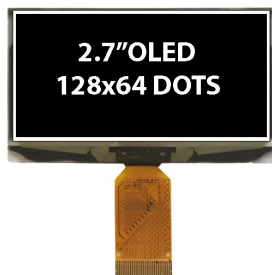


2.70 inch OLED module



PROFILE

- Type: Passive graphic
- Display Color: Monochrome (White/Blue)
- Display format: 128 x 64 dots
- Duty cycle: 1/64
- +2.8V power supply
- Controller IC: SSD1327
- Interface: 80XX Parallel, 4-wire SPI

FEATURES

NO.	ITEM	SPECIFICATION	UNIT
1	Panel Size	2.70	inch
2	Outline Dimension	73.0(W) x 40.24(H) x 2.0(T)	mm
3	Viewing Area	63.41 x 32.69	mm
4	Active Area	61.41 x 30.69	mm
5	Number of Dots	128 × 64	pixels
6	Dot Size	0.45(W) × 0.45(H)	mm
7	Dot Pitch	0.48(W) × 0.48(H)	mm
8	Display Mode	Passive graphic	-
9	Viewing Direction	160(Min.)	Degree
10	Display Color	White/Blue	-
11	Luminance(cd/m ²)	80(TYP.)	cd/m ²
12	Contrast Ratio	2000(TYP. In Dark Room)	-
14	Interface	80XX Parallel, 4-wire SPI	-
16	Drive IC	SSD1327	-
18	Operation Temperature	-40~70	°C
19	Storage Temperature	-40~85	°C



Display Zone

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	MIN	MAX	UNIT
Supply Voltage for Logic	V_{CI}	-0.3	4	V
Supply Voltage for Display	V_{CC}	8	19	V
Operating Temperature	T_{OP}	-40	85	°C
Storage Temperature	T_{STG}	-40	85	°C
Life Time (100 cd/m ²)		10,000	-	hour
Life Time (80 cd/m ²)		11,000	-	hour
Life Time (50 cd/m ²)		12,000	-	hour

ELECTRICAL CHARACTERISTICS

ITEM	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Supply Voltage for Logic	V_{CI}		2.6	2.8	3.5	V
Supply Voltage for Display	V_{CC}	Internal DC/DC Disable	14	15	15.5	V
High Level Input	V_{IH}	$I_{OUT}=100\mu A$, 3.3MHz	$0.8 \times V_{CI}$	-	V_{CI}	V
Low Level Input	V_{IL}	$I_{OUT}=100\mu A$, 3.3MHz	0	-	$0.2 \times V_{CI}$	V
High Level Output	V_{OH}	$I_{OUT}=100\mu A$, 3.3MHz	$0.9 \times V_{CI}$	-	V_{CI}	V
Low Level Output	V_{OL}	$I_{OUT}=100\mu A$, 3.3MHz	0	-	$0.1 \times V_{CI}$	V
Supply Current for V_{DD}	I_{CI}	Contrast = FFh	-	95	120	μA
Supply Current for V_{CC}	I_{CC}		-	25	30	mA
Sleep Mode Current for V_{DD}	$I_{DD, SLEEP}$		-	1	5	μA
Sleep Mode Current for V_{CC}	$I_{CC, SLEEP}$		-	2	10	μA

For detailed information, please refer to the “Product Numbering System” document.

