

TOSHIBA

TOSHIBA Bar Code Printer

B-SX4T Series, B-SX5T Series

External Equipment Interface Specification

First Edition:	November 18, 2002
Second Edition:	February 21, 2003
Third Edition:	June 6, 2003
Fourth Edition:	August 22, 2003
Fifth Edition:	February 27, 2004
Sixth Edition:	January 14, 2005
Seventh Edition:	February 8, 2005
Eighth Edition:	May 9, 2005
Ninth Edition:	April 4, 2006
Tenth Edition:	May 23, 2007

TOSHIBA TEC CORPORATION

TABLE OF CONTENTS

	Page
1. SCOPE	1
2. GENERAL DESCRIPTION.....	1
3. INTERFACE	4
3.1 SERIAL INTERFACE.....	4
3.2 PARALLEL INTERFACE	9
3.3 USB INTERFACE	19
3.4 NETWORK INTERFACE.....	19
4. KEY OPERATION FUNCTIONS.....	20
4.1 SYSTEM MODE FUNCTIONS	20
4.2 ONLINE MODE FUNCTIONS	25
4.3 DOWNLOAD MODE SETTING FUNCTION	25
5. TRANSMISSION SEQUENCE.....	26
5.1 INITIALIZATION	26
5.2 LABEL ISSUE OPERATION	28
6. INTERFACE COMMANDS.....	30
6.1 OUTLINE OF COMMANDS.....	30
6.2 LIST OF COMMANDS.....	31
6.3 COMMANDS FOR CREATING APPLICATION	33
6.3.1 LABEL SIZE SET COMMAND	33
6.3.2 POSITION FINE ADJUST COMMAND	39
6.3.3 PRINT DENSITY FINE ADJUST COMMAND.....	47
6.3.4 RIBBON MOTOR DRIVE VOLTAGE FINE ADJUST COMMAND.....	48
6.3.5 IMAGE BUFFER CLEAR COMMAND	49
6.3.6 CLEAR AREA COMMAND.....	50
6.3.7 LINE FORMAT COMMAND	52
6.3.8 BIT MAP FONT FORMAT COMMAND	56
6.3.9 OUTLINE FONT FORMAT COMMAND.....	73
6.3.10 BAR CODE FORMAT COMMAND	90
6.3.11 BIT MAP FONT DATA COMMAND.....	136
6.3.12 OUTLINE FONT DATA COMMAND	141
6.3.13 BAR CODE DATA COMMAND	144
6.3.14 ISSUE COMMAND.....	157
6.3.15 FEED COMMAND	173
6.3.16 EJECT COMMAND	180
6.3.17 FORWARD/REVERSE FEED COMMAND.....	182
6.3.18 STORAGE AREA ALLOCATE COMMAND	184
6.3.19 FLASH MEMORY FORMAT COMMAND	186
6.3.20 ATA CARD FORMAT COMMAND.....	187

	Page
6.3.21 2-BYTE WRITABLE CHARACTER CODE RANGE COMMAND	188
6.3.22 BIT MAP WRITABLE CHARACTER COMMAND ([ESC] XD)	189
6.3.23 BIT MAP WRITABLE CHARACTER COMMAND ([ESC] XA)	190
6.3.24 GRAPHIC COMMAND	201
6.3.25 SAVE START COMMAND ([ESC] XO)	209
6.3.26 SAVE START COMMAND ([ESC] XV)	210
6.3.27 SAVE TERMINATE COMMAND	211
6.3.28 SAVED DATA CALL COMMAND ([ESC] XQ)	212
6.3.29 SAVED DATA CALL COMMAND ([ESC] XT)	213
6.3.30 HEAD BROKEN DOTS CHECK COMMAND	214
6.3.31 MESSAGE DISPLAY COMMAND	215
6.3.32 RESET COMMAND.....	217
6.3.33 STATUS REQUEST COMMAND.....	218
6.3.34 RECEIVE BUFFER FREE SPACE REQUEST COMMAND.....	219
6.3.35 VERSION INFORMATION ACQUIRE COMMAND	220
6.3.36 ATA CARD INFORMATION ACQUIRE COMMAND	221
6.3.37 ATA CARD WRITABLE CHARACTER INFORMATION ACQUIRE COMMAND	223
6.3.38 PRINTER OPTION STATUS ACQUIRE COMMAND	224
6.3.39 IP ADDRESS SET COMMAND.....	225
6.3.40 SOCKET COMMUNICATION PORT SET COMMAND	226
6.3.41 DHCP FUNCTION SET COMMAND.....	227
6.3.42 PASS-THROUGH COMMAND	228
6.3.43 INTERNAL SERIAL INTERFACE PARAMETER SET COMMAND.....	229
6.4 COMMANDS FOR SYSTEM ADMINISTRATOR.....	230
6.4.1 PARAMETER SET COMMAND.....	230
6.4.2 FINE ADJUSTMENT VALUE SET COMMAND	234
6.4.3 RFID PARAMETER SET COMMAND.....	236
6.4.4 BATCH RESET COMMAND	238
6.5 COMMANDS RELATED TO RFID	239
6.5.1 RFID TAG POSITION ADJUSTMENT COMMAND	239
6.5.2 RFID TAG READ COMMAND.....	240
6.5.3 RFID VOID PATTERN PRINT COMMAND	243
6.5.4 RFID DATA WRITE COMMAND.....	244
7. CONTROL CODE SELECTION.....	248
8. ERROR PROCESSING.....	249
8.1 COMMUNICATION ERRORS.....	249
8.2 ERRORS IN ISSUING OR FEEDING	249
8.3 ERRORS IN WRITABLE CHARACTER AND PC COMMAND SAVE MODES.....	252
8.4 SYSTEM ERRORS.....	252
8.5 RESET PROCESSING.....	252
8.6 RFID ERROR	253

This is a “Table of Contents preview” for quality assurance

The full manual can be purchased from our store:

[https://the-checkout-tech.com/manuals/TEC/B-SX Interface Specification2 manual.html](https://the-checkout-tech.com/manuals/TEC/B-SX%20Interface%20Specification2%20manual.html)

And our free Online Keysheet maker:

<https://the-checkout-tech.com/Cash-Register-Keysheet-Creator/>

[HTTPS://THE-CHECKOUT-TECH.COM](https://THE-CHECKOUT-TECH.COM)