

OLED SPECIFICATION

Model No:

REX001602CWPP5N00000

CUSTOMER:

APPROVED BY	
PCB VERSION	
DATE	

FOR CUSTOMER USE ONLY

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY

Release DATE:



1. Revision History

VERSION	DATE	REVISED PAGE NO.	Note
0	2014/09/24		First issue



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1.General Specification

The Features is described as follow:

■ Module dimension: 68.5 x 17.5 x 2.05 (max.) mm

View area: 58.22 x 13.52 mmActive area: 56.22 x 11.52 mm

■ Number of dots: 16 Character x 2 Line

Dot size: 0.57 x 0.67 mmDot pitch: 0.60x 0.70 mm

Character size: 2.97 x 5.57 mmCharacter pitch: 3.55 x 5.95 mm

■ Duty: 1/16

■ Panel type: OLED, White

■ IC: SSD1311



2.Module Coding System

1	2	3	4	5	6	7	8	9	10	11	12	13
R	Е	Х	001602	С	W	Р	Р	5	N	0	0	000

Item	Description							
1	R: Raystar Optronics Inc.							
2	E:OLED							
3	Display Type: C→C	Character Type, G→Graphic Ty	pe,T→TAB Type ,X→COG Type					
4	Dot Matrix: 16* 02							
5	Serials code							
		A: Amber	R: RED					
6	6 Emitting Color	B: Blue	Y: Yellow					
		G: Green	W: White					
7	Polarizer	P: With Polarizer; N: Without	Polarizer					
8	Display Mode	P: Passive Matrix; A: Active	Matrix					
9	Driver Voltage	3: 3.0 V; 5: 5.0V						
10	Touch Panel	N: Without touch panel; T: W	ith touch panel					
10	TOUCH Faller	S: Resistive touch panel						
11	Species	0:Normal, 1:Sunlight readable, 2:Transparent, 3:Flexible,						
	·	4:Lighting						
12	Grade code							
13	Serial No.	Sales code						



3.Interface Pin Function

Pin No.	Symbol	Pin Type	Description					
1	NC	_	lo connection					
2	VSL	Р	This is segment voltage (output low level) reference pin. When external VSL is not used, this pin should be left open. When external VSL is used, connect with resistor and diode to ground (details depend on application).					
3	VSS	Р	Ground pin. It must be connected to external ground.					
4	REGVDD	I	nternal VDD regulator selection pin in 5V I/O application mode. When this pin is pulled HIGH, internal VDD regulator is enabled (5V I/O application). When this pin is pulled LOW, internal VDD regulator is disabled (Low voltage I/O application).					
5	SHLC	I	This pin is used to determine the Common output scanning direction. COM scan direction SHLC COM scan direction 1 COM0 to COM31 (Normal) 0 COM31 to COM0 (Reverse) Note (1) 0 is connected to VSS					
6	SHLS		(2) 1 is connected to VDDIO This pin is used to change the mapping between the display data column address and the Segment driver. SEG scan direction SHLS SEG direction 1 SEG0 to SEG99 (Normal) 0 SEG99 to SEG0 (Reverse) Note (1) 0 is connected to VSS					
7	VDD	Р	(2) 1 is connected to VDDIO Power supply for core logic operation. VDD can be supplied externally or regulated internally. In LV IO application (internal VDD is disabled), this is a power nput pin. In 5V IO application (internal VDD is enabled), VDD is regulated internally from VDDIO. A capacitor should be connected between VDD and VSS under all circumstances.					



