

Date: Sept 27, 1993

X3T9.2/92-184 Rev 4

To: X3T9.2 Committee (SCSI)

From: George Penokie (IBM)

Subject: Codes, ASCs, ASCQs, and Values Committed to SCSI-3

Below is a list of all new ASCs, new ASCQs, new Command Op Codes, changes to existing commands, new Mode Pages, changed Mode Pages, changed Log parameters, new Messages, new Diagnostics Pages, and new Inquiry data which have been approved for inclusion into SCSI-3.

Messages New

Doc. No.	Code	Description
90-062R4	12h	Continue I/O Process
90-062R4	13h	Target Transfer Disable
90-136R3	14h	Bus Device Reset Other Port
92-141R5	24h	ACA Queue Tag
92-141R5	16h	Clear ACA
No Doc	BFh	Expanded Identify (8 bytes follow message)

Messages Changed

Doc. No.	Message	Bits	Description
90-183R0	Identify	3-4	LUNTRN field expanded to 5 bits

Commands New

Doc. No.	Code	Description
90-048R7	57h	Release (10)
90-048R7	56h	Reserve (10) (Note: there is a typo in 90-048r7 which incorrectly indicates that the op code for this command is 16h)
90-110R2	B7h	Read Defect Data (12)

Commands Changed

Doc. No.	Command	Byte	Bits	Description
91-014R6	Start/Stop Unit	4	7-4	Power Conditions
92-006R1	Prevent allow medium removal	4	1-0	Prevent (changed from a 1 bit field to a 2 bit field)
No Doc	All (Control Byte)		2	ACA

Inquiry commands changed Inquiry Data

Doc. No.	Byte	Bit	Name	Description
92-006R1	6	6	MChngr	Medium Changer
90-136R3	6	5	PORT	Connected Port A/B
90-136R3	6	4	DualP	Dual Port Device
90-048R7	6	2	ACKREQQ	Q cable REQ and ACK supported
90-048R7	6	1	Addr32	32 bit wide data transfers supported
90-048R7	6	0	Addr16	16 bit wide data transfers supported
90-062R4	7	2	TranDis	Transfer Disable

Copy commands new function codes

Doc. No.	Function Code	Description
90-048R7	05h and 06h	Added 8 bit Source Address and 8 bit Destination Address
90-048R7	07h and 08h	Added 8 bit Source Address and 8 bit Destination Address
90-048R7	09h	Added 8 bit Source Address and 8 bit Destination Address
93-063r1	05h - 09h	Reserved for SCSI-4
93-063r1	0Ah - 0Eh	SAM compliant COPY function codes

Copy commands changed function codes

Doc. No.	Function Code	Description
90-183R0	05h and 06h	Increase LUN address to 5 bits
90-183R0	07h and 08h	Increase LUN address to 5 bits
90-183R0	09h	Increase LUN address to 5 bits

Log Commands Changed Log Pages

Doc. No.	Block	Byte	Bit	Name	Description
90-201R1	Log Parameters	2	1	LBIN	Binary List Parameter

Send Diagnostics Command New Pages

Doc. No.	Code	Description
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92-130R3	41h	Drive Status
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Status Code New

Doc. No.	Code	Description
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92-141R5	30h	Auto Contingent Allegiance Active
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Mode Pages New

