

Date: August 31, 1993
To: X3T9.2
From: Steve Finch, Editor ATA Extensions
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Subject: Is ATA-2 a Bus standard or a Device standard?

X3T9.2-791D, the proposed AT Attachment Interface For Disk Drives standard, does not state whether the it is documenting a bus or a device interface. My belief is that it is somewhere in between. The specification does not define a bus because: there is insufficient specification of the bus itself; bus timing diagrams do not take into account for bus delays; and, there is specification of power connectors not directly associated with the bus itself. The specification does not define a device because it includes more information than just what is seen at the device connector, including things such as cables and device interconnection.

The existing standard is a collection of related facts, which document the current implementations. The question is: should this be the way the ATA-2 should approach the problem, or should we (I) attempt to modify the document to make it a bus specifaion? Leaving the standard as it is will make life very difficult when we begin adding the extensions to the document necessary for 20 MB/s transfer rates which will require detailed cable, connection topology, driver/receiver specifications and termination.

I move that the ATA-2 Standard address all issues of the ATA interface as a bus structure, and that the editor make changes, as appropriate, to accomplish this goal.

If this motion passes, I will attempt to make these changes without changing any technical content. It is understood that all changes are subject to review by X3T9.2 membership.