8	VDDIO	Р	Low voltage power supply and power supply for interface logic level in both Low Voltage I/O and 5V I/O application. It should match with the MCU interface voltage level and must be connected to external source.					
9	BS0		MCU bus interface selection pins. Select appropriate logic					
10	BS1		setting as described in the following table. BS2, BS1 and BS0 are pin select.					
11	BS2	I	Bus Interface selection BS[2:0]					
12	GPIO	I/O	It is a GPIO pin. Details refer to OLED command DCh.					
13	CS#	I	This pin is the chip select input connecting to the MCU. The chip is enabled for MCU communication only when CS# is pulled LOW (active LOW). In I2C mode, this pin must be connected to VSS.					
14	RES#	Ι,	This pin is reset signal input. When the pin is pulled LOW, initialization of the chip is executed. Keep this pin pull HIGH during normal operation.					
15	D/C#		This pin is Data/Command control pin connecting to the MCU. When the pin is pulled HIGH, the data at D[7:0] will be interpreted as data. When the pin is pulled LOW, the data at D[7:0] will be transferred to a command register. In I2C mode, this pin acts as SA0 for slave address selection. When serial interface is selected, this pin must be connected to VSS.					
16	R/W#(WR#)	I	This pin is read / write control input pin connecting to the MCU interface. When 6800 interface mode is selected, this pin will be used as Read/Write (R/W#) selection input. Read mode will be carried out when this pin is pulled HIGH and write mode when LOW. When 8080 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 chip is selected. When serial or I2C interface is selected, this pin must be connected to VSS.					



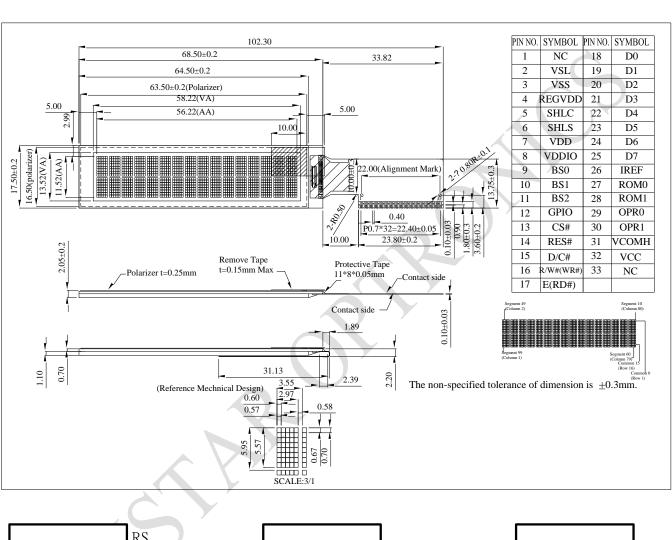
17	E(RD#)	I	This pin is MCU interface input. When 6800 interface mode is selected, this pin will be used as the Enable (E) signal. Read/write operation is initiated when this pin is pulled HIGH and the chip is selected. When 8080 interface mode is selected, this pin receives the Read (RD#) signal. Read operation is initiated when this pin is pulled LOW and the chip is selected. When serial or I2C interface is selected, this pin must be connected to VSS.							
18	D0									
19	D1		These pins are bi-directional data bus connecting to the MCU data bus.							
20	D2		Unused pins are recommended to tie LOW.							
21	D3	I/O	When serial interface mode is selected, D0 will be the serial clock input: SCLK; D1 will be the serial data input: SID and							
22	D4	1/0	will be the serial data output: SOD.							
23	D5		When I2C mode is selected, D2, D1 should be tied together and serve as SDAout, SDAin in application and D0 is the seri clock input, SCL.							
24	D6									
25	D7									
26	IREF	I	This pin is the segment output current reference pin. IREF is supplied externally. A resistor should be connected between this pin and VSS to maintain current of around 15uA.							
27	ROM0		These pins are used to select Character ROM; select appropriate logic setting as described in the following table. ROM1 and ROM0 are pin select as shown in below table: Character ROM selection ROM1 ROM0 ROM ROM							
28	ROM1		0 I B I O C I I S/W selectable (3) Note (1) 0 is connected to VSS (2) 1 is connected to VDDIO							
29	OPR0	I	This pin is used to select the character number of character generator. Character RAM selection							

