



晶采光電科技股份有限公司  
AMPIRE CO., LTD.

## SPECIFICATIONS FOR LCD MODULE

<b>CUSTOMER</b>	
<b>CUSTOMER PART NO.</b>	
<b>AMPIRE PART NO.</b>	<b>AM-1024600L2TMQW-01H</b>
<b>APPROVED BY</b>	
<b>DATE</b>	

- Approved For Specifications
- Approved For Specifications & Sample

AMPIRE CO., LTD.

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<b>APPROVED BY</b>	<b>CHECKED BY</b>	<b>ORGANIZED BY</b>

## RECORD OF REVISION

Revision Date	Page	Contents	Editor
2012/4/16	-	New Release	Rober
2012/7/2	27	Add the EDID table	Rober
2012/9/20	20	Remove the INCOMING INSEPCTION STANDARDS	Rober

## 1. FEATURES

The TFT is a color active matrix TFT LCD module using amorphous silicon TFT's (Thin Film Transistors) as an active switching devices. This module is composed of a TFT LCD panel, a driving circuit and a back light system. This TFT LCD has a 10.1 (17:10) inch diagonally measured active display area with WSVGA(1024 x 600 pixel) resolution.

- (1) 10.1 (17:10 diagonal) inch configuration
- (2) One channel LVDS interface
- (3) 262K color by 6 bit R.G.B signal input
- (4) RoHS Compliance
- (5) Halogen Free

## 2. PHYSICAL SPECIFICATIONS

Item	Specifications	Unit	Note
LCD size	10.1" (Diagonal)	inch	
Active area	222.72 (H) ×125.28 (V)	mm	
Number of pixels	1024(H) × 600(V)	pixels	
Pixel pitch	0.2715(H) × 0.2088(V)	mm	
Pixel arrangement	RGB Vertical stripe		
Display colors	262,144	colors	
Display mode	Normally white		
Dimensional outline	235.0 (Typ) ×145.8 (Typ) ×8.1(D)	mm	
Back-light	Single LED (Side-Light type)		
Weight	TBD	g	
Surface treatment	Anti-glare		

### 3. ABSOLUTE MAX. RATINGS

The followings are maximum values which, if exceed, may cause faulty operation or damage to the unit.

Item	Symbol	Values		UNIT	Note
		Min.	Max.		
LED Power Supply Voltage	V <sub>LED</sub>	-0.3	15.0	V	GND=0
Logic Supply Voltage	V <sub>DD</sub>	-0.3	5.0	V	
Operating Temperature	T <sub>OPA</sub>	-20	70	°C	
Storage Temperature	T <sub>STG</sub>	-30	80	°C	

## 4. ELECTRICAL CHARACTERISTICS

### 4.1 TFT LCD Module

Item	Symbol	Values			UNIT	Note
		Min.	Typ.	Max.		
Power voltage	VDD	3.0	3.3	3.6	V	Note1
Current of power supply	IDD	-	0.3	-	A	VDD=3.3V Black pattern
Power voltage for LED driver	VLED	9	12.0	15.0	V	
LED driver current of power supply	ILED	-	1.0		A	VLED=12V ADJ=100%

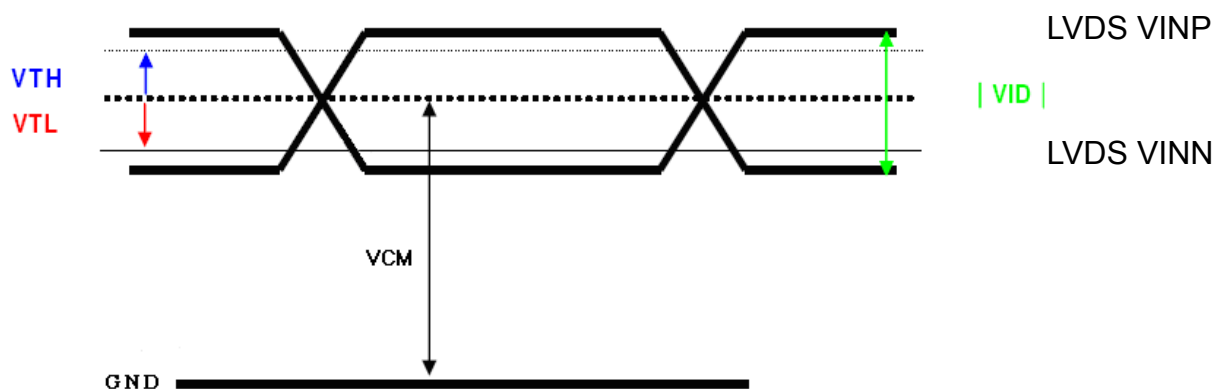
Note 1: VDD-dip condition :

when  $2.7V \leq VDD < 3.0V$  ,  $t_d \leq 10ms$ .

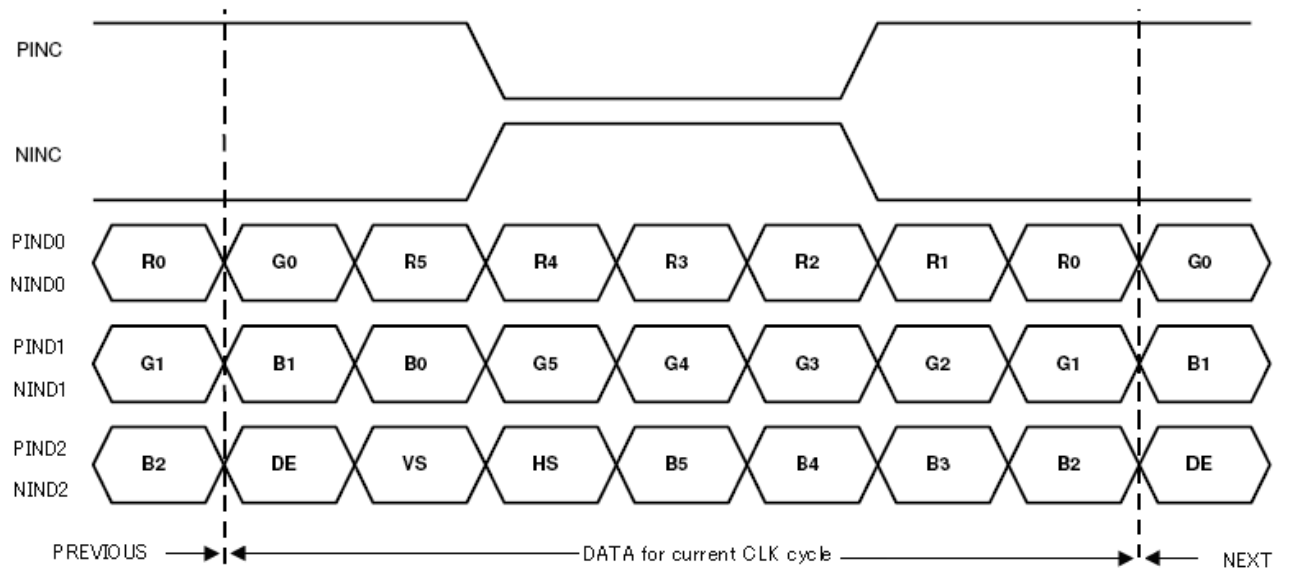
$VDD > 3.0V$  , VDD-dip condition should be same as VDD-turn-con condition.

