

Accredited Standards Committee^{*}

X3, Information Processing Systems

Doc. No. X3T10/97-153R0
Date: March 11, 1997
Project: X3T10-1228D
Ref. Doc.: X3T10/94-057
Reply to: R. Roberts

To: Membership of X3T10
From: R. Reisch/R. Roberts
Subject: Minutes of X3T10 MMC II Working Group - March 11 and 12, 1997

AGENDA

- 1.0 Opening Remarks
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- 3.0 Document Distribution
- 4.0 Call for Patents
- 5.0 Approval of Agenda
- 6.0 Meeting Agenda
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Minutes:

- 1.0 Opening Remarks

Ron Roberts called the meeting to order at 9:00 AM on Tuesday 03/11/97. He thanked Q Logic for hosting the meetings. Ron asked Mr. Rob Reisch of Kodak to act as recording secretary for the meetings.
- 2.0 Introductions

Introductions of attendees were made and a sign-up sheet was distributed. The following attendees were present during the two days of meetings:

Name:	Company:	E-mail address:
Ron Roberts	Apple Computer	rkroberts@alo.com
Robert Reisch	Eastman Kodak	reisch@kodak.com
Rob Sims	Hewlett Packard	robsims@depeche.lvld.hp.com
Bill McFerrin	Philips	bill.mcferrin@na.km.philips.com
Devon Worrell	Western Digital	worrell@dt.wdc.com
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3.0 Document Distribution

Ron Roberts distributed hard and soft copies of the following documents:

Document Number	Title	File Name
xxxxx	Command Descriptions for All Logical Units	M2SEC6R1.DOC
1228D	SCSI-3 Multimedia Commands	MMC2-RAA.ZIP

4.0 Call for Patents

The normal request for patent disclosures was made. No patents were identified.

5.0 Approval of Agenda

No modifications were made.

6.0 Meeting Agenda

6.1 - Review Public Comments to MMC1

6.1.1 Kodak's Comments were modified and accepted as follows:

1.0 Page 114 Track Size for stamped media is not defined. On page 114 add the following:

For the note above Table 147 change from:

NOTE: The Track Size number may not be exact for the tracks that do not have a PMA entry.

Agreed change, the note is changed to a statement as follows:

The Track Size number may not be exact for the tracks that do not have a PMA entry. The track size of tracks that do not have PMA entries is calculated as follows:

TrackSize of track n = (start of track n+1) - (start of track n)

n+1 is the Lead Out if n is the last track recorded in the TOC.

The Track Size from this calculation may include blocks from the following track and these blocks may not be readable.

2.0 Page 37 the read CD command when EDC ECC is returned it is not clear weather the data is ECC corrected. To clarify this make the following changes:

Current specification reads:

The EDC and ECC bit, when set to one, indicates that the EDC and ECC (L-EC) field shall be included in the data stream. For Mode 1 CD format, this will include the 8 bytes of pad data.

Agreed change as follows:

The EDC and ECC bit, when set to one, indicates that the EDC and ECC (L-EC) field shall be included in the data stream. For Mode 1 CD format, this will include the 8 bytes of pad data.

Error correction is controlled by the Read Error Recovery Mode Page regardless of the setting of the EDC and ECC bit.

3.0 Table 37 Change the Sub Channel data selection value 011b from reserved to Vendor Specific and optional. This will allow the specification to meet unique customer needs for the format of sub-channel data.

Statement 3.0 accepted as stated.

4.0 A clarification of Table 111 Data Block Type Codes. Make the following changes for the definition field:

From:

Raw data with P and Q sub-channel
2352 bytes of raw data,

16 bytes buffer for Q sub-channel:
Bytes 0..9 are Q sub-channel data
Bytes 10..11 are Q sub-channel EDC
Bytes 12..14 are zero
Byte 15, most significant bit has state of P sub-channel bit
(not valid for write type = packet)

To:

Raw data with P and Q sub-channel
2352 bytes of raw data,

16 bytes buffer for Q sub-channel:
Bytes 0..9 are Q sub-channel data
Bytes 10..11 are Q sub-channel EDC
Bytes 12..14 are zero
Byte 15, most significant bit has state of P sub-channel bit
(not valid for write type = packet)
(For Q sub-channel data format see table 38)

6.1.2 Other enhancements to MMC

MMC rev 9 Page 88 change table 108, Write Parameters Mode Page change the description of byte 1 from Page Length (32h) to Page Length (32 h or 36h)

Masa's comments:

The group agreed to the following clarification

Table 115, the description of the entire disc is to be erased. Is modified as follows:
The PCA may be excluded. At the completion of this operation the area from the start time of lead-in through last possible start time of lead-out plus 2,250 blocks and the entire PMA shall be blank.

Note: This operation may involve writing to every location on the disc.

6.2 - Review MMC2 Draft section 1-4

A page by page review was held. The modifications made will become part of revision 1.0.

Rob Sims made a suggestion for the following global change to MMC II:

- Replace the MSF bits with physical bits.
- For CD, the physical addressing is defined as MSF. For DVD, the physical address is the physical address defined in the DVD specifications, i.e. the logical address plus 30000h.

6.3 - Review MMC2 Draft section 5

A page by page review was held. The modifications made will become part of revision 1.0.

-CD Audio Control Parameters Page drop CD from the name and the STOC bit definition shall include the following:

SOTC should be ignored on media that does not contain tracks.

- The mode select pages will be alphabetically organized in the specification.
- Six byte mode select and sense commands will be made obsolete in MMCII.
- Page codes need to be compatible and consistent with SBC II definitions.

6.4 - Review MMC2 Draft section 6

A page by page review was held. The modifications made will become part of revision 1.0.

-Add an implementers note near table 71 that states the following:

Current position information must be returned within one block time, this may require fabrication of data.

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6.5 - Review MMC2 Draft section 7

The group will define a command that will report features of the device and the media that is mounted. This command will be based on a Microsoft request for a Get Interfaces command.

7.0 New Business

No new business.

8.0 Action Items

- 8.1 The MMC group is to complete a detailed review of the content of MMC II specification and post comments on the reflector before the next meeting.
- 8.2 Rob Sims, will post on the MMC reflector a proposal that will address read and write speed reporting through read disc information. Rob will report values using a 2 Byte field and 100KB granularity.

9.0 Status of Action Items from January meeting

- 9.1 Bill McFerrin to bring forth an ANNIX for 1394 that will cover SBP implementations on 1394. Completed
- 9.2 Bill McFerrin will bring additions to MMC for CD TEXT. Due by the beginning of February. Complete, CD Text will be handled with the raw data format.
- 9.3 Rob Sims will make a matrix chart of Feature sets and commands. Due by the beginning of February. Incomplete as of March 11.
- 9.4 Rob Sims will review MMC annex with ATAPI Implementation Notes. The definition of the ATAPI transport version number in the Inquire data, byte 3 bits 4-7 must be clarified in the annex. The definition of padding must be added. Due by the beginning of February.
- 9.5 Ron Roberts will compile the first draft of MMC II and post it on the MMC reflector by mid February. Completed

10.0 Future Meeting Schedule

Next meeting will be in Natica Mass May 6 and 7

11.0 Adjournment

The meeting adjourned at 3:30 PM March 12.