

SHENZHEN BRILLIANT CRYSTAL TECHNOLOGIC CO.,LTD.

深 圳 市 彩 晶 科 技 有 限 公 司

The specification for the following models :

CP07010

PROPOSED BY		APPROVED
Design	Approved	

TEL:+86-755-29995238

FAX:+86-755-29459900

Http://www.cj86.com

E-mail:szcj86@gmail.com

Http://www.szcm-lcd.com

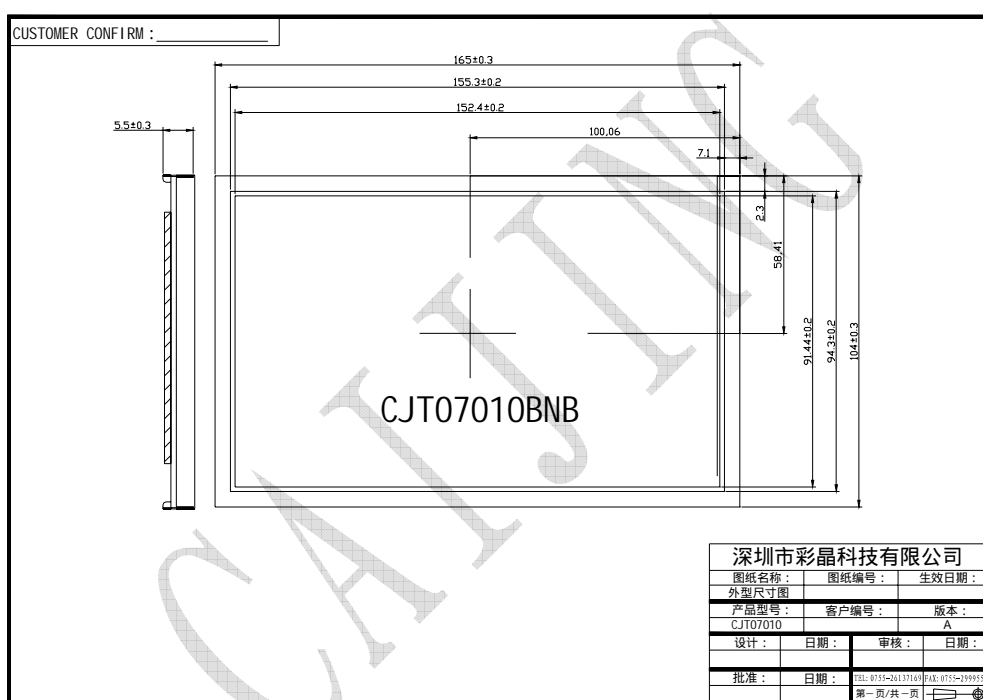
E-mail:szcj86@hotmail.com

地址：深圳市南山区西丽留仙洞工业区顺和达厂区第二栋

1. Mechanical Specification

ITEM	STANDARD VALUE	UNIT
LCD size	7.0inch(Diagonal)	
Driver element	a-Si TFT active matrix	
Resolution	800 X3(RGB) 480	--
MODULE DIMENSION	165 (W) X 104 (H) X 5.5 (T)	mm
VIEWING DISPLAY AREA	155.3 (W) X 94.3 (H)	mm
ACTIVE DISPLAY AREA	152.4 (W) X 91.44 (H)	mm
DOT PITCH	0.0635 (W) X 0.1905 (H)	mm
Color arrangement	RGB-stripe	
LED Backlight Color	White	
Weight	160g	

2. Mechanical Diagram



3.Interface Pin Connections

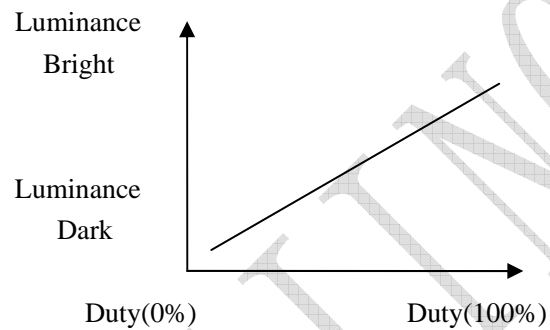
Pin assignment :

NO	SYMBOL	LEVEL	FUNCTION
1	VLED	P	Power supply for LED Driver
2	VLED	P	Power supply for LED Driver
3	ADJ	I	Adjust the led brightness with PWM Pulse
4	GLED	P	Ground for LED circuit
5	GLED	P	Ground for LED circuit
6	VCC	P	Power supply for digital circuit
7	VCC	P	Power supply for digital circuit
8	MODE	I	DE or HV mode control
9	DE	I	Data enable
10	VS	I	Vsync signal input
11	HS	I	Hsync signal input
12	GND	P	Power ground
13	B5	I	Blue data input (MSB)
14	B4	I	Blue data input
15	B3	I	Blue data input
16	GND	P	Power ground
17	B2	I	Blue data input
18	B1	I	Blue data input
19	B0	I	Blue data input(LSB)
20	GND	P	Power ground
21	G5	I	Green data input(MSB)
22	G4	I	Green data input
23	G3	I	Green data input
24	GND	P	Power ground
25	G2	I	Green data input
26	G1	I	Green data input
27	G0	I	Green data input(LSB)
28	GND	P	Power ground
29	R5	I	Red data input(MSB)
30	R4	P	Red data input
31	R3	I	Red data input
32	GND	P	Power ground