### 4.2 Switching Characteristics of LVDS Receiver

Item	Symbol	Min.	Typ.	Max.	Unit	Condition
Differential Input High Threshold	VTH	--	--	100	mV	VCM=1.2V
Differential Input Low Threshold	VTL	-100	--	--	mV	
Input current	IIN	-10	--	+10	uA	
Differential input Voltage	VID	0.2	--	0.6	V	
Common Mode Voltage Offset	VCM	$\frac{ VID }{2}$	1.25	$2.4 \cdot \frac{ VID }{2}$	V	



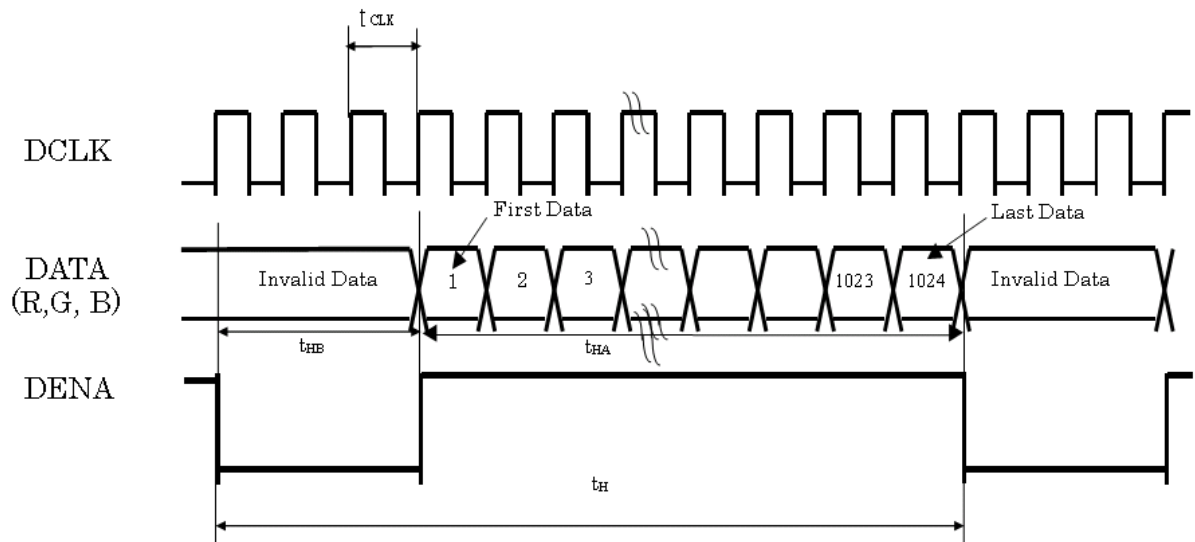
### 4.3 6-bit LVDS Input Data Mapping



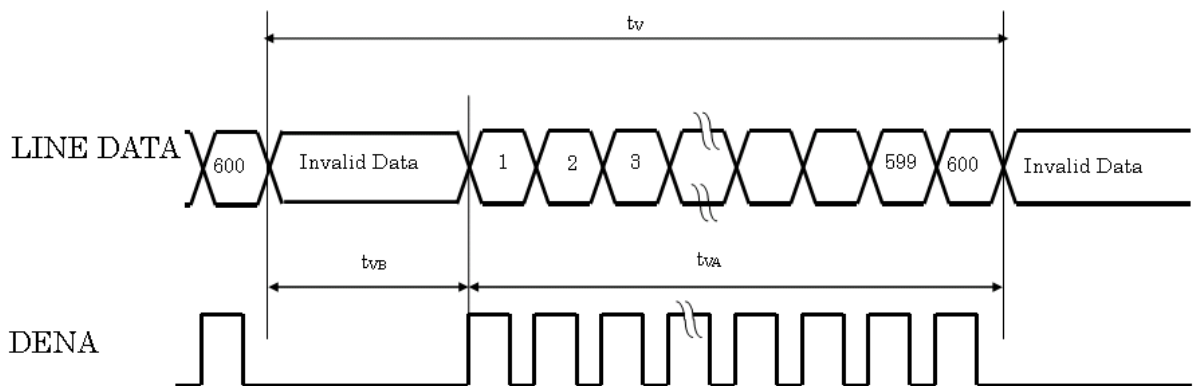
#### 4.4 Timing characteristics of input signals

Item		Symbol	Min.	Typ.	Max.	Unit	
LVDS input signal sequence	Frame Rate	tclk	41	51.2	57	MHz	
LCD input signal sequence (input LVDS Transmitter)	Horizontal	Horizontal total Timing	$t_H$	1214	1344	1364	tCLK
		Horizontal effective Timing	$t_{HA}$	1024			tCLK
		Horizontal Blank Time	$t_{HB}$	190	320	340	tCLK
	Vertical	Vertical total Time	$t_V$	615	365	645	$t_H$
		Vertical effective Time	$t_{VA}$	600			$t_H$
		Vertical Blank Time	$t_{VB}$	15	35	45	$t_H$

#### Horizontal timing sequence



#### Vertical timing sequence



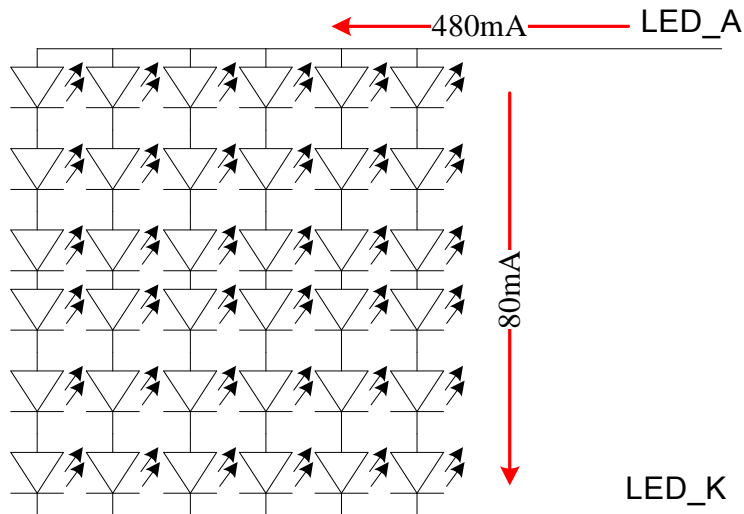
#### 4.5 Backlight Driving Conditions

Item	Symbol	Values			Unit	Note
		Min.	Typ.	Max.		
LED Driver voltage	VLED	9	12	15	V	
Power Supply Current For LED Driver	ILED	-	1000	-	mA	VLED=12V VADJ=3.3V (duty 100%)
ADJ Input Voltage	V <sub>ADJ</sub>	-	3.3	VLED	V	duty=100%
LED voltage	V <sub>AK</sub>	--	21	24.6	V	I <sub>L</sub> =480mA Ta=25°C
LED current	I <sub>L</sub>	--	480	--	mA	Note (1)
LED Life Time	-	--	50K	--	Hour	Note (2)

