

Date: February 12, 1987

To: SCSI-2 Optical Working Group and Accredited Standards Committee X3T9.2

From: Lou Edwards
LMSI-OSI
4425 ArrowsWest Drive
Colorado Springs, CO 80907
(303) 593-4205

Subject: Disconnect/Reconnect Page Parameters Alternative Proposal

Attached for your review is an alternative proposal for the subject page for use with optical devices. The main changes from the proposal produced for the Optical Working Group are:

1. A new page code will be needed if this page is unique to optical devices.
2. The two ratio parameters (Read Buffer Full and Write Buffer Empty) have been dropped. The Tape Working Group proposed making these parameters "advisory to the target". The burst size and time limit parameter make these ratios superfluous.
3. The burst size fields are expressed as a number of logical blocks rather than in increments of 512 bytes. Since the READ and WRITE commands (with which the Disconnect/Reconnect function is normally associated) specify transfer length in logical blocks, it is consistent to use the same terms.

Regards,

Lou

Lou Edwards, Manager
Sales Technical Support

lcw/2-12-87

ALTERNATIVE PROPOSAL

Optical Devices

Disconnect/Reconnect Parameters

Bit	7	6	5	4	3	2	1	0
Byte								
0	Reserved	Reserved			Page Code (XXh)			
1					Additional Page Length			
2	(MSB)					Bus Inactivity Time Limit		
3								(LSB)
4	(MSB)				Disconnect Time Limit			
5								(LSB)
6	(MSB)				Connect Time Limit			
7								(LSB)
8	(MSB)				Maximum Burst Size			
9								(LSB)
10	(MSB)				Minimum Burst Size			
11								(LSB)

Bus Inactivity Time Limit field indicates the maximum time, in 100 microseconds increments, that the target is allowed to maintain the bus busy without handshakes until it must attempt to disconnect. The target may round to its nearest capable value. A value of zero indicates that the target is allowed to either use its default limits or indefinitely maintain the bus busy without handshakes.

Disconnect Time Limit field indicates the minimum time, in 100 microseconds increments, that the target should remain disconnected until it attempts to reconnect. The target may round to its nearest capable value. A value of zero indicates that the target is allowed to reconnect immediately provided the Minimum Burst Size field requirements are met.

Connect Time Limit field indicates the maximum time, in 100 microseconds increments, that the target should remain connected until it attempts to disconnect. The target may round to its nearest capable value. A value of zero indicates that the target is allowed to remain connected indefinitely or use its default connect time.

Maximum Burst Size field indicates the maximum number of logical blocks that are to be transferred before the target attempts to disconnect. A value of zero indicates no limit on the number of logical blocks transferred, i.e. the Connect Time Limit field will be used to determine if and when to attempt to disconnect.

ALTERNATIVE PROPOSAL

Optical Devices

Minimum Burst Size field values are expressed as a number of logical blocks. A value of zero defaults to 1.

- o For READ's, this field indicates the minimum number of logical blocks in the target buffer before the target will attempt to reconnect.
- o For WRITE's, this field indicates the minimum amount of empty target buffer space that must be available before the target will attempt to reconnect.

The Minimum Burst Size and the Disconnect Time Limit fields' requirements must both be satisfied before the target will attempt to reconnect.

lcw/le/optdev2

99