SPECIFICATION Version: 0

CUSTOMER :
MODULE NO. : WEO012832P

APPROVED BY: (FOR CUSTOMER USE ONLY)	

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY
first FC components			
RELEASE DATE:			

■APPROVAL FOR SPECIFICATIONS ONLY

□APPROVAL FOR SPECIFICATIONS AND SAMPLE

Represented by:

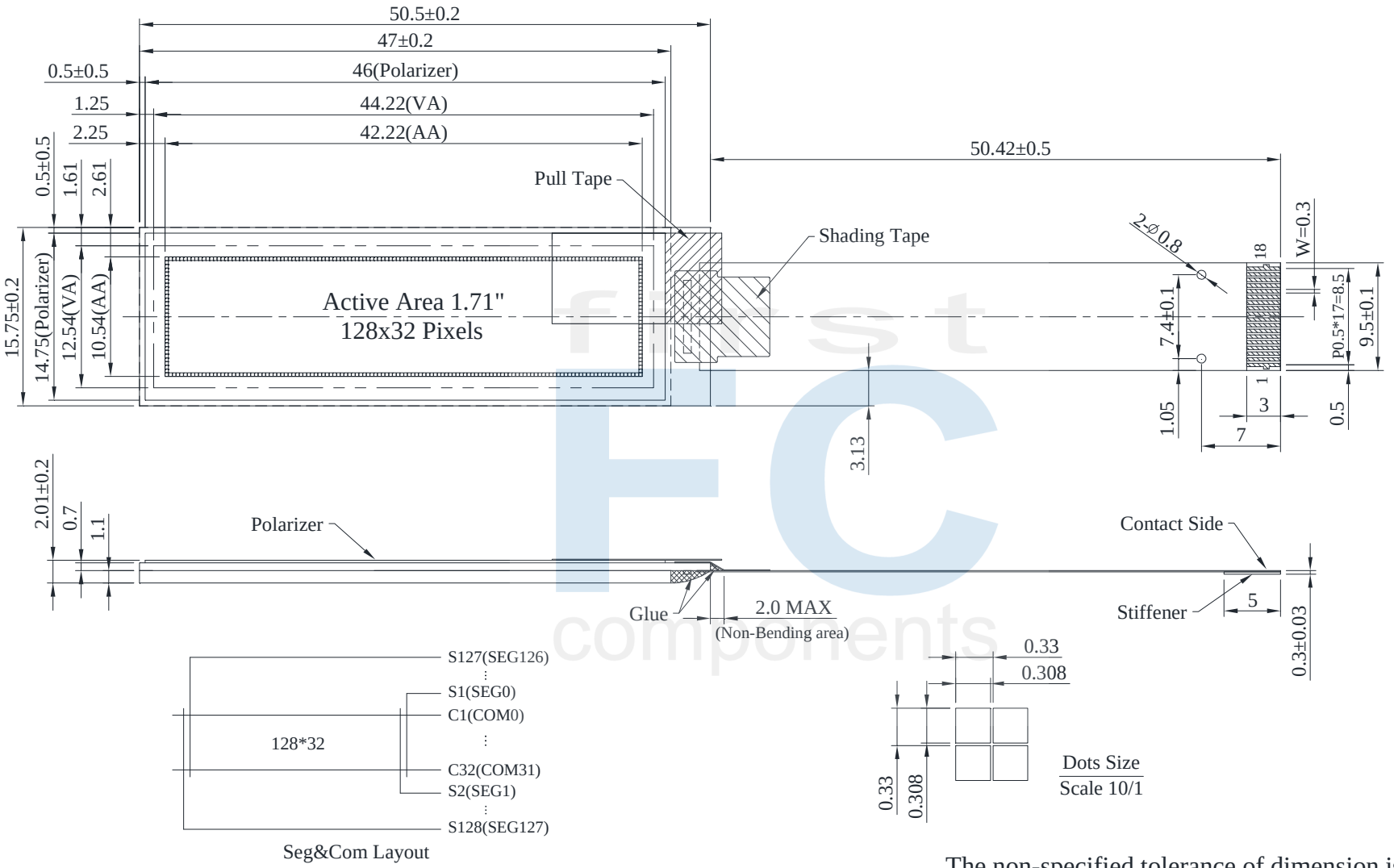
first FC components
FIRST Components s.r.l.
www.first-components.com
sales@first-components.com
+39 0332 1888005