Note (1) : The constant current source is needed for white LED back-light driving.

When LCM is operated over 60 deg.C ambient temperature, the I<sub>L</sub> of the LED back-light should be adjusted to 400mA max

There are 6 Groups LED shown as below , V<sub>LEDA-LEDK</sub>=21.0V , Ta=25°C





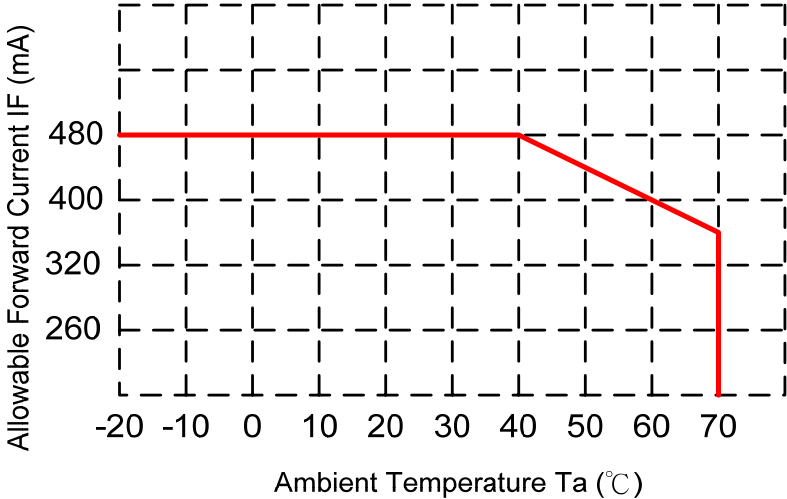
Note2 : Condition: Ta=25°C, continuous lighting

Life time is estimated data.

Definitions of failure:

- 1. LCM brightness becomes half of the minimum value.
- 2. LED doesn't light normally.

When LCM is operated over 40°C ambient temperature, the ILED should be follow :



## 5. OPTICAL SPECIFICATION

### 5.1 Optical specification

Item	Symbol	Condition	Values			Unit	Note
			Min.	Typ.	Max.		
Viewing angle	$\theta L$	$(CR \geq 10)$	60	70	--	degree	Note1 Note2
	$\theta R$		60	70	--		
	$\theta U$		60	70	--		
	$\theta D$		40	50	--		
Response time	TR	Normal $\theta = \Phi = 0^\circ$	--	5	7	msec	Note3
	TF		--	20	28	msec	
Contrast ratio	CR		400	500	--	--	Note2
Color chromaticity	WX		0.26	0.31	0.36	--	Note1 Note4
	WY		0.28	0.33	0.38	--	
	RX		0.54	0.59	0.64	--	
	RY		0.28	0.33	0.38	--	
	GX		0.29	0.34	0.39	--	
	GY		0.54	0.59	0.64	--	
	BX		0.11	0.16	0.21	--	
	BY	0.05	0.1	0.15	--		
Luminance	L	800	1000	--	cd/m <sup>2</sup>	Note4	
Luminance uniformity	YU	70	--	--	%	Note5	

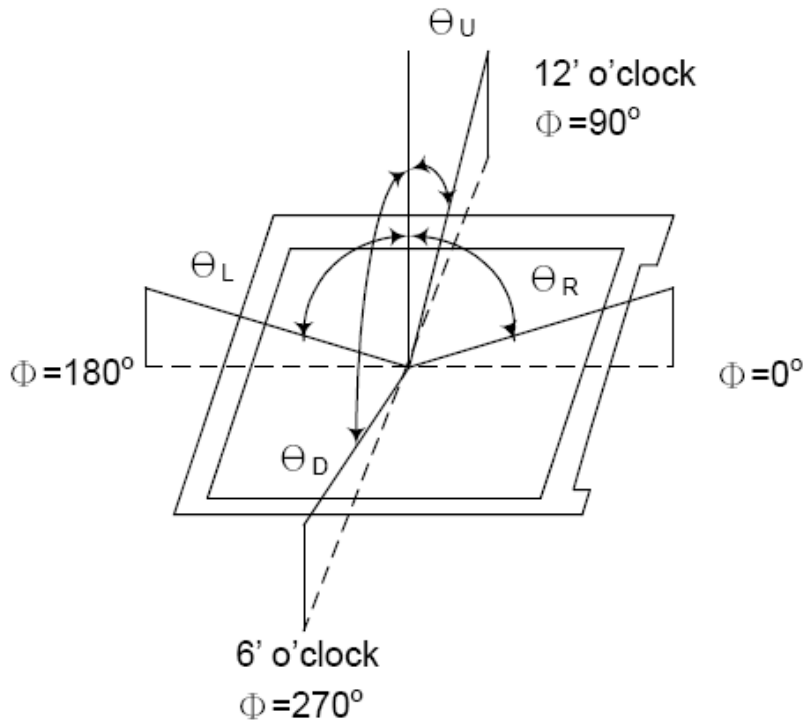
### 5.2 Measuring Condition

- Measuring surrounding : dark room
- Ambient temperature : 25±2°C
- 15min. warm-up time

## 5.2 Measuring Equipment

The optical characteristics should be measured in dark room. After 30 minutes operation, the optical properties are measured at the center point of the LCD screen. (Response time is measured by Photo detector TOPCON BM-7 of view : 1° / Height : 120mm.)

