

INTERFACE BOARDS FOR FTP-628DCL/ DSL45X SERIES

■ INTERFACE

1. Centronics interface

(1) Connector (CN1)

Connector part number : BM30B-SRDS-G-TFC (JST) or equivalent Mating connector part number : SHDR-30V-S-B (JST) or equivalent

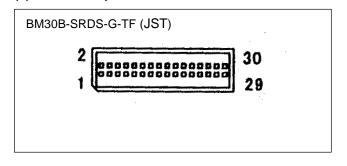
(2) Connector pin assignment

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No.	Signal	I/O	Contents	No.	Signal	I/O	Contents
1	PRSTB	ı	Data strobe	2	PRSTB-RET	_	Connected to logic GND
3	PRDT0	I	Data 0	4	PRDT0-RET	_	Connected to logic GND
5	PRDT1	I	Data 1	6	PRDT1-RET	_	Connected to logic GND
7	PRDT2	ı	Data 2	8	PRDT2-RET	_	Connected to logic GND
9	PRDT3	ı	Data 3	10	PRDT3-RET	_	Connected to logic GND
11	PRDT4	I	Data 4	12	PRDT4-RET	_	Connected to logic GND
13	PRDT5	ı	Data 5	14	PRDT5-RET	_	Connected to logic GND
15	PRDT6	ı	Data 6	16	PRDT6-RET	_	Connected to logic GND
17	PRDT7	I	Data 7	18	PRDT7-RET	_	Connected to logic GND
19	ACKNLG	0	Data input acknowledge	20	ACKNLG-RET	_	Connected to logic GND
21	BUSY	0	Busy	22	BUSY-RET	_	Connected to logic GND
23	RINF2	0	Printer status 2	24	INPRM-RET	_	Connected to logic GND
25	SLCTIN	ı	Printer select	26	ĪNPRM	ı	Reset
27	RINF1	0	Printer status 1	28	RINF3	0	Printer status 3
29	ĀTF	I	Paper feed request	30	GND	_	Logic GND

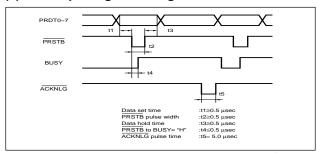
Notes: • Symbol "---" means a negative logic signal.

- "-RET" signal is a return signal of the twisted pair cable.
- "I" or "O" means a signal direction from the interface board side.

(3) Connector pin number



(4) Data input signal timing



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(5) Printer status signals

	Error status	RINF1	RINF2	RINF3	
1.	Paper out	Low	High	Low	
2.	Paper near end	High	High	Low	
3.	Head up	High	High Low		
4.	Head temperature abnormality	High	Low	High	
5.	Head voltage abnormality	Low	High	High	
6.	Hardware abnormality	High	High	High	
7.	Mark detection abnormality	Low	Low	Low	
8.	Normal	Low	Low	High	

2. RS-232C

(1) Connector (CN2)

Connector part number : B8B-ZR-SM3A-TF (J.S.T.) or equivalent

Mating connector part number: ZHR-8 (J.S.T.) or equivalent

(2) Connector pin assignment

No.	Signal	I/O	Contents No.	No.	Signal	I/O	Contents No.
1	RD	I	Receive data	2	TD	0	Transmission data
3	DTR	0	Data terminal ready	4	GND	-	Signal ground
5	DSR	I	Data set ready	6	SLCTIN	I	Printer select
7	INPRM	I	Reset	8	AFT	I	Paper feed request

Notes:

- Symbol "——" means a negative logic signal.
- "I" or "O" means a signal direction from the interface board side.