Doc. No. Code Description

91-014R6 0Dh Power Condition Page
 90-119R3 0Fh Data Compression Page

Mode Parameter Block Descriptor Change

Doc. No. Byte Description

93-032R1 1-3 Place Fs into field of No. of block is too large

Mode Pages Changed

Doc. No.	Page	Byte	Bit	Name	Description
90-021R4	Caching(08h)	2	7	IC	Initiator Control
90-021R4	Caching(08h)	2	6	ABPF	Abort Pre-Fetch
90-021R4	Caching(08h)	2	5	CAP	Caching Analysis Permitted
90-021R4	Caching(08h)	2	4	DISC	Discontinuity
90-021R4	Caching(08h)	2	3	SIZE	Size Enable
90-021R4	Caching(08h)	12	7	FSW	Force Sequential Write
92-217R1	Caching(08h)	12	6	LBCSS	Logical Block Cache Segment
90-021R4	Caching(08h)	12	5	DRA	Disable Read-Ahead
92-217R1	Caching(08h)	12	4-3		Vendor Specific
92-217R1	Caching(08h)	12	2-0		Reserved
90-021R4	Caching(08h)	13	All		Number of Cache Segments
90-021R4	Caching(08h)	14-15	All		Cache Segment Size
90-021R4	Caching(08h)	17-19	All		Non-Cache Segment Size
90-166R1	Dcon-rcon(02h)	12	7	EMDP	Enable Modify Data Pointer
92-133R8	Dcon-rcon(02h)	12	3	DImm	Disconnect Immediate
92-133R8	Dcon-rcon(02h)	12	0-2	DTDR	Data Transfer Disc. Control (added 1 bit to field)
90-168R2	Control (0Ah)	1	All		Page length = 0Ah
92-218R1	Control (0Ah)	2	1	GLTSD	Global Logging Target Save Disable
90-168R2	Control (0Ah)	4	6	RAC	Report a Check
90-168R2	Control (0Ah)	8-9	All		Busy Timeout Period

Density Codes (Tape)

Doc. No.	Code	Width mm (in)	Density b/mm (bpi)	Code	Type
92-047r0	18H	12.7 (0.5)	1673 (42500)	MFM	C
92-047r0	19H	TBD			
92-047r0	1AH	TBD			
92-047r0	1BH	TBD			
92-083r2	1CH	6.3 (.25)	1654 (42000)	MFM	C
92-083r2	1DH	6.3 (.25)	1512 (38400)	GCR	C
92-083r2	1EH	6.3 (.25)	630 (36000)	GCR	C
92-083r2	1FH	6.3 (.25)	2666 (67733)	RLL	C
92-083r2	20H	6.3 (.25)	2666 (67733)	RLL	C
92-083r2	21H	6.3 (.25)	2666 (67733)	RLL	C

92-083r2	22H	6.3	(.25)	1600	(40640)	GCR	C
92-083r2	23H	6.3	(.25)	2666	(67733)	RLL	C
92-164r1	24H	3.81	(0.15)	2400	(61000)	DDS-2	C
92-164r1	25H	3.81	(0.15)	3816	(97000)	DDS-3	C
92-164r1	26H	3.81	(0.15)	3816	(97000)	DDS-4	C

Density Codes (Optical)

Doc. No.	Code	Diameter mm (in)	Type	Sector Size	Tracks	Sides	Servo	Reference Standard
93-020r1	0AH	130 (5.25)		512/1024	37600	2	CS	ECMA-184

ASC/ASCQ New

93-066r0	Lists all the SCSI-3 ASC/ASCQs
90-184r	New Additional Sense Code Qualifiers (see 93-066rx)
91-027r1	New Additional Sense Code (5Dh) (see 93-066rx)
91-071r1	Direct-access Removable Media ASCQs (see 93-066rx)

Miscellaneous Documents approved for SCSI-3

Doc. No. Description

90-001r1	SCSI-3 Wide Bus Driving Rules Selection and Reselection Phases
90-083r0	Alternative Initiator Control of Reselection (Last two paragraphs were accepted and included in 90-062r4.)
90-133r1	SCSI-3 Modifications to Outbound Disconnect Message
90-160r0	Pinout Control of SCSI Round Cable Assemblies
90-187r0	HP Standoffs on P Cables
91-106r4	Format Status Log Page
91-150r0	SDTR and WDTR Clarification
91-159r0	DIFFSENSE Signal Loading Issue
92-007r1	Proposed SCSI Identifier Symbols
93-037r4	When to issue SDTR after WDTR
93-041r2	SCSI-3 Change for Dual Port Feature
93-077r0	Read Long Correct Bit vs DCR bit in Read/Write Recovery Mode Page
93-109r4	SCSI Configure AutoMatically

* Not yet accepted by the SCSI committee