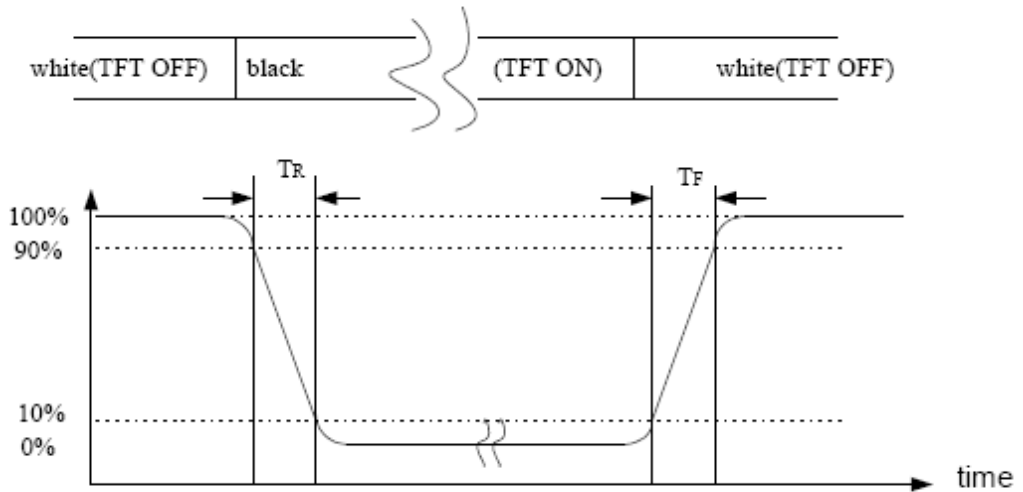
Note 1 : Definition of viewing angle range



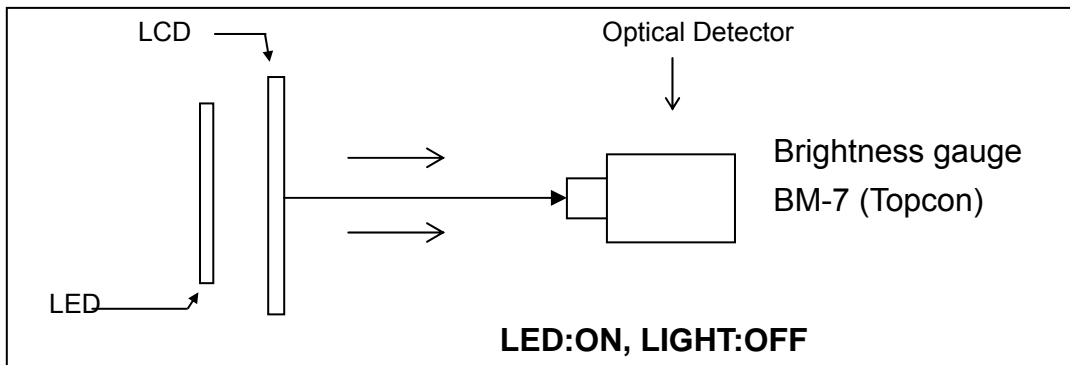
Note 2 : Definition of Contrast Ratio (CR) :  
measured at the center point of panel

$$CR = \frac{\text{Luminance with all pixels white}}{\text{Luminance with all pixels black}}$$

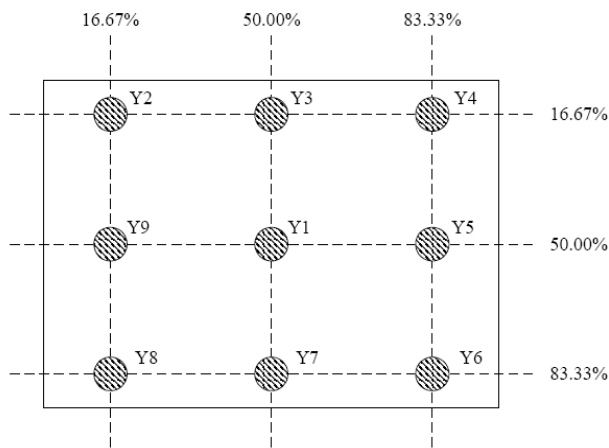
Note 3 : Definition of Response time : Sum of Tr and T



Note 4 : Definition of optical measurement setup



Note 5 : Definition of brightness uniformity



(Min Luminance of 9 points)

$$\text{Luminance uniformity} = \frac{\text{Min Luminance of 9 points}}{\text{Max Luminance of 9 points}} \times 100\%$$

Note 6 : Rubbing Direction (The different Rubbing Direction will cause the different optima view direction)

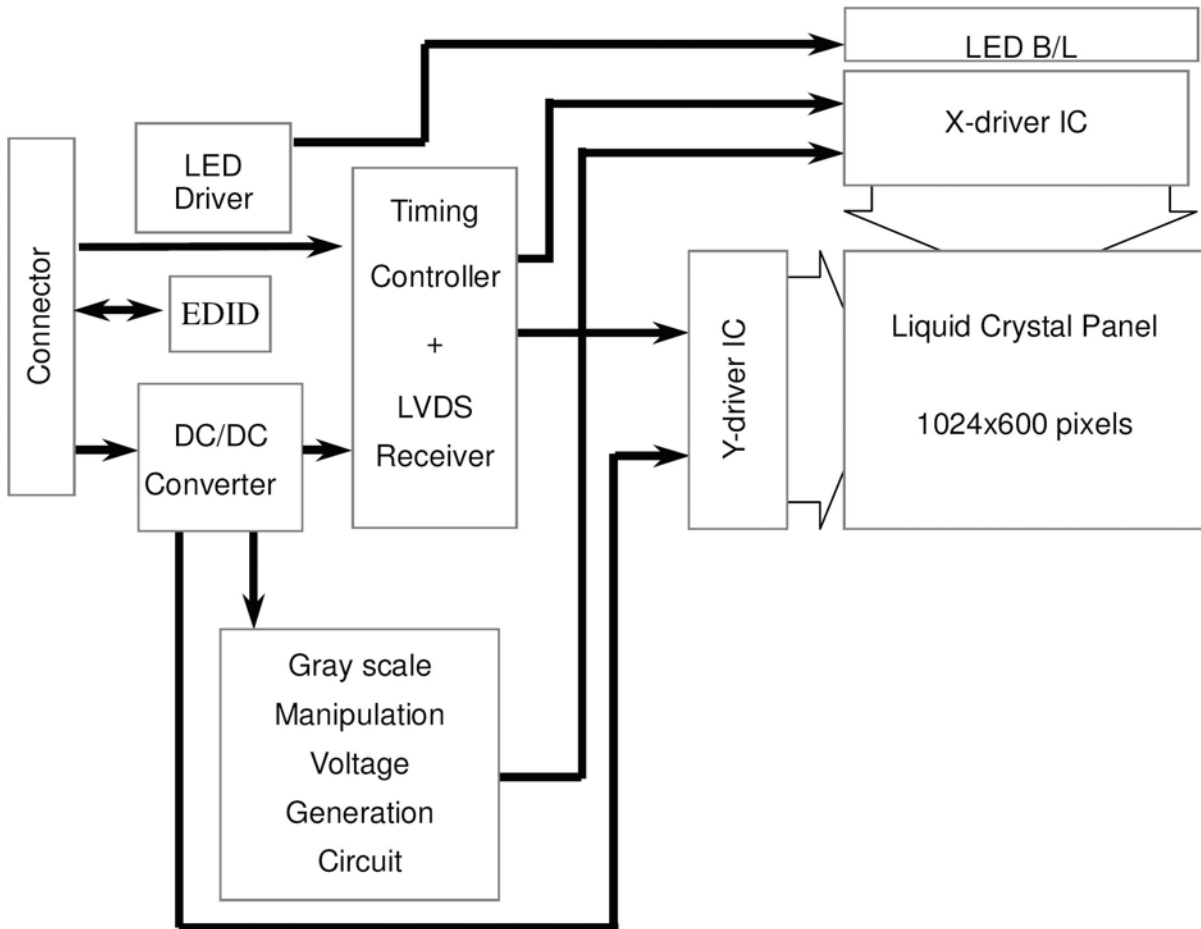
Note 7 : Condition:  $T_a=25^{\circ}\text{C}$ , Life time is estimated data.