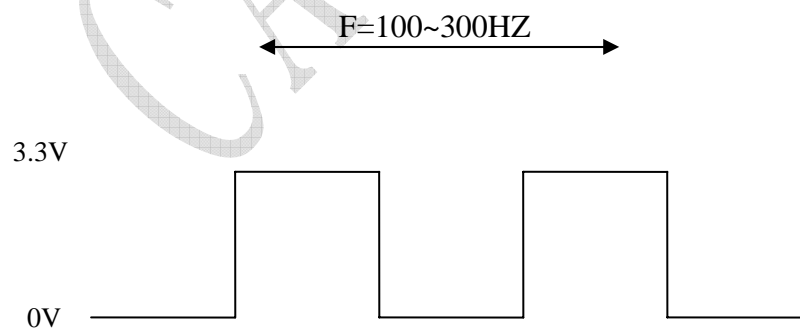
33	R2	I	Red data input
34	R1	P	Red data input
35	R0	I	Red data input(LSB)
36	GND	P	Power ground
37	DCLK	I	Sample clock
38	GND	P	Power ground
39	L/R	I	Select left or right scanning direction
40	U/D	I	Select up or down scanning direction

Note: I:input, O:output, P:power

Note1: Pin.3 is used to adjust brightness.



Note 2: ADJ signal =0~3.3V, operation frequency: 100~300Hz



4. Operation Specifications

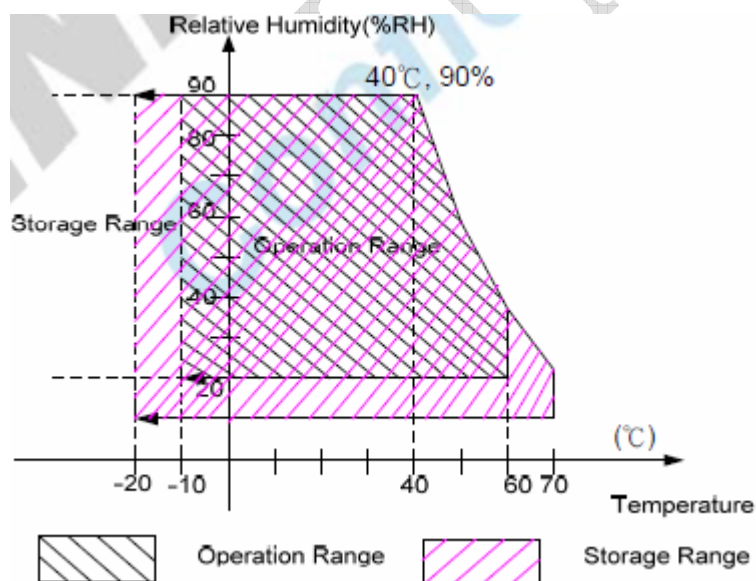
4.1. Absolute Maximum Ratings

(Note 1)

Item	Symbol	Values		Unit	Remark
		Min.	Max.		
Power voltage	VCC	-0.3	6.0	V	
	VLED		5.5	V	
Input signal voltage	VI	-0.3	6.3	V	
Operation temperature	TOP	-10	60		Note 2,3
Storage temperature	TST	-20	70		Note 2,3

Note1: The absolute maximum rating values of this product are not allowed to be exceeded at any times. A module should be used with any of the absolute maximum ratings exceeded, the characteristics of the module may not be recovered, or in an extreme condition, the module may be permanently destroyed.

Note2: 90% RH Max. (Max wet temp. is 40) Maximum wet-bulb temperature is at 38 or less. And No condensation (no drops of dew)



Note3: In case of temperature below 0 , the response time of liquid crystal (LC) becomes slower and the color of panel darker than normal one.

4.2. Typical Operation Conditions

Item	Symbol	Values			Unit	Remark
		Min.	Typ.	Max.		
Power voltage	V _{CC}	3.1	3.3	3.5	V	Note 1
	V _{LED}	4.8	5.0	5.2	V	Note 2
Current consumption	I _{CC}	-	250	300	mA	
	I _{LED}	-	500	550	mA	Note 3
Input logic igh voltage	V _{IH}	0.7V _{CC}	-	V _{CC}	V	Note 4
Input logic low voltage	V _{IL}	0	-	0.3V _{CC}	V	
LED life time	-	20,000	-	-	Hr	Note 5

Note 1: VCC setting should match the signals output voltage (refer to Note 4) of customer's system board.

Note 2: LED driving voltage.

Note 3: LED driving current.

Note 4: DCLK,DE, HS, VS, R0~ R5,,G0~ G5,B0~ B5.

Note 5: The "LED life time" is defined as the module brightness decrease to 50% original brightness at Ta=25 and VLED=5.0V. The LED lifetime could be decreased if operating VLED is larger than 5.0V.