Document Number T10/98-141R0

Attendees:
Ron Roberts, Apple
Michael McMurdie, Adaptec
Rob Sims, Hewlett-Packard
Devon Worrell, Western Digital
Tim Bradshaw, IOMEGA
Frank Bandle, Texas Instruments
Bill McFerrin, Philips Electronics

Rob Reisch, Kodak, has dropped out of T10 and consequently MMC, so we now have no taker of minutes.

Day 1, Morning Session
Meeting began at 09.00 PST, 8-Jan-98

Review the document for completeness.

The morning session was rather unstructured with discussion mainly by Devon Worrell about trying to make power management be consistent with both SPC2 and RBC.

In an attempt to accomplish something, Bill McFerrin of Philips, proposed that the afternoon session begin with a review of the document structure.

Day 1, Afternoon Session
Bill McFerrin made an overhead of the document sections for review.

Clause 5, Features and Profiles was split and moved. Some discussion was placed in clause 4, Models. Details of specific features and profiles were moved to clause 7, Parameters for logical units.

Annex C, Command Play/Scan Operation was moved to clause 7, play audio feature.

Annex O, Event/Status Notification Functions was moved to clause 7, Event/Status Notification feature.

New document structure:

Foreword
Introduction
1. Scope
2. Normative References
3. Definitions, Abbreviations, and Symbols
4. Models
    (Most of Fuji2 section 8 shall be merged)
5. Commands
6. Parameters and Features

Annex A: Sense Codes
Annex B: ATAPI Implementation
Annex E: SBP2 (1394) Implementation
Annex N: Command Listings
Annex P: Power Management
Annex Q: CD Text formats

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The foreword, Introduction, and Scope were reviewed. Some small modifications were made and the sections were then labelled stable.

Clause 3, Definitions, abbreviations, and symbols was reviewed. Ron Roberts is required to check capitalization rules of NCITS and ANSI and adjust the document accordingly.

Clause 4, Models will be undergoing many changes. It was decided that a new version of this clause should be created for review in February or March.

Day 2
Meeting began at 09.00 PST, 9-Jan-98

Attendees:
Ron Roberts, Apple
Rob Sims, Hewlett-Packard
Devon Worrell, Western Digital
Tim Bradshaw, IOMEGA
Frank Bandle, Texas Instruments
Bill McFerrin, Philips Electronics

Attention was moved to clause 5 (formerly clause 6).

1. Commands shall remain in alphabetic order according to command name.
2. All commands pertinent to CD and DVD shall be represented.

Devon Worrell noted that several Fuji commands are not yet in MMC2. Ron Roberts has the action in progress.

There was some discussion of Fuji2 and Fuji3 as they pertain to MMC2. It seems that DVD-R is the primary new content in Fuji3. The problem is that the rules for recording DVD-R are still being developed. Devon Worrell suggested that Fuji3 would not be completed until August.

Since the goal of MMC2 is to have a document forwarded for public review during the May NCITS T10 Plenary Meeting, Bill McFerrin proposed that MMC2 include only Fuji2 plus known Fuji3 changes which are specific to DVD-R. We could then include DVD-R in a MMC3 document once all content is known. Devon Worrell argued against it with no clear alternative.

Ron Roberts refused to include any material which is not based upon fixed rules. So, until further notice, DVD-R will not be represented in the MMC2 document.

Blank
        The mandatory/optional column in the Blanking Types table will be removed. The
        capability will be moved to the description of the Rewritable Feature.

Close Track/Session
        Close Session has an additional description.
        When a Close Session is requested and:
        1. Write Parameters specify that the disc should remain open and
        2. there is not sufficient space for a next session, then

        the session shall be closed with B0 pointer set to ff:ff:ff. No error shall be posted to the
        host.

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> Bill McFerrin objected: We cannot do what was requested, so we should post an error.

> Rob Sims argued that the action taken was the only possible action under the circumstances. Furthermore, closing a session is very often the last action prior to ejecting a medium, therefore, the host would not discover what we had done.

> Rob Sims opinion prevailed in a straw poll.

Format Unit
> IP bit must now be fixed to 1. Fuji changes for DVD will be moved in by Ron Roberts.

Get Event Status Notification
> No changes.

Load/Unload
> No changes.

Mechanism Status
> Bill McFerrin asked that verbage be added for field specifications when there is no changer:

> FAULT, CHANGER STATE, and CURRENT SLOT are reserved.
> Mechanism State, Door Open, Current LBA must have valid values.
> Number of slots available shall be zero.
> Length of slot tables shall be zero.

Pause/Resume
> No changes.

Play Audio (10)
Play Audio (12)
Play Audio MSF
> Transfer length (Play 10 and Play 12) shall be changed to Play length.
> Error labelled ILLEGAL MODE FOR THIS TRACK OR INCOMPATABLE MEDIUM must be changed to ILLEGAL MODE FOR THIS TRACK. This is consistent with SCSI-2 and ATAPI 1.2.

Play CD
> This command has been marked obsolete. The command and its description will appear in the MMC2 document, but will not appear in MMC3.

Read Buffer Capacity
> This command has been marked obsolete. The command and its description will appear in the MMC2 document, but will not appear in MMC3.

Read CD
> The description of this command is not well structured and it is difficult to follow.

> We need a new feature for R-W subcode reading; particular attention must be paid to CD-Text.

Read CD MSF
> This command relies upon the Read CD command description, so no changes are necessary.

Read CD/DVD Recorded Capacity

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>   Tables for various capacities are required.

Read Disc Information
>   There was some discussion about the accuracy of this command as it pertains to DVD.
>   The Read Track Information will also require changing in the event that DVD-R is to be
>   included in MMC2.
>
>   The meeting ended with the continuing argument about DVD-R.

Actions
Ron Roberts
>   Merge new Fuji2 command descriptions into MMC2 draft.
>   Modify document structure according to the new structure decided at this meeting.
>   Make the editorial changes decided at this meeting.

Rob Sims
>   to provide Get Configuration Command description for MMC2 and SPC2.

Bill McFerrin
>   Provide verbage for changes to Close Session command.
>   Provide verbage for changes for Read CD for CD-Text reading. Loss of streaming
>   statement. (p 89).
>
>   Provide a table for the CD part of the changes to Read CD/DVD Recorded Capacity.

Meeting Schedule
Document review will continue February 11, 12 at IOMEGA in Salt Lake City. A joint session will
be held on February 11 with the RBC (Reduced Block Commands) group from T10. This group is
defining a minimal command set for HDD. New proposals for removable medium devices will be
presented. The MMC group wishes to be assured that no serious system differences will arise.

NCITS T10 Week, March 16 – 20, San Diego. Sponsored by Q-Logic.

Document review session, April at Philips Electronics in Longmont, Co. Specific days are TBD.

NCITS T10 Week, May 4 – 8, Colorado Springs, Co. Sponsored by Symbios Logic. Document
finalisation and proposal to T10 Plenary to forward for public review.