

T10/04-107r0

Voting Results on T10 Letter Ballot 04-106r0 on  
Forwarding MMC-4 to First Public Review  
Ballot closed: 2004/04/23 12:00 noon MDT

Organization	Name	S	Vote	Add'l	Info
Adaptec, Inc.	Tim Symons	P	Yes		
Agilent Technologies			DNV		
AMCC	Neil Wanamaker	P	Abs		Cmnts
Amphenol Interconnect	Michael Wingard	P	Yes		
Brocade	Robert Snively	P	Yes		Cmnts
Cisco Systems, Inc.	Claudio DeSanti	P	Yes		
Crossroads Systems, Inc.	Dexter Anderson	A	Abs		Cmnts
Dallas Semiconductor	James A. Lott, Jr.	P	Yes		
Dell, Inc.	Kevin Marks	P	Yes		
EMC Corp.	Gary S. Robinson	P	Yes		
Emulex	Robert H. Nixon	P	Abs		Cmnts
ENDL	Ralph O. Weber	P	No		Cmnts
FCI	Douglas Wagner	P	Yes		
Fujitsu	Mike Fitzpatrick	P	Yes		
General Dynamics	Nathan Hastad	P	Yes		
Hewlett Packard Co.	Rob Elliott	P	No		Cmnts
Hitachi Cable Manchester	Zane Daggett	P	Yes		
Hitachi Global Storage Tech.	Dan Colegrove	P	Yes		
IBM Corp.	George O. Penokie	P	No		Cmnts
Intel Corp.	Robert Sheffield	P	Abs		Cmnts
Iomega Corp.	David Hawks	P	Yes		
LSI Logic Corp.	John Lohmeyer	P	Yes		
Madison Cable Corp.	Ashlie Fan	P	Yes		
Maxtor Corp.	Mark Evans	P	No		Cmnts
Microsoft Corp.	Emily Hill	P	Yes		
Molex Inc.	Jay Neer	P	Yes		
Panasonic Technologies, Inc	Terence J. Nelson	P	Yes		
Philips Electronics	William P. McFerrin	P	Yes		
Pivot3, Inc.	Bill Galloway	P	Abs		Cmnts
QLogic Corp.	Skip Jones	P	Yes		
Quantum Corp.	Paul Entzel	P	Yes		
Seagate Technology	Gerald Houlder	P	Abs		Cmnts
Storage Technology Corp.	Erich Oetting	P	Yes		
Sun Microsystems, Inc.	Vit Novak	P	Yes		
Texas Instruments	Paul D. Aloisi	P	Yes		Cmnts
Toshiba	Hiroshi Suzuki	P	Yes		
UNISYS	Ron Mathews	P	Yes		
Veritas Software	Roger Cummings	P	Yes		

Ballot totals: (27:4:6:1=38)

27 Yes

4 No

6 Abstain

1 Organization(s) did not vote

38 Total voting organizations

12 Ballot(s) included comments

This 2/3rds majority ballot passed.

27 Yes are more than half the membership eligible to vote minus abstentions  
[greater than 16] AND

27 Yes are at least 21 (2/3rds of those voting, excluding abstentions [31])  
AND

27 Yes are equal to or exceed a quorum [12]

Key:

P Voter is principal member

A Voter is alternate member

Abs Abstain vote  
DNV Organization did not vote  
Cmnts Comments were included with ballot  
NoCmnts No comments were included with a vote that requires comments

\*\*\*\*\*

Comments attached to Abs ballot from Neil Wanamaker of AMCC:

AMCC-1 Not materially affected by this standard; this organization lacks the expertise to evaluate this proposed standard.

\*\*\*\*\*

Comments attached to Yes ballot from Robert Snively of Brocade:

Brocade 001 (E) Page: 3 Location: 2.1

Problem Description:  
Hanging Paragraphs need to be corrected here and many many other places.

Suggested Solution:  
Perform correction. Contact George Penokie for explanatory information. Hanging paragraphs are most easily corrected by placing the hanging text in a new sub-clause titled "introduction", "explanation", "overview" or some similar appropriate name.

Brocade 002 (E) Page: 3 Location: 2.1.1

Problem Description:  
The text "Table F" appears here and in many other places. This appears to be a fault in the "style" definition for the text. Other examples are found in 4.1.5, 4.3, 4.3.1.11, 4.4.4.1, and many other places.

Suggested Solution:  
Perform correction.

Brocade 003 (T) Page: 4 & 5 Location: 2.2

Problem Description:  
Addresses for the availability of certain documents are not provided.

Suggested Solution:  
Provide availability addresses for Philips and Sony documents, including where possible the ISDN number, publisher, or Philips part-number. Provide availability addresses for the DVD Forum documents, including where possible the ISDN number, publisher, or DVD Forum document number. Documents that are not available to the general public for free or for a reasonable purchase or subscription fee should not be included as references.

Brocade 004 (T) Page: 4 Location: 2.2

Problem Description:  
The text "bytes" in the System Description Compact Disk Read Only Memory document title includes unprintable characters. I assume that these are associated with special ' or " formats and associated font problems.

Suggested Solution:

Perform correction.

Brocade 005 (T) Page: many Location: many

Problem Description:

A search for invalid keywords should be made. In particular, the word "must" appears a number of places in place of the correct keyword "shall". The words "not required" should be replaced with "may not" and an appropriate rewrite. The word "required" should be replaced with either a rewritten sentence or the keyword "mandatory" or "shall", depending on the context. The word "cannot" should be replaced with "shall not". The word "can" should be replaced with "may" or "should" depending on the context. The word "can" and "cannot" are used in code titles, and should probably be rewritten in those cases as well.

Suggested Solution:

Perform search and correction.

Brocade 006 (E) Page: many Location: many

Problem Description:

The word "which" should almost always be replaced with the word "that" or deleted entirely, depending on the context. Some of the cases may choose other rewrites.

Suggested Solution:

Perform search and correction.

\*\*\*\*\*

Comments attached to Abs ballot from Dexter Anderson of Crossroads Systems, Inc.:

Crossroads is not currently involved in interfacing to multimedia devices.

\*\*\*\*\*

Comments attached to Abs ballot from Robert H. Nixon of Emulex:

My organization is not directly or materially affected by the subject of this standard.

\*\*\*\*\*

Comments attached to No ballot from Ralph O. Weber of ENDL:

ENDL 1

PDF pg 67, pg 7, 3.1.4

Clarify that when this standard uses ASC outside the SK/ASC/ASCQ construct the

value is meant to be the ASC value that SPC-2 shows with an ASCQ of zero.

ENDL 2

PDF pg 72, pg 12, 3.1.78 , p 1, l 1

'...beyond that which...' [s/b] '...beyond the error correction that...'

ENDL 3

PDF pg 79, pg 19, 3.4 , p 5

Extend the description of SK/ASC/ASCQ to explain how this abbreviation containing three slashes relates to the text containing only two slashes that always appears near it.

ENDL 4

PDF pg 86, pg 26, 4.1.6.3 , table 2, r 2, c 2

'SK = BLANK CHECK, ASC and ASCQ are not specified in this document' [s/b] 'sense key set to BLANK CHECK and ASC/ASCQ not specified by this standard'

ENDL 5

PDF pg 86, pg 26, 4.1.6.3 , table 2, r 2, c 2

'- ASCQ should be selected for specific protection.' [s/b] 'The ASCQ shall be set as described in 4.8.4.'

ENDL 6

PDF pg 86, pg 26, 4.1.6.3 , table 2, r 4, c 2

NO MEDIUM PRESENT [s/b] MEDIUM NOT PRESENT

ENDL 7

PDF pg 88, pg 28, 4.1.8.1, 1st p after note, l 4

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 8

PDF pg 90, pg 30, 4.1.8.4.2 , last p, l 1&2

Replace '2/04/08 LOGICAL UNIT NOT READY, LONG WRITE IN PROGRESS' with the SK/ASC/ASCQ wording construction used elsewhere in this standard.

ENDL 9

PDF pg 113, pg 53, 4.2.5 , p 2, l 2&3

'...the ASCQ value may contain audio status as shown in Table 434.' [s/b]

'...the ASCQ shall contain one of the audio status values shown in Table 434.'

[Table 434 lists all the allowed ASCQ values.]

ENDL 10

PDF pg 147, pg 87, 4.4.6.1.1, 1st bullet

which [s/b] that

ENDL 11

PDF pg 151, pg 91, 4.4.7, p 2, l 6

For consistency with the way ASC/ASCQ information is presented in the remainder of the document delete '(05h/22h/00h)'. Alternatively, add correct

numeric values to the several hundred ASC/ASCQ requirements that are currently

missing them.

ENDL 12

PDF pg 155, pg 95, 4.6.3.2 , bulleted list

Change bulleted list to lettered list.

ENDL 13

PDF pg 156, pg 96, 4.6.3.3, bulleted lists

Change bulleted list to lettered list. [twice]

ENDL 14

PDF pg 156, pg 96, 4.6.3.3, 1st p after first list, l 3 and l 6; bullets 1 & 3

in second list

For consistency with the way ASC/ASCQ information is presented else where, delete '1/18/05'. Alternatively, add correct numeric values to the several hundred ASC/ASCQ requirements that currently lack them. [4 instances]

ENDL 15

PDF pg 157, pg 97, 4.6.3.3, Global in tables 51, 52, 53, and 54

Replace all instances of '1/18/05' with the spelled out SK/ASC/ASCQ notation

described in the conventions subclause and used elsewhere in this standard.

ENDL 16

PDF pg 158, pg 98, 4.6.3.3, 3rd p after table 55, l 4 and 4th p after table 55, l 1

Replace '1/18/05 RECOVERED DATA - RECOMMEND REASSIGNMENT' with the SK/ASC/ASCQ

wording construction used elsewhere in this standard. [twice]

ENDL 17

PDF pg 162, pg 102, 4.6.5.1 , p 2, l 2&3 and p 3, l 4&5

Replace '1/18/05 RECOVERED DATA - RECOMMEND REASSIGNMENT' with the SK/ASC/ASCQ

wording construction used elsewhere in this standard. [twice]

ENDL 18

PDF pg 162, pg 102, 4.6.5.1 , table 58, footnote 2

Replace '1/18/05' with the SK/ASC/ASCQ wording construction used elsewhere in

this standard.

ENDL 19

PDF pg 165, pg 105, 4.6.6.6, table 59, footnote 2

Replace '1/18/05' with the SK/ASC/ASCQ wording construction used elsewhere in

this standard.

ENDL 20

PDF pg 175, pg 115, 4.9.1.2 , p 1, l 1&2

NOT READY TO READY CHANGE - MEDIUM MAY HAVE CHANGED [s/b] NOT READY TO  
READY

CHANGE, MEDIUM MAY HAVE CHANGED

ENDL 21

PDF pg 175, pg 115, 4.9.1.2 , p 1, l 2

For consistency with the way ASC/ASCQ information is presented else where,  
delete '(06h/28h/00h)'. Alternatively, add correct numeric values to the  
several hundred ASC/ASCQ requirements that currently lack them.

ENDL 22

PDF pg 175, pg 115, 4.9.1.2.1 , p 1, l 2&3

'NOT READY, NO REFERENCE POSITION FOUND' [s/b] 'NOT READY/NO REFERENCE  
POSITION FOUND'

ENDL 23

PDF pg 175, pg 115, 4.9.1.2.1 , p 1, l 2

For consistency with the way ASC/ASCQ information is presented else where,  
delete '(02h/06h/00h)'. Alternatively, add correct numeric values to the  
several hundred ASC/ASCQ requirements that currently lack them.

ENDL 24

PDF pg 265, pg 205, 6.1, table 212, GET PERFORMANCE

Ach [s/b] ACh

ENDL 25

PDF pg 265, pg 205, 6.1, table 212, SCAN

Bah [s/b] BAh

ENDL 26

PDF pg 265, pg 205, 6.1, table 212, SEND CUE SHEET

Reference column should not contain 0.

ENDL 27

PDF pg 265, pg 205, 6.1, table 212, READ CD

Beh [s/b] BEh

ENDL 28

PDF pg 277, pg 217, 6.4.3 , p 1, l 3&4

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 29

PDF pg 280, pg 220, 6.5.2.1

Bulleted list should be lettered list.

ENDL 30

PDF pg 280, pg 220, 6.5.2.1

CORRUPTED MEDIUM FORMAT [s/b] MEDIUM FORMAT CORRUPTED

ENDL 31

PDF pg 285, pg 225, 6.5.2.3.11 and 6.5.2.3.12, Global in these 2 subclauses

ASC/ASCQ INVALID FIELD IN PARAMETER BLOCK is not defined in SPC-2 or SPC-3.

Perhaps the intended ASC/ASCQ is INVALID FIELD IN PARAMETER LIST. [I counted 6

instances of the problem, but your mileage may vary.]

ENDL 32

PDF pg 285, pg 225, 6.5.2.3.11 and 6.5.2.3.12, Global in these 2 subclauses

0xFFFFFFFF [s/b] FFFFFFFFh [I count 5 instances, your mileage may vary]

ENDL 33

PDF pg 285, pg 225, 6.5.2.3.11 and 6.5.2.3.12, Global in these 2 subclauses



0xFFFF0000 [s/b] FFFF0000h [I count 2 instances, your mileage may vary]

ENDL 34 Technical

PDF pg 287, pg 227, 6.5.3.1, table 237

Table 237 replicates requirements defined in SPC-2 and SPC-3 with the possibility that one of those standards might conflict with MMC-4. The table

should be removed and reference made to SPC-2 or SPC-3 instead.

