

**MMC Working Group Minutes - Tuesday & Wednesday 9 & 10 September 2003
9:00 AM - 5:00 PM**

T10 Meeting Week at:
Renaissance Hotel
Seattle, Wa

Hosted by: Microsoft Corporation

Special Notes:

This 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 this meeting will be posted to the 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.

MMC4R02D.PDF has been posted to the T10 website.

Draft Agenda:

1.0 Opening Remarks

2.0 Introductions

Present at the meeting:

David Hanes	HP
Hironmichi Oribe	IOMEGA
Emily Hill	Microsoft
Terry Nelson	Panasonic America
Bill McFerrin	Philips
Keiji Katata	Pioneer
Masaetsu Takahashi	Ricoh
Masaaki Nakagawa	Ricoh
Greg Fry	Roxio
Norchika Mine	Sony
Tomataka Kuranja	Sony

3.0 Document Distribution

4.0 Call for Patents

Katata, Pioneer announced that he has a patent disclosure for MMC/T10.

Katata will present the official letter to John Lohmeyer during the plenary.

5.0 Approval of Agenda

6.0 Old Business

6.1 Resolve questions wrt 4.1.6.3 Unable to Write Errors

Additional Legacy Specifications are to be requested, especially with respect to error reporting. The editor will send messages to T10, MtFuji and CDS21 reflectors. This is only for situations that are:

- 1) Not valid according to MMC4,
- 2) were valid under some previous MMC standard.

6.2 Resolve philosophical problems with DVD+R & DVD+RW Feature Descriptors

A well known problem with CD-RW media exists:

The chemistry of newer versions (sub-types) of CD-RW media is very sensitive. Some older drives may not be able to reduce write (and even erase) power sufficiently to record on this media without damaging it. Similarly, it is possible that newer devices may be unable to write older media due to insufficient write power.

It is possible that this problem will be seen again on certain types of writable DVD media. It has been proposed that MMC provide a method by which the initiator can discover the device's write capability with respect to various versions of the same media type. Similarly, it is desired that a common method be provided by which the Initiator can discover the media type and version of the currently mounted media.

The original proposal from the editor had all of the information in a feature descriptor. This means that the information about currently mounted media is volatile. Ai (Panasonic) finds this unacceptable since features should report only static information. Others joined Ai in his protest, albeit by e-mail. The results of the discussion led to the following:

- 1) There is no known technical reason to disallow volatile information in Feature Descriptors. That is, no example could be produced in which an unexpected failure could occur.
- 2) There is evidence from original MtFuji documents that the originators of "Features" intended that Feature Descriptors should not contain volatile information.

This issue required a great deal more time than it warranted. Discussion proceeded with a proposal from Ai (via Terry Nelson) for a method of separating the volatile information into the READ DISC INFO data.

Katata suggested that a generic method for the non-volatile information might be desirable.

After too much discussion, a vote was taken on the following proposal:

A Media Version Write Support Proposal to define a generalized feature adaptable to each major media type that identifies only version write capability.

Straw vote: Include proposal in MMC4R02E.

Yes 6

No 1

Abstain 3

6.3 Table in 7.2.6.1.2: Content?

Corrected in 2E.

7.0 New Business

Review the MMC-4 draft revisions 2c and 2d.

Merits of Operational Change proposal.

Katata claim: Operational Change is optional.

Both Fuji and MMC appear to disagree but not loudly.

Katata claim: Operational Change is not necessary to correct operation.

Some swr people claim that GESN is avoided because drives implement it badly.

Adjourned until Wed morning.

Generic Media Version Write Support

1. Generic is good because it is media type independent.
2. Generic may be very large if it shows every major media type.
3. Some media types do not have incompatibility problems across media versions.
4. Some media types will have only one version – no need for representation in the feature.

Tabled until PM session.

Operational Change Proposal - Obsolete/Make Legacy Operational Change Event

Discussions on Operational Change resulted in a major reduction of the event rather than obsolete/Legacy. The following were agreed:

1. Only remaining Event within Operational Change is:

LU has changed Operational State

2. Operational Status is Legacy. Value shall be 00 in future.

3. Operational Change is:

Only surviving values are:

No Change (0) and Feature Change (1)

Clauses 1, 2 and 3: McFerrin proposes to stabilize

No objections.

Reviewed Ai comments document and corresponding changes in 2d and 2e.

Device Busy table 267 in 2d is attempt by editor to clarify meaning of Device Busy status when used with Polled bit. Independent reviews by both hardware and software people will be appreciated.

Editor shall solicit comments by sending only DB text over reflector.

8.0 Review of Action Items

Editor shall change media type/version write capability in MMC4R02e according to meeting discussion.

Editor shall request input for review:

1. Additional Legacy Specifications, especially with respect to error reporting. The editor will send messages to T10, MtFuji and CDS21 reflectors. This is only for situations that are not valid according to MMC4, but were valid under some previous MMC standard.
2. Review for stabilization of clauses 4, 5 and 7.
3. Review for stabilization of annexes A, B, C ,D, & E

9.0 Future Meeting Schedule

November 2003 meeting planning:

Stabilize as much of MMC4 as possible.

Present project proposal to t10 for MMC5.

Plan for bar-b-que in Llano after Austin meeting. Tentative plan: Thursday After Plenary.

10.0 Adjournment

The meeting was adjourned at 5:30PM, Wednesday.

Regards,

Bill McFerrin, (CD Edge, Inc) for Philips Electronics, NA