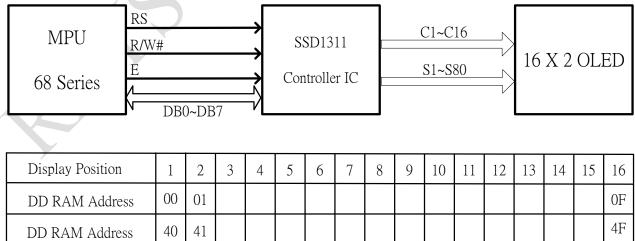


			OPR1	OPR0	CGROM	CGRAM	
			1	1	256	0	
			0	1	248	8	
00	0004		1	0	250	6	
30	OPR1		0	0	240	8	
			Note				
			(1) 0 is c	onnecte	d to VSS		
			` '		d to VDDIO		
			` '		elected volta		16
31	VCOMH	Р					this pin and VSS.
	1001111	•					nect to this pin.
20	\/CC	Б					his is also the most
32	VCC	Р			ntage supply	y pin. It is supp	olied by external high
			voltage s	ource.			
33	NC	_	No conne	ection			/



4. Counter Drawing & Block Diagram







5.Absolute Maximum Ratings

Item	Symbol	Min	Max	Unit Notes
Supply Voltage For Logic	VDDIO	-0.3	6.0	V
Operating Temperature	T _{OP}	-40	+80	$^{\circ}$ C
Storage Temperature	T _{ST}	-40	+80	$^{\circ}$ C

Note 1: All the above voltages are on the basis of "VSS = 0V".

Note 2: When this module is used beyond the above absolute maximum ratings, permanent breakage of the module may occur. Also, for normal operations, it is desirable to use this module under the conditions according to Section 5 "Electrical Characteristics". If this module is used beyond these conditions, malfunctioning of the module can occur and the reliability of the module may deteriorate



6.Electrical Characteristics

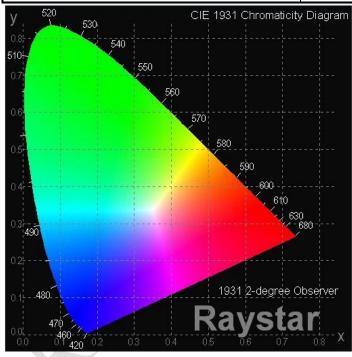
Item	Symbol	Condition	Min	Тур	Max	Unit
Supply Voltage For Logic	VDDIO	_	4.8	5.0	5.3	V
Supply Voltage for Display	VCC	_	10	12	15	V
Input High Volt.	VIH	_	0.8 VDD	-		V
Input Low Volt.	VIL	_	_	- (0.2VDD	V
Output High Volt.	VOH	IOH=-0.5mA	0.9 VDD		-	V
Output Low Volt.	VOL	IOL=0.5mA	-	-	0.1 VDD	V
50% Check Board Operating Current	ICC	VCC=12V	16	18	20	mA

Note: When you use 5V for Vddio please don't use 3V or 3.3V for logic I/O this will cause module does not work.



7. Optical Characteristics

Item	Symbol	Condition	Min	Тур	Max	Unit
View Angle	(V)θ	_	160	_	_	deg
view, angle	(Η)φ	_	160	_		deg
Contrast Ratio	CR	Dark	2000:1	-		
Response Time	T rise	_	_	10		μs
Treeponee Time	T fall	_	-	10		μs
Display with 50% check E	80	90	_	cd/m2		
CIEx(White)		(CIE1931)	0.26	0.28	0.30	_
CIEy(White)		(CIE1931)	0.30	0.32	0.34	_





8.OLED Lifetime

ITEM	Conditions	Min	Тур	Remark
Operating Life Time	Ta=25°C / Initial 50% check Board Typical Brightness Value	40,000 Hrs	50,000 Hrs	Note

Note:

- 1. Life time is defined the amount of time when the luminance has decayed to <50% of the initial value.
- 2. This analysis method uses life data obtained under accelerated conditions to extrapolate an estimated probability density function (*pdf*) for the product under normal use conditions.
- 3. Screen saving mode will extend OLED lifetime.



