To: T10 Technical Committee  
From: Rob Elliott, HP (elliott@hp.com)  
Date: 19 October 2002  
Subject: 02-396r1 SAS Device Identification VPD page requirements

**Revision History**
Revision 0 (1 October 2002) First revision  

**Related Documents**
sas-r02 - Serial Attached SCSI revision 2  
02-254r3 - WWNs for W-LUNs (George Penokie)

**Overview**
SAS should be very specific in requirements for INQUIRY vital product data (VPD) to improve interoperability and ensure the Protocol Specific mode page and log page data can be interpreted correctly.

**Suggested Changes**
10 Application layer  
10.1 SCSI application layer  
10.1.3 SCSI commands  
10.1.3.1 INQUIRY command

Each logical unit in a SAS SSP target device shall include the identification descriptors listed in table 1 in the Device Identification vital product data (VPD) page (83h) returned by the INQUIRY command (see SPC-3).

**Table 1 — Device Identification VPD page required identification descriptors**

<table>
<thead>
<tr>
<th>Field in identification descriptor</th>
<th>Logical unit name</th>
<th>Target port identifier</th>
<th>Relative target port identifier</th>
<th>Target device name</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDENTIFIER TYPE</td>
<td>NAA (3h)</td>
<td>NAA (3h)</td>
<td>Relative target port identifier (4h)</td>
<td>NAA (3h)</td>
</tr>
<tr>
<td>SIMULATION</td>
<td>Logical unit (0h)</td>
<td>Target port (1h)</td>
<td>Target port (1h)</td>
<td>Target device (2h)</td>
</tr>
<tr>
<td>CODE SET</td>
<td>Binary (1h)</td>
<td>Binary (1h)</td>
<td>Binary (1h)</td>
<td>Binary (1h)</td>
</tr>
<tr>
<td>IDENTIFIER LENGTH</td>
<td>8 or 16</td>
<td>8</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>PROTOCOL IDENTIFIER</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>SAS (6h)</td>
</tr>
<tr>
<td>IDENTIFIER</td>
<td>NAA IEEE</td>
<td>NAA IEEE</td>
<td>Target ports shall be numbered sequentially starting with 1h.</td>
<td>NAA IEEE Registered a format</td>
</tr>
<tr>
<td></td>
<td>Registered a or NAA IEEE Registered Extended b format</td>
<td>a or format c</td>
<td>b format c</td>
<td>c format</td>
</tr>
</tbody>
</table>

a Contains NAA field set to IEEE Registered (5h); the IDENTIFIER LENGTH is set to 8  
b Contains NAA field set to IEEE Registered Extended (6h); the IDENTIFIER LENGTH is set to 16  
c This identifier contains the SAS address of the target port.
Logical units may include additional identification descriptors than those required by this standard.

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**Editor’s Note 1: 02-254** makes the ASSOCIATION field a 2-bit field to allow a target device to be identified with 2h and adds a PROTOCOL IDENTIFIER field to the identification descriptor for that association type.

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**Editor’s Note 2:** Target device name is not being proposed here. If another proposal to add them is accepted, then the target device name column and protocol identifier row would be inserted in this table as shown.