Winstar Display Co., LTD
華凌光電股份有限公司
WEB: https://www.winstar.com.tw E-mail: sales@winstar.com.tw

SPECIFICATION

MODULE NO.: WO128128-xxxA2#FC

General Specification

Item	Dimension	Unit
Number of dots	128 x 128	—
Module dimension	60.0 x 62.79 x 8.6	mm
View area	42.0 x 42.0	mm
Active area	44.0 x 44.0	mm
Dot size	0.308 x 0.308	mm
Dot pitch	0.310 x 0.310	mm
Duty	1/136 Duty,1/12 Bias	
Backlight Type	LED	
IC	ST75161	

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Represented by:
first FC components
FIRST Components srl Via Cavour 69, 21020 Buguggiate (VA)
T. +39 0332 1888005 web: www.first-components.com

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T_{OP}	-20	—	+70	℃
Storage Temperature	T_{ST}	-30	—	+80	℃
Power Supply Voltage	VDD	-0.3	—	4.0	V
LCD Power supply voltage	VLCD	-0.3	—	20	V
LCD Power supply voltage	V0-XV0	-0.3	—	19	V
Input voltage	VIN	-0.3		VDD+0.3	V

Electrical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	V_{DD}-V_{SS}	—	2.7	3.0	3.3	V
Supply Voltage For LCD	V_{OP}	Ta=-20℃	—	—	—	V
		Ta=25℃	13.7	14.0	14.3	V
		Ta=70℃	—	—	—	V
Input High Volt.	V_{IH}	—	0.7 V_{DD}	—	V_{DD}	V
Input Low Volt.	V_{IL}	—	Vss	—	0.3 V_{DD}	V
Output High Volt.	V_{OH}	—	0.8 V_{DD}	—	V_{DD}	V
Output Low Volt.	V_{OL}	—	Vss	—	0.2 V_{DD}	V
Supply Current	I_{DD}	V_{DD}=3.0V	—	2.0	—	mA

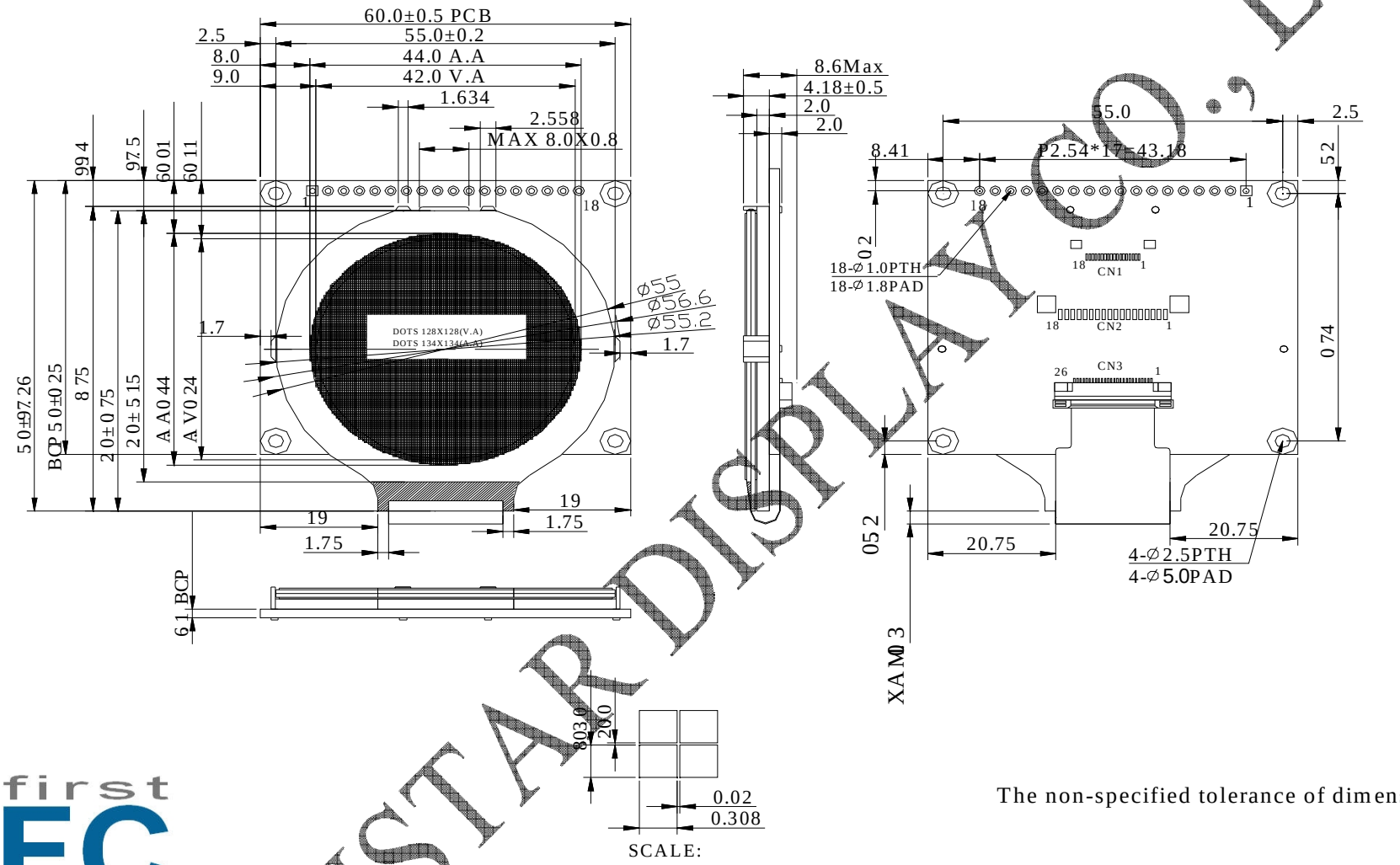
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Interface Pin Function

Pin No.	SYMBOL	Function
1	VDD	Power supply
2	NC	No Connection
3	VSS	Ground
4	CSB	Chip select input pin.
5	A0	It determines whether the access is related to data or command.
6	ERD	Read / Write execution control pin.
7	RWR	Read / Write execution control pin.
8	RSTB	Hardware reset input pin
9-16	D0-D7	When using 8-bit parallel interface: 8080 or 6800 mode:8 bit bi-directional data bus When using serial interface : 4-line SPI or 3-line SPI mode D[7:4] : fix to “H” by VDD1. D[3:1] : serial input/output data (SDA). D[0] : serial input clock (SCL). D1 to D3 must be connected together (SDA) When using serial interface : I2C interface D[7] : SA[1], I2C slave address bit. Must be connected to VDD1 or VSS1. D[6] : SA[0], I2C slave address bit. Must be connected to VDD1 or VSS1. D[5:4] : fix to “H” by VDD1. D[3:2] : SDA_OUT, serial data and acknowledge output for the I2C interface. D[1] : SDA_IN, serial input data D[0] : SCL, serial input clock . D1 to D3 must be connected together (SDA) CSB must be fixed to “L” by VSS1.
17	A	Anode input for LED backlight.
18	K	Cathode input for LED backlight

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Contour Drawing



PIN NO.	SYMBOL
1	VDD
2	NC
3	VSS
4	CSB
5	A0
6	ERD
7	RWR
8	RSTB
9	D0
10	D1
11	D2
12	D3
13	D4
14	D5
15	D6
16	D7
17	A
18	K

The non-specified tolerance of dimension is ±0.3mm.

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