■ CONNECTOR PIN ASSIGNMENT OF MECHANISM (FPC)

1. Thermal Head (CN 3)

Part number : 52610-3071 Molex or equivalent FTP-628MCL401 PIN ASSIGNMENT

FIF-020WCL4UI FIN ASSIGNWENT						
Signal	I/O	Contents				
PHK	_	Cathode				
VSEN	0	Logic power supply				
PHE	1	Paper out detection signal				
VH	0	Power supply for thermal head				
VH	0	Power supply for thermal head				
DO	0	Print data output				
CLK	0	Datacomm clock				
GND		Gound of power supply				
GND	_	Gouria or power supply				
STB6	0					
STB5	0	Head energizing signal				
STB4	0					
Vcc	_	Logic power				
TM	_	Head thermistor input				
TMR	0	Head thermistor ground				
STB3	0					
STB2	0	Head energizing signal				
STB1	0					
GND	_	Ground of thermal head				
GND		Ground or thermal flead				
LAT	0	Print data latch				
DI		Print data input				
VH	_	Power supply for thermal head				
VH	_	r ower supply for thermal head				
SW	0	Platen open detection				
SW		i aten open detection				
MT-A	_					
28 MT-/A		Phase signal for motor				
МТ-В	_	T hase signal for motor				
MT-/B	_					
	PHK VSEN PHE VH VH DO CLK GND GND STB6 STB5 STB4 Vcc TM TMR STB3 STB2 STB1 GND GND LAT DI VH VH SW SW SW MT-A MT-/A MT-/A	PHK — VSEN O PHE I VH O VH O DO O CLK O GND — STB6 O STB5 O STB4 O Vcc — TM — TMR O STB3 O STB2 O STB1 O GND — GND — LAT O DI I VH — SW O SW I MT-A — MT-B —				

2. Cutter unit (CN 4)

Part number : 52610-0871 Molex or equivalent **FTP-628MCL401PIN ASSIGNMENT**

No	Signal	I/O	Contents
1	VSEN	0	Logic power supply
2	PHE	I	Home Position Signal
3	PHK	-	Cathode side of sensor
4	MTA	-	Cutter drive signal
5	MT/A	-	Cutter drive signal
6	МТВ	-	Cutter drive signal
7	MT/B	-	Cutter drive signal
8	N.C.	-	Not connected

■ CONNECTOR PIN ASSIGNMENT OF MECHANISM (FPC)

1. Thermal Head (CN 3)

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MT-/B

Part number : 52610-3071 Molex or equivalent FTP-638MCL401 PIN ASSIGNMENT

2. Cutter unit (CN4)

Part number : 52610-0871 Molex or equivalent FTP-638MCL401PIN ASSIGNMENT

No	Signal	I/O	Contents			
1	PHK	_	Cathode			
2	VSEN	0	Logic power supply			
3	PHE		Paper out detection signal			
4	VH	0	Taper out detection signal			
5	VH	0	Power supply for thermal head			
6	DO	0	Print data output signal			
7	CLK	0	Datacom clock			
8	GND	_				
9	GND	_	Ground for thermal head			
10	STB5	0				
11	STB4	0	Head energizing signal			
12	STB3	0				
13	Vcc	_	Logic power			
14	TM	_	Head thermistor			
15	STB2	0	Head thermistor			
16	STB1	0	neau tremistor			
17	AE02	0				
18	AE01	0				
19	GND	_	Ground for thermal head			
20	GND	_	Ground for thermal head			
21	LAT	0	Print data latch			
22	DI		Print data input signal			
23	VH	_	Dower supply for thermal head			
24	VH	_	Power supply for thermal head			
25	SW	0	Dietan anna data d'accident			
26	SW		Platen open detection signal			
27	MT-A	_				
28	MT-/A	_	Phase signal for motor			
29	МТ-В	_				
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No	Signal	I/O	Contents
1	VSEN	0	Logic power supply
2	PHE	I	Home Position Signal
3	PHK	-	Cathode side of sensor
4	MTA	-	Cutter drive signal
5	MT/A	-	Cutter drive signal
6	MTB	-	Cutter drive signal
7	MT/B	-	Cutter drive signal
8	N.C.	-	Not connected

