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To: John Lohmeyer
From: Dexter Anderson

Subject: Passing Media Initialization Pattern during Format command
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   This memo is to re-submit a method of communicating an Initialization pattern during the Format command. This pattern would then be written to the disk during the Format operation.

Defect List Header

Bit Byte	7	6	5	4	3	2	1	0
0	Reserved						(00h)	
1	FOV	DPRY	DCRT	STPF	IP	Reserved		VU
2	Defect List Length (MSB)							
3	Defect List Length (LSB)							

Initialization Pattern Field (if IP = 1 above)

Byte								
0	Initialization Parameter Length (MSB)							
1	Initialization Parameter Length (LSB)							
2	Pattern Type							
3	LBA	PS	Reserved					
4-N	Initialization Pattern							

(1)

- **IP** (**Initialization Pattern**) bit set to one indicates that the initiator is passing a pattern in the Initialization Pattern Field following the defect list header and before any defect descriptors (if any). -

- **IP** bit set to zero indicates that the initiator is not passing a pattern and that the default pattern shall be used.

The **Defect List Length** shall **not** include the bytes used for the Initialization Pattern Field.

The first 2 bytes of the field shall be set to Initialization Parameter Length (IPL). This length does NOT include the Pattern Type and LBA/PS/Reserved bytes. If this length is zero, the Initialization Pattern is assumed to be the default type. The IPL may not exceed the logical block size.

The **Pattern Type** field defines the type of pattern that is enumerated in the Initialization Pattern. The values for this field are:

Pattern Type	Description
00h	Default pattern.
01h	Repeating Pattern, repeats the Initialization Pattern as many times as necessary to fill the data block
02h-7Fh	Reserved
80h-FFh	Vendor Unique

- **LBA** bit set to one indicates that the first 4 bytes of the initialization pattern (either sent or default) will will be overwritten with the 4-byte logical block address.

- **PS** bit set to one indicates that (for devices that have multiple physical sectors per logical block) the first 4 bytes of each physical sector will contain the logical block address.

Setting the Initialization Pattern does not necessarily change the default value, so if another FORMAT UNIT command is issued, the desired pattern must be passed again by the initiator.

Thank you for your consideration,

Dexter Anderson