MMC WG Meeting Agenda, Tuesday 9 September 2008

Antlers Hilton Hotel
4 South Cascade Avenue
Colorado Springs, Colorado 80903

Hosted by LSI.

1. Opening Remarks

The MMC meeting has been authorized by INCITS T10 and will be conducted under the INCITS rules. Ad hoc meetings take no final actions, but prepare recommendations for approval by the INCITS task group. The voting rules for the meeting are those of the parent committee, INCITS T10. For the ad hoc, other than straw votes, the voting rules are: one vote per participating company.

The minutes of the MMC meeting will be posted to the T10 Reflector and will be included in the next T10 committee mailing. Attendance at a working group meeting does not count toward minimum attendance requirements for T10 membership. Working group meetings are open to any person or company to attend and to express their opinion on the subjects being discussed.

2. Introductions

3. Document Distribution

The chair distributed this agenda and the latest draft of MMC6 (MMC6R02.PDF)

4. Call for Patents

None.

5. Approval of Agenda

No changes.

6. Old Business – Decisions

6.1 INQUIRY

The INQUIRY response data format in MMC-4 and MMC-5 are set to 0011b. All versions of SPC declare that 0011b is reserved. MtFuji7 is consistent with SPC.

Options:

1. Keep the MMC-4 and MMC-5 settings and pursue a change to SPC-4.
2. Change to be consistent with MtFuji.

In a straw poll, the voting was: Option #1 – 0, Option #2 – 8

MMC-6 will be changed according the WG opinion.

6.2 MRW

A question was posted to the T10 website: Is MRW important to any interested parties anymore? There were no responses.

Options:

1. Keep MRW in MMC-6.
2. Mark MRW as Legacy.

In a straw poll, the voting was: Option #1 – 0, Option #2 – 8

MMC-6 will be changed according the WG opinion.

6.3 HD DVD

HD DVD-ROM, HD DVD-RAM, and HD DVD-R command support is specified in MMC-5. HD DVD-RW and HD DVD-R DL have been proposed for MMC-6 but may not actually appear in the marketplace. The questions:

1. Should HD DVD-ROM, HD DVD-RAM, and HD DVD-R be made legacy?
2. Should HD DVD-RW and HD DVD-R DL command support be included in MMC-6?

The WG decided that these questions cannot answered yet. Both are to be deferred until the November meeting.

6.4 TCG Optical Security Subsystem Class

Status: The specification is expected to be approved by the TCG board of directors during their first meeting after 15 September. After that time, the specification will be available in   the public area of www.trustedcomputinggroup.org.

At the November meeting, Bill McFerrin will review the TCG OSSC.

6.5 BD Change from BD_cmds_r110_july_a.pdf (posted as T10/08-340r0)

The changes will be identified and put into MMC-6.

6.6 GESN Device Busy clarification

Drives can report Device Busy events during manual load the same as START STOP UNIT with Immed=1? Some drives have been found that do this, but MMC-5 only requires the behavior from command execution.

Proposal: Define the behavior as optional in MMC-6. A bit in the Removable Media Feature Descriptor shall be assigned.

In a straw poll, the voting was: Yes – 0, No – 5, abstain – 3.

There will be no change to MMC-6.

6.7 Review of MMC-6 Rev 2 - Status

Clause 1 is small and not changed from MMC-5. No errors were discovered.

Clause 2 has reference changes in "Other References". No other changes were proposed.

Clause 3 has a few new abbreviations. No other changes were proposed.

Clause 4 Changes are pending – no review at this meeting.

Clause 5 – Features and Profiles

> To be reviewed for changes and corrections.

Clause 6 – commands

> To be reviewed for changes and corrections.

Clause 7 – Mode pages

> To be reviewed for changes and corrections.

Annexes – Changes are pending – no review at this meeting.

6.8 Review of MMC-6 Rev 2

Clause 5 – Features and Profiles

- MRW, Feature 28h (table 92) shall be marked Legacy.

- Remove 5.3.17 MRW Feature.

- Table 161, row 2, column 2, note that BLANK applies only to DVD-RW SL. In the same cell, change "DVD-RW bit" to "DVD-RW SL bit".

- 5.3.26 Layer Jump Rigid Restricted Overwrite Feature: this feature applies only to DVD-RW DL.