ENDL 35

PDF pg 288, pg 228, 6.5.3.2.2 , p 1, l 2

BG [s/b] background

ENDL 36

PDF pg 288, pg 228, 6.5.3.2.2 , p 1, l 6&7

Replace '... set sense data to NOT READY, LOGICAL UNIT NOT READY, FORMAT IN PROGRESS (02/04/04)' with the SK/ASC/ASCQ wording construction used elsewhere

in this standard.

ENDL 37

PDF pg 288, pg 228, 6.5.3.2.2 , p 2, l 2

Replace '... sense data shall be set to NO SENSE, FORMAT IN PROGRESS (00/04/04)' with the SK/ASC/ASCQ wording construction used elsewhere in this

standard.

ENDL 38

PDF pg 308, pg 248, 6.8.1.4, last p, l 3

'INVALID FIELD IN CDB' [s/b] 'ILLEGAL REQUEST/INVALID FIELD IN CDB'

ENDL 39

PDF pg 314, pg 254, 6.8.2.5, p 2, l 4

For consistency with the way ASC/ASCQ information is presented in the remainder of the document delete '5/24/00'. Alternatively, add correct numeric

values to the several hundred ASC/ASCQ requirements that are currently missing

them.

ENDL 40

PDF pg 314, pg 254, 6.8.2.5, p 2, l 4

'INVALID FIELD IN CDB' [s/b] 'ILLEGAL REQUEST/INVALID FIELD IN CDB'

ENDL 41

PDF pg 315, pg 255, 6.8.2.6 , p 2, l 4

For consistency with the way ASC/ASCQ information is presented in the remainder of the document delete '5/24/00'. Alternatively, add correct numeric

values to the several hundred ASC/ASCQ requirements that are currently missing

them.

ENDL 42

PDF pg 315, pg 255, 6.8.2.6 , p 2, l 4

'INVALID FIELD IN CDB' [s/b] 'ILLEGAL REQUEST/INVALID FIELD IN CDB'

ENDL 43

PDF pg 315, pg 255, 6.8.2.6 , 5th p after table 290, l 2

Replace '5/24/00 INVALID FIELD IN CDB' with the SK/ASC/ASCQ wording construction used elsewhere in this standard.

ENDL 44

PDF pg 316, pg 256, 6.8.3, p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 45 Technical

PDF pg 317, pg 257, 6.9.1

Defining the INQUIRY CDB and parameter data formats in this standard creates

potential conflicts with SPC-2 and SPC-3, where SCSI defines the INQUIRY command. For example, the current INQUIRY CDB format allows 2 bytes for allocation length so that large VPD pages can be transferred, but this standard ignores that.

This standard should say something like: 'The CDB and parameter data formats

for the INQUIRY command are defined in SPC-2. The following exceptions apply

to the usage of the INQUIRY command by this standard: ..'

ENDL 46

PDF pg 321, pg 261, 6.9.4 , p 1, l 1

which [s/b] that

ENDL 47

PDF pg 323, pg 263, 6.10.4 , p 1, l 1

which [s/b] that

ENDL 48

PDF pg 326, pg 266, 6.11.3 , p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 49

PDF pg 329, pg 269, 6.12.3, p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 50

PDF pg 332, pg 272, 6.13.3, p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 51

PDF pg 334, pg 274, 6.14.3 , p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 52

PDF pg 336, pg 276, 6.15.2 , top of pg

What does Table F." have to do with the commands that are to be executed  
without disturbing PLAY or SCAN?

ENDL 53

PDF pg 336, pg 276, 6.15.3 , p 1, l 4

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 54

PDF pg 337, pg 277, 6.16.3 , p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 55

PDF pg 340, pg 280, 6.17.3 , p 1, l 4

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 56

PDF pg 342, pg 282, 6.18.3 , p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 57

PDF pg 345, pg 285, 6.19.3 , p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 58

PDF pg 347, pg 287, 6.20.2, numbered list

First number in list should be 1 not 5

ENDL 59

PDF pg 347, pg 287, 6.20.2, bulleted list

Change bulleted list to lettered list.

ENDL 60

PDF pg 347, pg 287, 6.20.3, p 1, 1 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 61

PDF pg 352, pg 292, 6.21.3, p 1, 1 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 62

PDF pg 355, pg 295, 6.22.3, p 1, 1 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 63

PDF pg 357, pg 297, 6.23.3, p 1, 1 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 64

PDF pg 366, pg 306, 6.24.3 , p 1, 1 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 65

PDF pg 368, pg 308, 6.25.3, p 1, 1 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 66

PDF pg 374, pg 314, 6.26.3 , p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 67

PDF pg 387, pg 327, 6.27.2.7, 2nd p after table 394, l 1

which [s/b] that

ENDL 68

PDF pg 388, pg 328, 6.27.2.8 , 3rd p after table 395, l 1

which [s/b] that

ENDL 69

PDF pg 392, pg 332, 6.27.2.11 , 1st p after table 399, l 2

which [s/b] that

ENDL 70

PDF pg 407, pg 347, 6.27.3 , p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 71

PDF pg 412, pg 352, 6.28.2.3 , table 427, format type 13h

which [s/b] that

ENDL 72

PDF pg 413, pg 353, 6.28.3 , p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 73

PDF pg 414, pg 354, 6.29.1, table 430, byte 6

Track Number (Hex) [s/b] Track Number [All binary values in CDBs are in hexadecimal.]

ENDL 74

PDF pg 420, pg 360, 6.29.3 , 1st p on pg, 1 2

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 75

PDF pg 422, pg 362, 6.30.2, table 445, bytes 2 & 3

Remove '(Hex)'. All values in data are in hexadecimal, one way or another.

ENDL 76

PDF pg 423, pg 363, 6.30.2.1, table 446, global in table

Remove '(Hex)' from three field definitions. All bytes in data are in hexadecimal, one way or another.

ENDL 77

PDF pg 426, pg 366, 6.30.2.2 , table 450, global in table

Remove '(Hex)' from three field definitions. All bytes in data are in hexadecimal, one way or another.

ENDL 78

PDF pg 428, pg 368, 6.30.2.3 , table 452, global in table

Remove '(Hex)' from three field definitions. All bytes in data are in hexadecimal, one way or another.

ENDL 79

PDF pg 436, pg 376, 6.30.3 , p 1, 1 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 80

PDF pg 447, pg 387, 6.31.3 , p 1, 1 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 81

PDF pg 447, pg 387, 6.31.4, p 1, l 1

which [s/b] that

ENDL 82

PDF pg 449, pg 389, 6.32.3, p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 83

PDF pg 457, pg 397, 6.33.3 , p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 84 Technical

PDF pg 458, pg 398, 6.34

The REQUEST SENSE command should not be defined in this standard because doing

so may conflict with definitions provided by SPC-2 or SPC-3.

ENDL 85

PDF pg 467, pg 407, 6.36.3 , p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 86

PDF pg 468, pg 408, 6.37.3, p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 87

PDF pg 473, pg 413, 6.38.2.5, p 1, l 1

Remove 'expressed in hexadecimal'. All values are in hexadecimal.  
Exceptions

should be identified, not the normal case.

ENDL 88

PDF pg 473, pg 413, 6.38.2.6, p 1, l 1



The following is not a sentence: 'The index number expressed in hexadecimal.'

Replace it with a useful description of the index field that does not mention

hexadecimal.

ENDL 89

PDF pg 478, pg 418, 6.38.3 , p 1, 1 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 90

PDF pg 486, pg 426, 6.39.6 , p 1, 1 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 91

PDF pg 490, pg 430, 6.40.3, p 1, 1 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 92

PDF pg 492, pg 432, 6.41.3 , p 1, 1 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 93

PDF pg 494, pg 434, 6.42.3, p1, 1 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 94

PDF pg 496, pg 436, 6.43.3 , p 1, 1 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 95

PDF pg 500, pg 440, 6.44.2.2, 3rd p after table 568, 1 3

Replace '5/26/00 INVALID FIELD IN PARAMETER LIST' with the SK/ASC/ASCQ

wording

construction used elsewhere in this standard.

ENDL 96

PDF pg 500, pg 440, 6.44.3, p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 97

PDF pg 502, pg 442, 6.45.2, p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 98

PDF pg 504, pg 444, 6.46.3, p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 99 Technical

PDF pg 507, pg 447, 6.48

The TEST UNIT READY command should not be defined in this standard because doing so may conflict with the definitions provided by SPC-2 or SPC-3.

ENDL 100

PDF pg 512, pg 452, 6.50.2.2, table 589

In the last two rows there are some invalid constructs (i.e., division by zero) in the form of 90/00/00 and the like. Find a way to clarify what is really meant.

ENDL 101

PDF pg 513, pg 453, 6.50.2.2, 3rd p after numbered list, l 4

Replace '1/18/05 RECOVERED DATA RECOMMEND REASSIGNMENT' with the SK/ASC/ASCQ

wording construction used elsewhere in this standard.

ENDL 102

PDF pg 513, pg 453, 6.50.3, p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 103

PDF pg 516, pg 456, 6.50.3, top of pg, p 1, l 6&7

Do not allow a line break in 2 048

ENDL 104

PDF pg 516, pg 456, 6.51.2, p 2, l 1

which [s/b] that

ENDL 105

PDF pg 516, pg 456, 6.51.3, p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 106

PDF pg 519, pg 459, 6.52.2, 2nd p on pg, l 2

which [s/b] that

ENDL 107

PDF pg 522, pg 462, 6.53.2.6, 2nd p on pg, l 3

Replace '5/2C/00 COMMAND SEQUENCE ERROR' with the SK/ASC/ASCQ wording construction used elsewhere in this standard.

ENDL 108

PDF pg 522, pg 462, 6.53.2.7, p 1, l 5

Replace '5/2C/00 COMMAND SEQUENCE ERROR' with the SK/ASC/ASCQ wording construction used elsewhere in this standard.

ENDL 109

PDF pg 522, pg 462, 6.53.2.7, p 5, l 5

Replace '5/24/00 INVALID FIELD IN CDB' with the SK/ASC/ASCQ wording

construction used elsewhere in this standard.

ENDL 110

PDF pg 522, pg 462, 6.53.2.7, p 6, l 4

Replace '5/24/00 INVALID FIELD IN CDB' with the SK/ASC/ASCQ wording construction used elsewhere in this standard.

ENDL 111

PDF pg 522, pg 462, 6.53.2.7, p 7, l 6&7

Replace '5/24/00 INVALID FIELD IN CDB' with the SK/ASC/ASCQ wording construction used elsewhere in this standard.

ENDL 112

PDF pg 523, pg 463, 6.53.2.8, 1st p on pg, l 1

Replace '5/2C/00 COMMAND SEQUENCE ERROR' with the SK/ASC/ASCQ wording construction used elsewhere in this standard.

ENDL 113

PDF pg 523, pg 463, 6.53.2.8, 4th p on pg, l 7&8

Replace '... set the additional sense code to MICROCODE HAS BEEN CHANGED' with the SK/ASC/ASCQ wording construction used elsewhere in this standard.

ENDL 114

PDF pg 523, pg 463, 6.53.2.8, 5th p on pg, l 8

Replace '5/24/00 INVALID FIELD IN CDB' with the SK/ASC/ASCQ wording construction used elsewhere in this standard.

ENDL 115

PDF pg 523, pg 463, 6.53.2.8, 6th p on pg, l 3

Replace '5/24/00 INVALID FIELD IN CDB' with the SK/ASC/ASCQ wording construction used elsewhere in this standard.

ENDL 116

PDF pg 523, pg 463, 6.53.2.8, 7th p on pg, l 6&7

Replace '5/24/00 INVALID FIELD IN CDB' with the SK/ASC/ASCQ wording construction used elsewhere in this standard.

ENDL 117

PDF pg 523, pg 463, 6.53.3, p 1, l 3

INSUFFICIENT TIME FOR EXECUTION [s/b] INSUFFICIENT TIME FOR OPERATION

ENDL 118

PDF pg 523, pg 463, 6.53.4, p 1, l 1

which [s/b] that

ENDL 119

PDF pg 532, pg 472, 7.2.4.9, table 607, codes 00h, 10h

which [s/b] that [twice]

ENDL 120

PDF pg 533, pg 473, 7.2.6.1.1, last p in subclause, l 1

'...block which could...' [s/b] '...block that could...'

ENDL 121

PDF pg 534, pg 474, 7.3.4, p 4 l 1

which [s/b] that

ENDL 122

PDF pg 536, pg 476, 7.4.3, table 612, byte 1

Does '32h/36h' mean 32h divided by 36h? If not, '32h or 36h' would be clearer.

ENDL 123

PDF pg 557, pg 497, C.1.7, p 1, l 1  
which [s/b] that

ENDL 124

PDF pg 557, pg 497, C.1.9, p 1, l 3  
which [s/b] that

ENDL 125

PDF pg 559, pg 499, C.2.2 , 1st l on pg  
which [s/b] that

ENDL 126

PDF pg 559, pg 499, C.3.1 , p 1, l 3  
which [s/b] that

ENDL 127

PDF pg 560, pg 500, C.3.2 , p 1, l 3  
which [s/b] that

ENDL 128

PDF pg 564, pg 504, D.2.1, p 1, l 2  
which [s/b] that

ENDL 129

PDF pg 565, pg 505, D.2.6, 2nd bullet  
which [s/b] that

ENDL 130

PDF pg 566, pg 506, D.2.9, p 1, l 1  
which [s/b] that

ENDL 131

PDF pg 573, pg 513, D.5.1, p 1, l 1

which [s/b] that

ENDL 132

PDF pg 573, pg 513, D.5.3, p 1, l 3&4

'The Initiator ignores any data received beyond that which is relevant.'

[s/b] 'The initiator ignores any data beyond the number of bytes specified by

the dCSWDataResidue field.'

