To: T10 Technical Committee

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Subject: T10/02-249r1 SES-2 Nonvolatile Cache Element cache size

## **Revision History**

Revision 0 (28 June 2002) first revision

Revision 1 (18 July 2002) incorporated comments from July CAP WG – use the odd ki-byte terminology rather than kilobytes to represent 2<sup>n</sup> quantities

## **Related Documents**

ses2r00 - SCSI Enclosure Services - 2 revision 00

#### Overview

Currently there is no way to determine the size of the Nonvolatile Cache element. Users and management applications would be better informed and be able to better manage the various related components if the size of the cache element in the enclosure was available.

# **Suggested Changes**

This proposal provides for a mechanism to report the size of the NV cache available in the enclosure.

## 7.3.11 Nonvolatile Cache element

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The format of the STATUS INFORMATION field for a Nonvolatile Cache element is defined in table 50.

Table 50 — Nonvolatile Cache element for Enclosure Status diagnostic pages

|   | 7             | 6                            | 5 | 4 | 3 | 2 | 1               | 0 |
|---|---------------|------------------------------|---|---|---|---|-----------------|---|
| 0 | COMMON STATUS |                              |   |   |   |   |                 |   |
| 1 | Reserved      |                              |   |   |   |   | SIZE MULTIPLIER |   |
| 2 | (MSB)         | NONVOLATILE CACHE SIZE (LSB) |   |   |   |   |                 |   |
| 3 |               |                              |   |   |   |   |                 |   |

The NONVOLATILE CACHE SIZE field and the SIZE MULTIPLIER indicate the approximate size of the nonvolatile cache. The SIZE MULTIPLIER field defines the units of the NONVOLATILE CACHE SIZE field.

Table x. SIZE MULTIPLIER field

| Units of NONVOLATILE CACHE SIZE field |  |  |  |  |
|---------------------------------------|--|--|--|--|
| <u>Bytes</u>                          |  |  |  |  |
| Ki-bytes <sup>a</sup> (2^10 bytes)    |  |  |  |  |
| Mi-bytes <sup>a</sup> (2^20 bytes)    |  |  |  |  |
| Gi-bytes <sup>a</sup> (2^30 bytes)    |  |  |  |  |
|                                       |  |  |  |  |

<sup>&</sup>lt;sup>a</sup> This nomenclature is defined in ISO/IEC 60027-2-am2 (1999-01), Letter symbols to be used in electrical technology - Part 2: Telecommunications and electronics (Amendment 2).