Next Vision Display
Brighten The Future

NEXT VISION DISPLAY

SPECIFICATION

CUSTOMER : _____

MODULE NO.: NG19264BN001ML

Version	01
Engineer	
Date	2019/07/29

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Customer:
Approved by

NEXT VISION DISPLAY CO., LTD.

地址: 中國上海小木橋路600號
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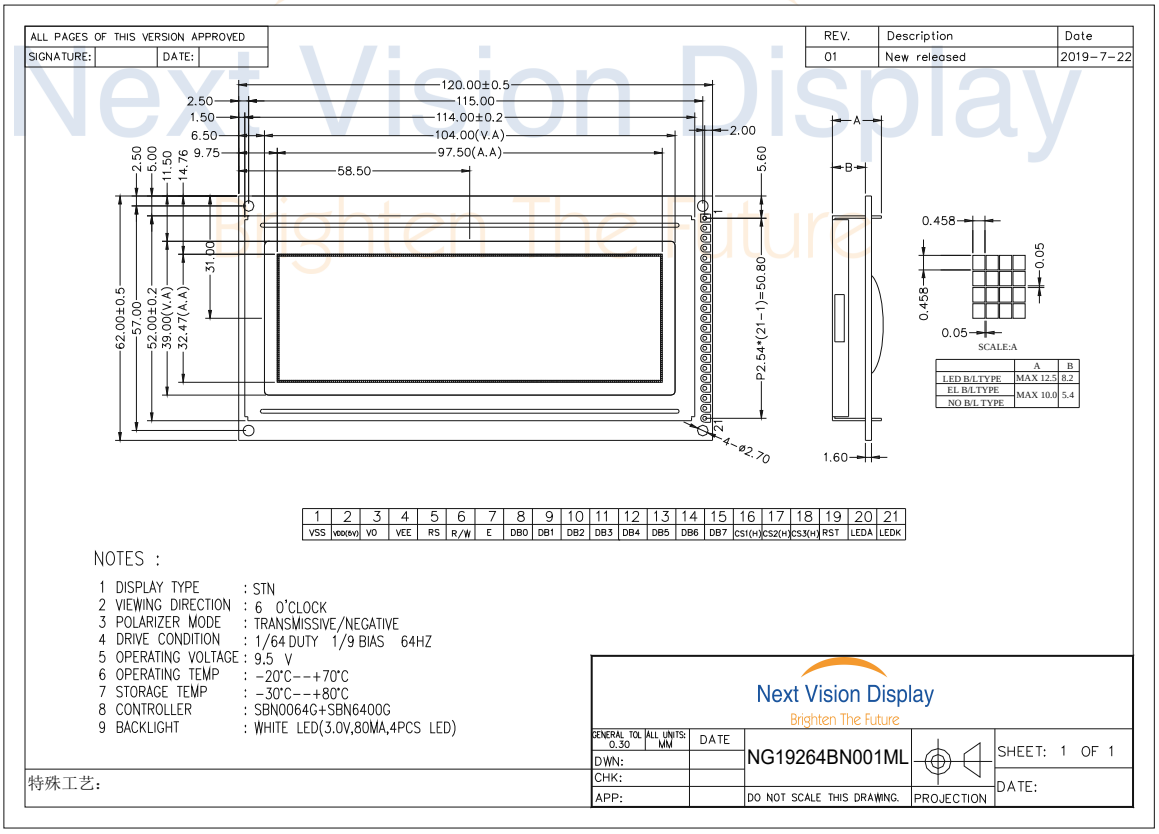
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MARKETING: marketing@nextvisiondisplay.com
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1. Mechanical Specification

ITEM	Standard Value	Unit
Number of pixels	192 X 64	--
Module Dimension	120.0(W)X62.0(H) x12.5 (T)	mm
Display Mode	FSTN mode, positive, transflective	
Viewing Display Area	104.0(W)X 39.0(H)	mm
Active Display Area	97.50(W)x32.47(H)	mm
Dot size	0.458(W)x0.458(H)	mm
Dot Pitch	0.508 (W)x0.508(W)	mm
Drive Method	1/64Duty,1/9 Bias	--
Viewing Direction	6 O'clock	--
LED Backlight Color	White	--
Backlight Input	DC +3.0	V
Input Voltage	DC +5.0	V
LCD driver	SBN0064G & SBN6400G or Equivalent.	

