

UNCONTROLLED DOCUMENT

PART NUMBER

LCM-H160160GWF

REV.

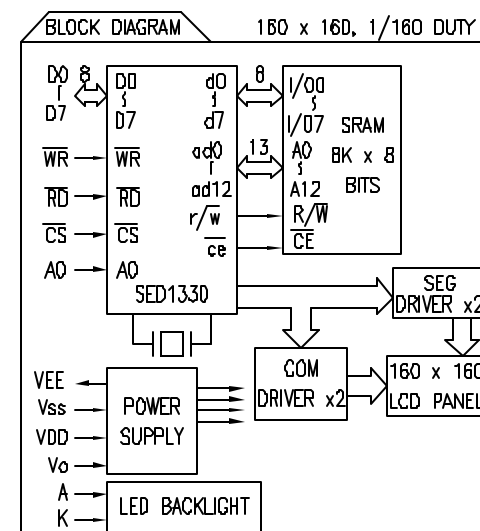
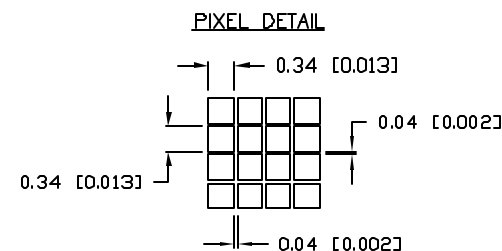
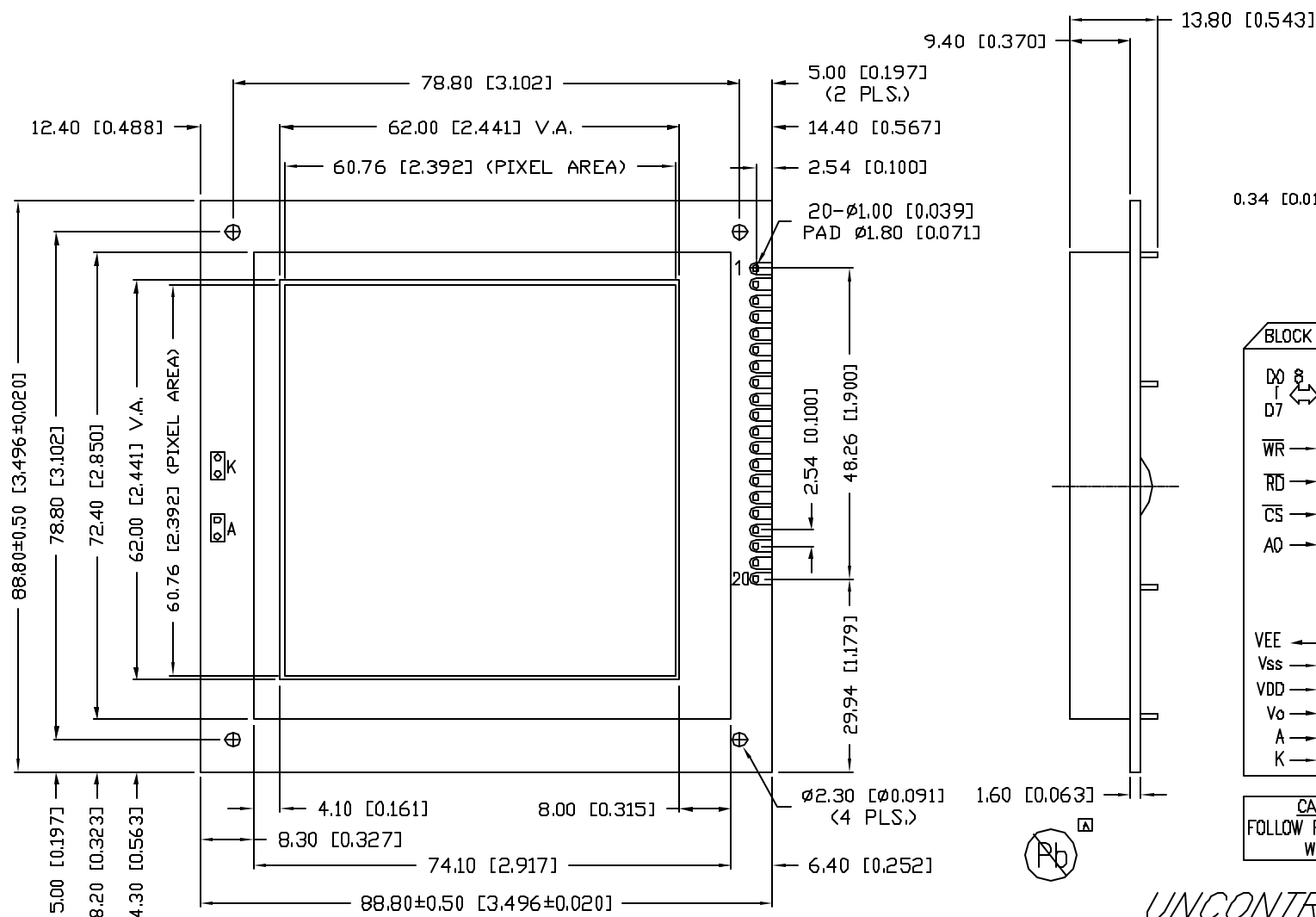
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REV.	E.C.N. NUMBER AND REVISION COMMENTS
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DATE _____

A	ECN # 11148
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4.19.07



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

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*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 -0.00 MAX.=+0.00 -DECIMAL PRECISION

REV.