- 5.3.27 Stop Long Operation Feature: the feature is applied to stop timeout type 2 operations.

- Table 175 – BD Read Feature – Class/Version bitmap is obsoleted and replaced.

- Table 177 – BD Write Feature – Class/Version bitmap is obsoleted and replaced.

- Table 182 – HD DVD Read Feature – need additional HD DVD bits.

- Table 184 – HD DVD Write Feature – need additional HD DVD bits.

- 5.3.44 DVD CSS Feature – Note that this is primarily associated with reading and has little connection to CSS managed recording (feature 0x010E).

- 5.3.45 Real-time Streaming Feature – add discussion of current bit based upon table from Panasonic and clarifications of meeting discussion. SMP bit described in MtFuji7 is missing here.

- 5.3.51 AACS feature: add WBE and BEC bits as described in MtFuji7.

- Table 234 DVD Download Disc Recording Profile is missing feature 106h.

Clause 6 – commands

- Table 258, "Features associated with the CLOSE TRACK SESSION command" is missing some features. The editor should review all feature lists in each command description.
- 6.3.3.2, "Close Function Definitions for DVD-R/-RW": Add descriptions to support DVD-RW DL.
- Close function 000b needs to refer to Stop Long Operation feature. Note that 000b applies only to DVD-RW DL.
- 6.3.3.11, "Close Function Definitions for BD-R": Note that The Drive shall finalize the disc if there is no remaining space for recording of a user data on the disc. This occurs automatically and is not related to the CLOSE TRASK SESSION command.
- 6.4.4.2.1, Format Type = 0: Need separate descriptions for DVD-RW DL and HD DVD-RW and HD DVD-RW DL.
- 6.4.4.2.3, Format Type = 10h: Add HD DVD-RW description.
- 6.4.4.2.4, Format Type = 11h: Add HD DVD-RW description.
- 6.4.4.2.5, Format Type = 12h is obsolete in Fuji7.
- 6.4.4.2.6, Format Type = 13h: Add HD DVD-RW description.
- 6.4.4.2.7, Format Type = 14h is obsolete in Fuji7.
- 6.4.4.2.8, Format Type = 15h: Add HD DVD-RW description.
- 6.4.4.2.10, 6.4.4.2.11, and 6.4.4.2.12 headings are not consistent with other format type headings.
- 6.4.4.2.14, MRW is legacy.
- Text following table 277 needs to be updated from BD commands ver 1.10.
- 6.4.4.3, insert note: "Stop Long Operation may be applicable. See CLOSE TRACK SESSION command."
- 6.4.4.4.4, background formatting applies to several media types. Each should be noted and differences noted.
- Remove note 12. An extreme corner case could make the statement false.
- Table 335, Inquiry Data – Response Data Format should be 2h.
- 6.22.3.1.6 and 6.22.3.1.7 headings should be made consistent with other format type headings.
- Table 464, BD Format Code Definitions: BCA (format code 3) is missing.
- Table 488 and 489, add newer HD DVD media types.
- 6.25.3.2.3 MRW – legacy
- 6.25.3.2.4 TOC Fabrications – include HD DVD media types
- Tables 521 through 527 check all media adaptations – particularly HD DVD.
- 6.26.3.18.9, add HD DVD media types to support.
- 6.26.3.21 and 6.26.3.22 should include DVD-RW DL
- Table 535, Key Class 01h is obsolete. Key class 21h is missing.
- 6.29 MM drives support only a 32-bit LBA format.
- 6.35.3.2.1 Check applicability to all HD DVD media types.
- Text after table 610: "The value of the each field Scramble Extent information shall not be zero."

- 6.35.3.2.12 – heading is not consistent with similar headings.

Clause 7 – Mode pages
- 7.4 MRW Mode Page – MRW is legacy.

8. Future Meeting Schedule
November 3-7, 2008
Embassy Suites
1325 E. Dyer Rd.
Santa Ana, CA 92705

Hosted by: Western Digital Technologies, Inc.
See T10.ORG for reservation details.

9. Action Items
Editor will investigate the possibility of making VCPS legacy.

Editor will create MMC6R02a by the end of September. Clauses 1, 2, and 3 will be unchanged. Clauses 5, 6, and 7 will be corrected according to the review.

Editor will create MMC6R02b with updates and corrections only to clause 4.

10. Adjournment
The meeting adjourned at 3 PM.