

**INTERNATIONAL
STANDARD**

**ISO/IEC
14165-226**

First edition
2020-01

**Information technology — Fibre
channel —**

Part 226:
**Single-byte command code sets
mapping protocol - 6 (FC-SB-6)**



Reference number
ISO/IEC 14165-226:2020(E)

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This document was prepared by INCITS (as INCITS 544-2018) and drafted in accordance with its editorial rules. It was assigned to Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 25, *Interconnection of information technology equipment*, and adopted under the "fast-track procedure".

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Table of Contents	Page
1 Scope	1
2 Normative References	2
2.1 Qualification and availability of references	2
2.2 Approved References	2
2.3 References Under Development	3
3 Definitions and Conventions	5
3.1 Overview	5
3.2 Definitions	5
3.3 Editorial Conventions	8
3.3.1 English Usage Conventions	8
3.3.2 FC Link Functions	8
3.3.3 Bit Numbering	8
3.3.4 Binary Notation	9
3.3.5 Hexadecimal Notation	9
3.4 Abbreviations, Acronyms, and Symbols	9
3.5 Keywords	11
4 Structure and Concepts	13
4.1 Introduction	13
4.2 FC-4 General Description	13
4.3 FC-SB-6 General Description	13
4.3.1 FC-SB-6 Instance	13
4.3.2 FC-SB-6 Protocols	13
4.4 Channel-Path Elements	14
4.4.1 Overview of Channel-Path Elements	14
4.4.2 Channel	14
4.4.3 Channel Image	14
4.4.4 Control Unit	15
4.4.5 Control-Unit Image	15
4.4.6 Link	16
4.5 Channel-Path Configurations	16
4.5.1 Channel-Path Configuration Overview	16
4.5.2 Point-to-Point Configuration	16
4.5.3 Fabric Configuration	17
4.5.4 Physical Path	19
4.5.5 Logical Path	19
4.5.6 Channel-to-Channel Communication	20
4.6 Information Transfer	21
4.7 Protocols	21
4.7.1 Protocol Overview	21
4.7.2 Link Level Protocol	21
4.7.3 Device Level Protocols	22
4.7.4 Addressing	22
5 FC-FS-4 Link Control	25
5.1 FC-FS-4 Link Control Overview	25
5.2 Class of Service	25
5.3 Buffer-to-Buffer Credit Reclamation	25
5.4 FC-SB-6 Sequences and Exchanges	26
5.4.1 FC-SB-6 Sequences	26

5.4.2	FC-SB-6 Exchanges	26
5.5	FC Frame Header Fields	28
5.5.1	Frame Header Field Overview	28
5.5.2	R_CTL Field	29
5.5.3	D_ID and S_ID Fields	29
5.5.4	CS_CTL	29
5.5.5	TYPE Field	30
5.5.6	F_CTL Field	30
5.5.7	SEQ_ID	30
5.5.8	DF_CTL	30
5.5.9	SEQ_CNT	30
5.5.10	OX_ID	30
5.5.11	RX_ID	30
5.5.12	Parameter Field	31
6	Link-Level Functions	33
6.1	Link-Level Function Overview	33
6.2	FC-FS-4 Basic Link Services	33
6.2.1	Basic Link Services Overview	33
6.2.2	Abort Sequence	33
6.3	FC-LS-3 Extended Link Services	33
6.3.1	Extended Link-Services Overview	33
6.3.2	F_Port Login	33
6.3.3	N_Port Login	33
6.3.4	N_Port Logout	34
6.3.5	Reinstate Recovery Qualifier	34
6.3.6	Registered State Change Notification	34
6.3.7	State-Change Registration	35
6.3.8	Query Security Attributes	36
6.3.9	Request Node-Identification Data	36
6.3.10	Registered Link-Incident Record	42
6.3.11	Link-Incident-Record Registration	46
6.3.12	Read Link Error Status Block	46
6.3.13	Registered Fabric Change Notification	46
6.3.14	Process Login	47
6.3.15	Process Logout	50
6.3.16	Read Exchange Concise	54
6.4	FC-SB-6 Link-Control Functions	54
6.4.1	FC-SB-6 Link-Control Function Overview	54
6.4.2	Establish Logical Path	57
6.4.3	Remove Logical Path	59
6.4.4	Logical Path Established	60
6.4.5	Logical Path Removed	60
6.4.6	Link-Level Acknowledgment	61
6.4.7	Test Initialization	62
6.4.8	Test Initialization Result	65
6.4.9	Link-Level Reject	69
6.4.10	Link-Level Busy	71
7	N_Port Link Initialization	73
7.1	N_Port Link Initialization Overview	73
7.2	Link-Initialization Procedure	74
7.3	Initialization Process for a Channel	75
7.3.1	Channel Initialization Overview	75

