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To: ATA-3 Working Group

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Subj: ATA-3/ATAPI differences

The following are the items that I found where the ATAPI document redefines or adds to the definitions in the ATA-3 document. This list may not be complete, these are simply the ones that I noted. We need to decide whether we will ignore this issue, reference the ATAPI document where applicable, or add the ATAPI definitions to the ATA-3 document.

#### **Clause 5 - Signals**

1. Behavior of PDIAG- and INTRQ signals is different for ATAPI commands ("strong overlap").
2. Response to the RESET signal is different in ATAPI.

#### **Clause 6 - Registers**

1. Contents of the Features, Cylinder Low, Cylinder High, Error, Sector Count, and Sector Number registers are redefined for ATAPI commands.
2. Definition and/or behavior of the DRQ, DSC, DRDY, and BSY bits in the Status and Alternate Status registers different for ATAPI commands.
3. SRST bit in the Device Control register not used in ATAPI.

#### **Clause 7 - Reset responses**

1. The Power-up, RESET signal, SRST bit responses are different in ATAPI.

#### **Clause 8 - Commands**

1. ATAPI defines four new commands with new command codes.
2. Protocol for some of the new commands differs from any currently defined command protocol.
3. New commands redefine register contents when issued.
4. List of mandatory/optional commands for ATAPI is different from ATA-3.
5. Commands using the Standby Timer are forbidden in ATAPI.

#### **Clause 9 - Protocols**

1. Protocol for ATAPI commands is different from any current ATA-3 protocol.