Definitions of failure:

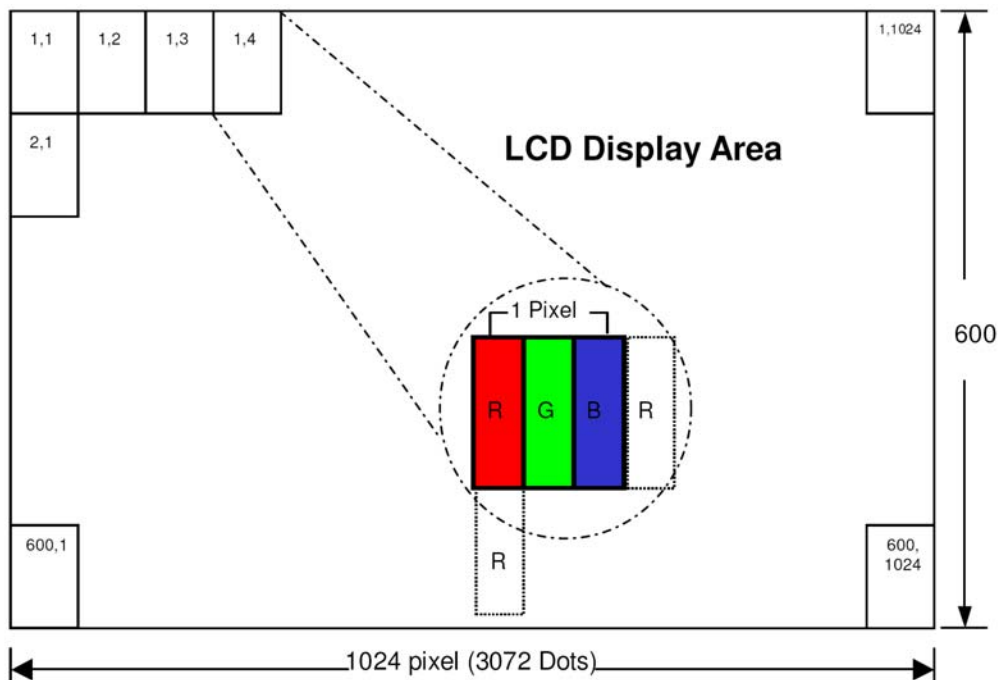
- i. LCM brightness becomes half of the minimum value.
- ii. LED doesn't light normally.

## 6. BLOCK DIAGRAM

### 6.1 TFTLCD Module



### 6.2 Pixel format



## 7.INTERFACE

### 7.1 Electrical Interface Connection

CN1(Input signal): CSTAR DS100-430-H23 (equivalent JAE FI-XB30SSRL-HF16)

Pin No.	Symbol	Description	Note
1	GND	Ground	
2	VDD	3.3V Power	
3	VDD	3.3V Power	
4	V_EDID	3.3V Power for EDID	
5	NC	No connection	
6	CLK_EDID	EDID Clock Input	
7	DATA_EDID	EDID Data Input	
8	RXIN0-	LVDS Signal - channel0-	
9	RXIN0+	LVDS Signal+ channel0+	
10	GND	Ground	
11	RXIN1-	Data Input channel1-	
12	RXIN1+	Data Input channel1+	
13	GND	Ground	
14	RXIN2-	Data Input channel2-	
15	RXIN2+	Data Input channel2+	
16	GND	Ground	
17	RXCLKIN-	Data Input CLK-	
18	RXCLKIN+	Data Input CLK+	
19	GND	Ground	
20	NC	No connection	
21	NC	No connection	
22	GND	Ground	
23	GND	Ground	
24	NC	No connection	

25	NC	No connection	
26	NC	No connection	
27	NC	No connection	
28	NC	No connection	
29	NC	No connection	
30	NC	No connection	

**CN2(LED backlight): BHSR-02VS-1 (JST or equivalent)**

Pin No.	Symbol	Description	Note
1	A	Anode for LED backlight (+21V, 480mA)	
2	K	Cathode for LED backlight	

**CN2(LED Driver Board): FPHTI-104TTW000(Kingfont or equivalent)**

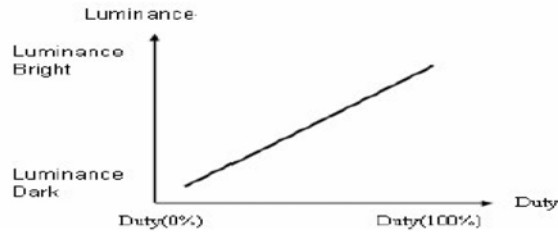
Pin No.	Symbol	Description	Note
1	+12V	Voltage for LED circuit (+12V)	
2	LED_EN	LED BLU ON/OFF	
3	GND	Power ground	
4	PWM	Adjust the LED brightness by PWM	

Note\* : The brightness of LCD panel could be changed by adjusting ADJ



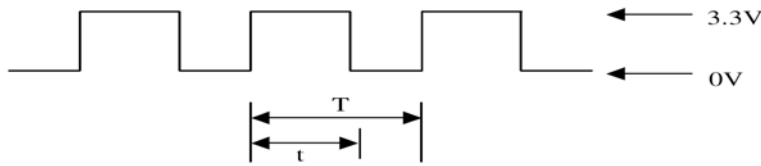
**[Note]**

(1) ADJ can adjust brightness to control Pin. Pulse duty the bigger the brighter.