7.3.2	Channel Login and Security Attribute Determination	75
7.3.3	Channel Node-Identifier Acquisition	76
7.3.4	Channel State-Change Registration	78
7.3.5	Channel Link-Incident-Record Registration	78
7.3.6	Process Login	79
7.3.7	Channel Logical-Path Establishment	79
7.4	Initialization Process for a Control Unit	80
7.4.1	Control Unit Initialization Overview	80
7.4.2	Control-Unit Login	80
7.4.3	Control Unit Node-Identifier Acquisition	82
7.4.4	Control Unit State-Change Registration	83
7.4.5	Process login	83
7.4.6	Control Unit Logical-Path Establishment	83
8	FC-SB-6 Information Units	85
8.1	FC-SB-6 Information Unit Overview	85
8.2	Rules for Sending FC-SB-6 IUs	85
8.2.1	Overview of Rules for Sending FC-SB-6 Information Units	85
8.2.2	Rules for Device-level Functions in Command Mode	87
8.2.3	Rules for Device-level Functions in Transport Mode	88
8.3	FC-SB-6 IU Structures	89
8.4	FC-SB-6 Header	93
8.4.1	FC-SB-6 Header Overview	93
8.4.2	FC-SB-6 Header Format	93
8.4.3	Channel Image ID	93
8.4.4	Control-Unit Image ID	93
8.4.5	Device Address	94
8.5	IU Header	94
8.5.1	IU Header Format	94
8.5.2	Information-Unit Identifier	95
8.5.3	Device-Header Flags	96
8.5.4	CCW Number	99
8.5.5	Token	101
8.6	Device Information Block (DIB) Structure	101
8.6.1	DIB Structure Overview	101
8.6.2	DIB Header	102
8.6.3	Longitudinal-Redundancy-Check Field	103
8.6.4	DIB Data Field	103
8.6.5	Cyclic-Redundancy-Check Field	104
8.7	Command DIB Structure	106
8.7.1	Command DIB Overview	106
8.7.2	Command Header	106
8.8	Command-Data DIB Structure	113
8.9	Data DIB Structure	113
8.9.1	Data DIB Overview	113
8.9.2	Data Header	114
8.10	Status DIB	114
8.10.1	Status DIB Processing	114
8.10.2	Status DIB Structure	116
8.10.3	Status Header	117
8.10.4	Supplemental Status Field	130
8.11	Control DIB Structure	131
8.11.1	Control DIB Structure Overview	131
8.11.2	Control Header	131

