TO BE DISCONTINUED

FUJITSU Component Thermal Printer
FTP-62GDSL001 series
Interface Board

Fujitsu interface board for 24V FTP-60G series

Features

- 24V FTP-62G series I/F board for low profile mechanism and cutter
- Auto cutter drive compatible (full or partial)
- Supports high speed serial (RS-232C) or USB (V2.0)
- Supports bar code and graphics
- Windows® 7, 8, Windows Vista®, Linux® drivers
- UL File No. E171434
- RoHS compliant

FTP-62GDSL

■ Part numbers

Part number	Interface type	Drivers	Mechanism part number
FTP-62GDSL001#**	USB/RS-232C	Windows® 7, 8, Vista, Linux	FTP-6xGMCL153 FTP-6xGMCL453

■ Interface specification at host side

Item	Specifications	
RS-232C	Data speed: Synchronous method: Handshake: Parity:	9.6k, 19.2k, 38.4k, 115.2k, 230.4k, 460.8kbps Start/stop synchronization RTS (DTR) / CTS (DSR) XON/XOFF control Non, even, odd
USB V2.0	Transmission route Interface class	Full speed 12Mbps Printer device

■ DIP switch setting DSW1

Bit No.	Setting Function	Setting	Remarks
1	62G 2-inch	ON	Factory setting
	63G 3-inch	OFF	

■ RS-232C settings (Initial)

Function	Factory	Command
Baud data	9600 pbs	GS E+L1+2+fn+d1 to d9 (fn=67)
Parity	Non	
Flow control	RTS / CTS (DTR/DSR)	

■ Font

Part number	Font
FTP-62GDSL001#01-R	ANK, Thai, Kanji
FTP-62GDSL001#02-R	ANK, Thai, Traditional Chinese

■ Specifications

1.1 Base specifications

Item	Specifications
Dimensions	70 x 35mm
Weight	Approx. 15g
Communication interface *1	RS-232C USB full speed (max. 12Mbps)

1.2 Print/paper feed specifications

Item	Specifications	
Part number	FTP-62GMCL153-R/453-R	FTP-63GMCL153-R/453-R
Resolution	8 dots/mm	
Number of dots	432 dots/line	576 dots/line
Max. printing width	Approx. 54mm	Approx. 72mm
Max. printing height	Approx. 240mm	
Print speed*1	Max. 200mm/sec.	

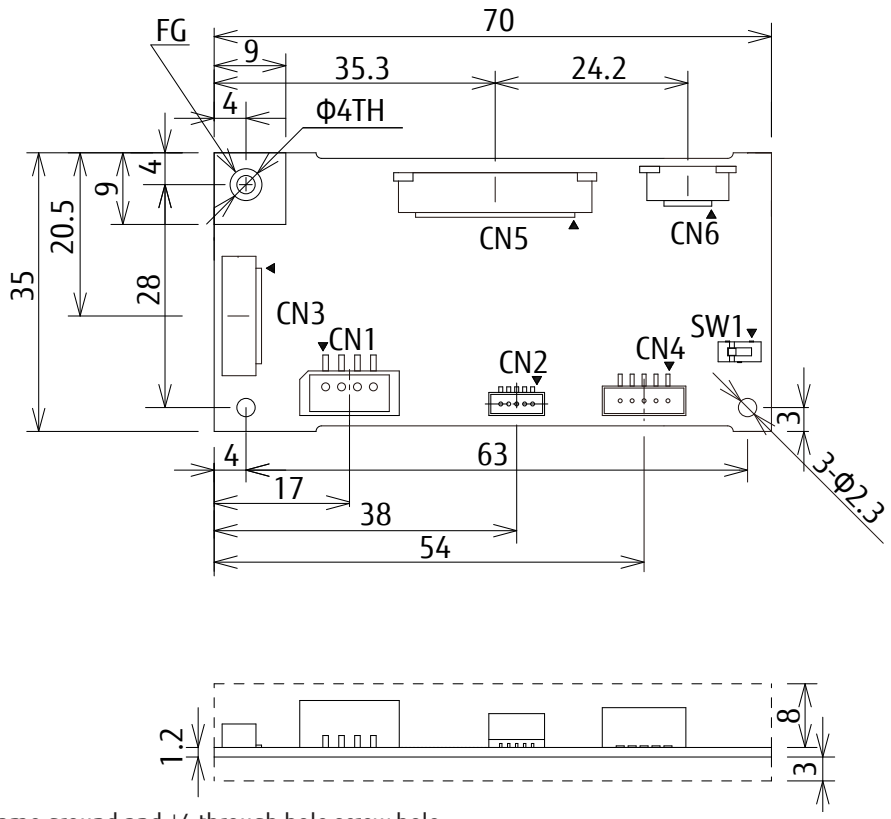
*1: USB is selected if you connect both USB and RS-232C.

