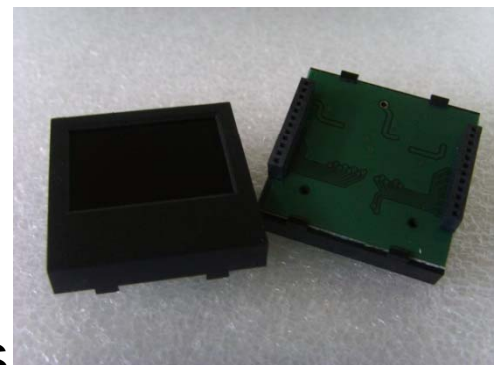# CY-3021 OLED 96RGBx64
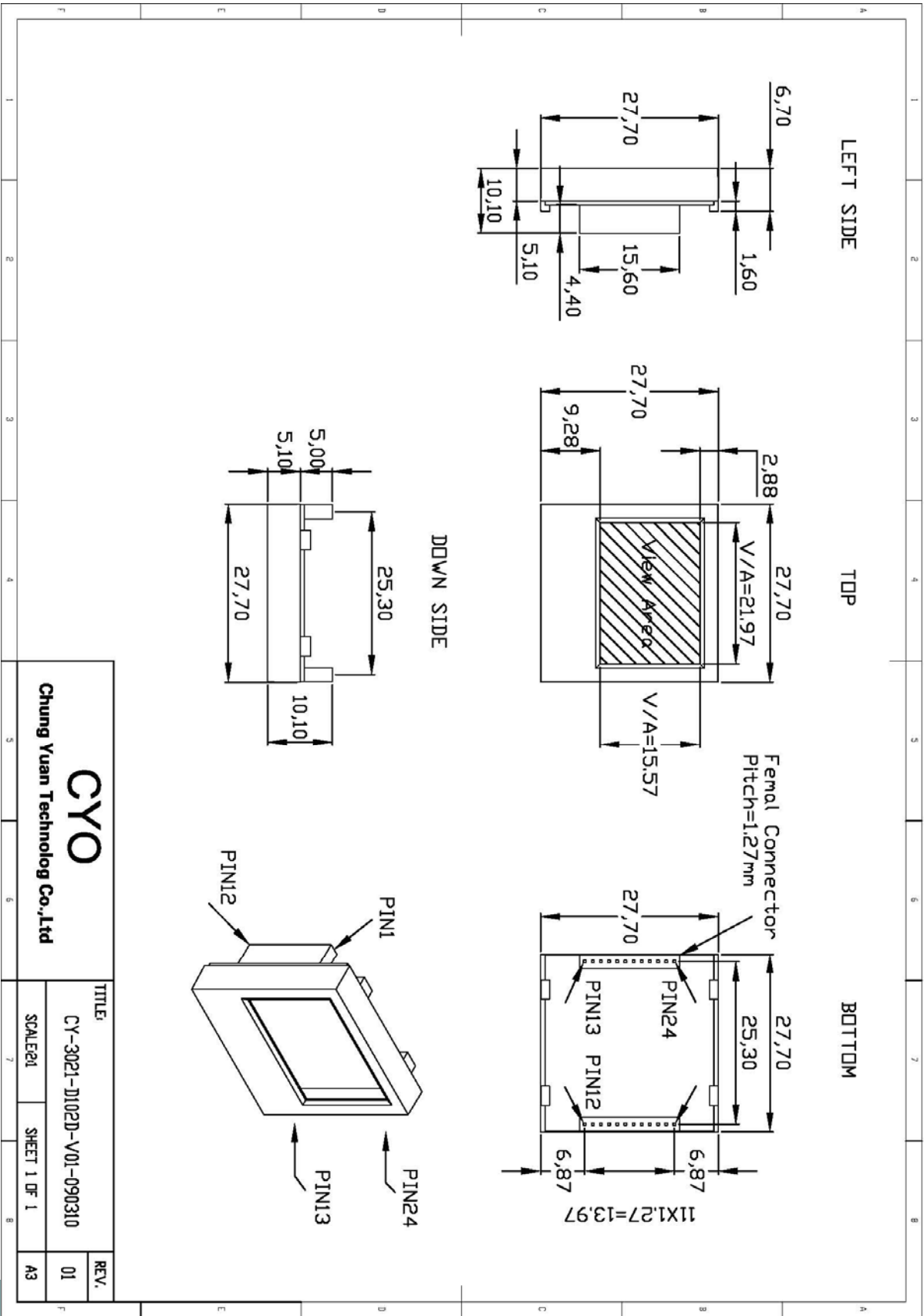# Display Module (0.95″)

☆ DISPLAY SPECIFICATIONS
- **Display Type:** OLED
- **Display Mode:** Passive Matrix
- **Display Color :** 65,536 Colors (Maximum)
- **Drive Duty:** 1/64 Duty
- **Number of Pixels :** 96(RGB) x 64
- **Active Area:** 20.14 x 13.42 (mm)

