

Date: June 14, 2003

To: INCITS T10 Committee (SCSI)

From: Lee Jesionowski (IBM)

Subject: ADI – Log Parameters for DTD Primary Port Status (T10/03-220r0)

Revision 0:

Initial proposal

Discussion:

There is a need for the ability for the automation device to poll the status of each DTD primary port. Based on prior discussion, it is proposed here that this status be reported as one or more log parameters of the VHF log page. Prior placeholders for reporting this via a separate log page will need to be removed. It is also proposed that the name of the VHF log page be changed to reflect a broader set of contents; however, the name of the VHF log parameters is not proposed to be changed. This proposal applies to ADC Revision 4.

NOTE: This proposal does not attempt to address the issue of how to report current primary port operating modes (e.g. Loop ID) to allow for a period of time in which a pending change to an operating mode does not match the current operating mode (e.g. if a target reset is required).

Changes to Draft Standard:

Beginning with clause 6.1, Table 7, change all occurrences of “Very High Frequency log page” to “DTD Status log page”.

In clause 6.1, Table 7, delete the entry for Page Code 14h, Interface Status Log Page.

In clause 6.1.2, change the heading for Table 9 from “Very High Frequency parameter codes” to “DTD Status parameter codes”.

In clause 6.1.2, Table 9, add an entry for Parameter Codes 0100h-01FFh, DTD Primary Port Status, referencing a new clause 6.1.2.3.

Delete clause 6.1.5, Interface Status log page.

New Clauses in Draft Standard:

6.1.2.3 DTD Primary Port Status log parameter(s)

The DTD Primary Port Status log parameter is shown in table 1.

Table 1 -DTD Primary Port Status log parameter

Bit Byte	7	6	5	4	3	2	1	0
4	(MSB) _____							
5	PARAMETER CODE _____ (LSB)							
6	DU(0)	DS(1)	TSD(0)	ETC(0)	TMC(0)		LBIN(1)	LB(1)
7	PARAMETER LENGTH (n-7) _____							
8	(MSB) _____							
	DTD Primary Port Status Data _____							
n	_____ (LSB)							

The PARAMETER CODE field contains a value from 0100h to 01FFh, as assigned by the DTD, which uniquely identifies the primary port relative to other primary ports in the device, independent of port type. Once assigned, the PARAMETER CODE value for a port shall not be changed as long as the port remains on the device. For each primary port, the PARAMETER CODE value shall be equal to 0100h plus the value of the RELATIVE TARGET PORT field associated with that port as defined in clause 6.2.2.2.1. *[Editors note: I suggest we globally rename RELATIVE TARGET PORT to RELATIVE PRIMARY PORT.]*

6.1.2.3.1 Fibre Channel Status Data

The DTD Primary Port Status Data for a Fibre Channel port is shown in table 2.

Table 2 –Fibre Channel Status Data

Bit Byte	7	6	5	4	3	2	1	0
8	Reserved					CONFLICT	LIGHT	LIPC

A value of one in the loop initialization process complete (LIPC) field indicates that the loop initialization process (LIP) is complete for the primary port. A value of zero indicates that the LIP is not complete.

A value of one in the LIGHT field indicates that light is detected at the primary port. A value of zero indicates light is not detected.

A value of one in the CONFLICT field indicates that another device has the required Hard AL_PA or that no AL_PA is available for the primary port. A value of zero indicates there is no AL_PA conflict.

6.1.2.3.2 Parallel SCSI Status Data

The DTD Primary Port Status Data for a Parallel SCSI port is shown in table 3.

Table 3 –Parallel SCSI Status Data

Bit Byte	7	6	5	4	3	2	1	0
8	Reserved							

[Editors note: I added this as a placeholder for discussion. Depending on the final content, it might make sense as an editorial change to combine these two tables back into a common log parameter (Table 1) with a note for each field that indicates which protocol it applies to.]