X3T10/95-145R0

From Hale to ATA Reflector on Monday 06 Feb 1995...

9.8.2 Device 1 only configurations

Host support of device 1 only configurations is host specific.

In a single device configuration where device 1 is the only device and the host selects device 0, device 1 shall respond to accesses of the Command Block and Control Block registers in the same way it would if device 0 was present. This is because device 1 can not determine if device 0 is, or is not, present.

Host implementation of read and write operations to the Command and Control Block registers of non-existant Device 0 are host specific.

Note: The remainder of this section is a host implementation note.

The host implementor should be aware of the following when supporting device 1 only configurations:

1) Following a hardware reset or software reset, device 1 will not be selected. The following steps may be used to reselect device 1:

   a) Write to the Device/Head register with DRV bit set to one.

   b) Using one or more of the Command Block registers that can be both written and read, such as the Sector Count or Sector Number, write a data pattern other than 00H or FFH to the register(s).

   c) Read the register(s) written in step b). If the data read is the same as the data written, proceed to step e).

   d) Repeat steps a) to c) until the data matches in step c) or until 31 seconds has pasted. After 31 seconds it can probably be assumed that device 1 is not functioning properly.

   e) Read the Status register and Error registers. Check the Status and Error register contents for any error conditions that device 1 may have posted.

2) Following the execution of an Execute Device Diagnostics command, device 1 will not be selected. Also, no interrupt will be generated to signal the completion of the command. After writing the Execute Device Diagnostic command to the Command register, execute the steps a) to e) as described in number 1) above.

3) At all other times do not write zero into the DRV bit of the Device/Head register. All other commands execute normally.