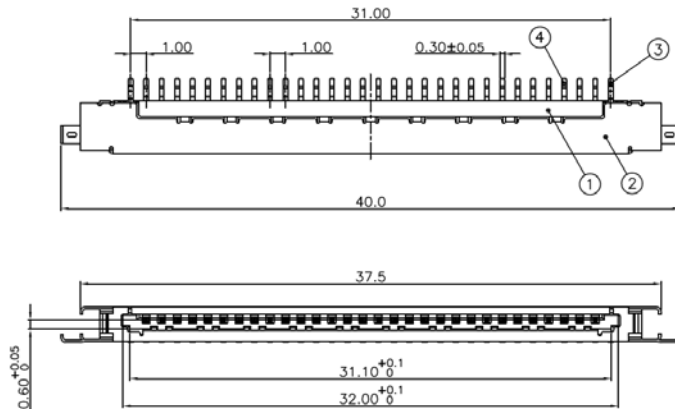
(2) ADJ Signal=0~3.3V · Operation Frequency :

Dimming Range		
PWM Frequency (F)	Duty Cycle (Min.)	Duty Cycle (Max.)
100Hz < F < 500Hz	5%	100%
500Hz < F < 20KHz	10%	100%

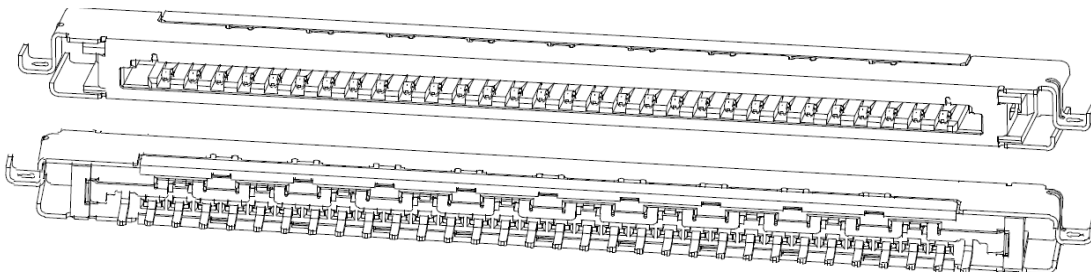


$$\text{Duty Cycle} = t / T * 100\%$$

(3) LVDS Connector : CSTAR DS100-430-H23

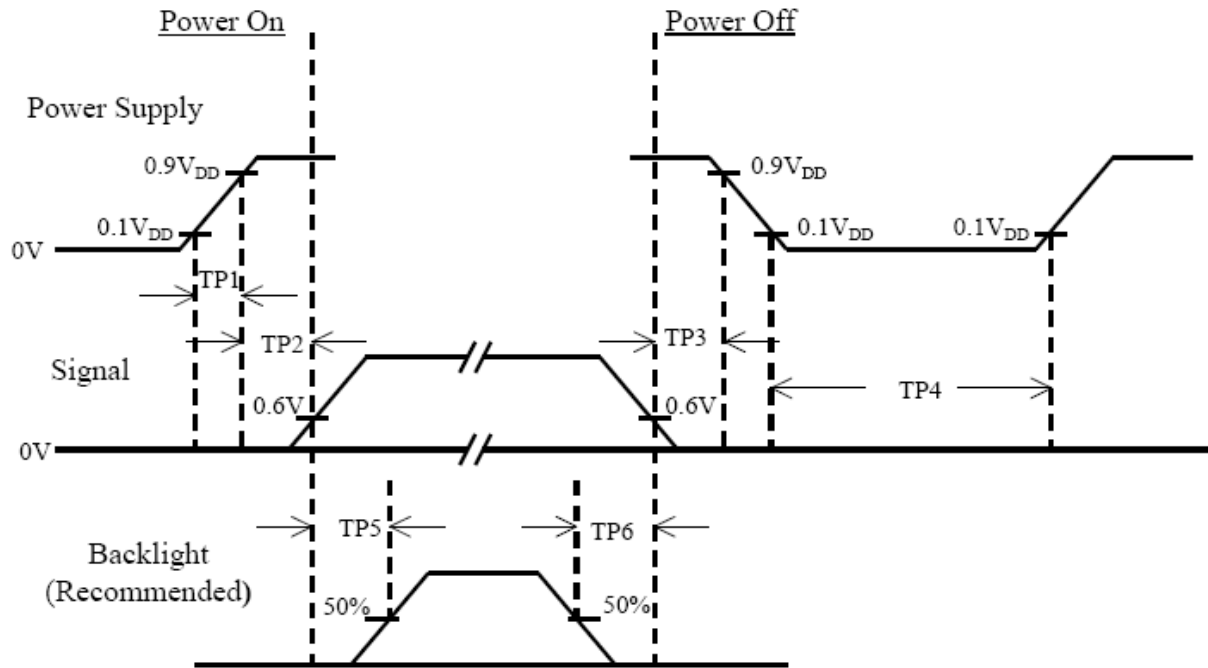


NOTES:  
 1.INSULATOR:THERMOPLASTIC;COLOR:BEIGE  
 2.CONTACT:COPPER ALLOY t=0.15mm  
 PLATING:CONTACT AREA 5u"GOLD,  
 SOLDER AREA 80~120u" TIN (LEAD FREE),  
 OVERALL WITH 50u"NICKEL UNDER PLATED.  
 3.SHELL: STAINLESS t=0.15mm  
 PLATING:SOLDER AREA PLATED WITH GOLD FLASH  
 4.GROUND: COPPER ALLOY t=0.15mm  
 PLATING:TIN(LEAD FREE).  
 ELECTRICAL:  
 VOLTAGE RATING:200V AC(RMS)/DC  
 CURRENT RATING:1A AC(RMS)/DC  
 CONTACT RESISTANCE:40mΩ Max.  
 INSULATION RESISTANCE:100MΩ Min.  
 DIELECTRIC WITHSTANDING VOLTAGE:500V AC(RMS)  
 OPERTING TEMPERATURE:-40°C~+80°C



DS100-430-H23  
BOTTOM MOUNT

## 8. Power On/Off Sequence



Item	Min.	Typ.	Max.	Unit	Remark
TP1	0.5	--	10	msec	
TP2	0	--	50	msec	
TP3	0	--	50	msec	
TP4	500	--	--	msec	
TP5	200	--	--	msec	
TP6	200	--	--	msec	