ENDL 133

PDF pg 587, pg 527, E.3.3 , table E.21, bytes 2&3

Either define the meaning of the small square before 'bytes/sec' in the conventions subclause or remove it from this table.

ENDL 134 Technical

PDF pg 588, pg 528, F.3

Add the following paragraph to this subclause: 'The ASC and ASCQ values in this subclause duplicate information found in SPC-2. In the event there is a

conflict between the ASC/ASCQ values in this standard and the ASC/ASCQ values

in SPC-3, the values in SPC-3 shall prevail.

ENDL 135 Technical

PDF pg 590, pg 530, F.3, table F.3

CANNOT WRITE MEDIUM - UNSUPPORTED MEDIUM VERSION is not defined in SPC-2 or

SPC-3. Therefore, usage of this ASC/ASCQ is not coordinated with other SCSI standards.

ENDL 136 Technical

PDF pg 594, pg 534, F.3, table F.7

MEDIUM NOT FORMATTED is not defined in SPC-2 or SPC-3. Therefore, usage of

this ASC/ASCQ is not coordinated with other SCSI standards.

ENDL 137 Technical

PDF pg 596, pg 536, F.3, table F.9

MMC-4 Does not support Persistent Reservations and therefore should not be using INVALID RELEASE OF ACTIVE PERSISTENT RESERVATION, a Persistent Reservations ASC/ASCQ.

ENDL 138

PDF pg 625, pg 565, J.1.4 , 3rd bullet after table J.10  
which [s/b] that

ENDL 139

PDF pg 626, pg 566, J.1.4.1.2, p 1, l 2  
which [s/b] that

ENDL 140

PDF pg 627, pg 567, J.1.4.3.5  
Heading 7.9.9.1.1 should not appear between J.1.4.3.5 and J.1.4.4.

ENDL 141

PDF pg 627, pg 567, J.1.4.3.5, Misplaced heading 7.9.9.1.1  
which [s/b] that

ENDL 142

PDF pg 630, pg 570, J.2.1 , table j.11, r 15, c 4  
Does '251120h/221120h' mean 251120h divided by 221120h? If not, maybe '251120h through 221120h' would be clearer.

ENDL 143

PDF pg 630, pg 570, J.2.1 , table j.11, r 15, c 5



Does '61 440 / 258 048' mean '61 440 divided by 258 048? If not, maybe '61 440

through 258 048' would be clearer.

ENDL 144

PDF pg 631, pg 571, J.2.3.1.3, heading text

which [s/b] that

ENDL 145 TECHNICAL

PDF pg 341-343, pg 281-283, 6.18

Resolve the problem described in 04-127r0.

\*\*\*\*\*

Comments attached to No ballot from Rob Elliott of Hewlett Packard Co.:

HPQ #1  
PDF Page 17  
ANSI cover page  
Add space in "InformationTechnology"

HPQ #2  
PDF Page xxi  
Table of contents  
Fix row after D.3 that contains garbage

HPQ #3  
PDF Page 1  
1 Scope  
Change "Device Type 5 devices" to "devices with a peripheral device type set to 5"

HPQ #4  
PDF Page 1  
1 Scope  
It's fair to redefine commands that SBC-2 also uses, since opcode definitions are device-type specific. Tape drives and disk drives, for example, both have READs which are very different. It is a very bad idea to redefine SPC-3 commands, though. It leads to inconsistencies, which should not be tolerated in simple commands like INQUIRY. A reader of MMC-4 should always have SPC-3 and SAM-3 on hand. At most, you could create a "profile" for those commands listing which features a typical MMC device implements. Point to SPC-3 for the meaning of each identified feature.

HPQ #5  
PDF Page 3  
2.1 Normative references  
Fix

"  
Table F.~  
Table F.~ Table F.~  
"

HPQ #6  
PDF Page 3  
2.1.1 Approved references  
"120 mm 4.7GB and 80 mm 1.46 GB DVD ReWritable Disc (DVD-RAM)" should be  
"120 mm (4,7 Gbytes per side) and 80 mm (1,46 Gbytes per side) DVD  
Rewritable Disk (DVD-RAM)"

HPQ #7  
PDF Page 3  
2.1.1 Approved references  
"120 mm 4.7GB and 80 mm 1.46 GB DVD ReWritable Disc (DVD+RW)" should be  
"120 mm (4,7 Gbytes per side) and 80 mm (1,46 Gbytes per side) DVD  
Rewritable Disk (DVD-RAM)"

HPQ #8  
PDF Page 3  
2.1.1 Approved references  
"120 mm 4.7GB and 80 mm 1.46 GB DVD ReWritable Disc (DVD-RW)" should be  
"80 mm (1,46 Gbytes per side) and 120 mm (4,70 Gbytes per side) DVD  
Re-recordable Disk (DVD-RW)"

HPQ #9  
PDF Page 3  
2.1.1 Approved references  
"ANSI/ISO/IEC 16449 80mm DVD Read-Only-Media"  
should be "ISO/IEC 16449:2002, Information technology - 80 mm DVD -  
Read-only disk"  
(maybe without the Information Technology part)

HPQ #10  
PDF Page 3  
2.1.1 Approved references  
"120mm DVD Read-Only-Media" should be "ISO/IEC 16448:2002: Information  
technology -- 120 mm DVD -- Read-only disk"  
(maybe without the Information Technology part)

HPQ #11  
PDF Page 3  
2.1.1 Approved references  
"ISO/IEC 16824 120 mm DVD ReWritable Disc"  
should be "ISO/IEC 16824:1999 Information technology -- 120 mm DVD  
rewritable disk "  
(maybe without the Information Technology part)

HPQ #12  
PDF Page 3  
2.1.1 Approved References  
ANSI/ISO/IEC 10149  
should be "ISO/IEC 10149:1995"

HPQ #13  
PDF Page 3  
2.1.1 Approved References  
ISO/IEC 3901  
should be ISO 3901:2001

HPQ #14  
PDF Page 3  
2.1.1 Approved References

If needed, point to SPI-5 not SPI-3

HPQ #15

PDF Page 4

2.2 Other References

add web site [www.dvdforum.org](http://www.dvdforum.org) and other contact info for DVD Forum.

HPQ #16

PDF Page 4

2.2 Other References

Any contact information for obtaining these Philips specs?

HPQ #17

PDF Page 4

2.1.2 References under development

The ATA/ATAPI-7 reference covers Serial ATA. No need to reference

"T13/e03104r0 Serial ATA: High Speed Serialized AT Attachment"

HPQ #18

PDF Page 4

2.2 Other references

Fix "Memory ~bytes~n Architecture"

HPQ #19

PDF Page 4

2.2 Other References

Add the book names and version numbers for all of these:

DVD-ROM, DVD-Video, DVD-Audio

DVD-R, DVD-R for General, DVD-R for Authoring

DVD-RAM (2.6G), DVD-RAM (4.7G)

DVD-RW

DVD-VR

HPQ #20

PDF Page 5

2.2 Other references

If it's an SFF document, [sffcommittee.org](http://sffcommittee.org) is the appropriate source.

Identify it by name INF-8090 Information Specification for

ATAPI DVD Devices Rev 5.5 June 5, 2003

HPQ #21

PDF Page 5

2.2 Other References

T10/00-361R2 does not exist on the T10 web site. 00-361r0 is the only

document with that number posted, called "Mount Fuji

Version 5, Draft 0.9" (see other comment that this should point to

[sffcommittee.org](http://sffcommittee.org) anyway)

HPQ #22

PDF Page 5

2.2 Other references

[www.osta.org](http://www.osta.org) has a Revision 2.50 posted. Is it necessary to list any but

the most recent version?

HPQ #23

PDF Page 5

2.2 Other References

add Revision 1.0

September 31, 1999

HPQ #24

PDF Page 5

2.2 Other References

2000, should not end with a ,

HPQ #25

PDF Page 5

2.2 Other references

Add web site <http://www.dvdrw.com/> for the DVD+RW Alliance and other contact information

HPQ #26

PDF Page 7

3.1.6 ATA

Point to ATA/ATAPI-7.

HPQ #27

PDF Page 7

3.1.7 ATAPI

Point to ATA/ATAPI-7

HPQ #28

PDF Page 12

3.1.79 Logical Block

Delete blank line (or correct formatting) after this row.

HPQ #29

PDF Page 15

3.1.119 Sector

Change "IEC/ISO 10149" to "ISO/IEC 10149"

HPQ #30

PDF Page 16

3.1.137 Yellow book

Delete "3.1.137 Yellow book: ANSI/ISO/IEC 10149, Information Technology-Data Interchange on Read-only 120 mm Optical Data Discs (CD-ROM). "

The references section documents the Yellow book as being a Philips spec.

Is it the Philips spec or the ISO/IEC version? If the

ISO/IEC, change "ANSI/ISO/IEC 10149" to "ISO/IEC 10149" and move the Yellow book acronym in 2.2.

However, given that "Red book" and "Green book" are not defined, there seems little need to define Yellow here. Just delete this definition.

HPQ #31

PDF Page 17

3.2 Abbreviations

Add DVD-R/-RW a DVD-R, a DVD-RW, or both

HPQ #32

PDF Page 17

3.2 Abbreviations

Change media0 to media)

HPQ #33

PDF Page 17

3.2 Abbreviations

Add:

DVD+R/+RW a DVD+R, a DVD+RW, or both

HPQ #34

PDF Page 18

3.3.2 legacy

"Legacy methods shall appear in the main body of this or subsequent standards.

Legacy methods shall be documented in an informative annex of this or

subsequent standards until deemed obsolete. " seem to contradict each other. Are legacy methods in the main body or in informative annexes? Should the first sentence be a "shall not"?

HPQ #35

PDF Page 18

3.3.2 legacy

"shall"s are not normally placed on standards editors. Just say "methods appear" and "methods are documented in"

HPQ #36

PDF Page 19

3.4 Conventions

SCSI standards use 1)2)3) for ordered lists and a)b)c) for unordered lists. ATA uses the opposite. Add a convention describing what MMC-4 has chosen which appears to be a mix of bullets and numbers all for unordered lists

HPQ #37

PDF Page 19

3.4 Conventions

Add ISO numbering convention about , as decimal point and space every 3 digits

HPQ #38

PDF Page 19

3.4 Conventions

What does G mean in this standard: 1000000, 1024\*1000, or 1024\*1024? GB is used several times

HPQ #39

PDF Page 21

4.1 General Characteristics

Check the format of this line; something made the Acrobat bookmark blank.

HPQ #40

PDF Page 21

4.1 General Characteristics

Move "hanging paragraphs" into a new 4.1.1

HPQ #41

PDF Page 22

4.1.2 Logical BLocks

Change WRITE PARAMETERS to Write Parameters

HPQ #42

PDF Page 23

4.1.5 Resets

Fix bullets that appear as

Table F.~

Table F.~

Table F.~

HPQ #43

PDF Page 32

4.1.9 Power Management

Change "Power Condition page" to "Power Condition mode page (see SPC-3)".

HPQ #44

PDF Page 32

4.1.9 Power Management

Change commands to command's

HPQ #45  
PDF Page 32  
4.1.9 Power Management  
Change "power condition  
page's" to "Power Condition mode page's"

HPQ #46  
PDF Page 32  
4.1.9 Power Management  
Delete "See the START STOP UNIT command description (6.45) and the MODE  
SELECT power condition page description (7.7) for more information. "  
and add a cross references to the first use of START STOP UNIT and Power  
Condition mode page in this paragraph.

HPQ #47  
PDF Page 32  
4.1.9 Power Management  
Stopped should be included in the power conditions. See SBC-2 for an  
example.

HPQ #48  
PDF Page 33  
4.2 CD Model  
Move hanging paragraph into a new 4.2.1

HPQ #49  
PDF Page 37  
4.2.3.2  
Fix bullets

HPQ #50  
PDF Page 41  
4.2.3.6.3  
Fix (See )

HPQ #51  
PDF Page 55  
4.3 DDCD model  
Fix "Table F.. reduction of the track pitch (x 1.45)  
Table F.. reduced minimum pit size (x 1.33)  
Table 26 . Realization of higher den"

HPQ #52  
PDF Page 55  
4.3 DDCD Model  
Move hanging paragraphs into a new 4.3.1

HPQ #53  
PDF Page 59  
4.3.1.6  
Fix item 8

HPQ #54  
PDF Page 59  
4.3.1.7  
Fix bullets

HPQ #55  
PDF Page 61  
4.3.1.11  
Fix bullets that appear as  
Table F.~  
Table F.~  
Table F.~

Table F.~  
Table F.~

HPQ #56  
PDF Page 63  
4.4 DVD Model  
Move hanging paragraphs into a new 4.4.1

HPQ #57  
PDF Page 63  
4.4 DVD Model  
After Alliance add a :

HPQ #58  
PDF Page 63  
4.4 DVD Model  
A DVD Logical Unit may be capable of reading CD-ROM.  
They may also be able to read CD-R and CD-RW, which seem to be different terms than CD-ROM in this standard

HPQ #59  
PDF Page 63  
4.4.1  
Fix "as shown in . "

HPQ #60  
PDF Page 64  
4.4.1.1  
Change 1-4 list to an a)-d) list since it is unordered.

HPQ #61  
PDF Page 64  
4.4.1.1 Track structure  
Change Lead-out start to Lead-out start address

HPQ #62  
PDF Page 64  
4.4.1.1 Track structure  
Change Lead-out start to Lead-out start address

HPQ #63  
PDF Page 64  
4.4.1.1 Track structure  
Change Lead-out start to Lead-out start address

HPQ #64  
PDF Page 65  
4.4.1.2 ECC Blocks  
PSN is used here without any introduction. Introduce "Physical Sector Number (PSN)" in one of the preceding sentences, or just use the generic sector term here.  
The definition could be moved from 4.4.1.2.1 to here. Since PSN is not really part of "the structure of the data sector" its intro text is misplaced.

