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April 26, 2001

To: T10 Technical Committee  
From: Bill Galloway  
Subj: SAS Error Primitive

The ERROR primitive shall be K28.5, D02.0, D01.4, D29.7.

**7.1.4.x ERROR**

ERROR is transmitted by an expander in the place of illegal dwords that the expander has received.

*Update the following paragraphs in the dword synchronization section.*

**6.7.5.2 Transition DWS3:DWS4 (Sync acquired:Lose Sync 1 invalid)**

The DWS3:DWS4 transition shall occur when an invalid dword is detected.

*Expanders shall replace the invalid received dword with the ERROR primitive.*

**6.7.6.3 Transition DWS4:DWS5 (Lose Sync 1 invalid:Lose Sync 2 invalid)**

The DWS4:DWS5 transition shall occur when a invalid dword is detected.

*Expanders shall replace the invalid received dword with the ERROR primitive.*

**6.7.8.3 Transition DWS5:DWS6 (Lose Sync 2 invalid:Lose Sync 2 invalid)**

The DWS5:DWS6 transition shall occur when a invalid dword is detected.

*Expanders shall replace the invalid received dword with the ERROR primitive.*

**6.7.10.3 Transition DWS6:DWS0 (Lose Sync 3 invalid:ACQ Sync Start)**

The DWS6:DWS0 transition shall occur when a invalid dword or loss of signal is detected. If an invalid dword is detected, at least 4 invalid dwords have been received without sufficient intervening valid dwords to nullify there affect. Dword synchronization is lost and must be reacquired.

*Expanders shall replace the invalid received dword with the ERROR primitive.*

**6.7.11.3 Transition DWS6a:DWS0 (Lose Sync 3 - 1 val:ACQ Sync Start)**

The DWS6a:DWS0 transition shall occur when an invalid dword or loss of signal is detected. If an invalid dword is detected, at least 4 invalid dwords have been received without sufficient intervening valid dwords to nullify there affect. Dword synchronization is lost and must be reacquired.

*Expanders shall replace the invalid received dword with the ERROR primitive.*