8.11.3	Control Payload	145
8.12	Link-Control DIB Structure	145
8.12.1	Link-Control DIB Structure Overview	145
8.12.2	Link Header	146
8.12.3	Link Payload	147
8.13	Transport Command IU	147
8.13.1	Transport Command Overview	147
8.13.2	FC-SB-6 Header	148
8.13.3	Transport Command Header	148
8.13.4	Transport Command Area Header	150
8.13.5	Transport Command Area	152
8.13.6	Longitudinal Redundancy Check	160
8.13.7	Data Length	161
8.13.8	Bidirectional Read Data Length	161
8.14	Transport Data IU	161
8.14.1	Transport Data IU Overview	161
8.14.2	Transport Data	162
8.14.3	Pad Bytes	162
8.14.4	Cyclic-Redundancy-Check	162
8.14.5	CRC Generation and Checking	163
8.15	Transport Response IU	163
8.15.1	Transport Response IU Overview	163
8.15.2	Transport Response IU Structure	164
8.15.3	FC-SB-6 Header	164
8.15.4	Status	165
8.15.5	Status LRC	170
8.15.6	Extended Status	170
8.16	Transfer Ready IU	186
8.16.1	Transfer Ready Structure Overview	186
8.16.2	Relative Offset	186
8.16.3	Burst Length	186
8.17	Transport Confirm IU	186
9	Device-Level Functions and Protocols	189
9.1	Device-Level Operations	189
9.1.1	Overview of Device-Level Operations	189
9.1.2	Channel Program Execution	189
9.2	CCW I/O operations	189
9.2.1	Initiating a CCW I/O Operation	189
9.2.2	Command Mode Data-Transfer Protocol	192
9.2.3	Ending a CCW I/O Operation	200
9.2.4	CCW Command Chaining	203
9.2.5	Priority	204
9.3	TCW I/O Operations	205
9.3.1	Initiating a TCW I/O operation	205
9.3.2	Transport Mode Data Transfer	206
9.3.3	TCA Processing	210
9.3.4	Ending a TCW I/O Operation	213
9.3.5	Extended Status	214
9.3.6	Priority	214
9.4	Device-Level Controls	215
9.4.1	Overview of Device-Level Control Functions	215
9.4.2	Stacking Status Function	215
9.4.3	Cancel Function	216

9.4.4	System-Reset Function	218
9.4.5	Selective-Reset Function	220
9.4.6	Request-Status Function	221
9.4.7	Device-Level-Exception Function	222
9.4.8	Status-Acceptance Function	222
9.4.9	Device-Level-Acknowledgment Function	223
9.4.10	Control-Unit-Busy Condition	223
9.4.11	Confirm Completion Function	224
9.4.12	Transport Mode ABTS Function	224
9.5	Error Handling at the Device Level	224
9.5.1	Purge Path Function	224
9.5.2	Command Retry	225
9.5.3	Channel-Initiated Recovery Procedures	228
9.5.4	Address-Exception Condition	231
9.5.5	REC Function	232
9.6	Resetting Event	232
9.7	Special Functions	234
9.7.1	Path Groups	234
9.7.2	Dynamic Reconnection	235
10	Link Error Detection	237
10.1	Link Error Detection Overview	237
10.2	FC-SB-6 Timeouts	237
10.2.1	Overview of FC-SB-6 Timeouts	237
10.2.2	FC-SB-6 Protocol Timeout Value	237
10.2.3	FC-SB-6 Timeout Value	238
10.2.4	Logical Path Timeout Value	238
10.2.5	Cancel Function Timeout Value	239
10.2.6	Transport Command Timeout Value	239
10.2.7	Transport Command Secondary Timeout Value	239
10.2.8	Interrogate Timeout Value	240
10.2.9	Process Logout Timeout Value	240
10.2.10	Exchange Quiesce Timeout Value	240
10.2.11	REC Timeout Value	240
10.3	FC-SB-6 Link Failure	240
10.4	Logical Path Timeout Error	240
10.5	FC-SB-6 Exchange Error	241
10.5.1	FC-SB-6 Exchange Error Overview	241
10.5.2	FC-SB-6 Protocol Timeout	241
10.5.3	FC-SB-6 IU Integrity Error	241
10.5.4	FC-SB-6 Protocol Errors	243
10.5.5	Receive ABTS	244
10.5.6	Cancel Function Timeout Error	244
10.5.7	Abnormal Termination of Exchange	244
10.6	Logical-Path-Not-Established Error	244
10.7	Test Initialization Result Error	244
10.8	Transport Operation Error	245
10.9	Transport Error	245
10.9.1	Transport Error Overview	245
10.9.2	Transport Command IU Integrity Error	245
10.9.3	TCH Content error	245
10.9.4	TCCB Content error	245
10.9.5	Second I/O Operation Error	245
10.10	Interrogate Operation Error	246

