



Interoffice Correspondence

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Date: 11/6/95

To: John Lohmeyer

Cc:

From: Gene Milligan OKM251

Subject: SCSI Version Proposal

In a prior working group meeting I proposed that SCSI include information reporting which version of the family of SCSI standards had been implemented in the product. I described how that might be done using a technique analogous to the one that has been included in ATA-3. The group recommended that I document the proposal for inclusion in SPC.

The attached modification of the INQUIRY command response is a documentation of the proposal. I have a file with the changes in complete context. However for brevity the attached includes only the changed portions.

Gene E. Milligan

7.5 INQUIRY command

7.5.1 Standard INQUIRY data

Table 19 - Standard INQUIRY data format

Bit	7	6	5	4	3	2	1	0
Byte								
2	ISO version		ECMA version			ANSI version		
56	(MSB)		Interface type			(LSB)		
58	(MSB)		Major version number			(LSB)		
60	(MSB)		Physical version number			(LSB)		
62	(MSB)		Primary Command set version number			(LSB)		
64	(MSB)		Device Type Command set version number			(LSB)		
66	Reserved							
95								

The ANSI-approved version field indicates the implemented version of this standard and is defined in table 22

Table 22 - ANSI-approved version

Code	Description
0h	The device might or might not comply to an <u>ANSI</u> standard.
1h	Reserved for historical uses
2h	The device complies to ANSI X3.131-1994 (SCSI-2).
3h	The device complies to this or a later version of SCSI. <del>This code is reserved to designate this standard upon approval by ANSI.</del>
4h - 7h	Reserved

7.5.4 Command support data

**Table 25 - Command support data format**

Bit	7	6	5	4	3	2	1	0
Byte	ISO version		ECMA version			ANSI version		

If the operation code being tested is supported as defined in a SCSI standard, the StdOp bit shall be one, the VSop bit shall be zero, and the ISO, ECMA and ANSI-approved version fields shall contain standard INQUIRY data naming the standard that defines the SCSI command. (Information about standard INQUIRY data can be found in clause .) If the operation code being tested is supported in a vendor-specific way, the StdOp bit shall be zero, the VSop bit shall be one, and interpretation of the ISO, ECMA and ANSI-approved version fields by the application client shall be vendor-specific. If the operation code being tested is not supported, both the StdOP and VSop bits shall be zero.

**Bytes 56 & 57: Interface type**

If not 0000h, the device claims compliance with the interface type and major version of that interface type.

The types specified are shown in Table ???. All other values are reserved.

**Table ??- Interface type**

Value	Interface type
0100h	SPI device
0200h	FCP device
0300h	SSA device
0400h	SBP device

**Bytes 58 & 59: Major version number**

If not 0000h, the device claims compliance with the major version(s) as indicated by bits 1 through 3 being equal to one. Values other than 0000h are bit significant. Since the SCSI-3 and SCSI-2 standards maintain downward compatibility with SCSI-1 (published as SCSI), it is allowed for a SCSI-3 device to set all of bits 1 through 3 to one.

**Table ?? Major version number**

Bit Number	Value	Interface type
0	1	SCSI
1	1	SCSI-1
2	1	SCSI-2
3	1	SCSI-3
4-15	0	Reserved

**Bytes 60 & 61: Physical version number**

If an implementor claims that the revision of the standard they used to guide their implementation does not need to be reported or if the implementation was based upon a standard prior to this revision of the standard, Words 60 & 61 shall be 0000h.

A revision of the standard which guided the implementation may optionally be reported in Words 60 & 61 as shown in Table ??.