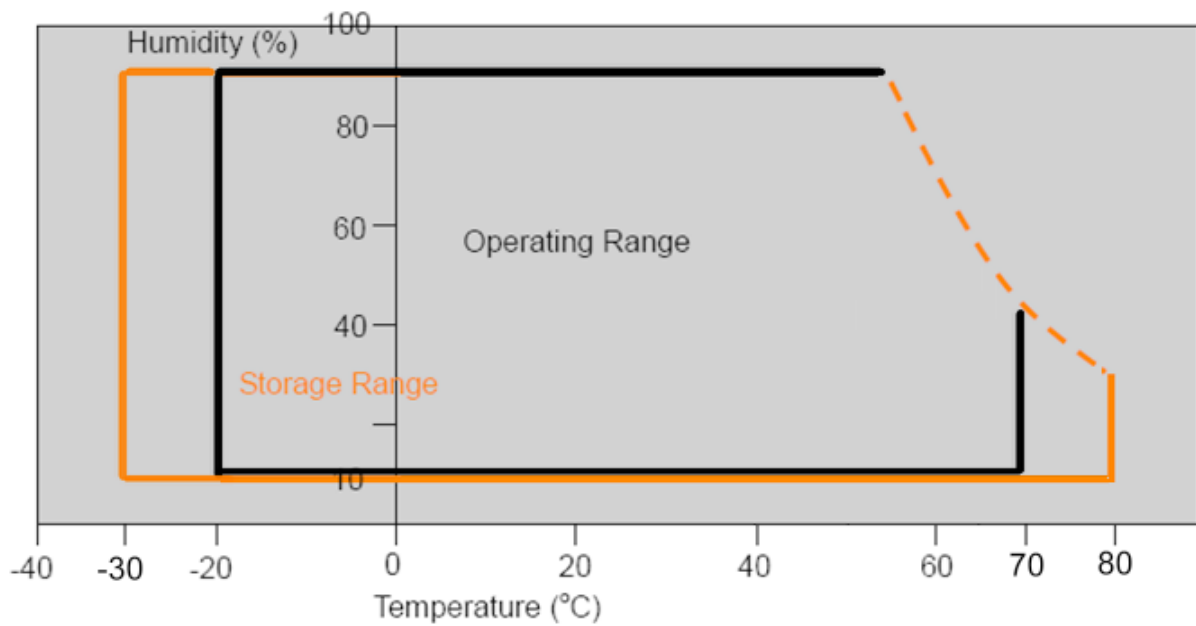
Note :

- (1) The supply voltage of the external system for the module input should be the same as the definition of  $V_{DD}$ .
- (2) Apply the lamp voltage within the LCD operation range. When the back-light turns on before the LCD operation or the LCD turns off before the back-light turns off, the display may momentarily become white.
- (3) In case of  $V_{DD}$  = off level, please keep the level of input signal on the low or keep a high impedance.
- (4) TP4 should be measured after the module has been fully discharged between power off and on period.
- (5) Interface signal shall not be kept at high impedance when the power is on.

## 9. RELIABILITY TEST CONDITIONS

Item	Test Conditions	Note
High Temperature Storage	Ta = 80°C 240 hrs	
Low Temperature Storage	Ta = -30°C 240 hrs	
High Temperature Operation	Ts = 70°C 240 hrs	
Low Temperature Operation	Ta = -20°C 240 hrs	
Thermal Shock	-30°C /30 min ~ +80°C /30 min 100 cycles	

### Storage / Operating temperature



**Note** .Max wet bulb temp.=39°C

## **10. HANDLING & CAUTIONS**

### **10.1 Cautions when taking out the module**

Pick the pouch only, when taking out module from a shipping package.

### **10.2 Cautions for handling the module**

10.2.1 As the electrostatic discharges may break the LCD module, handle the LCD module with care. Peel a protection sheet off from the LCD panel surface as slowly as possible.

10.2.2 As the LCD panel and backlight element are made from fragile glass material, impulse and pressure to the LCD module should be avoided.

10.2.3 As the surface of the polarizer is very soft and easily scratched, use a soft dry cloth without chemicals for cleaning.

10.2.4 Do not pull the interface connector in or out while the LCD module is operating.

10.2.5 Put the module display side down on a flat horizontal plane.

10.2.6 Handle connectors and cables with care.

### **10.3 Cautions for the operation**

10.3.1 When the module is operating, do not lose MCLK, DE signals. If any one of these signals were lost, the LCD panel would be damaged.

10.3.2 Obey the supply voltage sequence. If wrong sequence were applied, the module would be damaged.

### **10.4 Cautions for the atmosphere**

10.4.1 Dewdrop atmosphere should be avoided.

10.4.2 Do not store and/or operate the LCD module in a high temperature and/or humidity atmosphere. Storage in an electro-conductive polymer-packing pouch and under relatively low temperature atmosphere is recommended.

### **10.5 Cautions for the module characteristics**

10.5.1 Do not apply fixed pattern data signal to the LCD module at product aging.

10.5.2 Applying fixed pattern for a long time may cause image sticking.

### **10.6 Other cautions**

10.6.1 Do not disassemble and/or re-assemble LCD module.

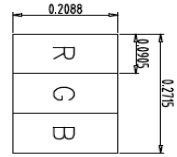
10.6.2 Do not re-adjust variable resistor or switch etc.

10.6.3 When returning the module for repair or etc, please pack the module not to be broken. We recommend using the original shipping packages.