HPQ #65  
PDF Page 65  
4.4.1.2  
Change ", apply" to "and apply"  
The sentence structure is "must read ... and apply .. prior to extracting"

HPQ #66  
PDF Page 65  
4.4.1.2.1 The Structure of the Data Sector

Change "2 064 bytes, 2 048 bytes" to "2 064 bytes, containing 2 048 bytes"

HPQ #67  
PDF Page 65  
4.4.1.2.1  
after sector add .

HPQ #68  
PDF Page 65  
4.4.1.2.1  
Figure 28  
Change 2048 to 2 048 to follow the awful ISO style

HPQ #69  
PDF Page 66  
4.4.1.2.1  
Move "Physical Sector Number (PSN) The least significant 24 bits (bits 23 through 0) contains the PSN in binary notation. The PSN of the first Physical Sector of an ECC Block shall be an integral multiple of 16. In the data zone, the translation of LBA to PSN varies according to media" into the previous section. PSN is not part of the strucutre itself.

HPQ #70  
PDF Page 66  
4.4.1.2.2  
"When 16 sequential sectors are packed in this way and there are 192 rows, each with 172 bytes. " lacks a verb. "When ..., <what happens?>"

HPQ #71  
PDF Page 68  
4.4.1.3 Lead-in Area  
Convert Disc Size into a table, showing all other values are reserved. Get rid of the yellow highlighted text.

HPQ #72  
PDF Page 68  
4.4.1.3 Lead-in Area  
Convert Boot Type values into a table

HPQ #73  
PDF Page 68  
4.4.1.3 Lead-in area  
Delete blank line after Medium Unique Data and before Disc Manufacturing information.

HPQ #74  
PDF Page 68  
4.4.1.3 Lead-in Area  
After "The Disc Manufacturing Information add "sector" to distinguish it from the fields above.

HPQ #75  
PDF Page 68  
4.4.1.3 Lead-in area  
Add a sentence introducing the Physical Format Information sector and table 33.

HPQ #76  
PDF Page 69  
4.4.2.1 Track Structure  
Use consistent , or not on the bullet list

HPQ #77



PDF Page 69

4.4.2 DVD-ROM/DVD Video

What is "DVD Video"? An alternative name for DVD-ROM, or a sub type? It's not in the definitions list. Should it be "DVD-Video" or "DVD Video" (the former is used a few times in the standard)

HPQ #78

PDF Page 70

4.4.2.3 The Lead-in

Table 35

Move 000000h up to match format of rest of table

HPQ #79

PDF Page 74

4.4.4.2 Sector Structure

Get rid of yellow highlighting

HPQ #80

PDF Page 74

4.4.4.1

Use ISO format for "3.95 and 4.7 GB"

HPQ #81

PDF Page 75

4.4.4.3 The Lead-in

Table 41

Get rid of yellow highlighting

HPQ #82

PDF Page 78

4.4.4.3.3 Extra Border Zone

Fix cross reference in

"is shown in

Figure 35. "

HPQ #83

PDF Page 79

4.4.4.4.1 Rzone Description

Fix bullets

HPQ #84

PDF Page 80

4.4.5.1 Track Structure

Change all the GB numbers to ISO format with , as decimal point

HPQ #85

PDF Page 85

4.4.5.2.2

Fix indents of the Logical Track Number equation

HPQ #86

PDF Page 87

4.4.6.1.2 Logical Structure

Use ISO format for numbers in "The DVD+RW 120-mm one-sided disc has 4.70GB available to the user, while the two-sided disc has 9.40GB. The DVD+RW 80-mm one-sided disc has 1.46GB available to the user, while the two-sided disc has 2.92GB. "

HPQ #87

PDF Page 94

4.6.2.1 Persistent-DM mode

Is "may not" intended here?

HPQ #88  
PDF Page 112  
4.8.6 WDCB  
Fix "see 0"

HPQ #89  
PDF Page 117  
4.9.4 Delayed Disc load operation (and global)  
These command names should be all-caps. There are quite a few tables here  
and in the profiles with this problem.

HPQ #90  
PDF Page 117  
4.9.4 Delayed Disc load operation  
Is "may not" intended here?

HPQ #91  
PDF Page 119  
5.2 FEATURES  
Change FEATURES to Features

HPQ #92  
PDF Page 120  
5.2.2 Persistent Bit  
Change NOT to not

HPQ #93  
PDF Page 120  
5.2.3 Current Bit  
Change NOT to not

HPQ #94  
PDF Page 123  
5.3 Feature Definitions  
Move "hanging paragraph" into a new 5.4.1 Feature Definitions Overview

HPQ #95  
PDF Page 126  
Table 78 - Physical Interface Standard  
What are these referencing?  
"See SCSI implementation  
See ATAPI implementation  
See 1394 implementation  
See 1394 implementation  
See Fibre Channel (FCP)  
Implementation  
See 1394 implementation  
See ATAPI implementation  
See USB implementation "

HPQ #96  
PDF Page 126  
Table 78  
Does "SCSI Family" really mean Parallel SCSI?

HPQ #97  
PDF Page 126  
Table 78  
If this table is listing low-level interconnects, it should have:  
Parallel SCSI  
Parallel ATA  
Serial ATA  
IEEE 1394  
Fibre Channel

etc.

If this is listing SCSI transport protocols, it should have:

Parallel SCSI

ATAPI over Parallel ATA or Serial ATA

SBP-3 over 1394

FCP-3 over Fibre Channel

etc.

Right now it is an unclear mix.

HPQ #98

PDF Page 133

5.3.7 Multi-Read Feature

Table 90

Beh should be BEh

HPQ #99

PDF Page 134

5.3.8 CD Read Feature

Table 92

Beh should be BEh

HPQ #100

PDF Page 135

5.3.9 DVD Read Feature

18h should be 28h for READ (10)

HPQ #101

PDF Page 135

5.3.9 DVD Read Feature

Change "READ(10)" to "READ (10)" and "READ(12)" to "READ (12)"

HPQ #102

PDF Page 136

5.3.10 Random Writable Feature

Is "may not" intended here or "shall not"?

HPQ #103

PDF Page 141

5.3.13 Formattable Feature

Change "VERIFY(10)" to "VERIFY (10)"

HPQ #104

PDF Page 143

5.3.15 Write Once Feature

Is "may not" intended here or "shall not"?

HPQ #105

PDF Page 143

5.3.15 Write Once Feature

Table 109

Change "WRITE(10)" to "WRITE (10)"

HPQ #106

PDF Page 169

5.3.32 Embedded Changer Feature

capitalize Mechanism Status

HPQ #107

PDF Page 179

5.3.40 Feature 010Ah: Disc Control Blocks

Format like the other 5.3.x sections: Disc Control Blocks Feature (010Ah)

HPQ #108

PDF Page 180

5.3.41 Feature 010Bh: DVD CPRM  
Format like the other 5.3.x sections: DVD CPRM Feature (010Bh)

HPQ #109  
PDF Page 181

5.3.42 Feature 010Ch: Firmware Information  
Format like the other 5.3.x sections: Firmware Information Feature (010Ch)

HPQ #110  
PDF Page 183  
5.4.1 Profile 0000h

Change "may be" to "is" - there's no option here.

HPQ #111  
PDF Page 183  
5.4.x

Use 00nnh or just nnh consistently for profile numbers

HPQ #112  
PDF Page 183

5.4 Profile Definitions

Move "hanging paragraphs" into a new 5.4.1 Profile Definitions Overview

HPQ #113  
PDF Page 184

5.4.2 Profile 1h

Use 1h or 0001h rather than just 1 consistently

HPQ #114  
PDF Page 185

5.4.3 Profile 2h

Use 2h or 0002h rather than just 2 consistently

HPQ #115  
PDF Page 186

5.4.4 Profile 3h

Use 3h or 0003h rather than just 3 consistently

HPQ #116  
PDF Page 187

5.4.5 Profile 4h

Use 4h or 0004h rather than just 4 consistently

HPQ #117  
PDF Page 188

5.4.6 Profile 5h

Use 5h or 0005h rather than just 5 consistently

HPQ #118  
PDF Page 189

5.4.7 Profile 8h

Use 8h or 0008h rather than just 8 consistently

HPQ #119  
PDF Page 190

5.4.8 Profile 9h

Use 9h or 0009h rather than just 9 consistently

HPQ #120  
PDF Page 190

5.4.8 Profile 9h

"Ability to notify Initiator about operational changes and accept Initiator requests to prevent operational changes "  
does not match the Morphing description in other tables in 5.4.x

HPQ #121  
PDF Page 198  
5.4.15 Profile 1Ah: DVD+RW  
consistently use either 001Ah or 1Ah

HPQ #122  
PDF Page 199  
5.4.15 Profile 1Bh: DVD+R  
consistently use either 001Bh or 1Bh

HPQ #123  
PDF Page 199  
5.4.17 Profile 1Bh  
"The device changes its operational behavior due to events external to the Initiator "  
does not exactly match the Morphing description in other tables in 5.4.x

HPQ #124  
PDF Page 201  
5.4.18 Profile 21h: DDCD-R  
Profile 20h should be 21h

HPQ #125  
PDF Page 202  
5.4.19 Profile 22h: DDCR-RW  
Profile 20h should be 22h

HPQ #126  
PDF Page 205  
6.1 Overview  
"SCSI Block Commands" should not be referenced by MMC-4

HPQ #127  
PDF Page 205  
6.1 Overview  
Refer to "SCSI Primary Commands" by its acronym SPC-3 since an acronym is defined

HPQ #128  
PDF Page 205  
6.1 Overview  
Table 212  
Change Ach to ACh

HPQ #129  
PDF Page 205  
6.1 Overview  
Table 212  
Change Bah to BAh

HPQ #130  
PDF Page 205  
6.1 Overview  
Table 212  
Beh to BEh  
6.1 Overview  
Table 212  
0 is a broken reference

HPQ #132  
PDF Page 206  
Table 213  
Change Ach to ACh

HPQ #133  
PDF Page 206  
Table 213  
Change Bah to BAh

HPQ #134  
PDF Page 206  
Table 213  
Change Beh to BEh

HPQ #135  
PDF Page 216  
6.4.1.3 RelAdr  
Multi-media devices do not support relative addressing. RelAdr shall be set to zero. If RelAdr is set to one, the command shall be terminated with CHECK CONDITION status and SK/ASC/ASCQ shall be set to to ILLEGAL REQUEST/INVALID FIELD IN CDB. Just label it Obsolete.

HPQ #136  
PDF Page 220  
6.5.2.1  
Change may not to shall not

HPQ #137  
PDF Page 224  
6.5.2.3.7 Format Type = 12h  
Change "or set to" to "or is set to the"

HPQ #138  
PDF Page 228  
6.5.3.2.3 Stopping and Restarting  
Change "SCSI command block" to "command"

HPQ #139  
PDF Page 257  
6.9.1.1 CmdDt  
"The command support data bit (CmdDt) is not supported by MM Logical Units. If this bit is set to one, the MM Logical Unit shall terminate this command with CHECK CONDITION status and set SK/ASC/ASCQ values to ILLEGAL REQUEST/ INVALID FIELD IN CDB. "  
This field is obsolete in SPC-3. By referring to the old definition, you are creating more confusion than helping.

HPQ #140  
PDF Page 257  
6.9 INQUIRY Command  
This command is owned by SPC-3 and should not be duplicated here.

HPQ #141  
PDF Page 259  
6.9.2.3 Version  
Change "attached via the ATA-PI" to "attached via an ATAPI target port"

HPQ #142  
PDF Page 259  
6.9.2.3  
"The Version field indicates the implemented version of this standard." is wrong. It implements the version of SPC-3 that is being followed.  
This whole command shouldn't be documented here. ATAPI devices should be

allowed to put 2h for SCSI, 3h for SPC-1, 4h for SPC-2, or 5h for SPC-3 like SPC defines.

HPQ #143

PDF Page 259

6.9.2.3 Version

"MM Logical Units attached via the SCSI shall report 04h."

"The SCSI" is weird. Limiting this rule to parallel SCSI doesn't make any sense. Applying this to all SCSI transport protocols doesn't make sense; this is the SPC version field, MMC-4 shouldn't care about its contents.

HPQ #144

PDF Page 259

6.9.2.4

"For ATAPI and

USB, this field shall have the value 0011b. "

This means that generic SCSI software will think ATAPI MMC devices support AutoContingent Allegiance and hierarchical LUN addressing.

A PROFILE could mention that ATAPI MMC-4 devices tend to set this to 0000b.

HPQ #145

PDF Page 259

6.9.2.5 Response Data Format

"A Response Data Format field value of two indicates that the data shall be in the format specified in this standard. "

No, it means it follows the format in SPC-n, not MMC-4.

HPQ #146

PDF Page 259

6.9.2.6

"theAllocation"

Add space

HPQ #147

PDF Page 259

6.9.2.7 Interface Dependent Field #2

"Interface Dependent Field #2 is defined differently based upon the actual interface. For SCSI, the definition of the bits within this field are given in ANSI NCITS.351:2001 (SPC-2). For ATAPI and USB, this field shall have the value 00h. "

A PROFILE could say that an ATAPI and USB MMC-4 device typically sets these bits to 00h.

HPQ #148

PDF Page 259

6.9.2.9 Interface Dependent Field #4

"Interface Dependent Field #4 is defined differently based upon the actual interface. For SCSI, the definition of the bits within this field are given in ANSI NCITS.351:2001 (SPC-2). For ATAPI and USB, this field shall have the value 00h. "

A PROFILE could say they're typical 00h for MMC-4 on ATAPI and USB.