9.Reliability

Content of Reliability Test

Environmenta	l Test		
Test Item	Content of Test	Test Condition	Applicable Standard
High Temperature storage	Endurance test applying the high storage temperature for a long time.	80℃ 240hrs	-,(
Low Temperature storage	Endurance test applying the low storage temperature for a long time.	-40℃ 240hrs	4
High Temperature Operation	Endurance test applying the electric stress (Voltage & Current) and the thermal stress to the element for a long time.	80℃ 240hrs	
Low Temperature Operation	Endurance test applying the electric stress under low temperature for a long time.	-40℃ 240hrs	
High Temperature/ Humidity Storage	Endurance test applying the high temperature and high humidity storage for a long time.	60°C ,90%RH 240hrs	
Temperature Cycle	Endurance test applying the low and high temperature cycle. -40°C 25°C 80°C 30min 5min 30min 1 cycle	-40°C/80°C 100 cycles	
Mechanical Tes	st		
Vibration test	Endurance test applying the vibration during transportation and using.	10~22Hz→1.5mmp-p 22~500Hz→1.5G Total 0.5hr	
Shock test endurance test applying the shock		50G Half sin wave 11 ms 3 times of each direction	
Atmospheric pressure test	Endurance test applying the atmospheric pressure during transportation by air.	115mbar 40hrs	
Others			
Static electricity test	Endurance test applying the electric stress to the terminal.	VS=800V,RS=1.5kΩ CS=100pF 1 time	



Test and measurement conditions

- 1. All measurements shall not be started until the specimens attain to temperature stability. After the completion of the described reliability test, the samples were left at room temperature for 2 hrs prior to conducting the failure test at 23±5°C; 55±15% RH.
- 2. All-pixels-on is used as operation test pattern.
- 3. The degradation of Polarizer are ignored for High Temperature storage, High Temperature/ Humidity Storage, Temperature Cycle

Evaluation criteria

- 1. The function test is OK.
- 2. No observable defects.
- 3. Luminance: > 50% of initial value.
- 4. Current consumption: within ± 50% of initial value.

APPENDIX:

RESIDUE IMAGE

Because the pixels are lighted in different time, the luminance of active pixels may reduce or differ from inactive pixels. Therefore, the residue image will occur. To avoid the residue image, every pixel needs to be lighted up uniformly.



10.Inspection specification

NO	Item	Criterion			AQL	
01	Electrical	1.1 Missing vertical, horizontal segment, segment contrast				
	Testing	defect.				
		1.2 Missing character , dot or icon.				
		1.3 Display malfunction.				
		1.4 No function				0.65
		1.5 Current consumption exceeds product specifications.				
		1.6 OLED viewing angle defect.1.7 Mixed product types.				
		1.8 Contrast def				
		1.0 Contrast der	001.			
02	Black or	2.1 White and b	lack spots	on display ≦0.25	mm, no more than	
	white	three white or bl				
	spots on		ced: No m	ore than two spot	s or lines within	2.5
	OLED	3mm.				
	(display only)					
03	OLED	3.1 Round type	· As		/	
	black	following drawin		SIZE	Acceptable Q	
	spots,	$\Phi = (x + y) / 2$	9		TY	
	white	X		Ф≦0.10	Accept no	
	spots,	→ →			dense	
	contamina		Y)	0.10 <	2	2.5
	tion	7		Ф≦0.20		
	(non-displ ay)			0.20 <	1	
	ay)		7	Ф≦0.25		
			/	0.25<Ф	0	
		3.2 Line type : (/		Ī		
		(+	Length	Width	Acceptable Q TY	
		~ / * ₩		W≦0.02	Accept no dense	2.5
		→i _L i←	L≦3.0	0.02 <w≤0.03< td=""><td>2</td><td>2.5</td></w≤0.03<>	2	2.5
		*	L≦2.5	0.03 <w≦0.05< td=""><td>_</td><td></td></w≦0.05<>	_	
				0.05 < W	As round type	
04	Polarizer					
	bubbles	If bubbles are vi	•	Size Φ	Acceptable Q TY	
		judge using blac	•	Ф≦0.20	Accept no dense	
		specifications, n		0.20<Φ≦0.50	3	2.5
		to find, must check in specify direction.		0.50<Φ≦1.00	2	
				1.00<Ф	0	
				Total Q TY	3	



