

**To: T10 Membership SAS Working Group**

**From: Kyle Sterling**

**Date: April 29, 2002**

**Subject: SMP REPORT MANUFACTURER INFO, Revision 1**

Reason for addition of response: There is need to identify the manufacture and revision level of the components within the domain.

This proposal defines a new SMP Management Function that provides a response of the component manufacturer name (the same NAA name defined in X.X.X), a component device ID, and a component Revision Level. Any end device or expander may provide this information response. This information is inserted by the manufacturer and is not modifiable in the field.

Add a FUNCTION 03h to Table 62 Management functions and add a new sub-clause REPORT MANUFACTURER INFORMATION function and TableXX and TableXV.

**Table 62. Management functions**

FUNCTION value	Function	Description
00h	DISCOVER	Return the device name to PHY mapping table of an expander device.
01h	REPORT GENERAL	Return a variety of information about the device
02h	REPORT SATA CAPABILITIES	Return information about which SATA features an expander device supports.
<u>03h</u>	<u>REPORT MANUFACTURER INFO</u>	<u>Returns VENDOR Name, Product ID, Product Revision Level</u>
<u>03h-04h</u> – 0Fh		Reserved for general input functions.
10h	REPORT PHY	Return information about a specific PHY.
11h	REPORT PHY ERROR LOG	Return error-logging information.
12h	REPORT SATA	Return information about a PHY currently attached to a SATA target port.
13h – 1Fh		Reserved for PHY input functions
20h – 7Fh		Reserved for input functions
80h – 8Fh		Reserved for general output functions
90h	PHY CONTROL	Trigger actions by the PHY (e.g., reset, enable/disable, NEA loop-back).
91h – 9Fh		Reserved for PHY output functions
A0h - FFh		Reserved for output functions

The ADDITIONAL REQUEST BYTES definition and length is based on the function (see 7.4.4). The maximum size of the ADDITIONAL REQUEST BYTES field is 1023 bytes, making the maximum size of the frame 1052 bytes (1024 + 24 byte header + 4 byte CRC).

The CRC field is a CRC value (see 6.15) that is computed over the entire frame.

## 7.4.X REPORT MANUFACTURER INFORMATION function

The REPORT MANUFACTURER INFORMATION function may be implemented by any device.

**Table XX REPORT MANUFACTURER INFO request**

Byte	7	6	5	4	3	2	1	0
0	FUNCTION (03h)							
1	Reserved							
2								
3								

Table XV defines the response format.

**Table XV REPORT MANUFACTURER INFO response**

Bit Byte	7	6	5	4	3	2	1	0
0	RESULT							
1	RESERVED							
3								
4	ADDITIONAL LENGTH (33h)							
5	RESERVED							
7								
8	(MSB)	VENDOR IDENTIFICATION						(LSB)
15								
16	(MSB)	PRODUCT IDENTIFICATION						(LSB)
31								
32	(MSB)	PRODUCT REVISION LEVEL						(LSB)
35								
36	VENDOR SPECIFIC							
55								

The ADDITIONAL LENGTH field shall specify the length in bytes of the parameters, including the ADDITIONAL LENGTH field. If the ADDITIONAL REQUEST BYTES of the SMP\_REQUEST is too small to transfer all of the parameters, the ADDITIONAL LENGTH shall not be adjusted to reflect the truncation.

VENDOR IDENTIFICATION field contains eight bytes of ASCII data identifying the vendor of the product. The data shall be left aligned within this field.

The PRODUCT IDENTIFICATION field contains sixteen bytes of ASCII data as defined by the vendor. The data shall be left aligned within this field.

The PRODUCT REVISION LEVEL field contains four bytes of ASCII data as defined by the vendor. The data shall be left-aligned within this field.