HPQ #149

PDF Page 259

6.9.2.8 Interface Dependent Field #3

"Interface Dependent Field #3 is defined differently based upon the actual interface. For SCSI, the definition of the bits within this field are given in ANSI NCITS.351:2001 (SPC-2). For ATAPI and USB, this field shall have the value 00h. "

A PROFILE could say they're typical 00h for MMC-4 on ATAPI and USB.

HPQ #150

PDF Page 259

6.9.2.9

Could an ATAPI or USB device set BQUE=1 and CMDQUE=0 supporting only basic queuing? Or do they have no tags and no queuing at all?

HPQ #151

PDF Page 260

6.9.2.14 Version Descriptor

It is ridiculous not to point to SPC-3 for these values.

HPQ #152

PDF Page 273

6.14.1 The CDB and Its Parameters

Merge "Reserved Reserved " byte 1 into one "Reserved"

HPQ #153

PDF Page 275

6.15.1.1 RelAdr

The RelAdr bit shall be set to zero. Mmdevices do not support relative addressing.

Just label it Obsolete.

HPQ #154

PDF Page 277

6.16.1

Table 323

RelADR bit

Just label it Obsolete.

HPQ #155

PDF Page 279

6.17.1 The CDB and its Parameters

Merge byte 1 "Reserved Reserved" into one "Reserved"

HPQ #156

PDF Page 281

6.18 PREVENT ALLOW MEDIUM REMOVAL Command

This command is owned by SPC-3 and should not be duplicated here.

HPQ #157

PDF Page 284

6.19.1.3 RelAdr

The Relative Address (RelAdr) bit is not used by MM Logical Units and shall be set to zero.

Just label it Obsolete.

HPQ #158

PDF Page 284

6.19.1.1 DPO

The Disable Page Out (DPO) bit is not used by MM Logical Units and shall be set to zero.

Label it "Restricted for SBC-2"

HPQ #159

PDF Page 286

6.20.1.3 RelAdr

The Relative Address (RELADR) bit is not used by MM Logical Units and shall be set to zero. "

Just label it Obsolete.

HPQ #160

PDF Page 286



## 6.20.1.1 DPO

The Disable Page Out (DPO) bit is not used by MM Logical Units and shall be set to zero.

Label it "Restricted for SBC-2"

## HPQ #161

PDF Page 289

## 6.21 READ BUFFER Command

This command is owned by SPC-3 and should not be duplicated here.

## HPQ #162

PDF Page 291

## 6.21.2.4

Fix "as shown in . "

## HPQ #163

PDF Page 296

## 6.23.1.1 RelAdr

The RelAdr field is not used by MM Logical Units and shall be set to zero. Just label it Obsolete.

## HPQ #164

PDF Page 296

## 6.23.1.2 Logical Block Address

The Logical Block Address field is not used by MM Logical Units and shall be set to zero.

Label it "Restricted for SBC-2"

## HPQ #165

PDF Page 296

## 6.23.1.3 PMI

The PMI field is not used by MM Logical Units and shall be set to zero. Label it "Restricted for SBC-2"

## HPQ #166

PDF Page 300

## 6.24.1.3 RelAdr

The RelAdr bit is not used by MM Logical Units and shall be set to zero. Just label it Obsolete.

## HPQ #167

PDF Page 339

## 6.27.2.19 Format Code 30h

Use standard text not italics

## HPQ #168

PDF Page 351

## 6.28.2.3 Formatted Capacity Descriptors

Is "may not" correct here?

## HPQ #169

PDF Page 395

## 6.33.2.5

Add . after 000101b

## HPQ #170

PDF Page 398

## 6.34 REQUEST SENSE Command

This command is owned by SPC-3 and should not be duplicated here.

## HPQ #171

PDF Page 400

## 6.34.2.6 Sense Key

Table 495 - Sense Key Descriptions

"  
Table F.~  
Table F.~  
Table F.~  
Table F.~  
" looks like a broken a)b)c)d) list  
Fix (or delete this whole command description)

HPQ #172  
PDF Page 406  
6.36.1.2 RelAdr  
The RelAdr bit is not used by MM devices and shall be set to zero.  
Just label it Obsolete.

HPQ #173  
PDF Page 433  
6.42.1  
Table 555  
Fix special character before bytes/sec

HPQ #174  
PDF Page 445  
6.47.1.2 RelAdr  
RelAdr (Relative Address) is not used by MM Logical Units and shall be set to zero.  
Just label it Obsolete.

HPQ #175  
PDF Page 445  
6.47.1.3 Logical Block Address  
The Logical Unit may ignore the Logical Block Address field.  
What if it doesn't?  
Either change to "Restricted for SBC-2" or import the definition.

HPQ #176  
PDF Page 445  
6.47.1.4 Number of Blocks  
The Logical Unit may ignore the Number of Blocks field.  
What if it doesn't? Change to "Restricted for SBC-2" or import the definition.

HPQ #177  
PDF Page 447  
6.48 TEST UNIT READY Command  
This command is owned by SPC-3 and should not be duplicated here.  
Leave the Timeout section since that is MMC-4 specific.

HPQ #178  
PDF Page 448  
6.49.1.3 RelAdr  
RelAdr (Relative Address) is not used by MM Logical Units and shall be set to zero.  
Just label it Obsolete.

HPQ #179  
PDF Page 448  
6.49.1.1 DPO  
Disable Page Out (DPO) is not used by MM Logical Units and shall be set to zero.  
Label it "Restricted for SBC-2"

HPQ #180  
PDF Page 448  
6.49.1.2 BytChk

BytChk (Byte Check) is not used by MM Logical Units and shall be set to zero.  
Label it "Restricted for SBC-2"

HPQ #181  
PDF Page 450  
6.50.1.1 DPO  
Disable Page Out (DPO) is not used by MM Logical Units and shall be set to zero.  
Label it "Restricted for SBC-2"

HPQ #182  
PDF Page 451  
6.50.1.3 RelAdr  
RelAdr (Relative Address) is not used by MM Logical Units and shall be set to zero.  
Just label it Obsolete.

HPQ #183  
PDF Page 453  
6.50.2.2 CD-R/-RW . SAO Raw, DVD-R/-RW . DAO, Incremental SCSI

HPQ #184  
PDF Page 460  
6.53 WRITE BUFFER COMMAND  
Change COMMAND to Command

HPQ #185  
PDF Page 460  
6.53 WRITE BUFFER  
This command is owned by SPC-3 and should not be duplicated here.

HPQ #186  
PDF Page 464  
7.1 Mode Parameter List Format  
Change pages to mode pages

HPQ #187  
PDF Page 464  
7.1 Mode Parameter List Format  
Change Pages to Mode pages

HPQ #188  
PDF Page 465  
7.1.2 Mode Pages and Global  
Change all bare "page", "Page", and "Mode Page" to "mode page". The SCSI convention is mixed case for the name then lowercase "mode page." Always including mode helps distinguish from log pages and diagnostic pages.

HPQ #189  
PDF Page 465  
7.1.3 Mode page format (and elsewhere)  
byte 0 bit 6 of each page is now the SPF bit (usually set to 0).

HPQ #190  
PDF Page 476  
7.4.3.3 Page Length  
How does a logical unit know if the initiator supports the field or not? The choice is entirely up to the logical unit.

HPQ #191

PDF Page 482

7.5.2 Page Code

"0Eh, identifying the CD Audio Control Mode Page" is wrong. This is page 08h.

HPQ #192

PDF Page 485

7.7 Power Condition Page (Page Code 1Ah)

This mode page is defined by SPC-3 and should not be duplicated here.

HPQ #193

PDF Page 487

7.8 Fault / Failure Reporting Control Page (Page Code 1Ch)

Since this page is defined in SPC-3, remove it from here and avoid the arbitrary name change too.

HPQ #194

PDF Page 487

7.8 Fault/Failure Reporting Control Page

Byte 2 bits 5 and 4, and byte 0 bit 6 are defined in SPC-3 too.

HPQ #195

PDF Page 491

A.1 Introduction

Point to ATA/ATAPI-7

HPQ #196

PDF Page 493

A.2.5 Use of Immediate

"MM ATAPI devices do not have the opportunity to use the Disconnect/Reselect mechanism of SCSI.

Consequently, the use of immediate operations has a greater importance in MM ATAPI devices."

This is no longer true in Serial ATA. A SATAPI MM device can leave commands outstanding for as long as they want; it shouldn't affect any other SATA links.

HPQ #197

PDF Page 494

A.2.6 Mapping of Reset Functions

The SCSI Architecture terms to map to are:

power on  
hard reset  
logical unit reset  
I\_T nexus loss

HPQ #198

PDF Page 495

B.1 Introduction

Delete ", and the SCSI Block Command Set (SBC) standard" and add an "and" earlier in the sentence.

This standard does not at all depend on SBC. It has a few notes highlighting differences from SBC, but nothing more.

HPQ #199

PDF Page 495

Annex B

I don't understand your definition of "SCSI". Is this referring to Parallel SCSI only (defined by SPI-5), or to all SCSI transport protocols?

HPQ #200

PDF Page 495

B.3.1 Additions to the SCSI standard

Delete "CHANGE DEFINITION is not required." It's not in SCSI any more.

HPQ #201

PDF Page 495

B.3.1 Additions to the SCSI standard

"GET EVENT STATUS NOTIFICATION command in addition to the AEN capability in SCSI. "

AEN is no longer in SCSI.

HPQ #202

PDF Page 495

B.3.1 Additions to the SCSI standard

"The power model for this specification is different from that described for SCSI."

Not really; it's just an enhancement.

HPQ #203

PDF Page 495

B.3.1 Additions to the SCSI standard

"The Information Exceptions Mode Page is called the Fault/Failure Reporting page in this standard."

Why? At least use both names - "Informational Exceptions (Fault/Failure Reporting) mode page" in mmc4 and get to

"Informational Exceptions mode page" in mmc5.

HPQ #204

PDF Page 495

B.3.1 Additions to the SCSI standard

"The Mechanism State in this specification uses a value of 3h for the data port in use and not 1h as is specified in the SCSI Standard. "

What is conflicting with what? The only "Mechanism State" in this document is in the MECHANISM STATUS command, which is MMC specific, so doesn't conflict with anything in any other SCSI standard.

HPQ #205

PDF Page 495

B.2 SCSI Signal Utilization

Delete "B.2 The Logical Unit utilizes the same signals and timing from the SCSI Standard and Extensions. "

What signals and timings does a command set care about?

HPQ #206

PDF Page 495

B.4.3 TARGET RESET task management function

If this is a generic SCSI section, not parallel specific, delete "B.4.3 TARGET RESET task management function The TARGET

RESET function may be used to reset all Logical Units in the Target.Note: The

TARGET RESET task management function was called a fBus Device Resetf in SCSI-2.

If the Initiator issues the LOGICAL UNIT RESET function to a Logical Unit, the response of the Logical Unit are the same as the

response to a TARGET RESET task management function. " as it is no longer in SCSI.

If this is parallel SCSI specific, it can remain.

HPQ #207

PDF Page 495

B.1 Introduction

NCITS is now INCITS

This whole sentence perhaps could be deleted.

HPQ #208

PDF Page 495  
B.4.1 Power On Reset  
Delete "See fTask and  
Command Lifetimes in the SCSI Architecture Model standard (SAM)." Cross  
references to parts of other standards are not  
supposed to be done.

HPQ #209  
PDF Page 502  
Annex D  
Remove italics from field names and "may"s

HPQ #210  
PDF Page 504  
D.2.2  
Remove italics from (class-specific request)

HPQ #211  
PDF Page 507  
D.3 Descriptors  
Table F.10.....A Configuration Descriptor  
Table D.4 . Configuration Descriptor " is all messed up.

HPQ #212  
PDF Page 512  
D.4.2 Command Status Wrapper (CSW)  
"Reserved (Obsolete)"  
Which one?

HPQ #213  
PDF Page 521  
E.3.1 Block Descriptors  
Table E.13  
ISO-ize 2448

HPQ #214  
PDF Page 527  
E.3.3  
Table E.21  
fix special character before bytes/sec

HPQ #215  
PDF Page 547  
I.1 Power Management States  
Stopped should be included in the model as a power condition state. See  
SBC-2 for an example.

HPQ #216  
PDF Page 547  
I.1  
Should ACPI be referenced, given these D0 - D3 references?

HPQ #217  
PDF Page 547  
I.1 Power Management States  
Informative annexes are not supposed to contain "shall"s. Many times in this  
annex.

HPQ #218  
PDF Page 548  
I.1 Power Management States  
Change "Mode page" to "mode page"

HPQ #219

PDF Page 549

I.3 Power Management state diagram

The cross reference to figure I.2 actually incorporates figure I.2 which yields this mess.

HPQ #220

PDF Page 551

I.4 Power Management timers

Change "POWER CONDITION mode page" to "Power Condition mode page (see SPC-3)".

HPQ #221

PDF Page 551

I.4 Power Management timers

Change "POWER CONDITION mode page" to "Power Condition mode page (see SPC-3)".

HPQ #222

PDF Page 555

J.1.1

change NOT to not

HPQ #223

PDF Page 556

J.1.1 CD-MRW Structure

Change NOT to not

HPQ #224

PDF Page 556

J.1.3 A CD-MRW EXAMPLE

Lowercase EXAMPLE

HPQ #225

PDF Page 557

J.1.3

Change "we may have" to "there are" or "there may be"

HPQ #226

PDF Page 557

J.1.3

Fix "interest Table J.1 ):"

HPQ #227

PDF Page 558

J.1.3.2

"We examine byte 2, bit 4 (Erasable) first. If this bit is set to zero, then the disc is not CD-RW and consequently cannot be MRW.

