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X3T10/44-069

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To: John Lohmeyer
Chairperson, X3T10

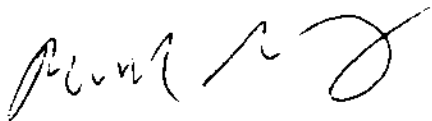
From: Bob Snively

Subject: Proposal for Write Buffer Command

Sun has studied Jim McGrath's proposal for modifying the Write Buffer command as used for downloading microcode.

- 1) Sun agrees with the proposal to drop the Buffer ID usage.
- 2) Sun supports a firmware download mechanism which allows the complete firmware to be downloaded in a single write buffer operation to avoid contention problems with the disk firmware upgrade. No disconnect is allowed during the data transfer. The use of multiple transfers would be a nonatomic procedure. In the worst case, when we have to download to a system disk, we can not isolate these multiple transfers from other activities on the disk. This creates a significant opportunity for system failures.
- 3) If the firmware can additionally support multiple write buffer commands via the buffer offset, we have no objection, provided the single write buffer option is *always* supported.

Sincerely,



Robert Snively
Sun Microsystems
X3T10 Principal Member