



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!



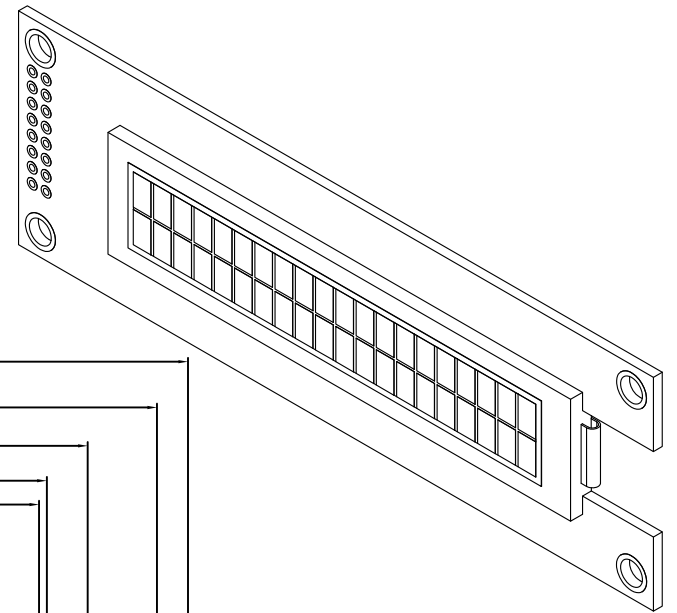
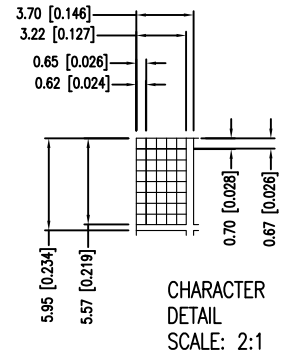
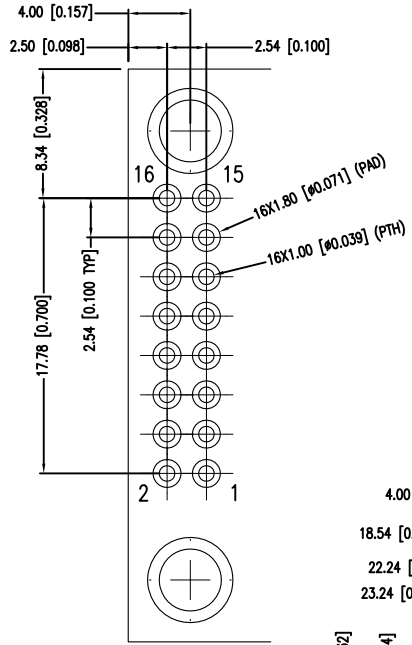
## Contact us

