

11 September 2006

06-408r1 Race condition out of SP14:SAS\_Fail state

To: T10 Technical Committee

From: Bill Martin, Sierra Logic

Date: 11 September 2006

Subject: 06-408r1 Race condition for transition out of SP14:SAS\_Fail state

R0: Original proposal

R1: Changes requested by working group to modify the grammar on the a, b list due to the proposed change.

\*. Specification revision: sas2r05a

\*. Page Number: 220

\*. Clause: 6.8.4.8

\*. Layer: Phy Layer

\*. Issue Description: In the case when SAS Speed negotiation window for the highest supported speed is successful, after the maximum speed negotiation window (highest supported speed plus one) fails, the following two transitions become valid resulting in race condition.

1) Transition SP14:SAS\_Fail to SP1:OOB\_AwaitCOMX

2) Transition SP14:SAS\_Fail to SP8:SAS\_Start

Proposed fix:

Change clause 6.8.4.8.2 to

This transition shall occur if:

- a) the current speed negotiation window is the maximum SAS speed negotiation window and the previous speed negotiation window was not successful; or
- b) the current speed negotiation window is the final SAS speed negotiation window.