X3T9.2/91-132

CIRRUS LOGIC, Inc.

To: I. Dal Allan, ANSI SCSI Committee, X3T9.2
From: Joe Chen, Cirrus Logic
Date: 8/16/91
Subject: Changes in ATA Document, Revision 2.5, July 16,1991

The following paragraph was changed from revision 2.4 to 2.5:

Rev 2.4: "The only way to recover from Sleep Mode without a reset or power on, is for the host to issue a software reset."

Rev 2.5: "The only way to recover from Sleep Mode without a reset or power on, is for the host to issue a ***hardware*** reset."

This change can affect the existing IDE interface because the reset line of the ATA bus is usually tie to the PC system reset pin. A recovery from sleep mode by issuing a hardware reset may reset the whole PC system. Therefore, this change is affecting most of the existing systems.

The soft reset, (register reset), allows PC system to recover the drive from Sleep Mode to Idle or Standby Mode. The implementation to allow a soft reset Sleep Mode recovery requires very small amount of current. The following table shows the relations between Standby Mode and Sleep Mode:

Mode Selected	Current Scale, 0-100%
Standby Mode	100%
Sleep Mode (allow Soft Reset)	5%
Sleep Mode (Hard Reset Only)	0

JC 8/16/91