PART NUMBER

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LCM-H160160GWF

160 x 160 DOT MATRIX GRAPHIC MODULE,
1/160 DUTY, FSTN, TRANSFLECTIVE, LED BACKLIGHT,
WIDE OPERATING TEMP.

CONFIDENTIAL INFORMATION

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RELIABILITY NOTE

OUR MANY YEARS OF EXPERIENCE DATA ACCUMULATION INDICATE THAT
SOLDER HEAT IS A MAJOR CAUSE OF EARLY AND FUTURE FAILURE.
PLEASE PAY ATTENTION TO YOUR SOLDERING PROCESS.



290 E. HELEN ROAD
PALATINE, IL 60067-6976
PHONE: +1.847.359.2790
US WEB: www.lumex.com
TW WEB: www.lumex.com.tw

DRAWN BY:

CHECKED BY:

APPROVED BY:

DATE: 2.22.04

JC

PAGE: 1 OF 2

SCALE: N/A

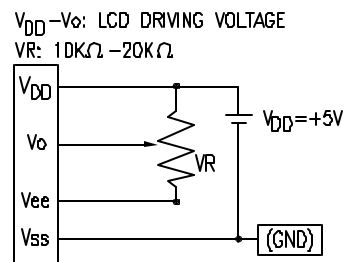
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A	SEE PAGE #1	

PIN CONFIGURATION

PIN NO.	SYMBOL	LEVEL	FUNCTION
1	V _{SS}	0V	GND
2	V _{DD}	5V	SUPPLY VOLTAGE FOR LOGIC
3	V _O	-	CONTRAST VOLTAGE FOR LCD DRIVE(VARIABLE)
4	RD	L	READ SIGNAL
5	WR	L	WRITE SIGNAL
6	CS	L	CHIP SELECT
7	AO	H/L	DATA TYPE SELECT
8~15	DB0~DB7	H/L	DATA BUS
16	RES	L	RESET SIGNAL (NOTE 1)
17	VEE	-	POWER SUPPLY VOLTAGE FOR LCD
18	A	4.2V	ANODE LED BACKLIGHT
19	K	-	CATHODE LED BACKLIGHT
20	(N/C)	-	NO CONNECTION

CAUTION:

1. RES IS A SCHMITT TRIGGER INPUT. THE PULSEWIDTH ON RES MUST BE AT LEAST 200 μ s. PULSES OF MORE THAN A FEW SECONDS WILL CAUSE DC VOLTAGES TO BE APPLIED TO THE LCD PANEL.



ELECTRICAL CHARACTERISTICS

V_{DD}=4.75V to 5.25V, T_A=25°C

ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN.	TYP.	MAX.	
SUPPLY VOLTAGE FOR LOGIC	V _{DD} -V _{SS}	-	4.75	5.0	5.25	V
SUPPLY VOLTAGE FOR LCD DRIVE	V _{DD} -V _{EE}	-	-	18.2	-	V
SUPPLY CURRENT FOR LOGIC	I _{DD}	-	-	-	20	mA
INPUT VOLTAGE	HIGH	V _{IH}	-	0.2	-	V _{DD} V
	LOW	V _{IL}	-	0	-	0.8 V
OUTPUT VOLTAGE	HIGH	V _{OH}	I _{OH} =-3.0mA	2.4	-	- V
	LOW	V _{OL}	I _{OL} =3.0mA	-	-	0.4 V
*LED BACKLIGHT	VOLTAGE	V _F	I _F =560mA	-	4.2	4.5 V
	CURRENT	I _F	-	-	560	mA
	POWER CONSUMPTION	PD	-	-	2.8	W
	LUMINOUS	L	I _F =560mA	60	-	cd/m ²
	COLOR	-	-	-	570	nm

*ONLY APPLIES TO MODULES WITH BACKLIGHT

ABSOLUTE MAXIMUM RATINGS

ITEM	SYMBOL	TEST CONDITION	STANDARD VALUE		UNIT
			MIN	MAX	
SUPPLY VOLTAGE FOR LOGIC	V _{DD} -V _{SS}	T _a =25°C	0	7.0	V
SUPPLY VOLTAGE FOR LCD DRIVE	V _{DD} -V _{EE}	-	17.2@40°C	19.2@0°C	V
INPUT VOLTAGE	V _I	T _a =25°C	V _{SS}	V _{DD}	V
OPERATING TEMPERATURE	T _{opr}	LCM-H	-20	70	°C
STORAGE TEMPERATURE	T _{stg}	LCM-H	-30	85	°C

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