*2: When printing at low speed, a white line may occur depending on printing pattern or division control. Therefore, please evaluate in a advance when you use low speed printing.

Conditions:

Paper:	PD150R or equivalent
Voltage:	24V
Print ratio:	Up to 144 dots
Operating temperature/humidity:	25°C, 60+/-15%

■ Dimensions



Note: Please connect frame ground and ϕ4 through hole screw hole.

Tolerance: ±0.2mm
Unit: mm

■ Control circuit board and connector types

Symbol	Name	Function	Note
CN1	Power supply connector	To connect +24V power supply	-
CN2	RS-232C connector	To connect RS-232C interface	-
CN3	External I/O connector	I/O	-
CN4	USB connector	To connect USB	-
CN5	Head / motor connector	FPC connection	-
CN6	Motor / auto cutter connector	FPC connection	-
SW1	Mech switch	Select paper width	-

■ Connector Pin Assignment of interface board

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

- Power supply connector (CN1)
  Mating connector part number: DF3-4S-2C (Hirose) or equivalent

No.	Signal	I/O	Content	No	Signal	I/O	Content
1	Vp	I	Power 24V	2	Vp	I	Power 24V
3	GND	-	Ground of 24V	4	GND	-	Ground of 24V

- RS-232C connector (CN2)
  Mating connector part number: SHR-05V-S (J.S.T.) or equivalent

No.	Signal	I/O	Content	No	Signal	I/O	Content
1	RXD	I	Receive data	2	TXD	O	Transmission data
3	RTS (DTR)	O	Request to send signal	4	GND	-	Ground signal
5	CTS (DTR)	I	Clear to send signal				

- External I/O Connector (CN3)
  Mating connector part number: *SHR-12V-S (J.S.T.) or equivalent

No.	Name	I/O	Description	No.	Name	I/O	Description
1	3.3V	O	Power to extend functionality	2	/INPRM	I	Initialization signal (low active)
3	/ATF	I	Paper feed signal (low active)	4	/SLCTIN	I	Detection function disabled signal (low active)
5	LED1	O	POWER LED signal	6	LED2	O	ERROR LED signal
7	/CUT	I	Paper cut signal (low active)	8	GND	-	Ground signal
9	GND	-	Ground signal	10	GND	-	Ground signal
11	/NES	I	Near end signal	12	POW_NES	O	Power for near end sensor

- USB Connector (CN4)
  Mating connector part number: ZHR-5 (J.S.T.) or equivalent

No.	Signal	I/O	Content	No	Signal	I/O	Content
1	VBUS	I	Bus power supply	2	D-	I/O	Differential data I/O D- terminal
3	D+	I/O	Differential data I/O D+ terminal	4	GND	-	Signal ground
5	FG	-	Frame ground				

■ Connector pin assignments of printer mechanism (2-inch)