10.11	REC Error	246
11	Error Recovery Actions	247
11.1	Error Recovery Action Overview	247
11.2	Link-Level Recovery	250
11.2.1	Link-Level Recovery Overview	250
11.2.2	Recovery for an FC-SB-6 Link Failure	250
11.2.3	Logical Path Timeout Error	250
11.2.4	Recovery for an FC-SB-6 Offline Condition	251
11.2.5	Recovery for an FC-FS-4 Link Failure Condition	251
11.2.6	Recovery for an FC-SB-6 Exchange Error	251
11.2.7	Recovery for a Logical-Path-Not-Established Error	252
11.2.8	Recovery for Link-Level Reject, P_RJT, and F_RJT	253
11.2.9	Recovery for a Test-Initialization-Result Error	254
11.2.10	Recovery for a Transport Operation Error	254
11.2.11	Recovery for a Transport Error	254
11.2.12	Recovery for an Interrogate Operation Error	255
11.2.13	Recovery for a REC Error	255
11.3	Device-Level Recovery	255
11.3.1	Device-Level Recovery Overview	255
11.3.2	Errors That Cause the Removal of a Logical Path	255
11.3.3	Errors that Do not Cause the Removal of a Logical Path	256
Annexes		
A	Fabric Address Assignment	261
B	Correlation of Exchanges of an Exchange Pair	263
C	LRC Calculation	265
D	Status/Chaining Summary	267
E	Bibliography	269

List of Figures	Page
Figure 1 – FC-FS-4/FC-LS-3 and FC-SB-6 Bit Numbering Conventions	9
Figure 2 – Channel Path with Channel Images	14
Figure 3 – Channel Path with Control-Unit Images	16
Figure 4 – Point-to-Point Channel-Path Configuration (Single Logical Image)	16
Figure 5 – Point-to-Point Channel-Path Configuration (Multiple Logical Images)	17
Figure 6 – Single-switch Fabric Channel-Path Configuration (Multiple Channel Images)	18
Figure 7 – Multi-switch Fabric Channel-Path Configuration (Multiple Channel Images)	18
Figure 8 – Fabric Channel-Path Configuration (Multiple Channel Images, Channel-to-Channel Connection)	20
Figure 9 – Relationships among Link Level, Device Level, Physical Path, and Logical Path	21
Figure 10 – Contents of the Node Descriptor	37
Figure 11 – Service Parameter Page for a PRLI Request	47
Figure 12 – Service Parameter Response Page for a PRLI LS_ACC	49
Figure 13 – Logout Parameter Page for a PRLO request	53
Figure 14 – Logout Parameter Page for a PRLO LS_ACC	53
Figure 15 – Link-Control Information Field of the LRJ IU	71
Figure 16 – IU Payload Structures for Command-Mode IUs	90
Figure 17 – IU Payload Structures for Transport-Mode IUs	92
Figure 18 – FC-SB-6 Header	93
Figure 19 – IU Header	94
Figure 20 – IU Identifier	95
Figure 21 – Device-Header Flags	97
Figure 22 – Basic DIB Structure	102
Figure 23 – DIB Header Structure	102
Figure 24 – DIB Data Field	103
Figure 25 – Addends of the Alternative Initialized Value of the CRC Generator	105
Figure 26 – Command Header	106
Figure 27 – CCW Control Flag Field	109
Figure 28 – Command-Flag Field	111
Figure 29 – Data Header	114
Figure 30 – Status Header	117
Figure 31 – Status-Flag Field	117
Figure 32 – Queue-Time Parameter (QTP) Format	125
Figure 33 – Queue-Time Parameter Example	126
Figure 34 – Defer Time Parameter Format	127
Figure 35 – Defer-Time Parameter Example	129
Figure 36 – Control Header	132
Figure 37 – Control-parameter Field for the Selective-Reset IU	137
Figure 38 – Control-parameter Field for the Device-level Exception IU	140
Figure 39 – Control-parameter Field for the Purge-Path IU	142
Figure 40 – Control Payload Format for the Purge-Path-Response IU	144
Figure 41 – Link Header	146
Figure 42 – Link-Control Field	146
Figure 43 – Transport-Command IU	148
Figure 44 – Transport Command Header (TCH)	148
Figure 45 – TCA Header Format	150
Figure 46 – Transport-Command Area (TCA) (Where N>0 and N<=59)	152
Figure 47 – Device Command Word	152
Figure 48 – CRC Offset Block	156
Figure 49 – Extended CRC Offset Block	156
Figure 50 – Transport-Command Area Extended (TCAX) plus Pad Bytes and CRC	158
Figure 51 – DCW Control Flags	158

