

To: T10 Technical Committee  
From: Rob Elliott, HP (elliott@hp.com)  
Date: 7 November 2002  
Subject: 02-472r1 SAS Make Protocol-Specific mode page short format optional

### **Revision history**

Revision 0 (2 November 2002) First revision  
Revision 1 (7 November 2002) Incorporated comments from SAS WG

### **Related documents**

sas-r02b - Serial Attached SCSI revision 2b

### **Overview**

The Protocol-Specific mode page short format, with the I\_T nexus loss time field, is not optional in sas-r02b and earlier. All mode pages should be optional.

### **Suggested changes**

#### **10.1.2.1 Disconnect-Reconnect mode page**

##### **10.1.2.1.1 Disconnect-Reconnect mode page overview**

The Disconnect-Reconnect mode page (see SPC-3) provides the application client the means to tune the performance of the service delivery subsystem. Table 91 defines the parameters which are applicable to SSP.

If any field in the Disconnect-Reconnect mode page is not implemented, the value assumed for the functionality of the field shall be zero (e.g., as if the mode page is implemented and the field is set to zero).

...

#### **10.1.2.2 Protocol-Specific Port mode page**

##### **10.1.2.2.1 Overview**

The Protocol-Specific Port mode page (see SPC-3) contains parameters that affect SAS SSP target port operation. If the mode page is implemented, all logical units in SAS SSP target devices supporting the MODE SELECT or MODE SENSE commands shall implement the page. If implemented, there shall be one copy of the mode page shared by all initiator ports.

...

The I\_T NEXUS LOSS TIME field indicates how long in milliseconds the target port shall retry connection requests to an initiator port that are rejected with OPEN\_REJECT (NO DESTINATION), OPEN\_REJECT (CONNECTION RATE NOT SUPPORTED), or connection timeouts before treating it as an I\_T nexus loss (see 4.5). An I\_T NEXUS LOSS TIME of zero indicates the target port shall never consider rejections an I\_T nexus loss. If the mode page is implemented, the default value shall be 2 000 ms; if the mode page is not implemented, the target port shall not implement an I\_T nexus loss timer.

...