

93-1164



EXTERNAL MEMO

X3T9.2/93-

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CC: X3T9.2 Membership

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SUBJ.: ATA Power Mode Timer

Background

The ATA document currently defines the idle timer used to count the elapsed time without a command before a lower power mode is triggered as a 8 bit counter. Common practice in the portable market has been to associate 5 seconds with every tick of this counter (this is not actually defined in the ATA standard, which is a problem itself). This gives a maximum timeout of 21 minutes, perfect for portable applications.

Increasingly these same commands are being used in the desktop environment to allow systems to qualify as a Green PC. The problem is that the goal in a desktop environment is to go into a low power mode, but power is not nearly as critical as it is in portables. A timeout longer than 20 minutes is required, since most of the power savings is realized by simply recognizing that the system should shut off automatically at night, which excessively shutting down the system during the day creates problems of system performance and reliability (due to excessive stressing of the CSS rating of disk drives). Timeouts on the order of 1 or 2 hours are more appropriate for this environment.

Request

We should clarify in ATA exactly how much time should be associated with each tick. This should be done in a way that preserves portable applications while giving us a larger range of responses for the desktop. I would be willing to act as a collection point for people's thoughts, and present a proposal at the next ATA meeting.

July 15, 1993

60