

WINSTAR Display

OLED SPECIFICATION

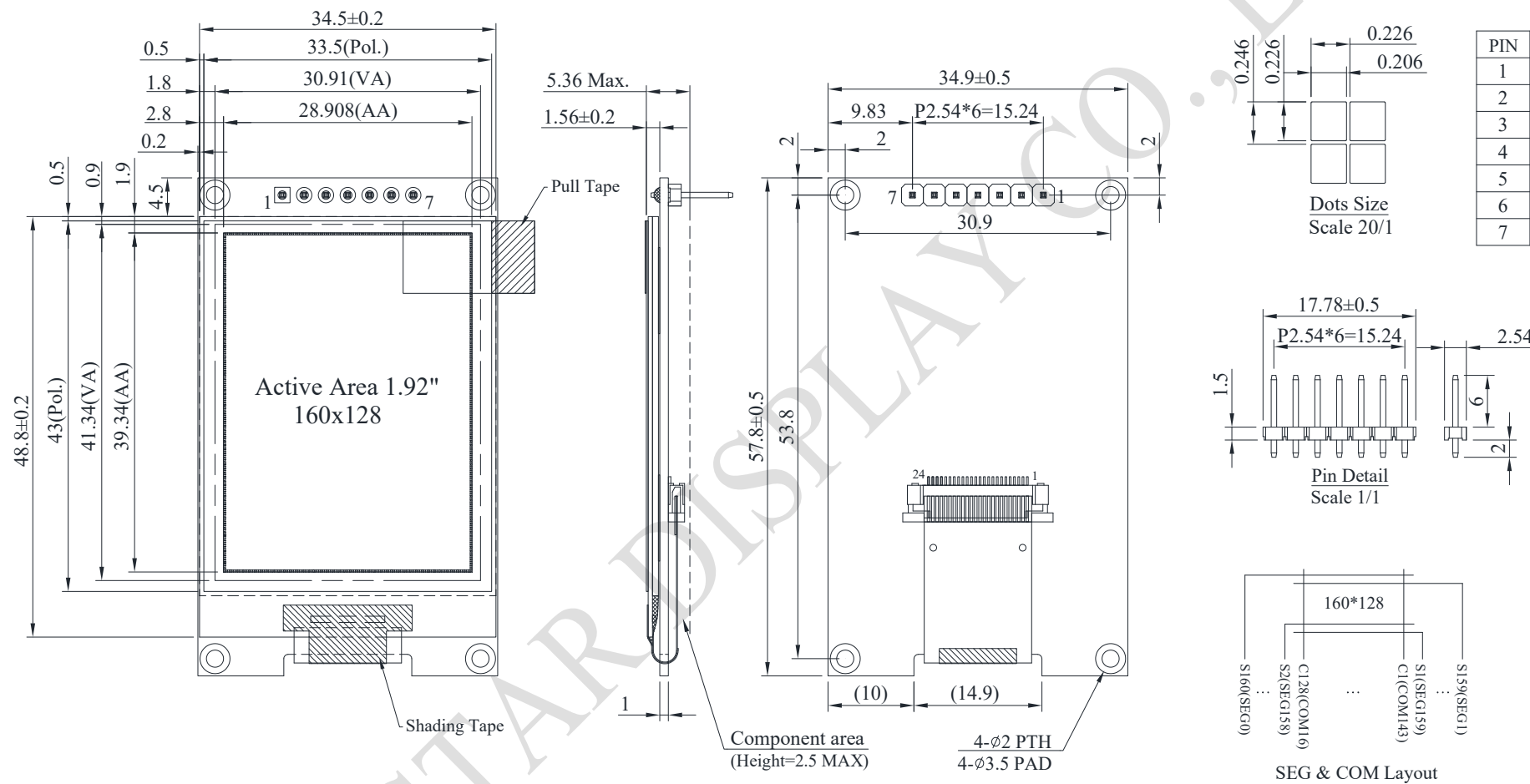
Model No:

WEA160128B

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	Monochrome	
Drive Duty	1/128 Duty	
Gray Scale	4 bits	
OLED IC	CH1120	
OLED Interface	4-Wire SPI	
Size	1.92 inch	

Contour Drawing & Block Diagram



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

Interface Pin Function

No.	Symbol	Function
1	GND	Ground for logic and analog. This pad should be connected to GND externally.
2	VDD	Power supply for logic and input/output
3	SCL	serial clock input
4	SI	serial data input
5	$\overline{\text{RES}}$	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. This pin internal pull high.
6	A0	This is the Data/Command control pad that determines whether the data bits are data or a command. A0 = "H": the inputs at D0 and D1 are treated as display data. A0 = "L": the inputs at D0 and D1 are transferred to the command registers.
7	$\overline{\text{CS}}$	This pad is the chip select input. When CS = "L", then the chip select becomes active, and data/command I/O is enabled.

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage for Logic	VDD	-0.3	6.5	V
Operating Temperature	TOP	-40	+80	°C
Storage Temperature	TSTG	-40	+85	°C

Electrical Characteristics

DC Electrical Characteristics

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage for Logic	VDD	—	3.0	3.3	5.2	V
Input High Volt.	VIH	—	0.8xVDD	—	VDD	V
Input Low Volt.	VIL	—	VSS	—	0.2xVDD	V
Output High Volt.	VOH	IOH=-0.5mA	0.8xVDD	—	VDD	V
Output Low Volt.	VOL	IOL=0.5mA	VSS	—	0.2xVDD	V
Display 50% Pixel on	IDD	VDD=3.3V	—	160	240	mA