■ INTERFACE BOARD CONNECTOR PIN ASSIGNMENT

1. Connector for power supply for head/motor (CN7)

Part number : S6B-XH-SM3-TB (J.S.T) or equivalent (board side)

No.	Signal	I/O	Contents No.	No.	Signal	I/O	Contents No.
1	Vcc	-	Power supply for logic	2	GND (Vcc)	-	Ground for logic
3	GND (Vdd)	-	Ground for head/motor	4	GND (Vdd)	-	Ground for head /motor
5	Vdd	-	Power for head/motor	6	Vdd		Power for head /motor

2. Connector for paper near-end sensor detection (CN8)

Part number : B2B-PH-SM3-TB (J.S.T) or equivalent (board side)

No.	Signal	I/O	Contents No.	No.	Signal	I/O	Contents No.
1	Vcc	-	Power supply for logic	2	NES	I	Paper near-end detection signal

■ COMMANDS

Command	Contents
HT	Moves print position to the next tab.
LF	Line feed.
FF	Feeds forms (new page).
DC2	Power down
ESC EM+n	Setting the amount of the feeding at automatic paper feed.
ECS RS	Sets reverse printing.
ESC US	Resets reverse printing.
ESC!+n	Sets print mode.
ESC % + n	External registration character specification/cancellation.
ESC &+y+c1+c2+x+d1~dN	Download character definition.
ESC *+m+n1+n2+d1~dN	Sets bit image mode.
ESC 2	Sets 1/6 inch line feed length.
ESC 3+n	Sets the line feed length.
ESC ? + n	External registration character deletion.
ESC @	Printer initialization.
ESC A+n	Sets the space between the line.
ESC C+n	Sets the page length by character line.
ESC D+d1~dN+NUL	Sets the tab position.
ESC J+n	Feeds paper in forward direction and prints.
ESC K+n	Reverse paper feed.
ESC R +n	International character specification.
ESC V+n	Right rotation 90°.
ESC X+m+n	Setting the turning time of the motor excitation.
ESC c+1+n	Sets internal processing (including auto paper loading).
ESC d+n	Printing and n-line feeding.
ESC e +n	Prints and reverse feeds n-lines.
ECS s+n	Sets printing speed.
ECS t+n	Character code table selection.
ESC (+n	Sets/resets upside down printing.

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Commands continued

Command	Contents
FS !+n	Kanji printing mode collective specification.
FS &	Kanji printing mode specification.
FS *+m+n1+n2+d1~dN	High speed collective image printing specified.
FS .	Kanji printing mode cancellation.
FS 9+n	Detection function enable/disable setting.
FS C+n	Kanji code system selection.
FS E+n	Correction of impressed energy.
FS W+n	Kanji double height and width mode specification/cancellation.
GS &+m+x+y1+y2+d1~dN	Registration of image data.
GS '+m+n	Prints registered image data.
GS <	Line feeds to the next mark.
GS A+m+n	Sets the line feed length after mark detection.
GS E+n	Sets print quality.
GS V+n+m	Paper cutting (for pending cutter models only).
GS e+n+m	Sets bar code width.
GS h+n	Sets bar code height.
GS k+m+n+d1~dn+NUL	Selects bar code type and prints.
GS w+n	Sets bar code width magnification.
GS a+n	Setting and cancellation of auto status transmission (serial mode only).
FS r+n	Parameter transmission. (serial mode only).

■ OPTIONS

1. Cables

Na	me	Part Number	Length (mm)
Interface Cable (between board and	For Centronics (CN1)	FTP-628Y202	500 (19.7 inches)
equipment)	For RS232C (CN2)	FTP-628Y302	500 (19.7 inches)
Power supply cable (CI	N7)	FTP-628Y402	500 (19.7 inches)

2. Paper holder

Name	Part number
Paper Flange	FTP-040HF
Paper Stand	FTP-040HS

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