WINSTAR Display

OLED SPECIFICATION

Model No:

WEA160128L#AP3N00000-FC

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Represented by:

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SPECIFICATION Version: A

CUSTOMER :
MODULE NO. : WEA160128L#AP3N00000-FC

APPROVED BY: (FOR CUSTOMER USE ONLY)	

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RELEASE DATE:			

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MODEL NO：

RECORDS OF REVISION			DOC. FIRST ISSUE
VERSION	DATE	REVISED PAGE NO.	SUMMARY
0	2021/09/08		First release
A	2022/10/04		Modify Reliability Test and measurement conditions

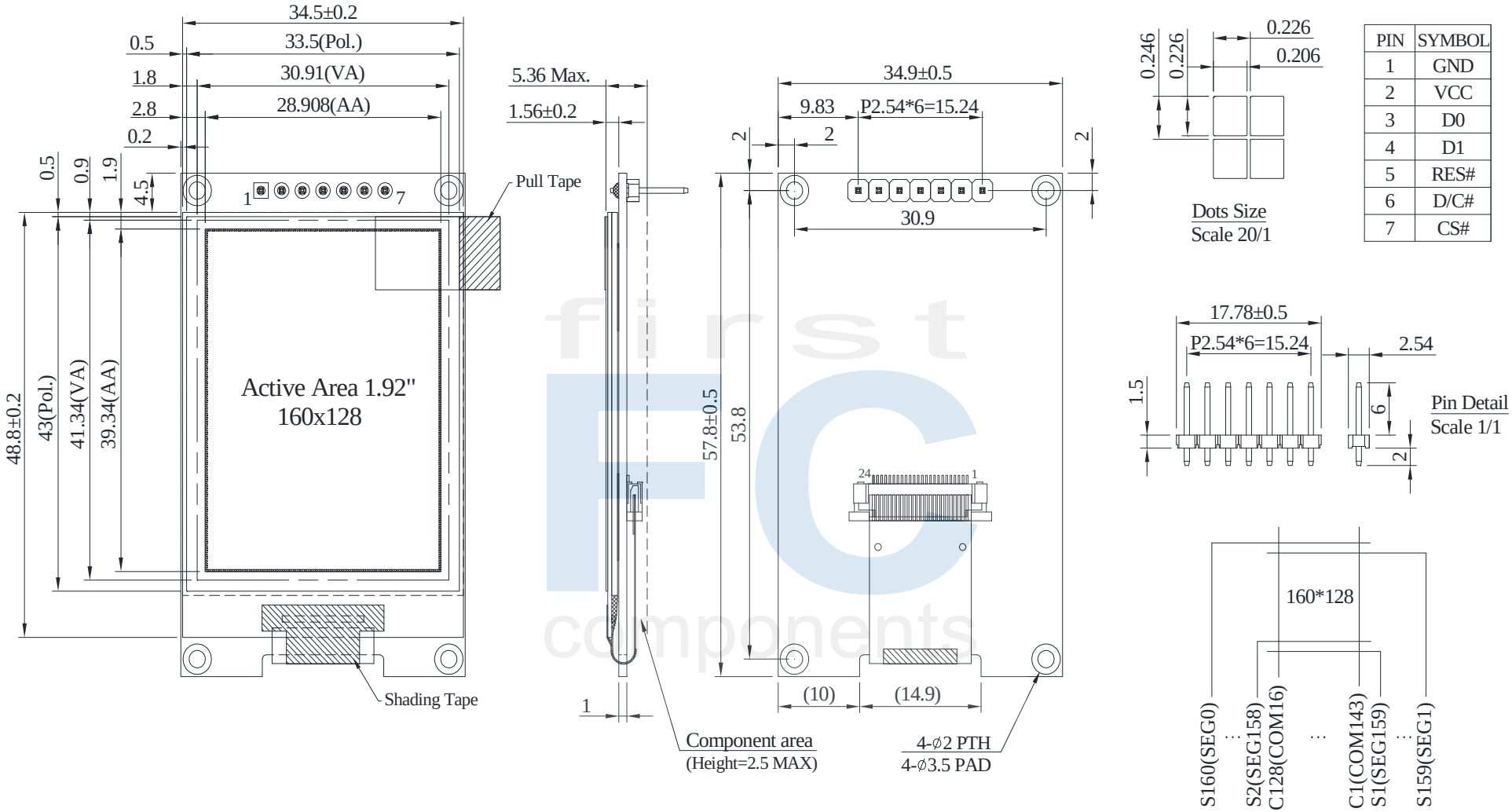
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General Specification

Item	Dimension	Unit
Dot Matrix	160 x 128 Dots	–
Module dimension	34.90 × 57.80 × 5.36 Max.	mm
Active Area	28.908 x 39.34	mm
Pixel Size	0.206 × 0.226	mm
Pixel Pitch	0.226 x 0.246	mm
Display Mode	Passive Matrix	
Display Color	Yellow	
Drive Duty	1/128 Duty	
OLED IC	SH1108	
OLED Interface	4-line SPI	
Size	1.92 inch	

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Contour Drawing & Block Diagram



PIN	SYMBOL
1	GND
2	VCC
3	D0
4	D1
5	RES#
6	D/C#
7	CS#

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

Interface Pin Function

No.	Symbol	Function
1	GND	Ground.
2	VCC	Power supply pin for logic.
3	D0	When the serial interface is selected, then D0 serves as the serial clock input pad (SCL) and D1 serves as the serial data input pad (SI).
4	D1	
5	RES#	This is a reset signal input pad. When RES is set to “L”, the settings are initialized. The reset operation is performed by the RES signal level.
6	D/C#	This is the Data/Command control pad that determines whether the data bits are data or a command. D/C = “H”: the inputs at D0 and D1 are treated as display data. D/C = “L”: the inputs at D0 and D1 are transferred to the command registers.
7	CS#	This pad is the chip select input. When CS = “L”, then the chip select becomes active, and data command I/O is enabled.

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Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit	Notes
Supply Voltage for Logic	VCC	-0.3	3.6	V	1, 2
Operating Temperature	TOP	-40	+80	°C	-
Storage Temperature	TSTG	-40	+85	°C	-

Note 1: All the above voltages are on the basis of “GND = 0V”.
Note 2: When this module is used beyond the above absolute maximum ratings, permanent breakage of the module may occur. Also, for normal operations, it is desirable to use this module under the conditions according to Section 6 ‘’Electrical Characteristics’’. If this module is used beyond these conditions, malfunctioning of the module can occur and the reliability of the module may deteriorate.

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Electrical Characteristics

DC Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage for Logic	VCC	—	1.65	3.0	3.3	V
High Level Input	VIH	—	0.8×VCC	—	VCC	V
Low Level Input	VIL	—	GND	—	0.2×VCC	V
High Level Output	VOH	—	0.8×VCC	—	VCC	V
Low Level Output	VOL	—	GND	—	0.2×VCC	V
50% Check Board operating Current	ICC	VCC =3V	—	50	100	mA

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