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Subj: SBC-3 Rename field in READ CAPACITY(16) parameter data

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In the course of explaining the READ CAPACITY(16) command to some colleagues, it became apparent that we have chosen an unfortunate name for one field in the read capacity parameter data. There is a 4 bit field named LOGICAL BLOCKS PER PHYSICAL BLOCK, but it has a different definition from "logical blocks per physical block". The logical blocks per physical block concept is well defined in the model section (clause 4.5, physical blocks) and this field has a different meaning but has the same name. I propose a different name for the READ CAPACITY(16) field to more accurately describe its actual meaning.

I propose renaming the LOGICAL BLOCKS PER PHYSICAL BLOCK field as the LBPPBE (Logical Blocks Per Physical Block Exponent) field. The changes to SBC for this are indicated in red below.

Changes to SBC-3, rev. 9:

Table 46 – READ CAPACITY(16) parameter data

1					- /			1
Bit	7	6	5	4	3	2	1	0
Byte								
0	(MSB) RETURNED LOGICAL BLOCK ADDRESS							
7	(LSB)							(LSB)
8	(MSB) LOGICAL BLOCK LENGTH IN BYTES							
11								(LSB)
12	RESERVED				P_TYPE			PROT_EN
13	RESERVED				<u>LBPPBE</u>			
14	RESE	RVED	(MSB)					
15			LOWEST	ALIGNED LOC	GICAL BLOCK ADDRESS			(LSB)
16				RESE	RVED			
31		•						

[Editors note: Unchanged text not shown]

The LBPPBE (Logical Blocks Per Physical Block Exponent) field is defined in table 48.

Table 48 - LBPPBE field

Code	Description				
0	One or more physical blocks per logical block ^a				
n > 0	2 ⁿ logical blocks per physical block				
^a The number of physical blocks per logical block is not reported.					