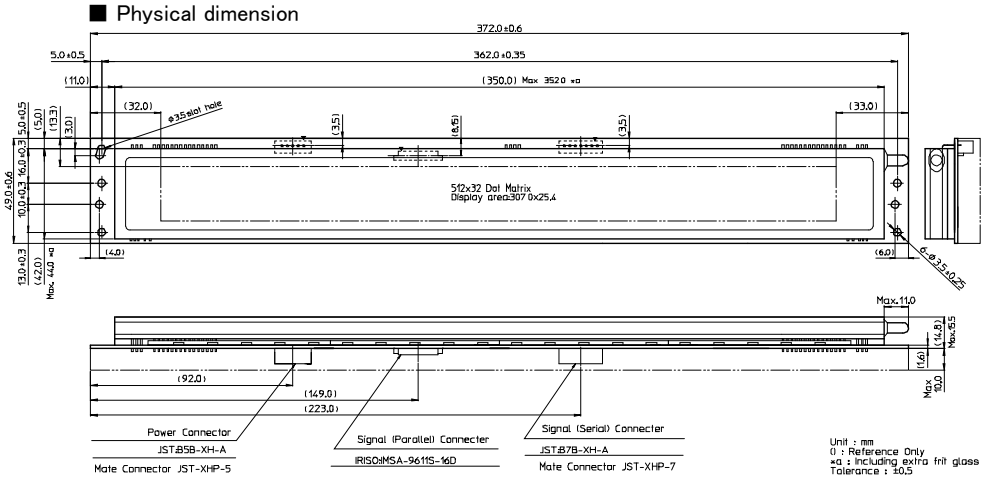
GU512X32H-3940B

SIMPLIFIED DATASHEET

■ Features

Higher resolution VFD – 512x32 dot model in same size as GU256X16M. Can display more information, or finely detailed font patterns. LED back light model.

■ Physical dimension



Specifications

■ Electrical Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Power supply voltage	VCC1	4.75	5.00	5.25	VDC	–
	VCC2	22.8	24.0	25.2	VDC	–

■ Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Parallel IF						
Logic input current	IpIH	–	–	1.0	μADC	–
D0-D7,/WR	IpIL	–	–	-200	μADC	–
Logic input voltage	VpIH	0.8VCC1	–	VCC1	VDC	–
D0-D7,/WR	VpIL	0	–	0.2VCC1	VDC	–
Logic output voltage	VpOH	3.5	–	VCC1	VDC	IOH=-10μA
RDY	VpOL	0	–	0.6	VDC	IOL=4mA
RS-232 I/F						
Logic input voltage	VsIH	3	–	15	VDC	–
RXD, DSR	VsIL	-15	–	-3	VDC	–
Logic output voltage	VsOH	5	–	–	VDC	RL=3KΩ
RXD, DSR	VsOL	–	–	-5	VDC	
Logic input Impedance						
RXD, DSR	RsIN	3	–	7	KΩ	–
Power Supply Current 1	ICC1-1	–	110	150	mADC	All LED OFF
5V	ICC1-2	–	600	900	mADC	All LED ON
Power Supply Current 2	ICC2-1	–	3	8	mADC	Display power OFF
24V	ICC2-2	–	170	250	mADC	All dots OFF
	ICC2-3	–	230	330	mADC	All dots ON
Power Consumption		–	8.5	12.4	W	All dots ON

■ Optical Specifications

Parameter	
Luminance	350 cd/m^2 Min.
Color of illumination (VFD)	Green (Blue-Green)
(LED)	Blue, Red, Green

■ Environmental Specifications

Parameter	
Operating Temperature	0 ~ +50 degrees C (LED ON) / -40 ~ +70 degrees C (LED OFF)
Storage Temperature	-40 ~ +85 degrees celsius
Operating Humidity	20 ~ 80% R.H. (non-condensing)
Vibration (non-operating)	10-55-10Hz, all amplitude 1mm, 30 minutes, X-Y-Z
Shock (non-operating)	392m/s2 (40G) 9ms X-Y-Z, 3 times each direction

■ Physical Specifications

Parameter	
Number of Dots	16,384 (512×32)
Display Area	307.0 mm x 25.4 mm
Dot Size (X x Y)	0.4 mm x 0.6 mm
Dot Pitch (X x Y)	0.6 mm x 0.8 mm
Weight	About 330 g

■ Interface

Parallel(CMOS), Asynchronous Serial (RS232)

■ Pin Assignment

Pin No.	Signal	Pin No.	Signal
1	D7	2	D6
3	D5	4	D4
5	D3	6	D2
7	D1	8	D0
9	GND	10	/WR
11	GND	12	RDY
13	GND	14	GND
15	NC	16	NC

(Asynchronous Serial)

Pin No.	Signal	Baud Rate Setting
1	RXD	4800bps
2	DTR	9600bps
3	DSR	19200bps
4	TXD	38400bps*
5	NC	57600bps
6	NC	115200bps
7	GND	(*:Default setting)

(Power connecter)

Pin No.	Signal
1	VCC1
2	GND
3	VCC2
4	GND
5	TEST

■Selectable Font

Parameter	*ANK(Alphabet, Numeric, Kana)
ANK	All Font Size
International	6 x 8 / 8 x 16 / 12 x 24 / 16 x 32 dot
2-byte character	16 x 16 dot
Japanese	32x32
Character numbers	85 x 4 by 6 x 8 dot ASCII
	42 x 2 by 12x24 dot ASCII
	32x 2 by 16x16 dot 2-byte character
	16 x 1 by 32x32 dot Japanese

■ Functions

Parameter	
Variable Character display	Variable Action Commands
Scroll function	Line / BOX Draw
Display Power Auto ON/OFF	AND/OR/XOR Mixture display
User Windows function	Program Macro function
I/O Port Control Function	Graphic DMA mode
Bit image by dot	Variable stored settings
LED backlight control	
etc.	

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