It is presumed that this bit is set to one, indicating that this is CD-RW disc. Next we should check byte 7, bits 1, 0 (BG format status). If the value is 00b, then this disc is

not formatted as MRW and furthermore, a MRW format is not in progress.

Let's suppose that BG format status is not 00b. " is way too conversational. We?

HPQ #228

PDF Page 564

J.1.3.5 READ(10), READ(12), READ CD, WRITE(10), WRITE and VERIFY(10), SEEK(10),

VERIFY(10) commands

Add space before each ( in the section title and capitalize the "and" in "WRITE and VERIFY"

HPQ #229

PDF Page 565

## J.1.4 Legacy considerations

"Note: It is only for the sake of completeness that we describe what might happen in cases 1A, 1B, 3A, and 3B. Nothing can be done within this document to make the legacy situations operate better. That work has been done in the format definition document: MRW Defect Management & Physical Formatting revision 1.0 " is too conversational. The cross reference should be better.

HPQ #230

PDF Page 565

J.1.4 LEGACY CONSIDERATIONS Use mixed case

HPQ #231

PDF Page 567

## J.1.4.4.2 Completing a Format

"Suppose that a disc was mounted and our medium identification discovered a disc with incomplete background format. We may issue a new FORMAT UNIT command with the Format Descriptor that indicates that we only wish to continue the background format. There are good reasons to NOT do that. " is way too conversational. Who is being referred to as "we" and "our"? Also, NOT cannot be used for emphasis under ISO style guidelines.

HPQ #232

PDF Page 567

J.1.4.4.1 Writing User Data to the Medium during Background Format Change "Read(10) and Read(12)" to "READ (10) and READ (12)"

HPQ #233

PDF Page 567

J.1.4.4.1 Writing User Data to the Medium during Background Format Change "WRITE(10)" to "WRITE (10)"

HPQ #234

PDF Page 569

## J.2.1

Use ISO format for numbers in "The DVD+RW 120-mm one-sided disc has a 4.70GB information zone, while the two-sided disc has 9.40GB. The (one-sided) MRW capacity is either 4.56GB or 4.16GB, based on formatting.

The DVD+RW 80-mm one-sided disc has 1.46GB information zone, while the two-sided disc has 2.92GB. The (one-sided) MRW capacity is 1.33GB. "

HPQ #235

PDF Page 569

## J.2.1

Change 1024 to 1 024

HPQ #236

PDF Page 572

## J.2.3.2.3 Completing a Format

"Suppose that a disc was mounted and our medium identification discovered a disc with incomplete background format. We may issue a new FORMAT UNIT Command with the Format Descriptor that indicates that we only wish to continue the background format. There are good reasons to NOT do that. " is way too conversational. Who is being referred to as "we" and "our"? Also, NOT cannot be used for emphasis under ISO style guidelines.



\*\*\*\*\*

Comments attached to No ballot from George O. Penokie of IBM Corp.:

IBM-001

PDF pg 3, pg iii, REVISION HISTORY

The revision history has to be removed before letter ballot.

IBM-002

PDF pg 39, pg xxxix, D.3 Descriptor

Here are more of these Table F references with the unprintable characters.

IBM-003

PDF pg 63, pg 3, 2.1 Normative References

It's apparent that the group writing this standard did not use the approved t10 style guide (03-049r0) in creating this standard. Until the style guide

is implemented into this standard I will not recommend this standard be forwarded.

IBM-004 Technical

PDF pg 63, pg 3, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms. I have scanned this standard and there are over

100 uses of the word can that I have not marked all have to be changed.

Although not true in all cases the statement << is able to >> can be used to

replace can.

IBM-005

PDF pg 63, pg 3, 2.1 Normative References

There are several unprintable characters in the Table F references.

IBM-006 Technical

PDF pg 68, pg 8, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-007 Technical

PDF pg 68, pg 8, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-008 Technical

PDF pg 69, pg 9, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-009 Technical

PDF pg 69, pg 9, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-010 Technical

PDF pg 69, pg 9, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-011 Technical

PDF pg 69, pg 9, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-012 Technical

PDF pg 69, pg 9, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms. There are at least 23 uses of cannot that

I have not noted that have to be changed to the correct terminology. Although

not true in all cases the statement << is not able to >> can be used to replace cannot.

IBM-013 Technical

PDF pg 70, pg 10, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-014 Technical

PDF pg 70, pg 10, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-015 Technical

PDF pg 70, pg 10, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-016 Technical

PDF pg 70, pg 10, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-017 Technical

PDF pg 70, pg 10, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-018 Technical

PDF pg 70, pg 10, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-019 Technical

PDF pg 78, pg 18, Global

The term << could >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-020

PDF pg 79, pg 19, 3.4 Conventions

The conventions section does not contain the information that is usually listed in t10 standards. For example there is no description of the ISO numbering format nor is there any statement about priority of conflicting requirement in test, tables, and figures. This section should be copied from

one of the other t10 standards for example SPC-3.

IBM-021

PDF pg 81, pg 21, 4.1 General Characteristics

Global

There are many hanging paragraphs in this standard and they all need to be fixed. For example all the text between section 4.1 and 4.1.1 in hanging text

that needs to be move to a section 4.1.1 with the current text moving to 4.1.2

etc. If you want more information on what hanging paragraphs are see the

t10

style guide.

IBM-022 Technical

PDF pg 81, pg 21, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-023 Technical

PDF pg 82, pg 22, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >> except were it occurs in a informative text

(i.e., notes and informative annex). In those cases any requirements have to

be removed as no requirements are allowed in informative text.

IBM-024 Technical

PDF pg 82, pg 22, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-025 Technical

PDF pg 83, pg 23, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-026

PDF pg 83, pg 23, Global

There should be no billeted lists. All lists should be either a,b,c or 1,2,3

where a,b,c is used when ordering is not important and 1,2,3 used where

ordering is important. Also all lists should follow the format below. This needs to fixed throughout this standard.

- a) text ;
- b) text ; and
- c) text.

or

- a) text ;
- b) text ; or
- c) text.

or

- 1) text ;
- 2) text ; and
- 3) text.

IBM-027

PDF pg 83, pg 23, 4.1.5 Resets

There are unprintable character is in the cross-reference Table F and the font

is not arial or helvetica.

IBM-028

PDF pg 84, pg 24, Global

There should be no bulleted lists. All lists should be either a,b,c or 1,2,3

where a,b,c is used when ordering is not important and 1,2,3 used where ordering is important. Also all lists should follow the format below. This needs to fixed throughout this standard.

- a) text ;
- b) text ; and
- c) text.

or

- a) text ;
- b) text ; or
- c) text.

or

- 1) text ;
- 2) text ; and
- 3) text.

IBM-029

PDF pg 84, pg 24, 4.1.6.2 Logical Unit Busy Conditions , Note

All notes need to be numbered.

IBM-030

PDF pg 84, pg 24, Global

99% of the time the statement << For example, >> should be replaced with << (e.g., text) >>. This needs to be corrected throughout this standard.

IBM-031

PDF pg 84, pg 24, Global

In this standard there are several different formats for inline notes; all caps, first letter only cap, indented, not indented, indented to different indents, and the note on a separate line from the text. There is only one correct format and that is specified in the t10 style guide. All the notes need to be fixed for this and many other reasons. See other comments from more

information.

IBM-032 Technical

PDF pg 84, pg 24, 4.1.6.2 Logical Unit Busy Conditions , 2nd Note

This note appears to contain requirements. As a result it needs to be made part of the normative text or deleted.

IBM-033 Technical

PDF pg 86, pg 26, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-034 Technical

PDF pg 86, pg 26, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-035 Technical

PDF pg 86, pg 26, 4.1.6.4 Deferred Errors

Why are deferred errors described in this standard. They are already defined

in SPC-3. There is no reason for duplicated specifications. If required to be

used in this standard there should only be a reference to SPC-3. Delete this

section except for that reference.

IBM-036 Technical

PDF pg 86, pg 26, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-037



PDF pg 86, pg 26, Global

Throughout this standard there are numbered list that appear to not be ordered

lists. All those lists should be changed to a,b,c list that follow the format

shown in my other comments.

IBM-038 Technical

PDF pg 86, pg 26, Global

The term << can >> needs to be removed from this standard and replaced with

the appropriate term or terms.

IBM-039 Technical

PDF pg 86, pg 26, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-040 Technical

PDF pg 87, pg 27, 4.1.7 Removable medium , 9th paragraph

The statement << as they would be if Persistent Prevent >> needs to be << as

if Persistent Prevent >>

IBM-041 Technical

PDF pg 88, pg 28, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-042

PDF pg 88, pg 28, Global

All notes have to be numbered starting with 1. (e.g., NOTE 1, NOTE 2)

IBM-043 Technical

PDF pg 88, pg 28, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-044

PDF pg 97, pg 37, 4.2.3.2 Frame Addressing

More unprintable characters after the Table F. reference.

IBM-045

PDF pg 112, pg 52, 4.2.3.11 The Track Descriptor Block , Under table 24

The << Recording method is coded as follows: >> codes should be in a table.

IBM-046 Technical

PDF pg 113, pg 53, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-047 Technical

PDF pg 113, pg 53, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-048

PDF pg 115, pg 55, 4.3 DDCD Model

Here are more of these Table F references with the unprintable characters.

IBM-049

PDF pg 115, pg 55, Global

All italics should be removed and replaced with normal text.

IBM-050

PDF pg 116, pg 56, 4.3.1 DDCD Specifications , Table 27

The note in this table does not use the correct table note format. See the t10 style guide for the correct format.

## IBM-051

PDF pg 117, pg 57, 4.3.1.2 Single Session Disc

There is a << w >> between figure 18 and the figure 18 title that does not appear to belong there.

## IBM-052

PDF pg 119, pg 59, 4.3.1.6 Sub-Channel Information Formats

Here are more of these Table F references with the unprintable characters.

## IBM-053

PDF pg 119, pg 59, 4.3.1.7 DDCD Ready Condition/Not Ready Condition

Here are more of these Table F references with the unprintable characters.

## IBM-054

PDF pg 121, pg 61, 4.3.1.11 DDCD Recordable and DDCD ReWritable Structure

Here are more of these Table F references with the unprintable characters.

## IBM-055 Technical

PDF pg 125, pg 65, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-056 Technical

PDF pg 125, pg 65, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-057

PDF pg 139, pg 79, 4.4.4.4.1 Rzone Description

Here are more of these Table F references with the unprintable characters.

IBM-058 Technical

PDF pg 142, pg 82, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-059 Technical

PDF pg 142, pg 82, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-060 Technical

PDF pg 142, pg 82, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-061 Technical

PDF pg 144, pg 84, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-062 Technical

PDF pg 144, pg 84, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-063 Technical

PDF pg 144, pg 84, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-064 Technical

PDF pg 144, pg 84, 4.4.5.2.1.3 Sessions , Note

The note contains normative requirements. Either the requirements have to be

removed, the note deleted, or the text moved into the body.

IBM-065

PDF pg 145, pg 85, 4.4.5.2.2 The Initiators Perspective

Here are more of these Table F references with the unprintable characters.

IBM-066 Technical

PDF pg 145, pg 85, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-067 Technical

PDF pg 145, pg 85, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-068 Technical

PDF pg 146, pg 86, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-069

PDF pg 147, pg 87, 4.4.6.1.2 Logical Structure , 3rd paragraph

The number << 4.70GB >> is not stated in the correct ISO format. It should be

<< 4,70GB >>

IBM-070

PDF pg 147, pg 87, 4.4.6.1.2 Logical Structure , 3rd paragraph

The number << 9.40GB >> is not stated in the correct ISO format. It should be

<< 9,40GB >>

IBM-071

PDF pg 147, pg 87, 4.4.6.1.2 Logical Structure , 3rd paragraph

The number << 1.46GB >> is not stated in the correct ISO format. It should be

<< 1,46GB >>

IBM-072

PDF pg 147, pg 87, 4.4.6.1.2 Logical Structure , 3rd paragraph

The number << 2.92GB >> is not stated in the correct ISO format. It should be

<< 2,92GB >>

IBM-073 Technical

PDF pg 149, pg 89, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-074 Technical

PDF pg 149, pg 89, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-075 Technical

PDF pg 149, pg 89, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-076 Technical

PDF pg 149, pg 89, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-077 Technical

PDF pg 150, pg 90, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-078 Technical

PDF pg 150, pg 90, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-079 Technical

PDF pg 150, pg 90, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-080 Technical

PDF pg 150, pg 90, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-081 Technical

PDF pg 152, pg 92, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-082 Technical

PDF pg 152, pg 92, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-083 Technical

PDF pg 152, pg 92, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-084 Technical

PDF pg 152, pg 92, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-085 Technical

PDF pg 152, pg 92, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-086 Technical

PDF pg 152, pg 92, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.



IBM-087 Technical

PDF pg 152, pg 92, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-088 Technical

PDF pg 152, pg 92, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-089 Technical

PDF pg 152, pg 92, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-090 Technical

PDF pg 152, pg 92, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-091 Technical

PDF pg 153, pg 93, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-092 Technical

PDF pg 153, pg 93, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-093 Technical

PDF pg 153, pg 93, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-094 Technical

PDF pg 153, pg 93, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-095 Technical

PDF pg 153, pg 93, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-096 Technical

PDF pg 153, pg 93, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-097 Technical

PDF pg 153, pg 93, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-098 Technical

PDF pg 159, pg 99, 4.6.3.4.1 Simple DBI memory model

The statement << before overflow would occur. >> should be << before an

overflow occurs >>

IBM-099 Technical

PDF pg 159, pg 99, Global

The term << could >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< is able to >> can be used to replace could.

