SPECIFICATION Version: G

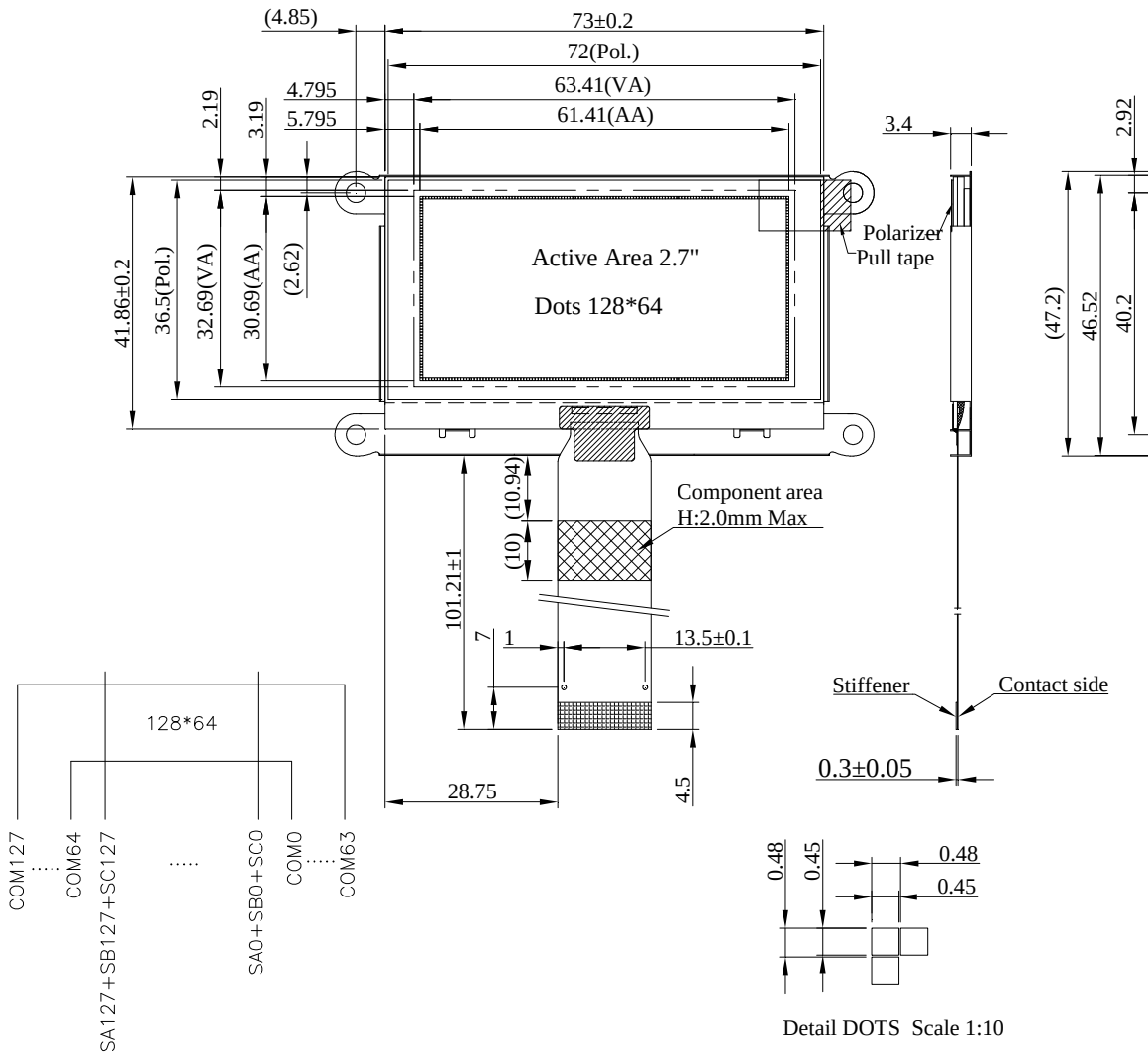
CUSTOMER :

