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To: **T10 Serial Attached SCSI Protocol Working Group**
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Subject: SAS SL_IR state receiving IDENTIFY frames

Introduction

There has been much discussion about resolving several letter ballot comments regarding the wording of what happens when an SL_IR receiver is receiving IDENTIFY address frames. The following recommended changes should resolve these comments. Clause number references in this proposal are to SAS-r03.

7.8.6 SL_IR transmitter and receiver

[No changes are proposed to the first two paragraphs on transmitter requirements in this clause. Delete the third paragraph in the clause that specifies receiver requirements as this is covered below.] The paragraph to be deleted is: "The SL_IR receiver shall ignore any primitive received inside an IDENTIFY address frame. In this case, a data dword shall be considered inside a frame when it is received after an SOAF and before an EOAF if the primitive is received after the 8th data dword following the SOAF."
.....

Change the following two clauses to be as written here (proposed changes were made with revision marks on):

7.8.6.2.3.1 [SL_IR_RIF2:Receive_Identify_Frame] State description

This state receives the dwords of an address frame and the EOAF.

This state shall ignore all primitives (e.g., BREAK and HARD_RESET) except SOAF.

If this state receives an SOAF, then this state shall discard the address frame and send an Address Frame Failed confirmation to the management application layer to indicate that an invalid IDENTIFY address frame was received.

If this state receives more than eight data dwords after an SOAF and before an EOAF, then this state shall discard the address frame and send an Address Frame Failed confirmation to the management application layer to indicate that an invalid IDENTIFY address frame was received.

After receiving ~~the~~an ~~frame~~EOAF, ~~it~~ this state shall check if ~~it is a correct~~the IDENTIFY address frame is valid.

This state shall accept an IDENTIFY address frame and send an Identify Received parameter to the IRC state machine if:

a) the ADDRESS FRAME TYPE field is set to Identify;
b) the number of data dwords between the SOAF and EOAF is 8; and
c) the CRC field contains a valid CRC.

Otherwise, this state shall discard the IDENTIFY address frame and send an Address Frame Failed confirmation to the management application layer to indicate that an invalid IDENTIFY address frame was received.

7.8.6.2.3.2 Transition SL_IR_RIF2:Receive_Identify_Frame to SL_IR_RIF3:Completed

This transition shall occur after ~~receiving an EOAF and~~ :

a) sending ~~the~~ an Identify Received parameter; or
b) sending an Address Frame Failed confirmation.