Winstar Display Co., LTD
華凌光電股份有限公司

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SPECIFICATION

CUSTOMER : _____

MODULE NO.: WG12864B-TGH-N#N

APPROVED BY: (FOR CUSTOMER USE ONLY)	**PCB VERSION:**	**DATA:**

SALES BY	APPROVED BY	CHECKED BY	PREPARED BY

VERSION	DATE	REVISED PAGE NO.	SUMMARY
C	2009/6/18	10	Modify Timing Characteristics

Represented by:

FIRST Components s.r.l.
www.first-components.com
technical@first-components.com
+39 0332 1888005

2.Precautions in use of LCD Modules

(1)Avoid applying excessive shocks to the 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 LCD module.
(3)Don't disassemble the LCM.
(4)Don't operate it above the absolute maximum rating.
(5)Don't drop, bend or twist LCM.
(6)Soldering: only to the I/O terminals.
(7)Storage: please storage in anti-static electricity container and clean environment.
(8). Winstar have the right to change the passive components
(9). Winstar have the right to change the PCB Rev.

3.General Specification

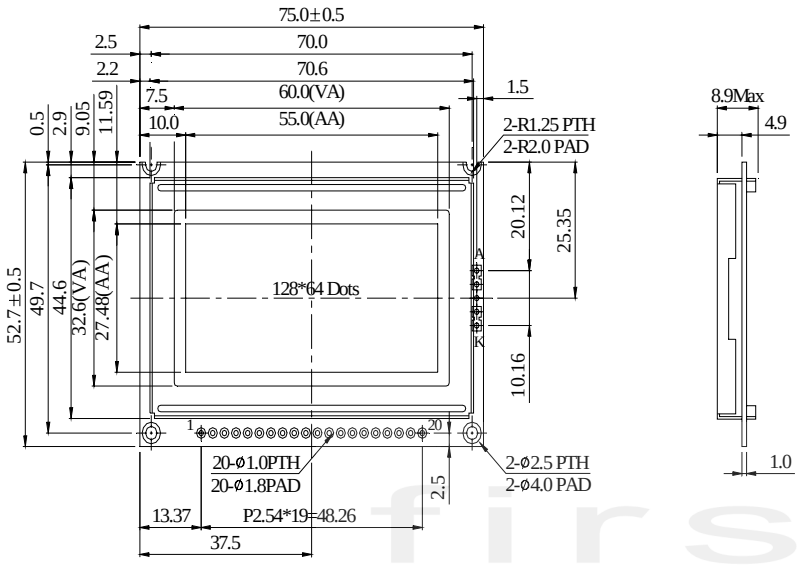
Item	Dimension	Unit
Number of Characters	128 x 64 Dots	—
Module dimension	75.0 x 52.7 x 8.9(MAX)	mm
View area	60.0 x 32.6	mm
Active area	55.0 x 27.48	mm
Dot size	0.39 x 0.39	mm
Dot pitch	0.43 x 0.43	mm
LCD type	STN Positive, Gray , Transflective , (In LCD production, It will occur slightly color difference. We can only guarantee the same color in the same batch.)	
Duty	1/64	
View direction	6 o'clock	
Backlight Type	LED, White	

7.Interface Description

Pin No.	Symbol	Level	Description
1	VDD	5.0V	Supply voltage for logic
2	V_{SS}	0V	Ground
3	V_o	(Variable)	Contrast Adjustment
4	DB0	H/L	Data bus line
5	DB1	H/L	Data bus line
6	DB2	H/L	Data bus line
7	DB3	H/L	Data bus line
8	DB4	H/L	Data bus line
9	DB5	H/L	Data bus line
10	DB6	H/L	Data bus line
11	DB7	H/L	Data bus line
12	CS1	L	Select Column 1~ Column 64
13	CS2	L	Select Column 65~ Column 128
14	RST	L	Reset signal
15	R/W	H/L	H: Read (MPU←Module) , L: Write (MPU→Module)
16	D/I	H/L	H: Data , L : Instruction
17	E	H	Enable signal
18	Vee	—	NC
19	A	—	Power Supply for LED backlight (+)
20	K	—	Power Supply for LED backlight (-)

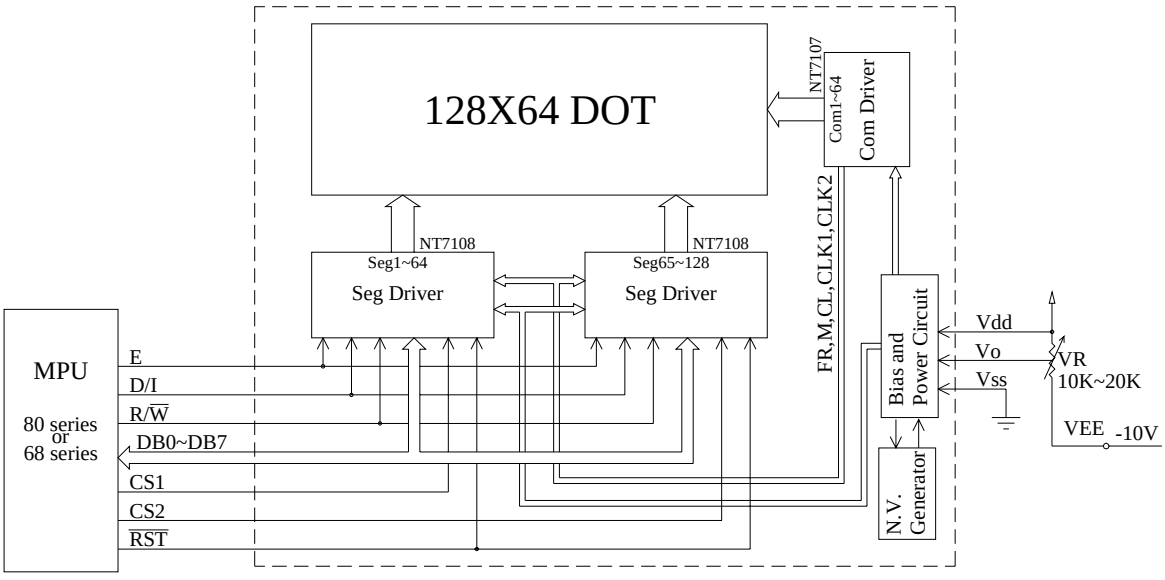
first components

8.Contour Drawing &Block Diagram



PIN NO.	SYMBOL
1	Vdd
2	Vss
3	Vo
4	DB0
5	DB1
6	DB2
7	DB3
8	DB4
9	DB5
10	DB6
11	DB7
12	CS1
13	CS2
14	$\overline{RST}$
15	R/$\overline{W}$
16	D/$\overline{I}$
17	E
18	Vee
19	A
20	K

The non-specified tolerance of dimension is ±0.3mm.



External contrast adjustment.