

Date: September 05, 2003  
 To: T10 Committee (SCSI)  
 From: Jim Coomes (Seagate)  
 Subject: SBC Default data protection block

## 1 Overview

There is a need for a data protection block definition that indicates that the block is not checked.

When the DATA BLOCK REFERENCE TAG is not locked to the LBA, valid protection information can not be determined for formatting the medium. Writing the LBA in the protection information would result in a error when unwritten blocks are accessed.

When the DATA BLOCK REFERENCE TAG is not locked to the LBA, valid protection information can not be determined for a write by a legacy initiator that does not provide the data protection block.

Additionally, a default data protection block allows disk drives format faster by not writing a unique value in the protection information.

The proposed default data protection block is all ones in all fields of the block.

### Changes to document 03-176r4

Page 3, Add:

Protected information equal to all ones (FFh,FFh, FFh,FFh, FFh, FFh, FFh, FFh) is used to indicate data blocks on the medium have not been written since the last format or were written by a legacy initiator that does not provide the data protection block. When an application client or device server detects protection information of all ones, the checking of fields in the protection information is disabled for the associated data block.

Page 7, add the text underlined and in red to the last paragraph.

An initialization pattern (IP) bit of zero indicates that an initialization pattern descriptor is not included and that the device server shall use its default initialization pattern of all ones. An IP bit of one indicates that an initialization pattern descriptor (see 4.0.9.2) is included in the FORMAT UNIT parameter list immediately following the .....