

T10/05-021 revision 0

Date: December 21, 2004

To: T10 Committee (SCSI)

From: George Penokie (IBM/Tivoli)

Subject: SPC-3: Timestamp (04-271) Questions/Answers

1 Overview

Several questions have come up relating to the 04-271 timestamp proposal that was accepted at the November SCSI meeting. Those questions and the answers were:

2 Question 1

The timestamp origin table includes: "000b Timestamp initialized to zero at power-on" but the text that follows says the condition that affects the timestamp is hard reset:

"c) A Hard reset ...

The Timestamp shall not be affected by an L_T nexus loss or a Logical Unit reset."

Which is intended, power on or hard reset?

2.1 Question 1 Answer

Both are intended.

2.2 Question 1 Solution

To fix this change the 000b description to "Timestamp initialized to zero at power-on or as the result of a Hard Reset". Also add in power-on into the a,b,c list under the table.

3 Question 2

Do you plan to propose these commands for any other command sets?

3.1 Question 2 Answer

Not at this time. If someone else wants to use them in another command set that's OK and they can bring in the proposal. The intent here was originally for ADC but the ADI working group thought it best to make this in SPC since it is of general use and intent.

4 Question 3

If there is more than one logical unit, is the timestamp a logical unit specific entry, or shared across logical units? The section label "5.12 Device Clocks" and the phrase "device timestamp" in the REPORT TIMESTAMP command imply it might be device-wide.

4.1 Question 3 Answer

The timestamp is device wide.

4.2 Question 3 Solution

In the Device Clocks section the following statement should be added:

There shall be only one timestamp per target device.

5 Question 4

Should there be a unit attention reporting that some other I_T nexus has changed the timestamp value? (like there is for Priority changes).

5.1 Question 4 Answer

A unit attention should occur.

5.2 Question 4 Solution

In the device clocks section add in following statement:

If the timestamp is changed by means other than the SET TIMESTAMP command then the device server shall generate a unit attention condition for the initiator port associated with each I_T nexus (see SAM-3), with the additional sense code set to TIMESTAMP CHANGED.

In the SET TIMESTAMP command section add in the following statement:

On successful completion of this command the device server shall generate a unit attention condition for the initiator port associated with each I_T nexus except the I_T nexus on which the SET TIMESTAMP command was received (see SAM-3), with the additional sense code set to TIMESTAMP CHANGED.

Need to add in a new ASCQ of TIMESTAMP CHANGED (2Ah 09h).