IBM-100 Technical

PDF pg 159, pg 99, 4.6.3.4.2 Large DBI buffer memory model

The statement << disc capacity would be enough size for Large DBI buffer >>

should be << disc capacity should be enough size for Large DBI buffer >>

IBM-101 Technical

PDF pg 161, pg 101, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-102 Technical

PDF pg 166, pg 106, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-103 Technical

PDF pg 166, pg 106, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-104 Technical

PDF pg 167, pg 107, 4.7.1.1 Error Handling with Hardware or No Defect

Management , Note

The note contains normative requirements. Either the requirements have to be

removed, the note deleted, or the text moved into the body.

IBM-105

PDF pg 174, pg 114, 4.9.1 Side definition

The statement <<Although this would not normally be thought of as a changer

type of operation, >> should be << Although this is not normally a changer

type of operation, >>

IBM-106

PDF pg 174, pg 114, 4.9.1 Side definition , 1st paragraph

The statement << logical slots. For example, referencing slot 0 would be one

side of the Disc, and slot 1 would then be the other side. >> should be << logical slots (e.g., reference to slot 0 points to one side of the Disc, and

to slot 1 other side. >>

IBM-107

PDF pg 179, pg 119, 5.1 Introduction , Last paragraph

The statement << If a Not Ready response would be given to a TEST UNIT READY

command, no Profile shall be current. >> should be << If a device is not ready (i.e., Not Ready response to a TEST UNIT READY command), no Profile shall be current. >>

IBM-108

PDF pg 179, pg 119, Global

There the number << 65530 >> is not written in ISO format. It should be << 65

530 >>. The entire standard should be examined to assure that all numbers conform to ISO.

## IBM-109 Technical

PDF pg 183, pg 123, Global

The term << could >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< is able to >> can be used to replace could.

## IBM-110

PDF pg 183, pg 123, 5.3.1 Profile List Feature (0000h) , 6th paragraph under

table 73

The statement << desirable. E.g. a DVD-ROM that could also read CD-ROM would

list the DVD-ROM Profile first and the CD-ROM Profile second. >> should be

<< desirable. (e.g., a DVD-ROM that is able to also read a CD-ROM lists the DVD-ROM Profile first and the CD-ROM Profile second). >>

## IBM-111

PDF pg 185, pg 125, 5.3.2 Core Feature (0001h) , Note

This note contains nominate text. That has to be removed or the note made part

of the main line text.

## IBM-112

PDF pg 188, pg 128, Global

When using the << i.e. >> it should be written as (i.e., text \

## IBM-113 Technical

PDF pg 188, pg 128, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-114 Technical

PDF pg 188, pg 128, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-115 Technical

PDF pg 190, pg 130, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-116 Technical

PDF pg 202, pg 142, 5.3.14 Hardware Defect Management Feature (0024h) , Note

The note contains normative requirements. Either the requirements have to be

removed, the note deleted, or the text moved into the body.

IBM-117 Technical

PDF pg 207, pg 147, 5.3.18 The MRW Feature (0028h) , Note

The note contains normative requirements. Either the requirements have to be

removed, the note deleted, or the text moved into the body.

IBM-118

PDF pg 213, pg 153, 5.3.20 DVD+RW Feature (002Ah) , Note

This note contains normative requirements and therefore needs to be made part

of the normative text.

IBM-119 Technical

PDF pg 213, pg 153, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-120 Technical

PDF pg 213, pg 153, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-121 Technical

PDF pg 214, pg 154, 5.3.21 DVD+R Feature (002Bh) , Note

The note contains normative requirements. Either the requirements have to be

removed, the note deleted, or the text moved into the body.

IBM-122

PDF pg 215, pg 155, 5.3.21 DVD+R Feature (002Bh) , Note

This note contains normative requirements and therefore needs to be made part

of the normative text.

IBM-123 Technical

PDF pg 215, pg 155, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-124 Technical

PDF pg 215, pg 155, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-125 Technical

PDF pg 228, pg 168, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-126 Technical

PDF pg 229, pg 169, Global

The term << cannot >> needs to be removed from this standard and replaced with the appropriate term or terms.

IBM-127

PDF pg 243, pg 183, 5.4 Profile Definitions , 1st paragraph

The statement << If a Not Ready response would be given to a TEST UNIT READY

command, no Profile shall be current. For example, a Logical Unit, with unformatted media, may not be able to read or write and the corresponding Features would not be current. >> should be << If device is not ready (i.e., a

Not Ready response to a TEST UNIT READY command) no Profile shall be current

(e.g., a Logical Unit, with unformatted media, may not be able to read or write and, therefore, the corresponding Features not current). >>

IBM-128

PDF pg 244, pg 184, 5.4.2 Profile 1h: Non-Removable Disk , Table 176

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-129

PDF pg 244, pg 184, Global

There appears to be several instances where a text font size other than 10 point is used. For example in table 176. All non-heading text should be 10 point except for notes which should be 9 point. This needs to be checked and

corrected throughout this standard.

IBM-130



PDF pg 245, pg 185, 5.4.3 Profile 2h: Removable Disk , Table 178

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-131

PDF pg 246, pg 186, 5.4.4 Profile 3h: Magneto-Optical Erasable , Table 180

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-132

PDF pg 247, pg 187, 5.4.5 Profile 4h: Optical Write Once , Table 182

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-133

PDF pg 248, pg 188, 5.4.6 Profile 5h: AS-MO , Table 184

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-134

PDF pg 249, pg 189, 5.4.7 Profile 8h: CD-ROM, Table 186

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-135

PDF pg 250, pg 190, 5.4.8 Profile 9h: CD-R, Table 188

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-136

PDF pg 252, pg 192, 5.4.9 Profile Ah: CD-RW, Table 190

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-137

PDF pg 253, pg 193, 5.4.10 Profile 10h: DVD-ROM , Table 192

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-138

PDF pg 254, pg 194, 5.4.11 Profile 11h: DVD-R Sequential recording , Table 194

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-139

PDF pg 255, pg 195, 5.4.12 Profile 12h: DVD-RAM, Table 196

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-140

PDF pg 256, pg 196, 5.4.13 Profile 13h: DVD-RW Restricted Overwrite , Table 198

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-141

PDF pg 257, pg 197, 5.4.14 Profile 14h: DVD-RW Sequential recording , Table 200

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-142

PDF pg 258, pg 198, 5.4.15 Profile 1Ah: DVD+RW , Table 202

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-143

PDF pg 259, pg 199, 5.4.16 Profile 1Bh: DVD+R, Table 204

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-144

PDF pg 260, pg 200, 5.4.17 Profile 20h: DDCD-ROM, Table 206

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-145

PDF pg 261, pg 201, 5.4.18 Profile 21h: DDCD-R, Table 208

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-146

PDF pg 263, pg 203, 5.4.19 Profile 22h: DDCD-RW , Table 210

There is no heading row and there is only one note reference called << c >>.

Where are a and b? These need to be fixed.

IBM-147

PDF pg 265, pg 205, 6.1 Overview , Table 212

Several of the hex characters in this table are not capitalized. This needs to be fixed.

IBM-148

PDF pg 266, pg 206, 6.1 Overview , Table 213

Several of the hex characters in this table are not capitalized. This needs to be fixed.

IBM-149 Technical

PDF pg 267, pg 207, Global

The term << must >> cannot be used in this standard. In most cases it should be replaced with << shall >>.

IBM-150 Technical

PDF pg 271, pg 211, 6.3.1.3 Track Number , Note

The note contains normative requirements. Either the requirements have to be removed, the note deleted, or the text moved into the body.

IBM-151

PDF pg 273, pg 213, 6.3.1.3 Track Number , Table 221

The statement << If upon completion of the closure, less than 65 ECC blocks would remain, the Logical Unit shall finalize the disc. >> should be << If upon completion of the closure, less than 65 ECC blocks remain, the Logical Unit shall finalize the disc. >>

IBM-152 Technical

PDF pg 278, pg 218, Global

The term << must >> cannot be used in this standard. In most cases it should be replaced with << shall >>.

## IBM-153 Technical

PDF pg 280, pg 220, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-154 Technical

PDF pg 280, pg 220, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-155

PDF pg 283, pg 223, 6.5.2.3.1 Format Type = 00h (Full Format) , 1st paragraph

The statement << Except as noted, the Number of Blocks >> should be << Except

as specified, the Number of Blocks >>

## IBM-156 Technical

PDF pg 283, pg 223, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-157

PDF pg 286, pg 226, 6.5.2.3.11 Format Types = 24h, (MRW Full Format) , Table 235

Both the notes should be replaced with a single note in a table footer.

<<Note: In this case, the CD-MRW Defect Management & Physical Formatting Specification and the DVD+MRW Defect Management & Physical Formatting Specification require certification of the user area. >>.

## IBM-158

PDF pg 286, pg 226, 6.5.2.3.12 Format Type = 26h, (DVD+RW Basic Format) ,  
Note:

This note needs to be in it's own paragraph <<The amount  
of the lead-in initialized by Quick Start formatting is vendor specific. >>

IBM-159 Technical

PDF pg 288, pg 228, Global

The term << must >> cannot be used in this standard. In most cases it  
should

be replaced with << shall >>.

IBM-160

PDF pg 290, pg 230, 6.5.3.2.4 Writing During the Background Format Process  
,

Table 238

The note needs to be in a table footer.

IBM-161

PDF pg 295, pg 235, 6.7.1.3 Allocation Length

There is no such thing as an << Implementers Note: >> it's just a note as  
all

notes are notes to implementers if they are more than that they should not  
be

notes.

IBM-162

PDF pg 299, pg 239, 6.7.2.4 External Request Events , Note

The note << This does not include the Load/Eject button. >> needs to be in  
its

own paragraph.

IBM-163 Technical

PDF pg 299, pg 239, Global

All notes in main line text are required to have four characteristics:

- They cannot contain any normative information
- They are in their own paragraph
- They are 9 point font
- They are numbered

Many (all) of the notes in this standard violate one more more of these rules.

They all need to be fixed.

IBM-164

PDF pg 299, pg 239, 6.7.2.4 External Request Events , Table 260

The statement <<The Logical Unit has received a command from another Initiator

that would require an action that may interfere with the Persistent Prevent

owner's operation. >> should be << The Logical Unit has received a command from another Initiator that requires an action that may interfere with the Persistent

Prevent owner's operation. >>

IBM-165

PDF pg 314, pg 254, 6.8.2.4 Write Speed (Type=03h), Note

This note violates yet another rule as in is not in the correct font type.

IBM-166 Technical

PDF pg 317, pg 257, 6.9 INQUIRY Command

The Inquiry command is defined in the SPC-3 standard and should not be redefined in this standard. The only thing that should be here is a reference

to the SPC-3 standard. Delete this section from this standard.

IBM-167

PDF pg 326, pg 266, 6.11.2.1 Mechanism Status Parameter List , 5th paragraph

under table 306

The statement << (e.g. for a 2 slot Logical Unit this value would be 8). >> should be << (e.g., for a 2 slot Logical Unit this value is 8). >>

#### IBM-168 Technical

PDF pg 328, pg 268, 6.12 MODE SELECT (10) Command

The Mode Select command is defined in the SPC-3 standard and should not be redefined in this standard. The only thing that should be here is a reference

to the SPC-3 standard. Delete this section from this standard.

#### IBM-169 Technical

PDF pg 330, pg 270, 6.13 MODE SENSE (10) Command

The Mode Sense command is defined in the SPC-3 standard and should not be redefined in this standard. The only thing that should be here is a reference

to the SPC-3 standard. Delete this section from this standard.

#### IBM-170

PDF pg 336, pg 276, 6.15.2 Command Execution

Here are more of these Table F references with the unprintable characters.

#### IBM-171 Technical

PDF pg 341, pg 281, 6.18 PREVENT ALLOW MEDIUM REMOVAL Command

The PREVENT ALLOW MEDIUM REMOVAL Command command is defined in the SPC-3 standard and should not be redefined in this standard. The only thing that should be here is a reference to the SPC-3 standard. Delete this section from

this standard.

#### IBM-172 Technical

PDF pg 349, pg 289, 6.21 READ BUFFER Command

The Read Buffer Command command is defined in the SPC-3 standard and should

not be redefined in this standard. The only thing that should be here is a



reference to the SPC-3 standard. Delete this section from this standard.

IBM-173 Technical

PDF pg 355, pg 295, 6.22.2.2 Reporting Available Buffer in Blocks , Note:

The note contains normative requirements. Either the requirements have to be

removed, the note deleted, or the text moved into the body.

IBM-174 Technical

PDF pg 365, pg 305, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-175

PDF pg 367, pg 307, 6.24.2.2.3 Corrected and De-interleaved R-W Sub-channel

Implementers Note

There is no such thing as an << Implementers Note: >> it's just a note as all

notes are notes to implementers if they are more than that they should not be

notes.

IBM-176 Technical

PDF pg 393, pg 333, 6.27.2.12 Format Code 0Bh: DVD-RAM Recording Type

Information, Note:

The note contains normative requirements. Either the requirements have to be

removed, the note deleted, or the text moved into the body.

IBM-177 Technical

PDF pg 406, pg 346, 6.27.2.22 Format Code FFh: DVD Structure List , Note

The note contains normative requirements. Either the requirements have to be

removed, the note deleted, or the text moved into the body.

IBM-178 Technical

PDF pg 410, pg 350, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-179 Technical

PDF pg 442, pg 382, Global

The term << can't >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< is not able to >> can be used to replace can't.

IBM-180 Technical

PDF pg 442, pg 382, Global

The term << can't >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< is not able to >> can be used to replace can't.