MODULE NO. : WEF12864x#U08-FC

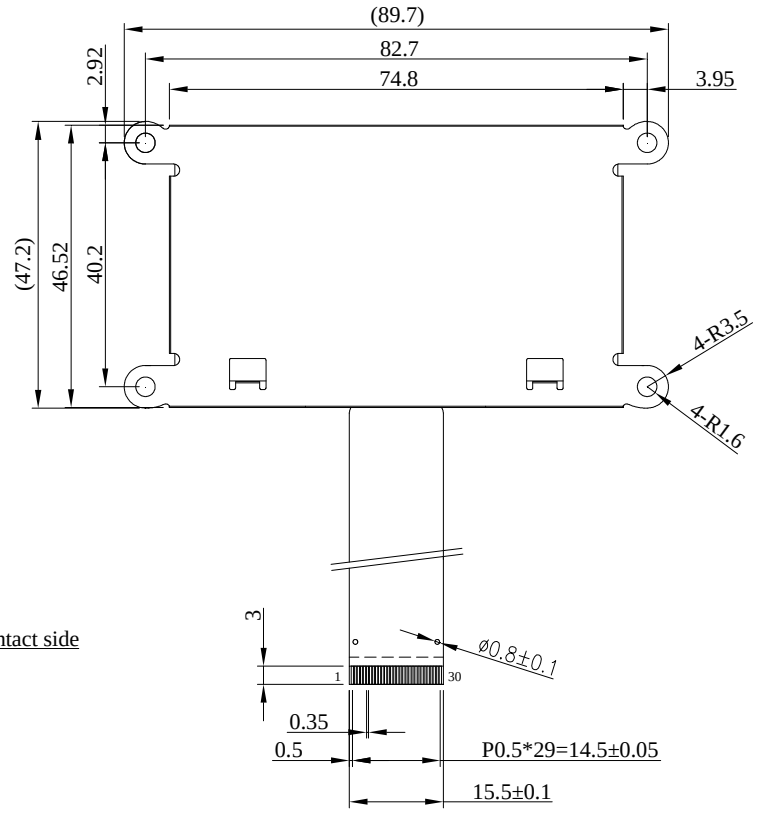
General Specification

Item	Dimension	Unit
Dot Matrix	128 x 64 Dots	–
Module dimension	89.7 x 47.2 x 3.4	mm
Active Area	61.41 × 30.69	mm
Pixel Size	0.45 × 0.45	mm
Pixel Pitch	0.48 × 0.48	mm
Display Mode	Passive Matrix	
Display Color	Monochrome	
Drive Duty	1/64 Duty	
IC	SSD1357	
Interface	68XX,80XX,4-Wire SPI,I2C	
Size	2.7 inch	

Contour Drawing & Block Diagram



Detail DOTS Scale 1:10



PIN	SYMBOL
1	GND(NC)
2	VCC
3	VCOMH
4	IREF
5	D7
6	D6
7	D5
8	D4
9	D3
10	D2
11	D1
12	D0
13	E/RD#
14	R/W#
15	DC#
16	RES#
17	CS#
18	NC
19	BS2
20	BS1
21	VDD
22	NC
23	NC
24	NC
25	NC
26	NC
27	NC
28	NC
29	VSS
30	GND(NC)

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

4. Interface Pin Function

No.	Symbol	I/O	Function
1	NC(GND)	P	*Reserved Pin (Supporting Pin)* The supporting pin can reduce the influences from stresses on the function pins. This pin must be connected to external ground.
2	VCC	P	*Power Supply for OLED Panel* This is the most positive voltage supply pin of the chip. It must be supplied externally.
3	VCOMH	P	*Voltage Output High Level for COM Signal* This pin is the input pin for the voltage output high level for COM signals. It can be supplied externally or internally. When VCOMH is generated internally, a capacitor should be connected between this pin and VSS.
4	IREF	I	*Current Reference for Brightness Adjustment* This pin is segment current reference pin. A resistor should be connected between this pin and VSS. Set the current at 10μA.
5~12	D7~D0	I/O	*Host Data Input/Output Bus* These pins are 8-bit bi-directional data bus to be connected to the microprocessor's data bus. When serial mode is selected, D1 will be the serial data input SDIN and D0 will be the serial clock input SCLK.
13	E/RD#	I	*Read/Write Enable or Read* This pin is MCU interface input. When interfacing to a 68XX-series microprocessor, this pin will be used as the Enable (E) signal. Read/write operation is initiated when this pin is pulled high and the CS# is pulled low. When connecting to an 80XX-microprocessor, this pin receives the Read (RD#) signal. Data read operation is initiated when this pin is pulled low and CS# is pulled low.
14	R/W#	I	*Read/Write Select or Write* This pin is MCU interface input. When interfacing to a 68XX-series microprocessor, this pin will be used as Read/Write (R/W#) selection input. Pull this pin to "High" for read mode and pull it to "Low" for write mode. When 80XX interface mode is selected, this pin will be the Write (WR#) input. Data write operation is initiated when this pin is pulled low and the CS# is pulled low.
15	D/C#	I	*Data/Command Control* This pin is Data/Command control pin. When the pin is pulled high, the input at D7~D0 is treated as display data. When the pin is pulled low, the input at D7~D0 will be transferred to the command register. For detail relationship to MCU interface signals, please refer to the Timing Characteristics Diagrams. When the pin is pulled high and serial interface mode is selected, the data at SDIN is treated as data. When it is pulled low, the data at SDIN will be transferred to the command register.

<table>
<tr><td>16</td><td>RES#</td><td>I</td><td>Power Reset for Controller and Driver
This pin is reset signal input. When the pin is low, initialization of the chip is executed.</td></tr>
<tr><td>17</td><td>CS#</td><td>I</td><td>Chip Select
This pin is the chip select input. The chip is enabled for MCU communication only when CS# is pulled low.</td></tr>
<tr><td>18</td><td>NC</td><td>-</td><td>Reserved Pin
The N.C. pins between function pins are reserved for compatible and flexible design.</td></tr>
<tr><td>19</td><td>BS2</td><td>I</td><td rowspan="2">Communicating Protocol Select
These pins are MCU interface selection input. See the following table:
<table><tr><td></td><td>BS1</td><td>BS2</td></tr><tr><td>I2C</td><td>1</td><td>0</td></tr><tr><td>4-wire Serial</td><td>0</td><td>0</td></tr><tr><td>8-bit 8080 Parallel</td><td>1</td><td>1</td></tr><tr><td>8-bit 6800 Parallel</td><td>0</td><td>1</td></tr></table></td></tr>
<tr><td>20</td><td>BS1</td><td>I</td></tr>
<tr><td>21</td><td>VDD</td><td>P</td><td>Power Supply for Logic Circuit
This is a voltage supply pin. It must be connected to external source.</td></tr>
<tr><td>22~28</td><td>NC</td><td>-</td><td>Reserved Pin
The N.C. pins between function pins are reserved for compatible and flexible design.</td></tr>
<tr><td>29</td><td>VSS</td><td>P</td><td>Ground of OLED System
This is a ground pin. It also acts as a reference for the logic pins, the OLED driving voltages, and the analog circuits. It must be connected to external ground.</td></tr>
<tr><td>30</td><td>GND(NC)</td><td>P</td><td>Reserved Pin (Supporting Pin)
The supporting pin can reduce the influences from stresses on the function pins. This pin must be connected to external ground.</td></tr>
</table>