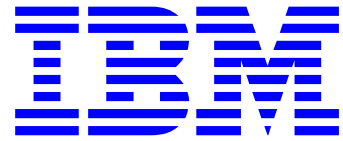


To: INCITS Technical Committee T10  
From: Kevin Butt  
Date: November 3, 2008  
Document: T10/07-372r4 — SMC-3 - Medium Magazine Error Codes



## 1 Revisions

- 07-372r0. (August 24, 2007) Initial revision
- 07-372r1. (February 12, 2008) Expanded to include model section for media magazine.
- 07-372r2. (September 08, 2008) Edits from Sept. SMC Working Group.
- 07-372r3. (October 01, 2008) Edits from 01 Oct phone conference.
- 07-372r4. (October 01, 2008) Edits from 03 November phone conference. This is version that was approved for inclusion into SMC-3.

## 5 Introduction

The SMC-3 working group is attempting to clarify what additional sense codes are used in SMC devices and when they are presented. I have been given the assignment to propose those codes for Medium Magazines.

NOTE 1 - Sept WG: I need to create the full proposal for when used and where inserted into SMC-3. Perhaps there should be a model clause for these sense codes. Should be linked to Move Medium and exchange media command. Open/Close Import/Export Element.

## 6 Proposal

Editor's Note 1: Editor is instructed to sweep SMC-3 for medium magazine and change to media magazine.

Editor's Note 2: Editor is instructed to sweep SMC-3 for magazine (i.e., with no qualifier) and change to media magazine.

**3.1.9 media magazine:** A structure consisting of one or more import/export elements and/or storage elements that is used to contain a set of volumes within the media changer (see 5.3). Some media changer devices allow an operator to remove media magazine(s) from the media changer.

### 5.3 Media magazine (Entire section is new so no font delineation)

A media changer may organize import/export elements or storage elements into physical groupings that may be accessed as one entity using a structure called a media magazine. A media magazine consists of:

- a) one or more import/export elements;
- b) one or more storage elements; or
- c) one or more elements where the elements are a mixture of import/export elements and storage elements.

Table 1 describes ~~when~~-how additional sense codes related to media magazines are used.

Table 1 — Media magazine additional sense codes

Additional Sense Code	Sense Key	<del>When</del> - <u>How</u> used
MEDIUM MAGAZINE REMOVED	UNIT ATTENTION	A unit attention condition <del>is</del> - <u>may be</u> established when a media magazine has been removed from the media changer.
	NOT READY	This CHECK CONDITION <del>is</del> - <u>shall be</u> returned in response to a command that the device server is unable to process because <del>the logical unit is not ready a media magazine is not present in the media changer</del> <u>due to a removed media magazine.</u>
	ILLEGAL REQUEST	<u>This CHECK CONDITION shall be returned in response to a command that the device server is unable to process because a media magazine has been removed.</u>
MEDIUM MAGAZINE INSERTED	UNIT ATTENTION	A unit attention condition <del>is</del> - <u>may be</u> established when a media magazine has been inserted into the media changer.
	NOT READY	This <u>sense key and additional sense code</u> combination shall not be used.
	ILLEGAL REQUEST	<del>Editors Note 3 - KDB: There was discussion about whether or not to list ILLEGAL REQUEST. The point was raised that ADC specifies to use ILLEGAL REQUEST in certain conditions. Look and see when and what, if anything, it should drive in this table.</del>
MEDIUM MAGAZINE LOCKED	UNIT ATTENTION	A unit attention condition <del>is</del> - <u>may be</u> established when a media magazine has been locked. The ACCESS bit in the element status data indicates whether access to a specific element by the medium transport element is allowed (see 6.11.5).
	NOT READY	This <u>sense key and additional sense code</u> combination shall not be used.
	ILLEGAL REQUEST	This <u>sense key and additional sense code</u> combination shall not be used.

Table 1 — Media magazine additional sense codes

Additional Sense Code	Sense Key	<del>When</del> <u>How</u> used
MEDIUM MAGAZINE UNLOCKED	UNIT ATTENTION	A unit attention condition <del>is</del> <u>may be</u> established when a media magazine has been unlocked. Removal of the media magazine is allowed and elements in the magazine are not accessible by the medium transport element.
	NOT READY	<u>This sense key and additional sense code combination shall not be used.</u> <del>This CHECK CONDITION is returned in response to a command that the device server is unable to process because the media magazine is unlocked.</del>
	ILLEGAL REQUEST	<u>This CHECK CONDITION shall be returned in response to a command that the device server is unable to process because the media magazine is unlocked.</u>
MEDIUM MAGAZINE NOT ACCESSIBLE	UNIT ATTENTION	<u>A unit attention condition may be established when a media magazine becomes inaccessible.</u>
	NOT READY	<u>This sense key and additional sense code combination shall not be used.</u> <del>This CHECK CONDITION is returned in response to a command that the device server is unable to process because a media magazine is not accessible by a medium transport element (e.g., position has changed)</del>
	ILLEGAL REQUEST	<u>This CHECK CONDITION shall be returned in response to a command that the device server is unable to process because a media magazine is not accessible by a medium transport element (e.g., position has changed).</u>

## 5.4 Volume tag information

Editor's Note 4: Nothing changed in the Volume tag information clause except numbering

### 6.11.4 Medium transport element descriptor

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An element disabled (ED) bit set to one indicates that the element is disabled (e.g., a [media](#) magazine or drive is not installed or has been logically disabled). An ED bit set to zero indicates that the element is enabled.

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### 7.3.3 Extended Device Capabilities mode page

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A storage magazine (SMGZ) bit set to one indicates that the media changer uses ~~medium~~ [media](#) magazines for some storage elements. A SMGZ bit set to zero indicates that the media changer does not use ~~medium~~ [media](#) magazines for any storage element.

An import/export magazine (IEMGZ) bit set to one indicates that the media changer uses ~~medium~~ [media](#) magazines for some import/export elements. An IEMGZ bit set to zero indicates that the media changer does not use ~~medium~~ [media](#) magazines for any import/export element.