Figure 52 – Transport Response IU	164
Figure 53 – Transport Response IU Status Area Format	165
Figure 54 – Transport Response Status Flags1	165
Figure 55 – Status Flags2	168
Figure 56 – Status Flags3	169
Figure 57 – Extended Status General Format	171
Figure 58 – Extended Status Flags	171
Figure 59 – I/O Status Extended Status Format	173
Figure 60 – I/O-Exception Extended Status Format	177
Figure 61 – Interrogate Extended Status Format	183
Figure 62 – Interrogate Flags	183
Figure 63 – Link Error Detection	237
Figure 64 – Recovery Actions for the Channel and Control Units	249

List of Tables

Table 1 – Information Categories of FC-SB-6 IUs	29
Table 2 – Specific Link-Incident Record for FC-SB-6	43
Table 3 – Incident-Specific Information	45
Table 4 – Summary of Link-Control Request and Response IUs	56
Table 5 – Logical Path Field - Basic	66
Table 6 – Logical Path Field - Extended	67
Table 7 – TINCR Logical Path Field	69
Table 8 – Characteristics of IUs Sent by a Channel	86
Table 9 – Characteristics of IUs Sent by a Control Unit	87
Table 10 – DIB-Type Settings	96
Table 11 – EE-bit Table	99
Table 12 – Contents of the Command Field	107
Table 13 – Required Commands	108
Table 14 – LRI and RV Bit Usage	119
Table 15 – Status Byte	120
Table 16 – QTF/QTU Relationship	125
Table 17 – DTF/DTU Relationship	128
Table 18 – Bits 0 - 5 of Sense-data Byte 0	131
Table 19 – Summary of Device-Level Control Functions	132
Table 20 – Summary of Control IUs	134
Table 21 – Interpretation of the RO and RU Bits	139
Table 22 – Exception Code Assignments	140
Table 23 – Error Codes for the Purge-Path IU	143
Table 24 – Error Codes for the Purge-Path-Response IU	145
Table 25 – Contents of the DCW Command Field	153
Table 26 – Required Commands	154
Table 27 – Transport Commands	155
Table 28 – Transport Response Exception Codes	167
Table 29 – Extended Status Type code	172
Table 30 – I/O exception Reason Code (RC)	178
Table 31 – RCQ for TCCB Integrity Error	179
Table 32 – RCQ for Output Data CRC Error	179
Table 33 – RCQ for Incorrect TCCB Length Specification	179
Table 34 – RCQ for TCAH Specification Error	180
Table 35 – RCQ for DCW Specification Error	181
Table 36 – RCQ for Transfer-Direction Specification Error	182
Table 37 – RCQ for Transport-Count Specification Error	182
Table 38 – RCQ for COB Error	182
Table 39 – Interrogate CU State	184
Table 40 – Interrogate Device State	184
Table 41 – Operation State	185
Table 42 – Permitted Responses to a Selective-Reset IU	229
Table C.1 – Headers of IU	265
Table C.2 – LRC Calculation Example	265
Table D.1 – Status/Chaining Summary	267

Foreword (This foreword is not part of American National Standard INCITS 544-2018.)

The Fibre Channel Single-Byte Command Code Sets - 6 (FC-SB-6) standard describes the Fibre Channel mapping protocol associated with the Single-Byte Command Code Sets.

This standard was developed by the INCITS Fibre Channel T11 Technical Committee (FC-TC) of Accredited Standards Committee during 2015-2016. The standards approval process started in 2016. This document includes annexes which are informative and are not considered part of the standard.

