

American National Standard

for Information Technology –

AT Attachment with Packet Interface Extensions 7 (ATA/ATAPI-7) Amendment 1

Amended: Secretariat: Information Technology Industry Council

Page 65 of INCITS 397-2005 ATA/ATAPI-7 Volume 1 replace sub-clauses 5.15.1-5.15.3 with the following text:

5.15.1 Signature for devices not implementing the PACKET command feature set

A device not implementing the PACKET command feature set shall place the signature in the Command Block registers listed below for power-on reset, hardware reset, software reset, and the EXECUTE DEVICE DIAGNOSTIC command.

If the device does not implement the PACKET command feature set, the signature shall be:

Sector Count	01h
LBA Low	01h
LBA Mid	00h
LBA High	00h

A device implementing the PACKET command feature set shall place the signature in the Command Block registers listed below for power-on reset, hardware reset, software reset, the EXECUTE DEVICE DIAGNOSTIC command, and the DEVICE RESET command. The DEVICE RESET command shall not change the value of the DEV bit when writing the signature into the Device register for a device implementing the PACKET command feature set. If the device implements the PACKET command feature set, the signature is also written in the registers for the IDENTIFY DEVICE and READ SECTOR(S) commands.

5.15.2 Signature for devices implementing the PACKET command feature set

If the device implements the PACKET command feature set, the signature shall be:

Interrupt Reason	01h
LBA Low	01h
Byte Count Low	14h
Byte Count High	EBh

If the PACKET command feature set is implemented by a device, then the signature values written by the device in the Command Block registers following power-on reset, hardware reset, software reset, or the DEVICE RESET command shall not be changed by the device until the device receives a command that sets DRDY to one. Writes by the host to the Command Block registers that contain the signature values shall overwrite the signature values and invalidate the signature.

5.15.3 Reserved Signatures for Serial ATA Working Groups

The following signatures are Reserved. The use of these signatures are not defined by this standard.

Signature 3Ch:

Sector Count	01h
LBA Low	01h
LBA Mid	3Ch
LBA High	C3h

Signature 69h:

Interrupt Reason	01h
LBA Low	01h
Byte Count Low	69h
Byte Count High	96h

Page 100 of INCITS 397-2005 ATA/ATAPI-7 Volume 1 replace paragraph 11 of sub-clause 6.10.4.8.5 with:

Word 7 bit 4 is cleared to zero to disable support for the Power-up in Standby feature set and has the effect of clearing bits (6:5) to zero in word 83 and word 86 of the IDENTIFY DEVICE or IDENTIFY PACKET DEVICE response. If Power-up in Standby has been enabled by a jumper, these bits shall not be cleared.

Page 148 of INCITS 397-2005 ATA/ATAPI-7 Volume 1 replace paragraph 5 of sub-clause 6.18.9 with:

If bit 2 is set to one it indicates that the content of the IDENTIFY PACKET DEVICE data is incomplete. This will occur if the device supports the Power-up in Standby feature set and required data is contained on the device media. In this case the content of at least word 0 and word 2 shall be valid.

Page 196 of INCITS 397-2005 ATA/ATAPI-7 Volume 1 insert new table 27 as shown:

Table 27 - Extended Self-test log data structure

Byte	First sector	Subsequent sectors
0	Self-test log data structure revision number	Reserved
1	Reserved	Reserved
2	Self-test descriptor index (7:0)	Reserved
3	Self-test descriptor index (15:8)	Reserved
4-29	Descriptor entry 1	Descriptor entry 19n+1
30-55	Descriptor entry 2	Descriptor entry 19n+2
....
472-497	Descriptor entry 19	Descriptor entry 19n+19
498-499	Vendor specific	Vendor specific
500-510	Reserved	Reserved
511	Data structure checksum	Data structure checksum

n is the sector number within the log. The first sector is sector zero

Page 197 of INCITS 397-2005 ATA/ATAPI-7 Volume 1 insert new table 28 as shown:

Table 28 - Extended Self-test log descriptor entry

Byte	Descriptions
n	Content of the LBA Low register.
n+1	Content of the self-test execution status byte.
n+2	Life timestamp (least significant byte).
n+3	Life timestamp (most significant byte).
n+4	Content of the self-test failure checkpoint byte.
n+5	Failing LBA (7:0).
n+6	Failing LBA (15:8).
n+7	Failing LBA (23:16).
n+8	Failing LBA (31:24).
n+9	Failing LBA (39:32).
n+10	Failing LBA (47:40).
n+11 - n+25	Vendor specific.

Page 58 of INCITS 397-2005 ATA/ATAPI-7 Volume 3 remove sub-clause 14.4.8