IBM-181 Technical

PDF pg 442, pg 382, Global

The term << can't >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< is not able to >> can be used to replace can't.

IBM-182 Technical

PDF pg 442, pg 382, Global

The term << can't >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< is not able to >> can be used to replace can't.

IBM-183 Technical

PDF pg 445, pg 385, 6.31.2.7 Track Status: RT, Blank, Packet, and FP Bits , Note

The note contains normative requirements. Either the requirements have to be

removed, the note deleted, or the text moved into the body.

IBM-184 Technical

PDF pg 447, pg 387, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-185 Technical

PDF pg 458, pg 398, 6.34 REQUEST SENSE Command

The Request Sense Command command is defined in the SPC-3 standard and should

not be redefined in this standard. The only thing that should be here is a reference to the SPC-3 standard. Delete this section from this standard.

IBM-186

PDF pg 458, pg 398, 6.34.1 The CDB and Its Parameters

The statement << the Initiator should assume that the bytes not transferred

would have been zeros had the Logical Unit returned those bytes. >> is a pointless statement and should be deleted.

IBM-187

PDF pg 460, pg 400, 6.34.2.6 Sense Key

Here are more of these Table F references with the unprintable characters.

## IBM-188

PDF pg 461, pg 401, 6.34.2.8 Additional Sense Length

The statement << available minus 7. For example, if 36 bytes of sense data

were returned, then the value of this field would be 29. >> should be << minus

7 (e.g., if 36 bytes of sense data were returned, then the value of this field is set to 29). >>

## IBM-189 Technical

PDF pg 464, pg 404, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-190 Technical

PDF pg 468, pg 408, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-191 Technical

PDF pg 484, pg 424, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-192 Technical

PDF pg 490, pg 430, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-193 Technical

PDF pg 501, pg 441, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

#### IBM-194 Technical

PDF pg 505, pg 445, 6.47 SYNCHRONIZE CACHE Command , Note

The note contains normative requirements. Either the requirements have to be

removed, the note deleted, or the text moved into the body.

#### IBM-195 Technical

PDF pg 507, pg 447, TEST UNIT READY Command

The Test Unit Ready Command command is defined in the SPC-3 standard and should not be redefined in this standard. The only thing that should be here

is a reference to the SPC-3 standard. Delete this section from this standard.

#### IBM-196 Technical

PDF pg 508, pg 448, 6.49 VERIFY (10) Command , Note

The note contains normative requirements. Either the requirements have to be

removed, the note deleted, or the text moved into the body.

#### IBM-197 Technical

PDF pg 510, pg 450, 6.50 WRITE (10) Command, Note

The note contains normative requirements. Either the requirements have to be

removed, the note deleted, or the text moved into the body.

#### IBM-198 Technical

PDF pg 511, pg 451, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-199 Technical

PDF pg 513, pg 453, Global

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

IBM-200 Technical

PDF pg 520, pg 460, WRITE BUFFER COMMAND

The Write Buffer Command command is defined in the SPC-3 standard and should

not be redefined in this standard. The only thing that should be here is a reference to the SPC-3 standard. Delete this section from this standard.

IBM-201

PDF pg 525, pg 465, 7.1.2 Mode Pages , Note

The note needs to be on a separate paragraph.

IBM-202

PDF pg 528, pg 468, 7.2.4.4 Read Continuous (RC) , Implementers Note

There is no such thing as an << Implementers Note: >> it's just a note as all

notes are notes to implementers if they are more than that they should not be

notes.

IBM-203 Technical

PDF pg 531, pg 471, Global

The term << could >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< is able to >> can be used to replace could.

IBM-204 Technical

PDF pg 533, pg 473, Global

The term << could >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< is able to >> can be used to replace could.

IBM-205 Technical

PDF pg 545, pg 485, 7.7 Power Condition Page (Page Code 1Ah)

The Power Control Page is defined in the SPC-3 standard and should not be redefined in this standard. The only thing that should be here is a reference

to the SPC-3 standard. Delete this section from this standard.

IBM-206 Technical

PDF pg 547, pg 487, 7.8 Fault / Failure Reporting Control Page (Page Code 1Ch)

The Fault / Failure Reporting Control Page is defined in the SPC-3 standard

and should not be redefined in this standard. The only thing that should be here is a reference to the SPC-3 standard. Delete this section from this standard.

IBM-207 Technical

PDF pg 555, pg 495, Global

The term << would >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< may >> can be used to replace would.

IBM-208

PDF pg 555, pg 495, B.4.3 TARGET RESET task management function , Note

The note needs to be in a separate paragraph.

IBM-209

PDF pg 567, pg 507, D.3 Descriptors

The text between section D.3 and table D.4 is not readable. This needs to be

fixed.

IBM-210 Technical

PDF pg 567, pg 507, D.3 Descriptors , Table d.4

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>. However this is listed as an informative annex which cannot have requirements. The requirement implied by the must needs to

be removed from this annex or the annex made normative. It could be changed to

<< Bit 7 is reserved and is set to one for historical reasons. >>.

IBM-211 Technical

PDF pg 581, pg 521, E.3.1 Block Descriptors , Note

The note contains normative requirements. Either the requirements have to be

removed, the note deleted, or the text moved into the body.

IBM-212

PDF pg 581, pg 521, E.3.1 Block Descriptors , Table E.15

The number << 2448 >> should be << 2 448 >> to comply with ISO number format.

IBM-213

PDF pg 585, pg 525, E.3.3 MM Capabilities and Mechanical Status Page (Page Code 2Ah) , Implementers Note:

There is no such thing as an << Implementers Note: >> it's just a note as all

notes are notes to implementers if they are more than that they should not be

notes.



## IBM-214 Technical

PDF pg 591, pg 531, F.3 Error Lists , Table F.4

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-215 Technical

PDF pg 601, pg 541, F.3 Error Lists , Table F.10

The term << must >> cannot be used in this standard. In most cases it should

be replaced with << shall >>.

## IBM-216 Technical

PDF pg 603, pg 543, Global

The term << would >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< is able to >> can be used to replace would.

## IBM-217 Technical

PDF pg 603, pg 543, Global

The term << could >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< is able to >> can be used to replace could.

## IBM-218 Technical

PDF pg 603, pg 543, Global

The term << would or would not>> needs to be removed from this standard and

replaced with the appropriate term or terms. Although not true in all cases

the statement << may or may not >> can be used to replace would.

IBM-219 Technical

PDF pg 603, pg 543, Global

The term << would >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< may >> can be used to replace would.

IBM-220 Technical

PDF pg 603, pg 543, Global

The term << would >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< may >> can be used to replace would.

IBM-221 Technical

PDF pg 603, pg 543, Global

The term << would >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< may >> can be used to replace would.

IBM-222 Technical

PDF pg 604, pg 544, Global

The term << would >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< may >> can be used to replace would.

IBM-223 Technical

PDF pg 605, pg 545, H.2 Functional Behavior Guidelines

The term << must >> cannot be used in this standard. It cannot be replaced

with a shall as that would be placing a requirement in an informative annex which is not allowed. The requirement needs to be removed, reworded as not being a requirement or the annex made normative.

IBM-224 Technical

PDF pg 605, pg 545, H.2 Functional Behavior Guidelines

The term << must >> cannot be used in this standard. It cannot be replaced

with a shall as that would be placing a requirement in an informative annex which is not allowed. The requirement needs to be removed, reworded as not being a requirement or the annex made normative.

IBM-225 Technical

PDF pg 605, pg 545, H.2 Functional Behavior Guidelines

The term << must >> cannot be used in this standard. It cannot be replaced

with a shall as that would be placing a requirement in an informative annex which is not allowed. The requirement needs to be removed, reworded as not being a requirement or the annex made normative.

IBM-226 Technical

PDF pg 605, pg 545, H.2 Functional Behavior Guidelines

The term << must >> cannot be used in this standard. It cannot be replaced

with a shall as that would be placing a requirement in an informative annex which is not allowed. The requirement needs to be removed, reworded as not being a requirement or the annex made normative.

IBM-227 Technical

PDF pg 605, pg 545, H.2 Functional Behavior Guidelines

The term << must >> cannot be used in this standard. It cannot be replaced

with a shall as that would be placing a requirement in an informative annex which is not allowed. The requirement needs to be removed, reworded as not

being a requirement or the annex made normative.

IBM-228 Technical

PDF pg 607, pg 547, Annex I Power Management

This annex is listed as informative yet it contains at least 34 shalls. For this annex to remain as informative all the requirements (i.e., shalls) have to be removed.

IBM-229 Technical

PDF pg 615, pg 555, J.1.1 CD-MRW Structure

The term << must >> cannot be used in this standard. It cannot be replaced

with a shall as that would be placing a requirement in an informative annex which is not allowed. The requirement needs to be removed, reworded as not being a requirement or the annex made normative.

IBM-230 Technical

PDF pg 615, pg 555, J.1.1 CD-MRW Structure

The term << must >> cannot be used in this standard. It cannot be replaced

with a shall as that would be placing a requirement in an informative annex which is not allowed. The requirement needs to be removed, reworded as not being a requirement or the annex made normative.

IBM-231 Technical

PDF pg 625, pg 565, Global

The term << could >> needs to be removed from this standard and replaced with

the appropriate term or terms. Although not true in all cases the statement

<< is able to >> can be used to replace could.

IBM-232 Technical

PDF pg 627, pg 567, 7.9.9.1.1 Case: Discovering Non-Blank Media which is not

a MRW disc

The term << must >> cannot be used in this standard. It cannot be replaced

with a shall as that would be placing a requirement in an informative annex which is not allowed. The requirement needs to be removed, reworded as not being a requirement or the annex made normative.

IBM-233

PDF pg 627, pg 567, J.1.4.4.1 Writing User Data to the Medium During Background Format

The statement << But note: When reading >> should either be made into a note

or the statement << But note: >> deleted.

IBM-234

PDF pg 628, pg 568, J.1.4.4.3 Early Eject

The statement << Above, it was noted that the Initiator is in charge of when a

BG format is restarted. >> Has no specified reference to were the term << above >> specifically refers to. It should have a specific subclause. Also the

stated << it was noted >> should be deleted as this is not a note.

IBM-235 Technical

PDF pg 628, pg 568, J.1.4.4.3 Early Eject

The term << must >> cannot be used in this standard. It cannot be replaced

with a shall as that would be placing a requirement in an informative annex which is not allowed. The requirement needs to be removed, reworded as not being a requirement or the annex made normative.

IBM-236 Technical

PDF pg 630, pg 570, J.2.2 Addressing

The term << must >> cannot be used in this standard. It cannot be replaced

with a shall as that would be placing a requirement in an informative annex which is not allowed. The requirement needs to be removed, reworded as not being a requirement or the annex made normative.

IBM-237

PDF pg 632, pg 572, J.2.3.2.1 Writing User Data to the Medium During Background Format , Note

This note contains a requirement. The requirement needs to be removed or the

note made normative text which.

IBM-238 Technical

PDF pg 632, pg 572, J.2.3.2.1 Writing User Data to the Medium During Background Format

The term << must >> cannot be used in this standard. It cannot be replaced

with a shall as that would be placing a requirement in an informative annex which is not allowed. The requirement needs to be removed, reworded as not being a requirement or the annex made normative.

IBM-239 Technical

PDF pg 632, pg 572, J.2.3.2.3 Completing a Format

The term << must >> cannot be used in this standard. It cannot be replaced

with a shall as that would be placing a requirement in an informative annex which is not allowed. The requirement needs to be removed, reworded as not being a requirement or the annex made normative.

IBM-240

PDF pg 632, pg 572, J.2.3.2.4 Early Eject

The statement << Above, it was noted that the Initiator is in charge of when a

>> Has no specified reference to were the term << above >> specifically

refers to. It should have a specific subclause. Also the stated << it was noted >> should be deleted as this is not a note.

IBM-241 Technical

PDF pg 632, pg 572, J.2.3.2.4 Early Eject

The term << must >> cannot be used in this standard. It cannot be replaced

with a shall as that would be placing a requirement in an informative annex which is not allowed. The requirement needs to be removed, reworded as not being a requirement or the annex made normative.

IBM-242 Technical

PDF pg 632, pg 572, J.2.3.2.4 Early Eject

The term << must >> cannot be used in this standard. It cannot be replaced

with a shall as that would be placing a requirement in an informative annex which is not allowed. The requirement needs to be removed, reworded as not being a requirement or the annex made normative.

\*\*\*\*\*

Comments attached to Abs ballot from Robert Sheffield of Intel Corp.:

Not materially affected by this proposal.

\*\*\*\*\*

Comments attached to No ballot from Mark Evans of Maxtor Corp.:

There are seven commands described in detail in MMC-4 that are defined in SPC-3 (INQUIRY, MODE SELECT(10), MODE SENSE(10), READ BUFFER, REQUEST SENSE,

TEST UNIT READY, and WRITE BUFFER). Such duplication can result in divergence

in definition. As an example: MMC-3 defines byte 3 in the mandatory INQUIRY

command as Reserved, whereas SPC-3 defines this byte as part of the Allocation

Length field.

It is appropriate to define command set-specific behavior for a particular command in a command set standard, but all duplication with SPC-3 should be removed from MMC-4.

\*\*\*\*\*

Comments attached to Abs ballot from Bill Galloway of Pivot3, Inc.:

Not materially affected by this proposal.

\*\*\*\*\*

Comments attached to Abs ballot from Gerald Houlder of Seagate Technology:

My company is not materially affected by this standard because we don't make products conforming to this standard.

\*\*\*\*\*

Comments attached to Yes ballot from Paul D. Aloisi of Texas Instruments:

Very humbling document

Table 90 51h Information is misspelled

\*\*\*\*\* End of Ballot Report \*\*\*\*\*