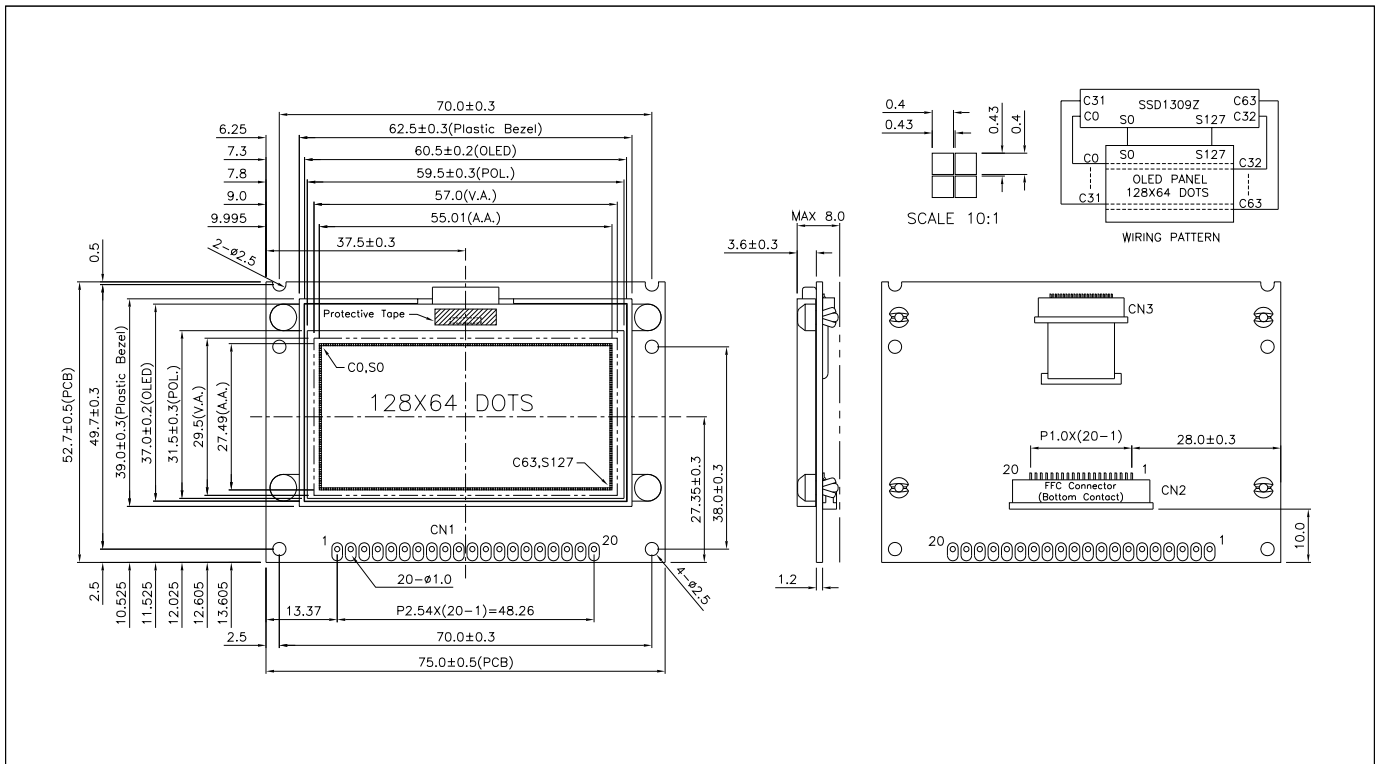


VSEG128642-5V

2.42" OLED 128 x 64 dots, 8-bit 6800/8080 parallel, SPI or I²C, 3.3V to 5.5V



ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Min.	Max.	Unit
Supply Voltage(Logic)	V _{DD} - V _{SS}	-0.3	6.0	V
Supply Voltage(OLED)	V _{CC} - V _{SS}	-0.3	15.0	V
Input Voltage	V _I	-0.3	V _{DD} + 0.3	V
Operating Temp.	T _{opr}	-40	70	°C
Storage Temp.	T _{stg}	-40	80	°C

