



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



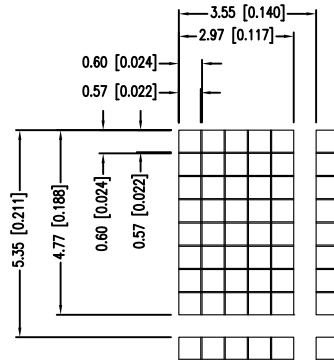
## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

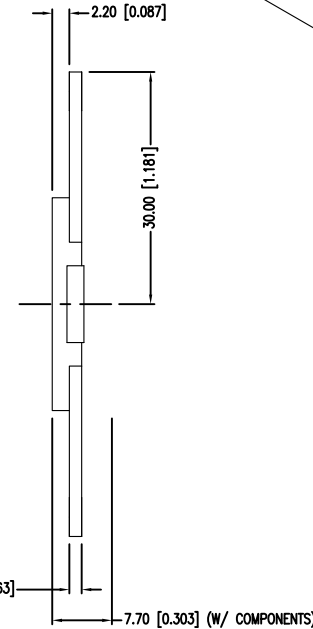
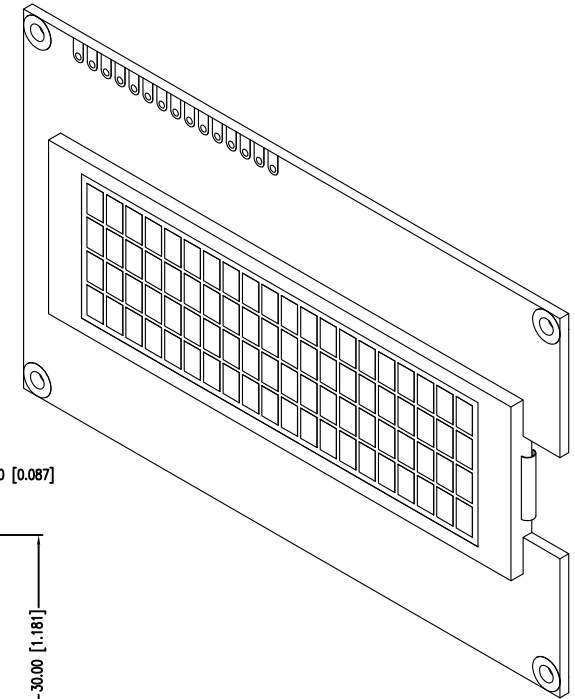
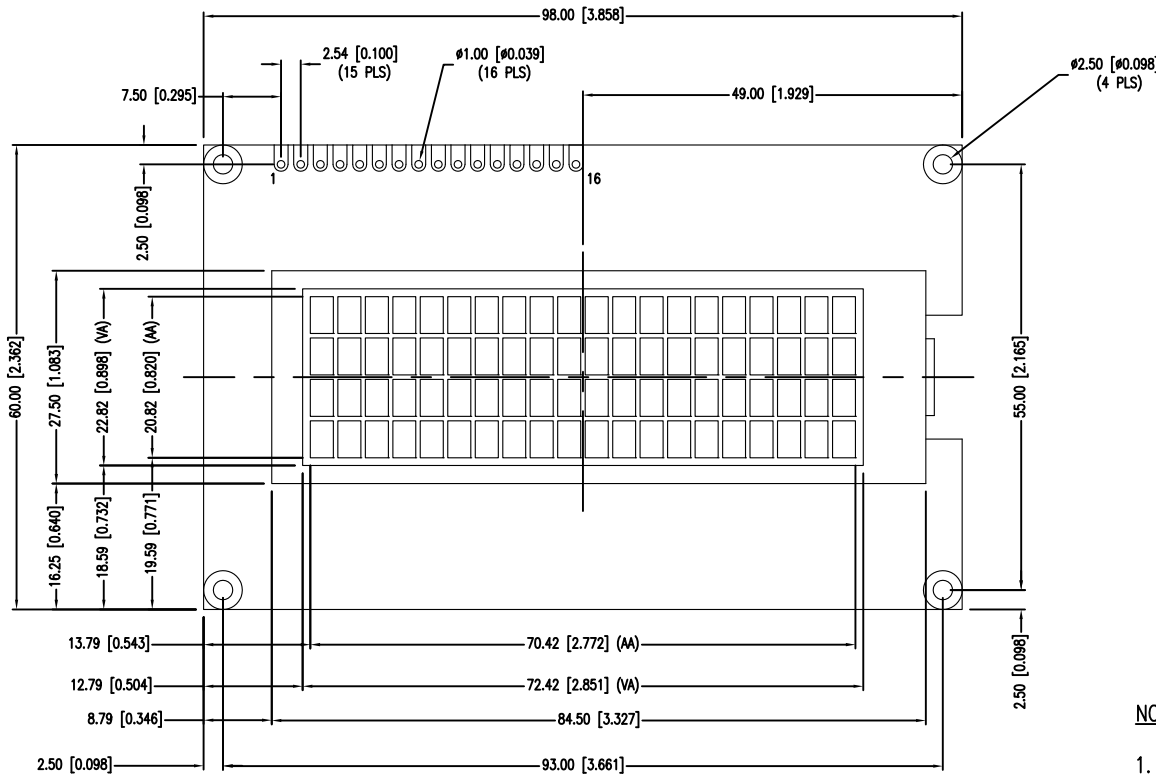
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





CHARACTER DETAIL  
SCALE: 5:1



NOTES:

1. BLACK BACKGROUND.
2. PIXEL COLOR GREEN.
3. MINIMUM VIEWING ANGLE OF 65° FROM 12,3,6,9, 0'CLOCK.
4. WISECHIP SEMI US2066 CONTROLLER.