2.General Specification

Item	Dimension	Unit
Dot Matrix	128 x 32 Dots	–
Module dimension	50.50 x 15.75 x 2.01	mm
Active Area	42.22 x 10.54	mm
Pixel Size	0.308 x 0.308	mm
Pixel Pitch	0.33 x 0.33	mm
Display Mode	Passive Matrix	
Display Color	Monochrome	
Drive Duty	1/32 Duty	
IC	CH1115	
Interface	SPI,I2C	
Size	1.71 inch	

first FC components

3. Contour Drawing & Block Diagram

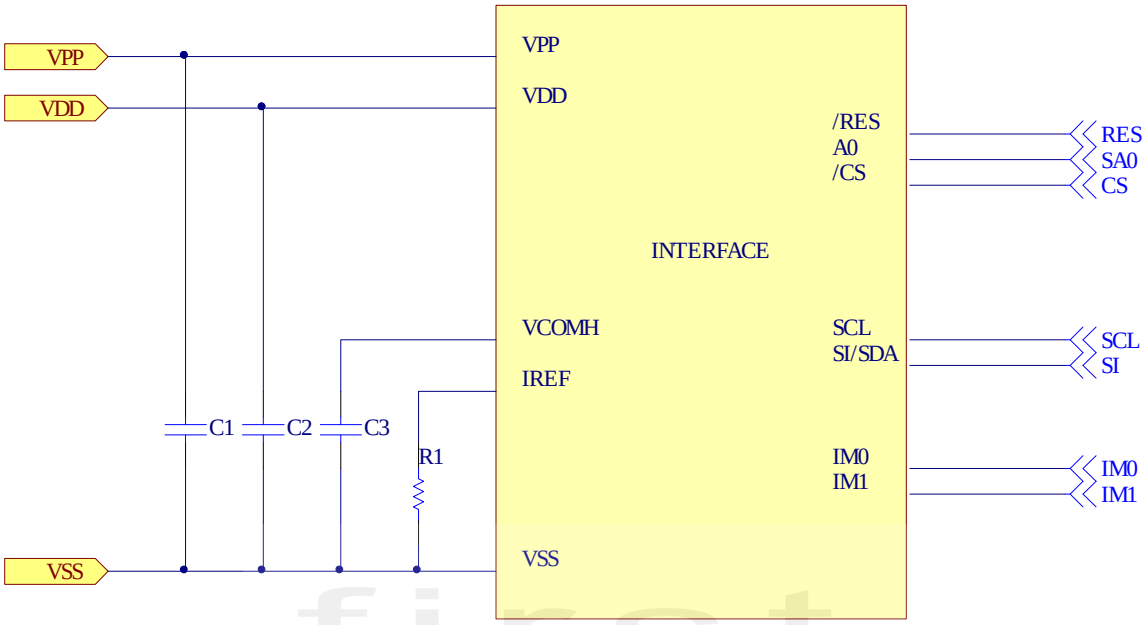


PIN	SYMBOL
1	N.C.(GND)
2	VPP
3	VSS
4	VSS
5	VDD
6	/CS
7	/RES
8	A0
9	SCL
10	SI/SDA
11	NC
12	IREF
13	VCOMH
14	VPP
15	IM0
16	IM1
17	VSS
18	N.C.(GND)

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

first components

3.1 Application recommendations



Recommended components：

C1, C2,C3：4.7uF

Bus Interface selection: (Must be set the IM[0:1], refer to item 4)

3 or 4-wire SPI, and I2C

Voltage at IREF = VPP – 3.5V. For VPP = 12V, IREF = 18.75uA:

(R1 + 150K) = (Voltage at IREF - VSS) / IREF

R1 = [(12 - 3.5) V / 18.75uA] - 150K ohm

≧ 303K ohm(2)

R1 recommends 510K ohm.

Note:
(1).The capacitor value is recommended value. Select appropriate value against module application.
(2). Minimum value. When OLED product application, then R1 must be greater than the calculated value.

4.Interface Pin Function

No.	Symbol	Function
1	N.C. (GND)	Dummy Pin This is dummy pin. Do not group or short NC pins together.
2	VPP	OLED panel power supply.
3	VSS	This is a ground pin.
4	VSS	This is a ground pin.
5	VDD	Power Supply for Logic
6	$\overline{CS}$	This pad is the chip select input. When $\overline{CS}$ = "L", then the chip select becomes active, and data/command I/O is enabled.
7	$\overline{RES}$	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.
8	A0	This is the Data/Command control pad that determines whether the data bits are data or a command. In I2C interface, this pad serves as SA0 to distinguish the different address of OLED driver.
9	SCL	The serial clock input pad
10	SI/SDA	The serial data input pad
11	NC	Dummy Pin
12	IREF	This is a segment current reference pad. A resistor should be connected between this pad and VSS. Set the current at 18.75 μ A.
13	VCOMH	The pin is for COM signal deselected voltage level. A capacitor should be connected between this pin and VSS.
14	VPP	OLED panel power supply.

first components

<table>
<tr><td>15</td><td>IM0</td><td rowspan="2">These are the MPU interface mode select pads.<table><tr><td></td><td>3SPI</td><td>4SPI</td><td>I2C</td></tr><tr><td>IM0</td><td>1</td><td>0</td><td>0</td></tr><tr><td>IM1</td><td>0</td><td>0</td><td>1</td></tr></table></td></tr>
<tr><td>16</td><td>IM1</td></tr>
<tr><td>17</td><td>VSS</td><td>This is a ground pin.</td></tr>
<tr><td>18</td><td>N.C.
(GND)</td><td>Dummy Pin
This is dummy pin. Do not group or short NC pins together.</td></tr>
</table>

first FC components