

WINSTAR Display

OLED SPECIFICATION

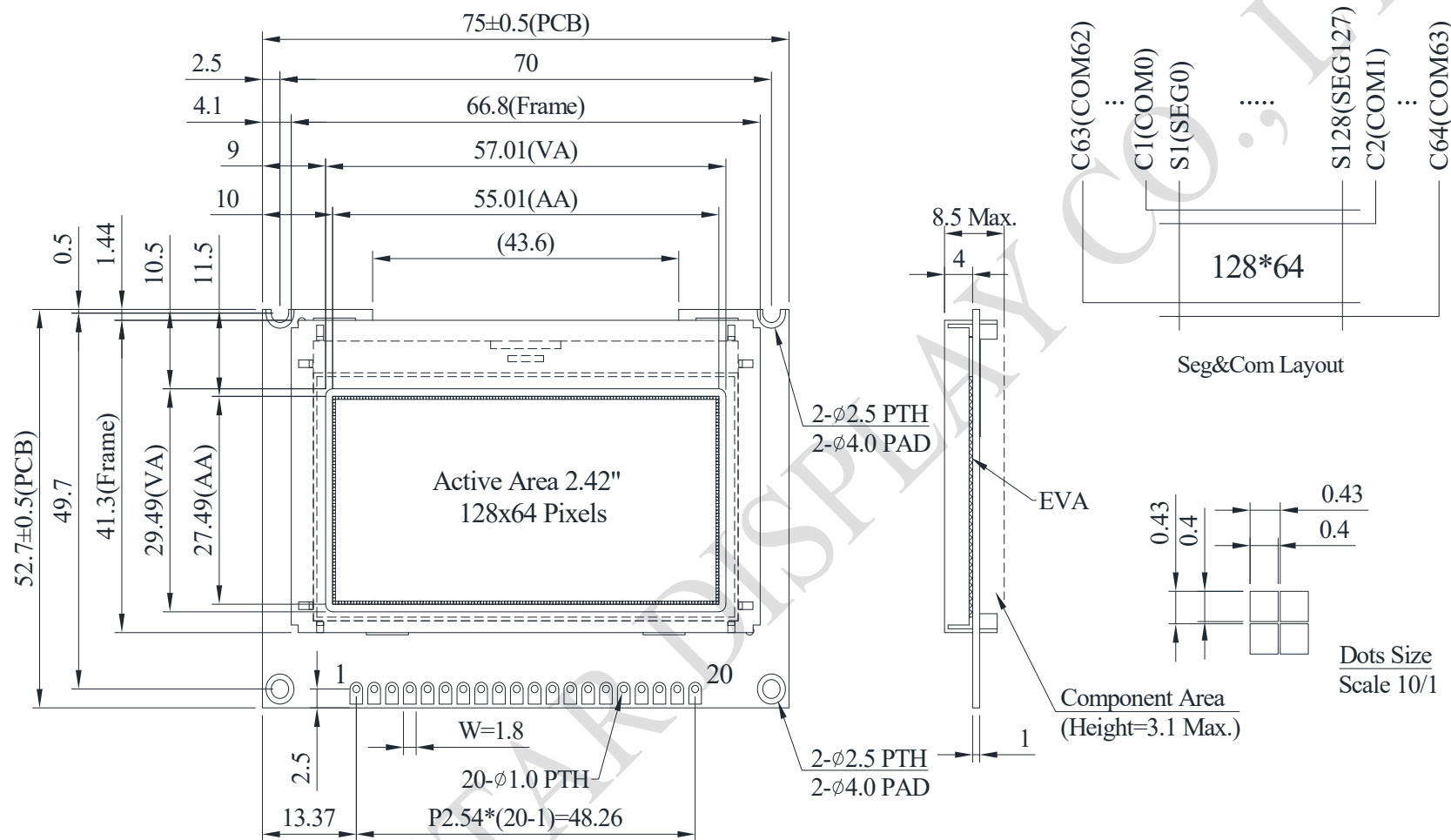
Model No:

WEP012864AJ

General Specification

Item	Dimension	Unit
Dot Matrix	128 x 64	—
Module dimension	75.0 × 52.7 × 8.5(Max).	mm
Active Area	55.01 × 27.49	mm
Pixel Size	0.40 × 0.40	mm
Pixel Pitch	0.43 × 0.43	mm
Display Mode	Passive Matrix	
Display Color	Monochrome	
Drive Duty	1/64 Duty	
IC	CH1116	
Interface	8080	
Size	2.42 inch	

Contour Drawing & Block Diagram



PIN	SYMBOL
1	VDD
2	VSS
3	NC
4	D0
5	D1
6	D2
7	D3
8	D4
9	D5
10	D6
11	D7
12	CS
13	NC
14	RES
15	WR
16	A0
17	RD
18	NC
19	DISP
20	NC

The non-specified tolerance of dimension is $\pm 0.3\text{mm}$.

Interface Pin Function

No.	Symbol	Function
1	VDD	Power supply input
2	VSS	Ground.
3	NC	No connection
4~11	D0~D7	This is an 8-bit bi-directional data bus that connects to an 8-bit or 16-bit standard MPU data bus.
12	$\overline{CS}$	This pad is the chip select input. When $\overline{CS}$ = "L", then the chip select becomes active, and data/command I/O is enabled.
13	NC	No connection
14	$\overline{RES}$	This is a reset signal input pad. When $\overline{RES}$ is set to "L", the settings are initialized. The reset operation is performed by the $\overline{RES}$ signal level.
15	$\overline{WR}$	This is a MPU interface input pad. When connected to an 8080 MPU, this is active LOW. This pad connects to the 8080 MPU $\overline{WR}$ signal. The signals on the data bus are latched at the rising edge of the $\overline{WR}$ signal.
16	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 to D7 are treated as display data. A0 = "L": the inputs at D0 to D7 are transferred to the command registers.
17	$\overline{RD}$	This is a MPU interface input pad. When connected to an 8080 series MPU, it is active LOW. This pad is connected to the $\overline{RD}$ signal of the 8080 series MPU, and the data bus is in an output status when this signal is "L".
18	NC	No connection
19	DISP	Display off when it's pulled low; Display on when it's pulled high.
20	NC	No connection

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage for Logic	VDD	-0.3	3.6	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	—	2.8	3.0	3.3	V
High Level Input	VIH	—	0.8×VDD	—	VDD	V
Low Level Input	VIL	—	VSS	—	0.2×VDD	V
High Level Output	VOH	—	0.8×VDD	—	VDD	V
Low Level Output	VOL	—	VSS	—	0.2×VDD	V
Display 50% Pixel on	IDD	VDD = 3.0V	—	60	120	mA