multiple interfaces such as SCSI, ATA/ATAPI, SATA/SATAPI, USB (both 1.1 and 2.0), and SBP-3 (1394A and 1394B). MMC-6 will be developed with the viewpoint that ATA/ATAPI (and SATA/SATAPI) is the primary connection. Details useful for other physical connections are to be included in annexes.

Additionally, the following items should be considered for inclusion in MMC-6:

- 1) extensions to DVD product commands for the support of DVD-RW Dual Layer,
- 2) extensions to BD product commands for the support of new BD media formats,
- extensions to HD DVD product commands for the support of HD DVD-RW and HD DVD-R Dual Layer,
- 4) other capabilities that may fit within the general application scope of this project.

3.2. Existing Practice and the Need for a Standard

The proposed project involves a compatible evolution of the present command set to provide for newly developed Multi-media products.

3.3. Implementation Impacts of the Proposed Standard

3.3.1. Development Costs

Members of T10 will provide the necessary resources. The T10 members will host the required meetings for development, provide for the necessary lab experiments, and provide the Technical Editor for the project.

3.3.2. Impact on Existing or Potential Markets

The nature of the proposed project is to provide for growth in the CD, DVD, BD, and HD DVD industry. This ensures that current investments in Multi-Media attachments will have a stable managed migration path in the face of technological developments.

3.3.3. Costs and Methods for Conformity Assessment

The committee will consider the results of testing as may be available to the committee through the voluntary efforts of the various participants in T10. With this method all costs are borne by the organizations of the various participants and have for the most part been mainly an adjunct of their normal development costs.

3.3.4. Return on Investment

ROI information is considered proprietary data by the member organizations, but members have stated that the ROI is expected to be much more than sufficient to justify the project.

3.4. Legal Considerations

3.4.1. Patent Assertions

Calls will be made to identify assertions of patent rights in accordance with the relevant INCITS, ANSI, and ISO/IEC policies and procedures.

3.4.2. Dissemination of the Standard or Technical Report

Drafts of this document will be disseminated electronically. Dissemination of the final standard will be restricted, as the document becomes property of INCITS, ANSI, and/or ISO/IEC.

4. Related Standards Activities

4.1. Existing Standards

ID Number	Title
INCITS 401-2005	Multi-Media Command Set – 4 (MMC-4)
INCITS 402-2005	SCSI Architecture Model – 3 (SAM-3)
INCITS 408-2005	SCSI Primary Commands - 3 (SPC-3)
INCITS 397-2005	AT Attachment – 7 with Packet Interface (ATA/ATAPI-7)
INCITS 375-2004	Serial Bus Protocol – 3 (SBP-3)
ANSI/IEEE Std 1394A-2000	IEEE High Performance Serial Bus

4.1. Related Standards Activity

ID Number	Title
T10/1675-D	Multi-Media Command Set – 5 (MMC-5)
T10/1683-D	SCSI Architecture Model – 4 (SAM-4)
T10/1731-D	SCSI Primary Commands – 4 (SPC-4)
T13/1697-D,	AT Attachment – 8 with Packet Interface (ATA/ATAPI-8)
T13/1698-D,	
T13/1699-D	

4.2. Corresponding ISO Projects

ID Number	Title
ISO/IEC 14776-411	SCSI Architecture Model - 3 (SAM-3)
ISO/IEC 14776-312	SCSI Primary Commands - 3 (SPC-3)
ISO/IEC 14776-971	AT Attachment – 7 with Packet Interface (ATA/ATAPI-7)
ISO/IEC 14776-861	AT Attachment – 8 ATA/ATAPI Architecture Model (ATA8-AAM)
ISO/IEC 14776-871	AT Attachment – 8 ATA/ATAPI Command Set (ATA8-ACS)
ISO/IEC 14776-881	AT Attachment – 8 ATA/ATAPI Parallel Transport (ATA8-APT)
ISO/IEC 14776-891	AT Attachment – 8 ATA/ATAPI Serial Transport (ATA8-AST)
ISO/IEC 14776-364	Multi-Media Command Set – 4 (MMC-4)
ISO/IEC 14776-365	Multi-Media Command Set – 5 (MMC-5)

4.3. Recommendations for Close Liaison

INCITS T13.

5. Units of Measurement used in the Standard

The International System of Units (SI) will be used.