Project Proposal
For a New
NCITS Standard

MultiMedia Command Set - 6

(MMC-6)

Command Set

February 17, 2006
1. Source of the Proposed Project

1.1. Title: MultiMedia Command Set version 6 (MMC-6)

1.2. Date Submitted: February 17, 2006

1.3. Proposing Group: T10, 8 members of T10 are also members of NCITS

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 NCITS 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)
May 2007

2.8. Estimated Useful Life of Standard or Technical Report
5 Years

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/AATAPI, USB (both 1.1 and 2.0), and SBP-3 (1394A and 1394B). MMC-6 shall be developed with the viewpoint that ATA/ATAPI (and SATA/SATAPI) is the primary connection. Details needed for other physical connections shall be included in annexes.

Additionally, the following items should be considered for inclusion in MMC-6:
- extensions to DVD product commands for the support of DVD-RW Dual Layer,
- 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,
- 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 NCITS, 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 NCITS, ANSI, and/or ISO/IEC.
4. Related Standards Activities

4.1. Existing Standards

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<th>ID Number</th>
<th>Title</th>
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<tr>
<td>INCITS 401-2005</td>
<td>Multi-Media Command Set – 4 (MMC-4)</td>
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<tr>
<td>INCITS 402-2005</td>
<td>SCSI Architecture Model – 3 (SAM-3)</td>
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<tr>
<td>INCITS 408-2005</td>
<td>SCSI Primary Commands - 3 (SPC-3)</td>
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<tr>
<td>INCITS 397-2005</td>
<td>AT Attachment – 7 with Packet Interface (ATA/ATAPI-7)</td>
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<tr>
<td>INCITS 375-2004</td>
<td>Serial Bus Protocol – 3 (SBP-3)</td>
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4.2. Related Standards Activity

<table>
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<tr>
<th>Project</th>
<th>Title</th>
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<tr>
<td>T10/1675-D</td>
<td>Multi-Media Command Set – 5 (MMC-5)</td>
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<tr>
<td>T10/1683-D</td>
<td>SCSI Architecture Model – 4 (SAM-4)</td>
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<td>T10/1731-D</td>
<td>SCSI Primary Commands – 4 (SPC-4)</td>
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<tr>
<td>T13/1697-D through T13/1699-D</td>
<td>AT Attachment – 8 with Packet Interface (ATA/ATAPI-8)</td>
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4.3. Recommendations for Coordinating Liaison

None.

4.5. Recommendations for Close Liaison

NCITS T13.