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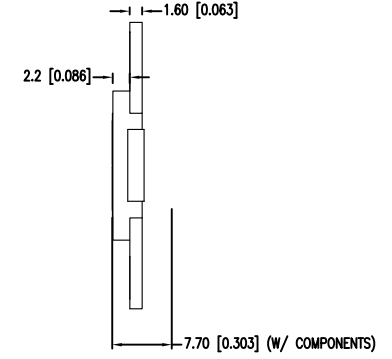
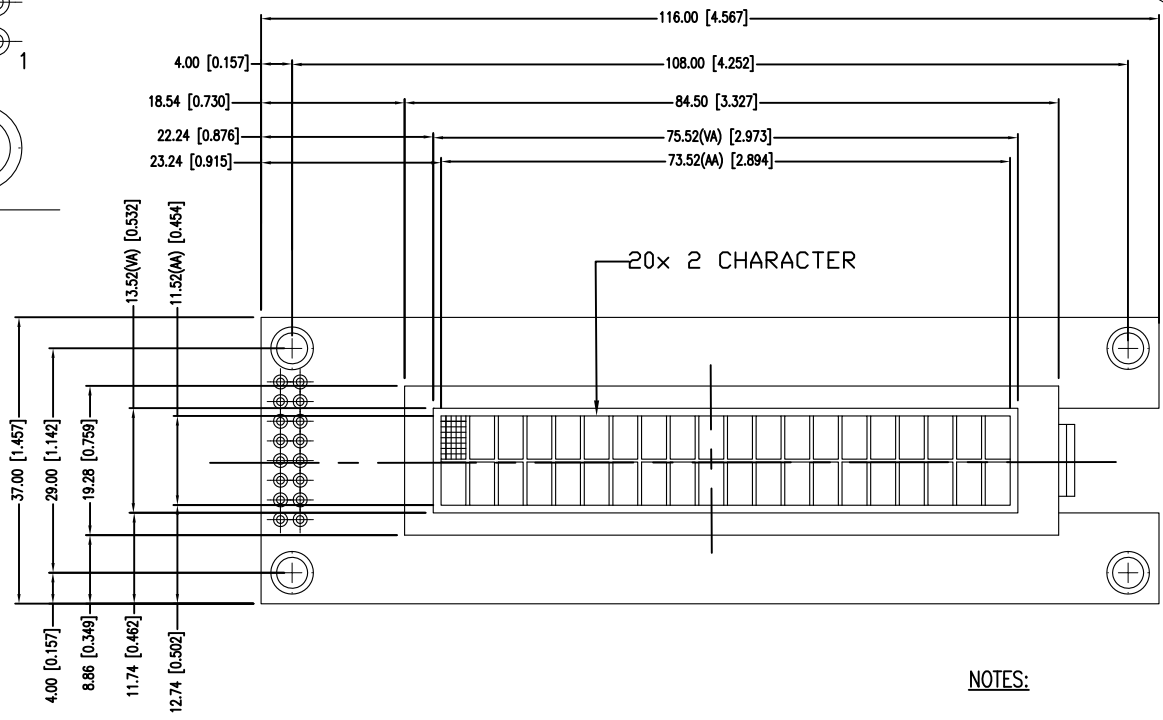
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

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PIN DETAIL  
SCALE: 2:1



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

NOTES:

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

\*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

**LUMEX**  
Creating LED and LCD Solutions Together™

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20 X 2 OLED DISPLAY, WHITE CHARACTERS

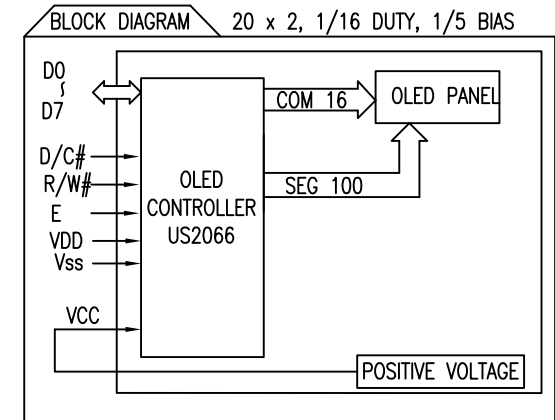
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DATE: 6.9.15	DRAWN BY: MJK
PAGE: 1 OF 2	CHKD BY: --
SCALE: NTS	APRVD BY: --
UNIT: mm [INCH]	Ⓟ

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)
16	NC	-	-



ELECTRICAL/OPTO CHARACTERISTICS

V<sub>DD</sub>=5V , T<sub>A</sub>=25°C

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>	-	-	83	-	mA
VIEW ANGLE				FREE		
DARK ROOM CONTRAST			-	>10000:1	-	-
C.I.E. (C.I.E. 1931)	X	-	0.25	0.29	0.33	-
	Y	-	0.27	0.31	0.35	-
RESPONSE TIME			-	-	30	ns
BRIGHTNESS W/POLARIZER			60	80	-	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	7	13	V
HUMIDITY			-	85	%
OPERATING TEMPERATURE*	T <sub>opr</sub>	-	-40	80	°C
STORAGE TEMPERATURE	T <sub>stg</sub>	-	-40	90	°C

OPERATING LIFE 30,000 HRS  
END OF LIFE IS SPECIFIED AS 50 %OF INITIAL BRIGHTNESS

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20 x 2 OLED DISPLAY, WHITE CHARACTERS

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