**Table ??- Physical version number**

Value	Minor revision (this table may need columns added for some physicals)
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0001h	SCSI
0003h	SCSI-2 prior to revision 10h
0005h	SCSI-2 revision 10h
0007h	SCSI-2 as published
0009h	SPI-2 prior to revision 15a
0008h	SPI-2 revision 15a
0006h	SPI-2 as published
0002h	SCSI Fast-20 revision 6
0004h	SCSI Fast-20 as published
000Ah	FC-AL revision 4.5 & FC-PH as published
000Bh	FC-AL as published & FC-PH as published
000Ch	FC-AL revision 4.5 & FC-EP Revision TBD
000Dh	FC-AL as published & FC-EP Revision TBD
000Eh	FC-PH as published
000Fh	FC-EP Revision TBD
0010h	SSA-PH1 revision TBD
0011h	SSA-PH1 as published
0012h	SSA-PH2 revision TBD
0013h	SSA-PH2 as published
0014h	IEEE 1394 revision D7.1
0015h	IEEE 1394 as published
0016h-FFFFh	Reserved

**Bytes 62 & 63: Primary Command set version number**

If an implementor claims that the revision of the standard they used to guide their implementation does not need to be reported or if the implementation was based upon a standard prior to this revision of the standard, Words 62 & 63 shall be 0000h.

A revision of the standard which guided the implementation may optionally be reported in Words 62 & 63 as shown in Table ??.

**Table 1?? - Primary Command set version number**

Value	Minor revision
0001h	SCSI-1
0003h	SCSI-2 section 7 prior to revision 10h
0005h	SCSI-2 section 7 revision 10h
0007h	SCSI-2 section 8 as published
0009h	SPC Revision 4
0008h	SPC Revision 5
0006h	SPC Revision 6
0002h	SPC Revision 7
0004h, 000Ah-FFFFh	Reserved

**Bytes 64 & 65: Device Type Command set version number**

If an implementor claims that the revision of the standard they used to guide their implementation does not need to be reported or if the implementation was based upon a standard prior to this revision of the standard, Words 64 & 65 shall be 0000h.

A revision of the standard which guided the implementation may optionally be reported in Words 64 & 65 as shown in Table ??.

**Table ?? - Device Type Command set version number**

Value	Minor revision (this table may need columns added for some physicals)
0001h	SCSI-1
0002h	SCSI-2 section 8 prior to revision 10h
0005h	SCSI-2 section 8 revision 10h
0007h	SCSI-2 section 9 as published
0009h	SCSI-2 section 9 prior to revision 10h
0008h	SCSI-2 section 9 revision 10h
0006h	SCSI-2 section 10 as published
0002h	SCSI-2 section 10 prior to revision 10h
0004h	SCSI-2 section 10 revision 10h
000Ah	SCSI-2 section 11 as published
000Bh	SCSI-2 section 11 prior to revision 10h
000Ch	SCSI-2 section 11 revision 10h
000Dh	SCSI-2 section 12 as published
000Bh	SCSI-2 section 12 prior to revision 10h
000Ch	SCSI-2 section 12 revision 10h
000Dh	SCSI-2 section 13 as published
000Eh	SCSI-2 section 13 prior to revision 10h
000Fh	SCSI-2 section 13 revision 10h
0010h	SCSI-2 section 14 as published
0011h	SCSI-2 section 14 prior to revision 10h
0012h	SCSI-2 section 14 revision 10h
0013h	SCSI-2 section 15 as published
0014h	SCSI-2 section 15 prior to revision 10h
0015h	SCSI-2 section 15 revision 10h
0016h	SCSI-2 section 16 as published
0017h	SCSI-2 section 16 prior to revision 10h
0018h	SCSI-2 section 16 revision 10h
0019h	SCSI-2 section 17 as published
001Ah	SCSI-2 section 17 prior to revision 10h
001Bh	SCSI-2 section 17 revision 10h
001Ch	SCSI-2 section 18 as published
001Dh	SCSI-3 SBC Revision 2
001Eh	SCSI-3 SBC as published
001Fh	SCSI-3 SCC Revision 5
0020h	SCSI-3 SCC Revision 6
0021h	SCSI-3 SCC as published
0022h	SCSI-3 SSC Revision 2
0023h	SCSI-3 SSC Revision 3
0024h	SCSI-3 SSC as published
0025h	SCSI-3 SGC Revision 0
0026h	SCSI-3 SGC as published
0027h	SCSI-3 SMC Revision 3
0028h	SCSI-3 SMC as published
0029h	SCSI-3 MMC Revision 2b
002Ah	SCSI-3 MMC Revision 3
0030h	SCSI-3 MMC as published
0031h-FFFFh	Reserved