Requests for interpretation, suggestions for improvement or addenda, or defect reports are welcome. They should be sent to InterNational Committee for Information Technology Standards (INCITS), ITI, 1101 K Street, NW, Suite 610, Washington, DC 20005.

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Task Group T11.3 on Fibre Channel Interconnection Schemes, which developed and reviewed this standard, had the following members:

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Introduction

FC-SB-6 describes the Fibre Channel protocol mapping for the Single-Byte Command Code Sets. FC-SB-6 is one of a number of Fibre Channel protocol mappings, referred to as FC-4s.

Fibre Channel – Single-Byte Command Code Sets Mapping Protocol - 6 (FC-SB-6)

1 Scope

This standard describes a communication interface between a channel and I/O control units that utilize the Single-Byte Command Code Sets (SBCCS) as implemented in a wide range of data processing systems. It employs information formats and signaling protocols that provide a uniform means for communicating with various types of I/O control units, facilitating a high bandwidth, high performance, and long distance information exchange environment. The signaling protocols and information exchanges are defined at a layer (FC-4) to compatibly utilize the link services and other functions provided by the INCITS Fibre Channel Framing and Signaling (FC-FS-4) and the INCITS Fibre Channel Link Services (FC-LS-3) specifications. This FC-4 Upper Level Protocol is referred to as the Fibre Channel-Single-Byte-6 Command Code Sets Mapping Protocol (FC-SB-6).

This standard modifies the FC-SB-5 standard to specify enhancements and clarifications to the command-mode and transport-mode protocols to increase the efficiency and expand the capabilities of operations.

INCITS 544-2018

2 Normative References

2.1 Qualification and availability of references

The references listed in this clause contain provisions that, through reference in this text, constitute provisions of this document. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed in this clause.

Orders for ISO Standards and ISO publications should normally be addressed to the ISO member in your country. If that is impractical, ISO Standards and ISO publications may be ordered from ISO Central Secretariat (ISO/CS):

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Copies of the following documents may be obtained from ANSI, an ISO member organization:

Approved ANSI standards;
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or the InterNational Committee for Information Technology Standards (INCITS):

Phone: 202-626-5737
Web: <http://www.incits.org>
E-mail: incits@itic.org

IETF Request for Comments (RFCs) may be obtained directly from the IETF web site at <http://www.ietf.org/rfc.html>.

2.2 Approved References

FC-PI-2:INCITS 404-2006, *Fibre Channel Physical Interfaces - 2 (FC-PI-2)*

FC-PI-5:INCITS 479-2011, *Fibre Channel Physical Interfaces - 5 (FC-PI-5)*

FC-PI-6:INCITS 512-2015, *Fibre Channel - Physical Interface - 6 (FC-PI-6)*

FC-PI-6P:INCITS 533-201x, *Fibre Channel - Physical Interface - 6 (FC-PI-6P)*

SBCON:ANSI X3.296-1997, *Single-Byte Command Code Sets Connection Architecture (SBCON)*

FC-SB-5:INCITS 485-2014, *Fibre Channel - Single Byte Command Code Sets - 5 (FC-SB-5)*

FCP-4:INCITS 481-2012, *Fibre Channel - Protocol - 4 (FCP-4)*

FDDI-MAC:ISO/IEC 9314-2:1989, *Fibre Distributed Data Interface - Media Access Control (FDDI-MAC)*

2.3 References Under Development

At the time of publication, the following referenced standards were still under development. For information on the current status of the document, or regarding availability, contact the relevant standards body or other organization as indicated.

FC-FS-4:INCITS Project 2238-D, *Fibre Channel - Framing and Signaling - 4 (FC-FS-4)*

FC-LS-3:INCITS Project 2237-D, *Fibre Channel - Link Services - 3 (FC-LS-3)*

FC-SW-6:INCITS Project 2220-D, *Fibre Channel - Switch Fabric - 6 (FC-SW-6)*

FC-PI-7:INCITS 543-201X, *Fibre Channel - Physical Interface - 6 (FC-PI-7)*

INCITS 544-2018