No	Signal	Content	I/O
1	VSEN	Paper sensor power	OUT
2	PHK	Cathode for photo interrupter	IN
3	PHE	Emitter for photo interrupter	IN
4	N.C.	Not connected	-
5	VH	Head drive power	OUT
6	VH	Head drive power	OUT
7	VH	Head drive power	OUT
8	VH	Head drive power	OUT
9	DI	Data in	OUT
10	/STB2	/Strobe2	OUT
11	/STB3	/Strobe3	OUT
12	VDD	Logic power	OUT
13	GND	Head ground	-
14	GND	Head ground	-
15	GND	Head ground	-
16	GND	Head ground	-
17	GND	Head ground	-
18	GND	Head ground	-
19	GND	Head ground	-
20	GND	Head ground	-
21	TM	Thermistor	IN
22	N.C.	Not connected	OUT
23	/STB1	/Strobe1	OUT
24	/LAT	/Data latch	OUT
25	CLK	Clock	OUT
26	VH	Head drive power	OUT
27	VH	Head drive power	OUT
28	VH	Head drive power	OUT
29	VH	Head drive power	OUT
30	N.C.	Not connected	-
31	SW	Platen switch release	IN
32	SW	Platen switch release	IN
33	MT_/A	Excitation signal /A	SINK/SOURCE
34	MT_/A	Excitation signal /A	SINK/SOURCE
35	MT_A	Excitation signal A	SINK/SOURCE
36	MT_A	Excitation signal A	SINK/SOURCE
37	MT_/B	Excitation signal /B	SINK/SOURCE
38	MT_/B	Excitation signal /B	SINK/SOURCE
39	MT_B	Excitation signal B	SINK/SOURCE
40	MT_B	Excitation signal B	SINK/SOURCE

■ Connector pin assignments of printer mechanism (3-inch)

No	Signal	Content	I/O
1	VSEN	Paper sensor power	OUT
2	PHK	Cathode for photo interrupter	IN
3	PHE	Emitter for photo interrupter	IN
4	N.C.	Not connected	-
5	VH	Head drive power	OUT
6	VH	Head drive power	OUT
7	VH	Head drive power	OUT
8	VH	Head drive power	OUT
9	DI	Data in	OUT
10	/STB3	/Strobe3	OUT
11	/STB4	/Strobe4	OUT
12	VDD	Logic power	OUT
13	GND	Head ground	-
14	GND	Head ground	-
15	GND	Head ground	-
16	GND	Head ground	-
17	GND	Head ground	-
18	GND	Head ground	-
19	GND	Head ground	-
20	GND	Head ground	-
21	TM	Thermistor	IN
22	/STB1	/Strobe1	OUT
23	/STB2	/Strobe2	OUT
24	/LAT	/Data latch	OUT
25	CLK	Clock	OUT
26	VH	Head drive power	OUT
27	VH	Head drive power	OUT
28	VH	Head drive power	OUT
29	VH	Head drive power	OUT
30	N.C.	Not connected	-
31	SW	Platen switch release	IN
32	SW	Platen switch release	IN
33	MT_/A	Excitation signal /A	SINK/SOURCE
34	MT_/A	Excitation signal /A	SINK/SOURCE
35	MT_A	Excitation signal A	SINK/SOURCE
36	MT_A	Excitation signal A	SINK/SOURCE
37	MT_/B	Excitation signal /B	SINK/SOURCE
38	MT_/B	Excitation signal /B	SINK/SOURCE
39	MT_B	Excitation signal B	SINK/SOURCE
40	MT_B	Excitation signal B	SINK/SOURCE

■ Connector pin assignments of printer mechanism (FPC) (2-inch, 3-inch)

No	Signal	Content	I/O
1	MT_B	Excitation signal /B	SINK/SOURCE
2	MT_B	Excitation signal /B	SINK/SOURCE
3	MT_/B	Excitation signal B	SINK/SOURCE
4	MT_/B	Excitation signal B	SINK/SOURCE
5	MT_A	Excitation signal /A	SINK/SOURCE
6	MT_A	Excitation signal /A	SINK/SOURCE
7	MT_/A	Excitation signal A	SINK/SOURCE
8	MT_/A	Excitation signal A	SINK/SOURCE
9	N.C.	Not connected	-
10	VSEN	Paper sensor power	IN
11	PHE	Emitter for photo interrupter	OUT
12	PHK	Cathode for photo interrupter	OUT