PIN DESCRIPTION FOR OLED MODULE

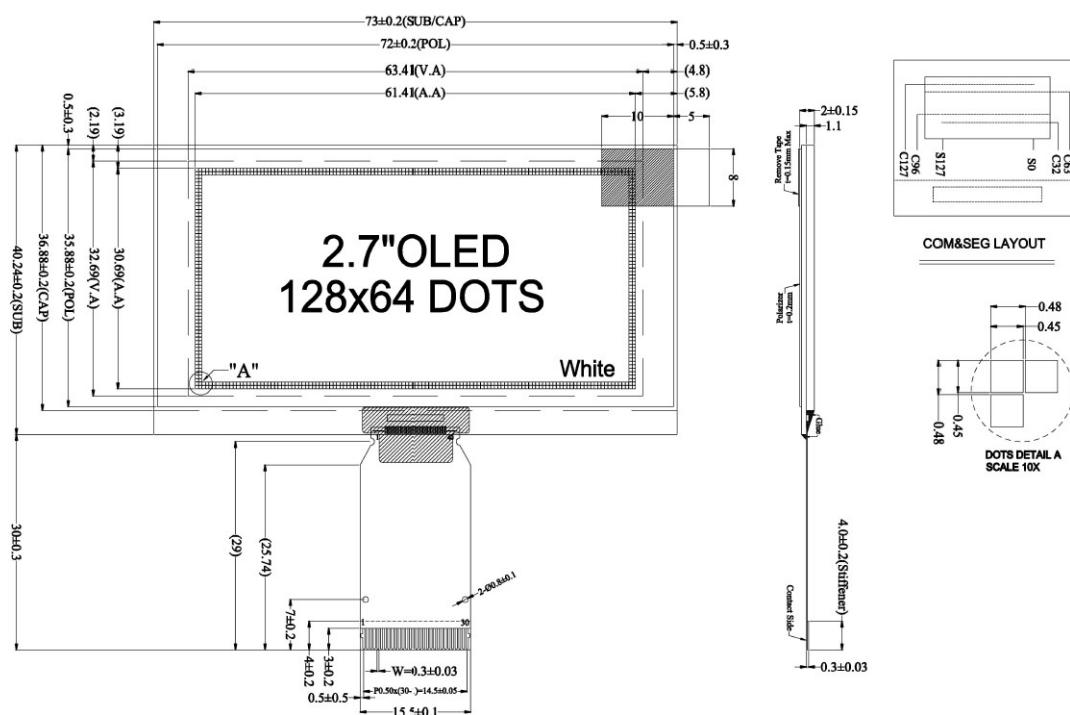
NO.	SYMBOL	I/O	FUNCTION
1	N.C. (GND)	-	Reserved Pin (Supporting Pin)
2	V_{SS}	P	Ground of Logic Circuit
3	V_{CC}	P	Power Supply for OEL Panel
4	V_{COMH}	O	Voltage Output High Level for COM Signal
5	V_{LSS}	P	Ground of Analog Circuit
6	D7	I/O	Host Data Input/Output Bus
7	D6	I/O	Host Data Input/Output Bus
8	D5	I/O	Host Data Input/Output Bus
9	D4	I/O	Host Data Input/Output Bus
10	D3	I/O	Host Data Input/Output Bus
11	D2	I/O	Host Data Input/Output Bus
12	D1	I/O	Host Data Input/Output Bus
13	D0	I/O	Host Data Input/Output Bus
14	RD	I	Read/Write Enable or Read

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15	WR	I	Read/Write Select or Write		
16 17	BS0 BS1	I	Communicating Protocol Select These pins are MCU interface selection input. See the following table:		
				BS0	BS1
			4-wire SPI	0	0
			8-bit 80XX Parallel	0	1
18	D/C	I	Data/Command Control		
19	CS	I	Chip Select		
20	RES	I	Power Reset for Controller and Driver		
21	N.C.	-	Reserved Pin		
22	IREF	I	Current Reference for Brightness Adjustment		
23	N.C.	-	Reserved Pin		
24	N.C.	-	Reserved Pin		
25	V _{DD}	P	Power Supply pin for core Logic operation		
26	V _{CI}	P	Low voltage power supply and power supply for interface logic level		
27	N.C.	-	Reserved Pin		
28	VLSS	P	Ground of Analog Circuit		
29	V _{CC}	P	Power Supply for OEL Panel		
30	N.C. (GND)	-	Reserved Pin (Supporting Pin)		

I/O: I: input, O: output, P: power

DIMENSIONS in millimeters



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