MECHANICAL DATA

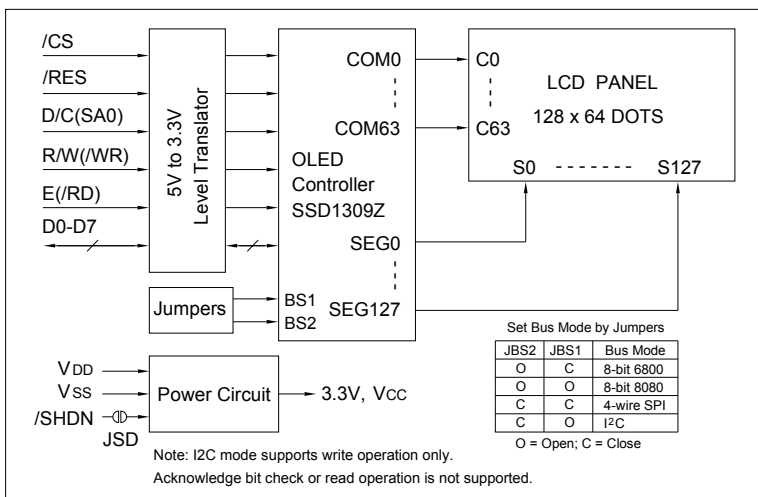
Item	Nominal Dimensions	Unit
Module Size (W x H x T)	75.0 x 52.7 x 8.0	mm
Viewing Area (W x H)	57.0 x 29.5	mm
Dot Pitch (W x H)	0.43 x 0.43	mm
Dot Size (W x H)	0.4 x 0.4	mm
Weight	Approx. 24	g

ELECTRICAL CHARACTERISTICS (V_{DD}=3.3V to 5.5V)

Item	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Input High Voltage	V _{IH}	--	2.0	--	V _{DD}	V
Input Low Voltage	V _{IL}	--	0	--	0.8	V
Output High Voltage	V _{OH}	I _{OH} = -0.1mA	V _{DD} -0.2	--	V _{DD}	V
Output Low Voltage	V _{OL}	I _{OL} = 0.1mA	0	--	0.2	V
Supply Current	I _{DD} Note 1	V _{DD} = 5V	--	90.0	110.0	mA
	I _{DD} Note 2	V _{DD} = 5V	--	110.0	140.0	mA
	I _{DD} Note 1	V _{DD} = 3.3V	--	135.0	170.0	mA
	I _{DD} Note 2	V _{DD} = 3.3V	--	180.0	225.0	mA

Note 1: White color, 50% display area turned on, contrast register is set to CFH
 Note 2: White color, 100% display area turned on, contrast register is set to CFH

BLOCK DIAGRAM



PIN CONNECTIONS (CN1/CN2)

Pin	Symbol	Level	Function
1	V _{DD}	3.3V to 5.5V	Power supply for logic
2	V _{SS}	0V	Ground
3	NC or /SHDN	-	JSD open: No connection JSD close: Shutdown input for V _{CC} converter /SHDN="H": V _{CC} converter is on /SHDN="L": V _{CC} converter is off
4	D0	H/L	For 6800/8080 parallel mode: D0 to D7 are 8-bit bi-directional data bus
5	D1	H/L	
6	D2	H/L	For 4-wire SPI mode: D0 is serial clock input SCLK D1 is serial data input SDIN
7	D3	H/L	
8	D4	H/L	For I ² C mode: D0 is serial clock SCL D1 is serial data input SDA _{IN} D2 should be connected to V _{SS}
9	D5	H/L	
10	D6	H/L	
11	D7	H/L	
12	/CS	L	Chip selection signal. Active "L".
13	NC	-	No connection
14	/RES	L	Reset signal. Active "L".
15	R/W (/WR)	H/L	R/W for 68 MPU. "H": Read; "L": Write /WR for 80 MPU. Write data at the rising edge of /WR.
16	D/C (SA0)	H/L	Data/Command selection for parallel or SPI mode "H": Display data; "L": Instruction code Slave address SA0 for I ² C mode
17	E (/RD)	H/L	Enable for 68 MPU. Read data when E is "H"; write data at the rising edge. /RD for 80 MPU. Active "L".
18	NC	-	No connection
19	NC	-	No connection
20	NC	-	No connection