NO	Item	Criterion			AQL
05	Scratches	Follow NO.3 OLED black spots, white spots, contamination			
			y: Chip width z: 0 t: Glass thickness a: gth:		
		6.1 General glass ch 6.1.1 Chip on panel s	ip : surface and crack beto	ween panels:	
00	Chipped	z: Chip thickness Z≤1/2t	y: Chip width Not over viewing area	x: Chip length x≤1/8a	2.5
06	glass	1/2t < z ≦ 2t	Not exceed 1/3k	x≦1/8a	2.5
			y: Chip width Not over viewing		
		∠ <u>≥ 1/2</u> t	area	A ≥ 1/0a	
		1/2t < z ≤ 2t	Not exceed 1/3k	x≦1/8a	
		⊙ If there are 2 or mo	ore chips, x is the tota	l length of each chip.	



NO	Item	Criterion	AQL
		Symbols:	
		x: Chip length y: Chip width z: Chip thickness	
		k: Seal width t: Glass thickness a: OLED side length	
		L: Electrode pad length	
		6.2 Protrusion over terminal :6.2.1 Chip on electrode pad :	
		6.2.1 Chip on electrode pad .	
		T T	
		Tax and the same of the same o	
		A A A	
		y: Chip width x: Chip length z: Chip thickness	
		$y \le 0.5$ mm $x \le 1/8$ a $0 < z \le t$	
		6.2.2 Non-conductive portion:	
		رآ ⊶سا	
06	Glass		2.5
	crack	V 12 Y 12	
		χ	
		y: Chip width x: Chip length z: Chip	
		thickness	
		$y \le L$ $x \le 1/8a$ $0 < z \le t$	
		⊙ If the chipped area touches the ITO terminal, over 2/3 of the ITO	
		must remain and be inspected according to electrode terminal	
		specifications.	
		⊙ If the product will be heat sealed by the customer, the alignment	
		mark not be damaged.	
	7	6.2.3 Substrate protuberance and internal crack.	
		y: width x: length	
		$y \le 1/3L$ $x \le a$	
		v N	
	7		
		75 ²⁰	



NO	Item	Criterion	AQL
07	Cracked glass	The OLED with extensive crack is not acceptable.	2.5
08	Backlight elements	 8.1 Illumination source flickers when lit. 8.2 Spots or scratched that appear when lit must be judged. Using OLED spot, lines and contamination standards. 8.3 Backlight doesn't light or color wrong. 	0.65 2.5 0.65
09	Bezel	9.1 Bezel may not have rust, be deformed or have fingerprints, stains or other contamination.9.2 Bezel must comply with job specifications.	2.5 0.65
10	PCB、COB	 10.1 COB seal may not have pinholes larger than 0.2mm or contamination. 10.2 COB seal surface may not have pinholes through to the IC. 10.3 The height of the COB should not exceed the height indicated in the assembly diagram. 10.4 There may not be more than 2mm of sealant outside the seal area on the PCB. And there should be no more than three places. 10.5 No oxidation or contamination PCB terminals. 10.6 Parts on PCB must be the same as on the production characteristic chart. There should be no wrong parts, missing parts or excess parts. 10.7 The jumper on the PCB should conform to the product characteristic chart. 10.8 If solder gets on bezel tab pads, OLED pad, zebra pad or screw hold pad, make sure it is smoothed down. 	2.5 2.5 0.65 2.5 2.5 0.65 2.5
11	Soldering	 11.1 No un-melted solder paste may be present on the PCB. 11.2 No cold solder joints, missing solder connections, oxidation or icicle. 11.3 No residue or solder balls on PCB. 11.4 No short circuits in components on PCB. 	2.5 2.5 2.5 0.65



NO	Item	Criterion	AQL
NO	Item	 12.1 No oxidation, contamination, curves or, bends on interface Pin (OLB) of TCP. 12.2 No cracks on interface pin (OLB) of TCP. 12.3 No contamination, solder residue or solder balls on product. 12.4 The IC on the TCP may not be damaged, circuits. 12.5 The uppermost edge of the protective strip on the 	2.5 0.65 2.5 2.5 2.5
12	General appearance	 interface pin must be present or look as if it cause the interface pin to sever. 12.6 The residual rosin or tin oil of soldering (component or chip component) is not burned into brown or black color. 12.7 Sealant on top of the ITO circuit has not hardened. 12.8 Pin type must match type in specification sheet. 12.9 OLED pin loose or missing pins. 12.10 Product packaging must the same as specified on packaging specification sheet. 12.11 Product dimension and structure must conform to product specification sheet. 	2.5 0.65 0.65 0.65 0.65