★ MECHANICAL DIMENSIONS
- **DIMENSION:** 27.7 x 27.7 x 10.1 (mm)
- **WINDOW SIZE:** 21.97 x 15.57 (mm)

CY-3021 OLED 96RGBx64 Display Module (0.95")

LEFT SIDE

27,70

6,70

10,10

5,10

15,60

4,40

1,60

TOP

27,70

9,28

2,88

V/A=21.97

27,70

View Area

V/A=15.57

DOWN SIDE

5,00

5,10

27,70

25,30

10,10

Femal Connector
Pitch=1.27mm

BOTTOM

27,70

27,70

25,30

PIN24

PIN13   PIN12

6,87

6,87

11X1.27=13.97

PIN12

PIN1

PIN13

PIN24

CYO
Chung Yuan Technolog Co.,Ltd

TITLE: CY-3021-D102D-V01-090310

SCALE:2:1

SHEET 1 OF 1

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CY-3021 OLED 96RGBx64 Display Module (0.95'')

☆ PIN DEFINITION

Pin No.	Symbol	Type	Function
1	VDD	P	**Power Supply for Core VDD** This is a voltage supply pin. It must be connected to external source.
2	VSS	P	**Ground for System** This a ground pin. It must be connected to external source.
3	NC	-	**Reserved Pin**
4	NC	-	**Reserved Pin**
5 6	BS1 BS2	I	**Communication Protocol Select** These pins are MCU interface selection input. See the following table: |	68xx-Parallel	80xx-Parallel	Serial
BS1	0	1	0
BS2	1	1	0	
7	CS#	I	**Chip Select** This is the chip select input. The chip is enable for MCU communication only when CS# is pulled low.
8	RES#	I	**Power Reset for Controller and Drive** This is reset signal input. When the pin is low , initialization of the chip is executed.
9	D/C#	I	**Data/ Command Control** This pin is Data/Command control pin. When the pin is pulled high, the input at D0~D7 is treated as display data. When the pin is pulled low, the input at D0~D7 will be transferred to the command register.
10	WR# (R/W#)	I	**Write or Read/Write Select** When 80xx interface mode is selected, the pin will be the Write (WR#) input. When interfacing to a 68xx-series microprocessor, the 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.
11	RD#(E)	I	**Read or Read/Write Enable** When 80xx interface mode is selected, the pin will be the Read (RD#) input. When interfacing to a 68xx-series microprocessor, the 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.

CY-3021 OLED 96RGBx64 Display Module (0.95″)

☆ PIN DEFINITION

12	NC	-	**Reserved Pin**
13~20	D0~D7	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 the D0 will be the serial clock input SCLK.
21	VSS	P	**Ground for System** This a ground pin. It must be connected to external source.
22	VCC-CTL	I	**OLED Driver Power Supply ON/ OFF Control** When this pin is pulled high, the panel power supply will be turned ON. When this pin is pulled low, the panel power supply will be turned OFF.
23	NC	-	**Reserved Pin**
24	VCC	P	**OLED Driver Power Supply Output** This pin is OLED driver power supply output. When VCC-CTL is pulled high, the pin will be output about 14V voltage

★ DC CHARACTERISTICS

Characteristics	Symbol	Conditions	Min	TYP	Max	Unit
Supply Voltage	V_{DD}		2.4	2.8	3.5	V
Driver Supply Voltage	V_{CC}	Note 1	-	14.0	-	V
High Level Input	V_{IH}	Iout=100µA, 3.3MHz	$0.8 \times V_{DD}$	-	V_{DD}	V
Low Level Input	V_{IL}	Iout=100µA, 3.3MHz	0	-	$0.2 \times V_{DD}$	V
High Level Output	V_{OH}	Iout=100µA, 3.3MHz	$0.9 \times V_{DD}$	-	V_{DD}	V
Low Level Output	V_{OL}	Iout=100µA, 3.3MHz	0	-	$0.1 \times V_{DD}$	V
Operating Current for V_{DD}	I_{DD}	Note 2 Note 3	- 	0.2 0.2	0.6 0.6	mA mA
Operating Current for V_{CC}	I_{CC}	Note 2 Note 3	- 	8 13.5	11 18	mA mA
Sleep Mode Current for V_{DD}	I_{DD}, SLEEP		-	1	2	µA
Sleep Mode Current for V_{CC}	I_{CC}, SLEEP		-	< 2	2	µA

Note 1: Brightness (L_{br}) and Driver Supply Voltage (V_{CC}) are subject to the change of the panel characteristics and the customers' request.
Note 2: V_{DD} = 2.8V, V_{CC} = 14V, 50% Display Area Turn on.
Note 3: V_{DD} = 2.8V, V_{CC} = 14V, 100% Display Area Turn on.