■ Commands

Command	Content
HT	Moves print position to the next tab
LH	Line feed
FF	Feeds forms (new page)
ESC EM	Setting the amount of feeding at automatic paper feed
ESC RS	Sets reverse printing
ESC SP+n	Right side character spacing
ESC US	Resets reverse printing
ESC !+n	Sets print mode
ESC %+n	External registration character specification/cancellation
ESC &+y+c1+c2+x+d1 to dn	External registration character definition*1
ESC *+m+n1+n2+d1+dk	Set bit image mode
ESC -+n	Undeline setting
ESC 2	Sets 1/6 inch line feed length
ESC 3+n	Sets the line feed length
ESC ?+n	External registration character deletion*1
ESC @	Printer initialization
ESC A+n	Set the space between the line
ESC C+n	Sets the page length by character line
ESC D+n1 to nk+NUL	Set the tab position
ESC J+n	Feeds paper in forward direction and prints
ESC K+n	Reverse paper feed
ESC R+n	Selects internationl character
ESC V+n	Right rotation 90° specification/cancellation
ESC X+m+n	Setting the turning time of the motor excitation
ESC c+1+n	Sets internal processing
ESC c+5+n	Panel switch valid/invalid setting
ESC d+n	Printing and n-line feeding
ESC e+n	Prints and reverses feeds n-line
ESC ¡	Full cut
ESC m	Partial cut
ESC s+n	Sets printing speed
ESC t+n	Character code table selection
ESC {+n	Sets/resets updside down printing
ESC DEL +n	Flash memory erase*1
FS !+n	Kanji printing mode collective specification
FS &	Kanji printing mode specification
FS *+m+n1+n2+d1 to dn	High speed collective image printing specified
FS -+n	Kanji underline specification/cancellation
FS .	Kanji printing mode cancellation
FS 2+c1+c2+d1 to dn	External character definition*1

■ Commands

Command	Content
FS 9+n	Sets the detection functions
FS C+n	Kanji code system selection
FS E+n	Correction of impressed energy
FS S+n1+n2	Kanji spacing setting
FS W+n	Kanji double height and width printing specification/cancellation
FS r+n	Parameter transmission (serial mode)
GS !+n	Character size setting
GS &+m+x+y1+y2+d1 to dn	Registered bit image definiton*1
GS '+m+n	Registered bit image printing
GS (+E+L1+L2+fn+d1 to d9 (fn=67)	RS-232C communication setting*1
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 L+n1+n2	Left margin setting
GS V+m+n	Paper cutting (this command is only available for chip)
GS W+n1+n2	Sets print area width
GS a+n	Set auto status transmission
GS e+m+n	Sets bar code width
GS h+n	Barcode height setting
GS k+m+n+d1 to dn	Bar code print
GS k+m+k1+k2+k3+k4+{[p1][d(1, 1)] to [d(1, j)]} to {[pi][d(i, 1)] to [d(i, j)]}[00]16	2D code (QR code) print
GS k+m+n+k+pL+pH+d1 to dn	Bar code (GS1 DataBar) print
GS k+m+n+k1+k2+k3+k4	Bar code (GS1 DataBar) setting
GS w+n	Sets bar code width magnification

*1: Write to/erase the non-volitile memory

■ Options

Cables

Name		Part number	Length (mm)
Interface cable (between board & equipment)	USB (CN4)	FTP-62GY301	1,000 (39.4 inches)
	RS232C (CN2)	FTP-62GY302	500 (19.7 inches)
Power supply cable	Logic, head, motor (CN1)	FTP-62GY601	300 (11.8 inches)

Paper holder

Name	Part number
Paper flange	FTP-040HF
Paper stand	FTP-040HS

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