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Date: August 29, 1988

To: X3T9.2 Committee (SCSI)

From: Andy Hospodor (I/O XEL)

Subject: Reporting target rotation rate in Mode Sense

The rotation rate of current SCSI rigid and flexible disk drives is not available to the host. This information is required for disk drive test equipment which measures access time, and bridge controllers which must determine timeouts based on revolution time. It is also required as a baseline for sensing motor speed variations. Thirdly, the host must know the rotation rate in order to calculate the rotational offset or skew (added as Page Code 4, byte 18 in SCSI-2 rev4).

This capability is necessary because several drive manufacturers have begun making SCSI disk drives which rotate at speeds other than 3600 rpm. The Quantum ProDrive rotates at 3660 rpm, while the HP SCSI drive rotates at 3350 rpm.

It is suggested to the committee that bytes 24 and 25 be used to report the Revolutions per Minute, with byte 24 being the Rotation Rate MSB, and byte 25 being the LSB. Defining the bytes in this way allows the rotation rate to be reported similarly for both flexible and rigid disk drives.

This modification would affect Mode Sense and Mode Select pages 4 and 5.