2. Mechanical Diagram

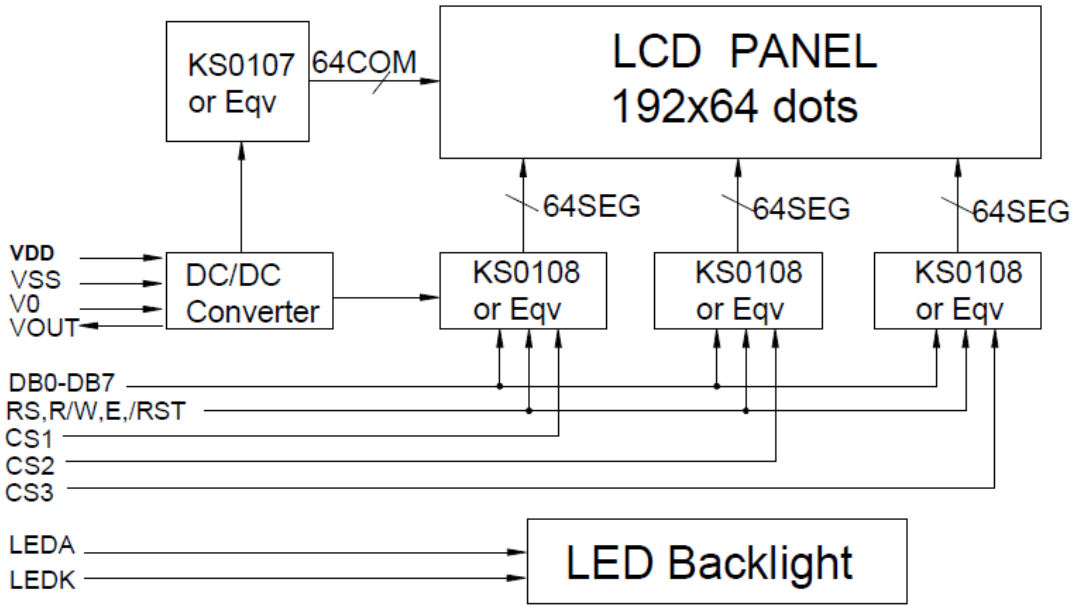


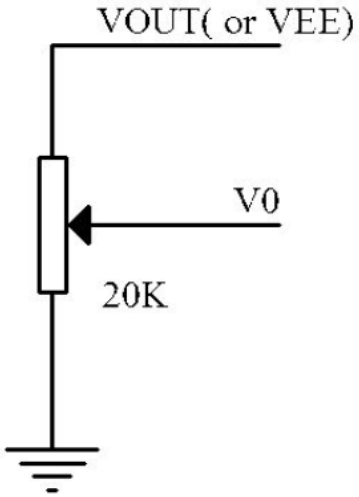
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3. Interface pin connection:

ITEM	SYMBOL	LEVEL	FUNCTION
1	VSS	0V	Power Ground
2	VDD	+5.0V	Power Supply For Logic
3	V0	-	Contrast Adjust
4	VEE	-	Negative Power output For LCD Driving
5	RS	H/L	H：Data　L：Command
6	R/W	H/L	H：Read　L：Write
7	E	H，H->L	Enable Signal
8～15	DB0～DB7	H/L	Data Bus
16	/CS1	H	Chip Selection A
17	/CS2	H	Chip Selection B
18	/CS3	H	Chip Selection C
19	/RST	L	Reset Signal
20	LEDA	+3.0V	Power Supply For LED Backlight
21	LEDK	0V	

Block diagram





DC Characteristics:

Items	Symbol	Min	TYP	Max	Unit	Condition
Operating Voltage	Vdd	4.8	5.0	5.2	V	Vdd
Supply Current	Idd	—	8	15	mA	except LED backlight
Input High Voltage	Vin	2.0	—	Vdd	V	RS,RW,E,DB0-DB7
Input Low Voltage	Vil	0	—	0.8	V	
Output High Voltage	Voh	2.4	—	—	V	Ioh=-0.1mA,DB0-DB7
Output Low Voltage	Vol	—	—	0.4	V	Iol=0.1mA,DB0-DB7
LCD Driving Voltage	Vlcd	9.0	9.5	10.0	V	Vdd-V0

AC Characteristics:

Items	Symbol	Min	TYP	Max	Unit
E cycle time	t_C	**1000**	—	—	**nS**
E high level width	t_{WH}	**700**	—	—	**nS**
E low level width	t_{WL}	**700**	—	—	**nS**
E rise time	t_R	—	—	**18**	**nS**
E fall time	t_F	—	—	**18**	**nS**
Address set-up time	t_{ASU}	**210**	—	—	**nS**
Address hold time	t_{AH}	**15**	—	—	**nS**
Data set-up time	t_{DSU}	**300**	—	—	**nS**
Data delay time	t_D	—	—	**480**	**nS**
Data hold time（write）	t_{DHW}	**15**	—	—	**nS**
Data hold time（read）	t_{DHR}	**30**	—	—	**nS**

Display control instructions:

Instructions	Code										Function	Note
	RS	R/W	DB7	DB6	DB5	DB4	DB3	DB2	DB1	DB0		
Display on/off	0	0	0	0	1	1	1	1	1	1/0	Controls the display on or off. Internal status and display data in RAM is not affected 0=off, 1=on	*2
Set Column (Y) Address	0	0	0	1	Y address (0-63)						Set the Column address into the Y address counter	*2
Set Page (X) Address	0	0	1	0	1	1	1	X address (0-7)			Set the Page address into the X address register	*2
Set Display Start Line (Z address)	0	0	1	1	Z address (0-63)						Indicates the display data RAM displayed at the top of the screen	*2
Status Read	0	1	Busy	0	on/off	Reset	0	0	0	0	Read status Busy=L, Driver ready; Busy=H, Driver busy on/off=L, Display is on; on/off=H, Display is off Reset=L, Normal Running; Reset=H, reset	*1
Write Display Data	1	0	Write data								Write display data into display data RAM, After writing instruction, Y address counter increased by 1 automatically	*2
Read Display Data	1	1	Read data								Read display data form the display data RAM	*1

Note:

1*. Only one section(driver) could be read at the same time.

2*. For the details of the display control instructions, please refer to SBN0064G datasheet.

Absolute maximum ratings:

Item	Symbol	Condition	Standard	
			Min	Max
Logic Voltage	Vdd	T=25°C	-0.3V	5.5V
Input Voltage	Vi		-0.3V	Vdd+0.3V
Operation Temp.	Top	-	-20°C	70°C
Stortage Temp.	Vop	-	-30°C	80°C

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