Check Item	Classification	Criteria	
No Display	Major		S
Missing Line	Major		
Pixel Short	Major		
Darker Short	Major		
Wrong Display	Major		
Un-uniform B/A x 100% < 70% A/C x 100% < 70%	Major	A Normal B Dark Fixel C Elight Fixel	



11.Precautions in use of OLED Modules

- (1) Avoid applying excessive shocks to module or making any alterations or modifications to it.
- (2) Don't make extra holes on the printed circuit board, modify its shape or change the components of OLED display module.
- (3) Don't disassemble the OLED display module.
- (4) Don't operate it above the absolute maximum rating.
- (5) Don't drop, bend or twist OLED display module.
- (6) Soldering: only to the I/O terminals.
- (7) Storage: please storage in anti-static electricity container and clean environment.
- (8) It's pretty common to use "Screen Saver" to extend the lifetime and Don't use fix information for long time in real application.
- (9) Don't use fixed information in OLED panel for long time, that will extend "screen burn" effect time..
- (10) Raystar has the right to change the passive components, including R2and R3 adjust resistors. (Resistors, capacitors and other passive components will have different appearance and color caused by the different supplier.)
- (11) Raystar have the right to change the PCB Rev. (In order to satisfy the supplying stability, management optimization and the best product performance...etc, under the premise of not affecting the electrical characteristics and external dimensions, Raystar have the right to modify the version.)

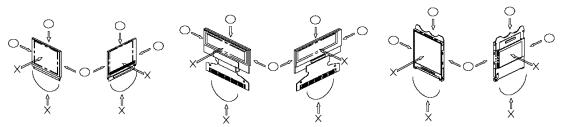
11.1 Handling Precautions

- (1) Since the display panel is being made of glass, do not apply mechanical impacts such us dropping from a high position.
- (2) If the display panel is broken by some accident and the internal organic substance leaks out, be careful not to inhale nor lick the organic substance.
- (3) If pressure is applied to the display surface or its neighborhood of the OLED display module, the cell structure may be damaged and be careful not to apply pressure to these sections.
- (4) The polarizer covering the surface of the OLED display module is soft and easily scratched. Please be careful when handling the OLED display module.
- (5) When the surface of the polarizer of the OLED display module has soil, clean the surface. It takes advantage of by using following adhesion tape.
- * Scotch Mending Tape No. 810 or an equivalent

Never try to breathe upon the soiled surface nor wipe the surface using cloth containing solvent Also, pay attention that the following liquid and solvent may spoil the polarizer:

- * Water
- * Ketone
- * Aromatic Solvents
- (6) Hold OLED display module very carefully when placing OLED display module into the System housing. Do not apply excessive stress or pressure to OLED display module. And, do not over bend the film with electrode pattern layouts. These stresses will influence the display performance. Also, secure sufficient rigidity for the outer cases.





- (7) Do not apply stress to the LSI chips and the surrounding molded sections.
- (8) Do not disassemble nor modify the OLED display module.
- (9) Do not apply input signals while the logic power is off.
- (10) Pay sufficient attention to the working environments when handing OLED display modules to prevent occurrence of element breakage accidents by static electricity.
- * Be sure to make human body grounding when handling OLED display modules.
- * Be sure to ground tools to use or assembly such as soldering irons.
- * To suppress generation of static electricity, avoid carrying out assembly work under dry environments.
- * Protective film is being applied to the surface of the display panel of the OLED display module. Be careful since static electricity may be generated when exfoliating the protective film.
- (11) Protection film is being applied to the surface of the display panel and removes the protection film before assembling it. At this time, if the OLED display module has been stored surface of the display panel after removed of the film. In such case, remove the residue material by the method introduced in the above Section 5.
- (12) If electric current is applied when the OLED display module is being dewed or when it is placed under high humidity environments, the electrodes may be corroded and be careful to avoid the above.

