

Document number: 99-226r1.pdf  
Date: September 20, 1999  
To: T10/T11 Committees  
From: Jim Coomes, Seagate Technology  
Subject: Mode Page 19h DSA bit Clarification

At the September Joint T10/T11 Tape meeting last week, the proposal to change the definition of the Disable Soft Address bit in the FC Control mode page was discussed. This mode page is documented in FCP-2. The change is to support the customer requested and implemented behavior for this function. The clarification limits the target to only select a hard address in loop initialization.

The text below is updated based on input from the meeting. The substance of the change is the target after acquiring a hard address in LIHA will attempt to get this address in subsequent loop initializations in either LIFA if a valid Fabric login exists or LIPA unless the hard address has changed.

The consensus was to change the name of the bit to Require Hard Address (RHA) to reflect the function of the bit.

**New Text:**

**9.1.3.4 Require Hard Address (RHA)**

Targets not attached to an FC-AL loop shall ignore this bit.

A Require Hard Address (RHA) bit of one indicates that a target attached to an FC-AL loop shall attempt to obtain the hard address available in the SCA-2 SFF-8067 connector or device address jumpers during loop initialization. If there is a conflict for the hard address selection during loop initialization or the target does not have a valid hard address available, the target shall enter the nonparticipating state. If the target detects loop initialization while in the nonparticipating state, the target shall again attempt to get its hard address. If the hard address has not changed from the address obtained in a previous successful loop initialization, the target shall attempt to obtain the address in the LIFA phase if a valid Fabric login exists or LIPA phase of loop initialization. If the hard address has changed, the target shall attempt to obtain the new address in the LIHA phase. When the RHA bit is zero, the target follows the normal initialization procedure, including the possibility of obtaining a soft address during the loop initialization process.

**Additionally:**

LIFA, LIPA, LIHA, and LISA are added to the abbreviation section.