

TO: T10 Membership, ADI Working Group  
 FROM: Rod Wideman, Quantum; [rod.wideman@quantum.com](mailto:rod.wideman@quantum.com)  
 DATE: July 2<sup>nd</sup>, 2007  
 SUBJECT: ADI: ADC-2 Letter Ballot Comment HPQ-159 Resolution (document T10/07-303r0)

Rev0 – Initial draft.

Rev1 – Changed “..for all I\_T nexuses...” to “...for any I\_T nexuses...” per the July 10<sup>th</sup> WG meeting.

**Related Documents**

ADC-2 Revision 7  
 ADC-2 Revision 7e  
 T10/06-475

**Introduction**

This proposal is intended to address ADC-2 letter ballot comment HPQ-159 ( reproduced below from T10/06-475 for convenience).

HPQ-159	43	2nd paragraph	T	Add a BUA bit set to zero sentence
---------	----	---------------	---	------------------------------------

**Discussion**

The behavior of the BUA bit is specified partially in conjunction with the NRSC bit, but an dedicated behavior specification is missing. One challenge to overcome is that the ASC and ASCQ fields are not necessarily ignored when the BUA bit is set to zero. I believe the relevant test condition is NRSC set to one and BUA set to zero. The proposed wording should allow not ready sense data to be updated without requiring unit attention conditions be established or broadcast.

In reviewing this section I also note that the ASC and ASCQ fields do not have their own paragraphs that describe them (they are indirectly described via the BUA and NRSC bits). Since there are no letter ballot comments requesting a change for these, I only mention it for future consideration, since I believe the convention is for each bit and field to have their own description. If one were to be added later, I would suggest adding a paragraph after the mdc bit description that states “[The ASC field and ASCQ field contain additional sense data as specified by the BUA and NRSC bits.](#)” (The working group may wish to consider this as an extension to this proposal if deemed not too controversial).

**Proposed Changes to ADC-2**

Proposed new text shown in [blue underline](#). Deleted text is shown in ~~red-strikeout~~.

*Changes to 5.2 (based on fourth paragraph after table 7 in rev07e):*

A broadcast unit attention (BUA) bit set to one specifies that the ASC field and ASCQ field contain the additional sense data that shall be used by the local SMC device server to establish a unit attention condition for all I\_T nexuses accessible via the DT device primary ports. If none of the known I\_T nexuses are able to have a unit attention condition established by the device server due to insufficient resources, then the device server shall terminate the NOTIFY DATA TRANSFER DEVICE command with a CHECK CONDITION status and set the sense key to ILLEGAL REQUEST and the additional sense

code to INSUFFICIENT RESOURCES. If the additional sense data in the ASC field and ASCQ field is set to NOT READY TO READY CHANGE, MEDIUM MAY HAVE CHANGED, then the remote SMC device server ready state has transitioned to indicate ~~ed~~ accessible (see 4.3.5). [A BUA bit set to zero specifies that the ASC field and ASCQ field contents shall not be used by the local SMC device server to establish a unit attention condition for any I T nexuses accessible via the DT device primary ports.](#)

Deleted: [all](#)