11.2 Storage Precautions

- (1) When storing OLED display modules, put them in static electricity preventive bags avoiding exposure to direct sun light nor to lights of fluorescent lamps. And, also, avoiding high temperature and high humidity environment or low temperature (less than 0°C) environments. (We recommend you to store these modules in the packaged state when they were shipped from Raystar Optronics Inc. At that time, be careful not to let water drops adhere to the packages or bags nor let dewing occur with them.
- (2) If electric current is applied when water drops are adhering to the surface of the OLED display module, when the OLED display module is being dewed or when it is placed under high humidity environments, the electrodes may be corroded and be careful about the above.



11.3 Designing Precautions

- (1) The absolute maximum ratings are the ratings which cannot be exceeded for OLED display module, and if these values are exceeded, panel damage may be happen.
- (2) To prevent occurrence of malfunctioning by noise, pay attention to satisfy the VIL and VIH specifications and, at the same time, to make the signal line cable as short as possible.
- (3) We recommend you to install excess current preventive unit (fuses, etc.) to the power circuit (VDD). (Recommend value: 0.5A)
- (4) Pay sufficient attention to avoid occurrence of mutual noise interference with the neighboring devices.
- (5) As for EMI, take necessary measures on the equipment side basically.
- (6) When fastening the OLED display module, fasten the external plastic housing section.
- (7) If power supply to the OLED display module is forcibly shut down by such errors as taking out the main battery while the OLED display panel is in operation, we cannot guarantee the quality of this OLED display module. Connection (contact) to any other potential than the above may lead to rupture of the IC.



Page: 1

Module Sample Estimate Feedback Sheet				
Module Number :	Module Number:			
1 · Panel Specification :				
1. Panel Type:	□ Pass	□NG ,		
2. Numbers of Pixel:	□ Pass	□NG ,		
3. View Area:	□ Pass	□NG ,		
4. Active Area:	□ Pass	□NG ,		
5.Emitting Color:	□ Pass	□NG ,		
6.Uniformity:	□Pass	□NG ,		
7.Operating	□ Pass	□NG ,		
Temperature :		Y		
8.Storage Temperature:	□ Pass	□NG ,		
9.Others:				
2 · Mechanical Specification	<u>on</u> :			
1. PCB Size:	□Pass	□NG ,		
2.Frame Size :	□Pass	□NG ,		
3.Materal of Frame:	□Pass	□NG ,		
4.Connector Position:	□Pass	□NG ,		
5.Fix Hole Position:	□Pass	□NG ,		
6. Thickness of PCB:	□Pass	□NG ,		
7. Height of Frame to PCB:	□Pass	□NG ,		
8.Height of Module:	□Pass	□NG ,		
9.Others:	□Pass	□NG ,		
3 · Relative Hole Size :				
1.Pitch of Connector:	□Pass	□NG ,		
2.Hole size of	□Pass	□NG ,		
Connector:				
3.Mounting Hole size:	□Pass	□NG ,		
4.Mounting Hole Type:	□Pass	□NG ,		
5.Others:	□Pass	□NG ,		

>> Go to page 2 <<



		Page: 2		
Module Number :				
4 · Electronic Characteristics of Module :				
1.Input Voltage:	□Pass	□NG ,		
2.Supply Current:	□Pass	□NG ,		
3.Driving Voltage for	□Pass	□NG ,		
OLED:				
4.Contrast for OLED:	□Pass	□NG ,		
5.Negative Voltage	□Pass	□NG ,		
Output:				
6.Interface Function:	□Pass	□NG ,		
7.ESD test:	□Pass	□NG ,		
8.Others:	□Pass	□NG ,		
5 \ <u>Summary</u> :				
	42			
	Y			
Cales signature t				
Sales signature :	•			
Customer Signature : <u>Date : / /</u>				

ПОСТАВКА ЭЛЕКТРОННЫХ КОМПОНЕНТОВ

многоканальный

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001 Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

Данный компонент на территории Российской Федерации Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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