CAUTION: STATIC SENSITIVE DEVICE  
FOLLOW PROPER E.S.D. HANDLING PROCEDURES  
WHEN WORKING WITH THIS PART.

\*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN.= +DECIMAL PRECISION MAX.= +0.00 -DECIMAL PRECISION



20 X 4 OLED DISPLAY MODULE, GREEN CHARACTERS

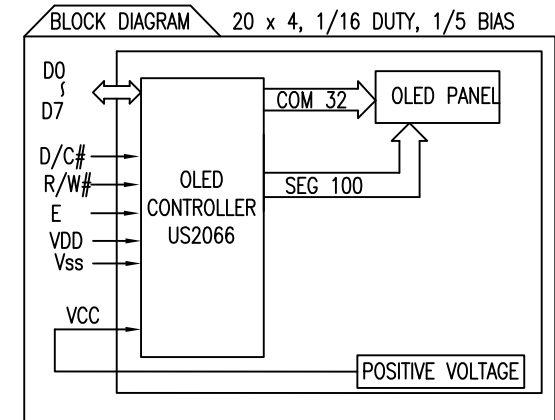
\*\*THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.\*\*

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DATE:	05.21.15	DRAWN BY:	MJK
PAGE:	1 OF 2	CHKD BY:	--
SCALE:	NTS	APRVD BY:	--
UNIT:	mm [INCH]		Ⓟ

PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	DESCRIPTION
1	V <sub>SS</sub>	0V	SUPPLY VOLTAGE FOR LOGIC GROUND
2	V <sub>DD</sub>	5.0V	SUPPLY VOLTAGE FOR LOGIC
3	NC	-	-
4	RS	H/L	H:DATA, L: INSTRUCTION CODE
5	R/W	H/L	H:READ (MPU-->MODULE);L:WRITE(MPU-->MODULE)
6	E	H,H->L	CHIP ENABLE SIGNAL
7	DB0	H/L	DATA BIT 0
8	DB1	H/L	DATA BIT 1
9	DB2	H/L	DATA BIT 2
10	DB3	H/L	DATA BIT 3
11	DB4	H/L	DATA BIT 4
12	DB5	H/L	DATA BIT 5
13	DB6	H/L	DATA BIT 6
14	DB7	H/L	DATA BIT 7
15	V <sub>CC</sub>	12.0V	SUPPLY VOLTAGE FOR PANEL(POSITIVE VOLTAGE OUTPUT): PLEASE NC
16	NC	-	-



ELECTRICAL/OPTO CHARACTERISTICS

V<sub>DD</sub>=5V , T<sub>A</sub>=25°C, 60% RH, V<sub>CC</sub>=12.0V

ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN.	TYP.	MAX.	
SUPPLY VOLTAGE FOR LOGIC	V <sub>DD</sub> -V <sub>SS</sub>	-	4.7		5.3	V
SUPPLY VOLTAGE FOR PANEL	V <sub>CC</sub> -V <sub>SS</sub>	-	11.5	12.0	12.5	V
INPUT VOLTAGE	HIGH	V <sub>IH</sub>	0.8V <sub>DD</sub>	-	V <sub>DD</sub>	V
	LOW	V <sub>IL</sub>	0	-	0.2V <sub>DD</sub>	V
OUTPUT VOLTAGE	HIGH	V <sub>OH</sub>	0.9V <sub>DD</sub>	-	V <sub>DD</sub>	V
	LOW	V <sub>OL</sub>	0	-	0.1V <sub>DD</sub>	V
OLED DRIVING CURRENT	I <sub>DD</sub>	-	60	-	-	mA
VIEW ANGLE				FREE		
DARK ROOM CONTRAST				>10000:1		
C.I.E. (C.I.E. 1931)	X		0.25	0.29	0.33	
	Y		0.62	0.66	0.73	
RESPONSE TIME					30	ns
BRIGHTNESS W/POLARIZER			80	100		cd/m <sup>2</sup>

\*BRIGHTNESS=80cd/m<sup>2</sup> , T<sub>a</sub>=25°C, 60% RH, V<sub>DD</sub>=5.0V, V<sub>CC</sub>=12.0V, 100% DISPLAY AREA TURN ON.

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	V <sub>DD</sub> -V <sub>SS</sub>	T <sub>a</sub> =25°C	2.4	5.5	V
SUPPLY VOLTAGE FOR PANEL	V <sub>CC</sub> -V <sub>SS</sub>	T <sub>a</sub> =25°C	11.5	12.5	V
HUMIDITY				85	%
OPERATING TEMPERATURE*	T <sub>opr</sub>		-40	80	°C
STORAGE TEMPERATURE	T <sub>stg</sub>		-40	90	°C

OPERATING LIFE 50,000 HRS  
END OF LIFE IS SPECIFIED AS 50 %OF INITIAL BRIGHTNESS

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20 X 4 OLED DISPLAY, GREEN CHARACTERS

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