

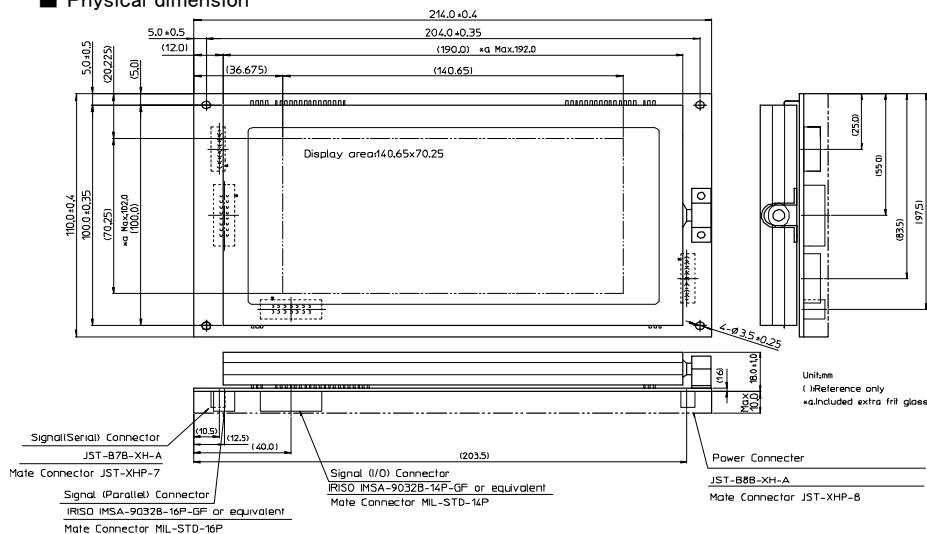
## GU256X128E-3900B

## SIMPLIFIED DATASHEET

## ■ Features

Largest VFD in the 256x128 dot size. High-impact graphic module. For bigger and bolder information display.

## ■ Physical dimension



## Specifications

## ■ Electrical Ratings

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Power supply voltage	VCC1	4.75	5.00	5.25	VDC	—
	VCC2	11.4	12.0	12.6	VDC	—

## ■ Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Parallel IF						
Logic input current	I <sub>PIH</sub>	—	—	1.0	μADC	—
D0-D7,/WR	I <sub>PIH</sub>	—	—	200	μADC	—
Logic input voltage	V <sub>PIH</sub>	0.8VCC1	—	VCC1	VDC	—
D0-D7,/WR	V <sub>PIH</sub>	0	—	0.2VCC1	VDC	—
Logic output voltage	V <sub>POH</sub>	3.5	—	VCC1	VDC	I <sub>OH</sub> =-10 μA
RDY	V <sub>POL</sub>	0	—	0.6	VDC	I <sub>OL</sub> =4mA
RS-232 I/F						
Logic input voltage	V <sub>SIH</sub>	3	—	15	VDC	—
RXD, DSR	V <sub>SIL</sub>	-15	—	-3	VDC	—
Logic output voltage	V <sub>SOH</sub>	5	—	—	VDC	RL=3KΩ
RXD, DSR	V <sub>SOL</sub>	—	—	-5	VDC	—
Logic input Impedance	R <sub>SIN</sub>	3	—	7	KΩ	—
General-purpose I/O port						
Power Supply Current 1	ICC1	—	80	120	mADC	—
Power Supply Current 2	ICC2-1	—	0.75	1.05	ADC	All dots ON
	ICC2-2	—	0.55	0.75	ADC	All dots OFF
	ICC2-3	—	0.7	1.4	mADC	Display power OFF
Power Consumption	—	—	9.4	13.2	W	All dots ON

## ■ Optical Specifications

Parameter	
Luminance	350 cd/m <sup>2</sup> Min. (500 cd/m <sup>2</sup> Typ.)
Color of illumination	Green (Blue-Green)

## ■ Environmental Specifications

Parameter	
Operating Temperature	-40 ~ +70 degrees celsius
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/s <sup>2</sup> (40G) 9ms X-Y-Z, 3 times each direction

## ■ Physical Specifications

Parameter	
Number of Dots	32,768 (256 x 128)
Display Area	140.65 mm x 70.25mm
Dot Size (X x Y)	0.4 mm x 0.4 mm
Dot Pitch (X x Y)	0.55 mm x 0.55 mm
Weight	About 630 g

## ■ Interface

Parallel(CMOS), Asynchronous Serial (RS232), I/O port

## ■ 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	VCC1	16	VCC1

## (Asynchronous Serial )

Pin No.	Signal	Baud Rate Setting
1	RXD	4800bps
2	DTR	9600bps
3	DSR	19200bps
4	TXD	38400bps*
5	TEST	57600bps
6	VCC1	115200bps
7	GND	(*:Default setting)

## (Powr connector)

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

## (General-purpose I/O port:Abbreviation)

## ■ 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	16x16 dot
Japanese	32 x 32 dot
Character numbers	42 x 16 by ASCII
	21 x 5 by 12 x 24 dot ASCII
	16 x 8 by 16 x 16 dot 2-byte character
	8 x 8 by 16 x 32 dot ASCII

## ■ 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	
etc.	