10.6.4 AMIPRE will provide one year warrantee for all products and three months warrantee for all repairing products.

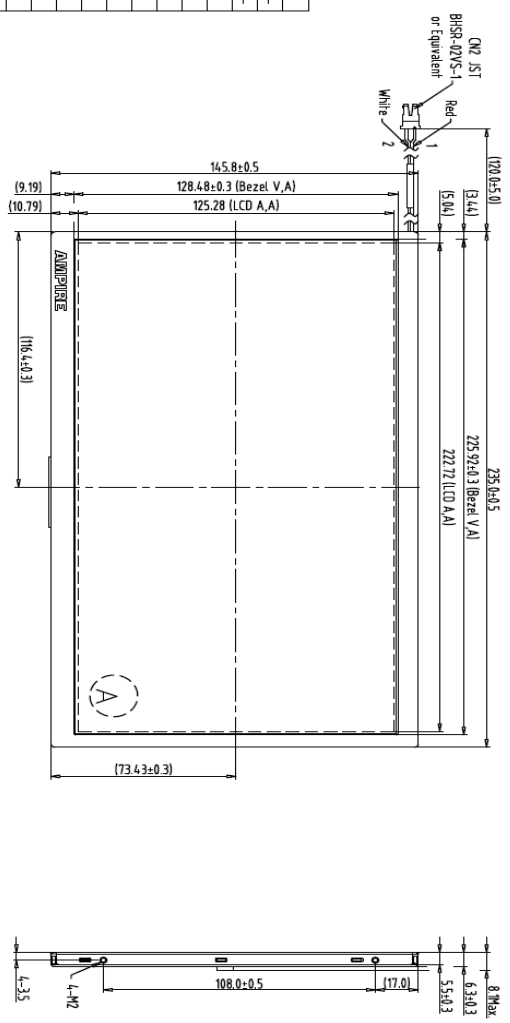
# 11. OUTLINE DIMENSION

REV	REVISION RECORD	DATE NAME
0	NEW RELEASE	02-29-12/EMILY
1	TFT-1024600-24C-0 Rename to 1024600L2	03-22-12/EMILY



A Block

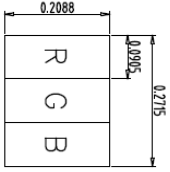
1	GND	16	GND
2	VDD	17	RXCCLKIN-
3	VDD	18	RXCCLKIN+
4	V_EDID	19	GND
5	NC	20	NC
6	CLK_EDID	21	NC
7	DATA_EDID	22	GND
8	RXIN0-	23	GND
9	RXIN0+	24	NC
10	GND	25	NC
11	RXIN1-	26	NC
12	RXIN1+	27	NC
13	GND	28	NC
14	RXIN2-	29	NC
15	RXIN2+	30	NC



- Note:
1. Unless indicated, Tolerance "±0.3"
  2. UV Glue For OLB Protection.
  3. CN1:P0.5 60Pin/CSF-4282-601R or Equivalent
  4. CN2:P1.0 30Pin/DS100-430-H23 or Equivalent
  5. CN3:P1.25 2Pin/3808K-F02N-03R or Equivalent

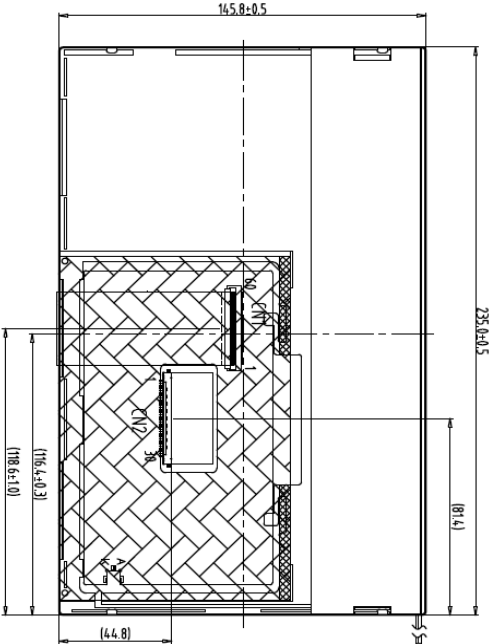
1	TFT-1024600-24C-0	7	TOLERANCE GRADE(±)	A	B	DIM.	MM	DWG.	EMILY	DATE	TITLE
2		8				IE NO.		CHK.		DATE	 晶采光电科技
3		9				PARTS NO./LCM	1024600L2	APPD.		DATE	
4		10								DATE	
5		11								DATE	
6		12								DATE	
						DWG. NO.	*120273MA	SHEET	1 OF 1		

REV	REVISION RECORD	DATE	NAME
0	NEW RELEASE	02-29-12	EMILY
1	TFT-1024600-24C-0 Rename to 1024600L2	03-27-12	EMILY



A Block

1	GND	16	GND
2	VDD	17	RXCLKIN-
3	VDD	18	RXCLKIN+
4	V_EDID	19	GND
5	NC	20	NC
6	CLK_EDID	21	NC
7	DATA_EDID	22	GND
8	RXIN0-	23	GND
9	RXIN0+	24	NC
10	GND	25	NC
11	RXIN1-	26	NC
12	RXIN1+	27	NC
13	GND	28	NC
14	RXIN2-	29	NC
15	RXIN2+	30	NC

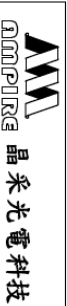


Back view

Note:

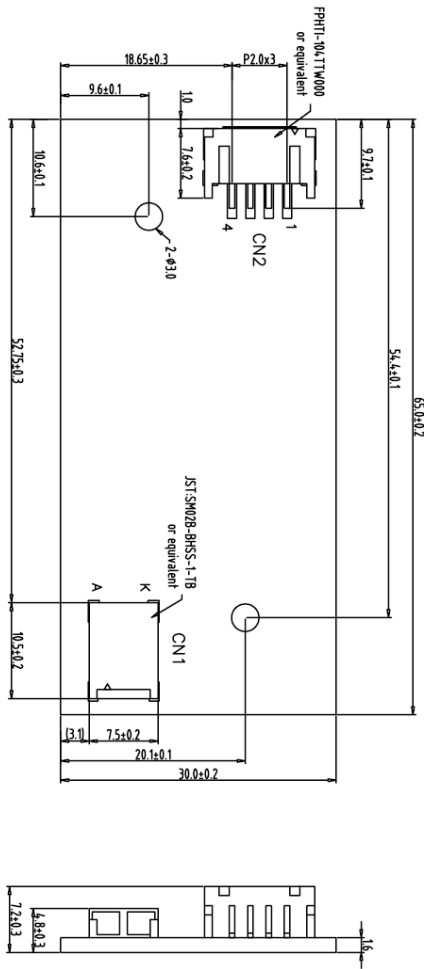
1. Unless indicated, Tolerance "±0.3"
2. UV Glue For OLB Protection.
3. CN1:P0.5 60Pin/CSF-4282-601R or Equivalent
4. CN2:P1.0 30Pin/DS100-430-H23 or Equivalent
5. CN3:P1.25 2PIN/3808K-F02N-03R or Equivalent

1	TFT-1024600-24C-0	7		TOLERANCE GRADE(±)	A	B	DIM.	MM	DWN.	EMILY	DATE	02-29-12	TITLE	1024600L2	DWG. NO.	*120274MA	SHEET	1 OF 1
2		8					IE NO.		CHK.		DATE							
3		9					PARTS NO.	LCM-1	APPD.		DATE							
4		10																
5		11																
6		12																



# OUTLINE DIMENSION (LED driver)

REV	REVISION RECORD	DATE	NAME
0	NEW RELEASE	12-23-10	EMILY
1	Added Dimensions	01-07-11	EMILY
2	TFT-1024600-11-0 Rename to 1024600B2-01	01-11-11	EMILY



LED Driver Board

1	+12V
2	LED_EN
3	GND
4	PWM

- Note:
1. Unless indicated, Tolerance Grade "B" is adopted.
  2. UV Glue For OLB Protection.

1	TFT-1024600-11-0	7		TOLERANCE GRADE(F)	A	B	DIM.	MM	DWN.	EMILY	DATE
2		8		~6	0.05	0.1					12-23-10
3		9		6~18	0.08	0.18	JE NO.		CHK.		DATE
4		10		18~50	0.1	0.25					
5		11		50~180	0.2	0.4	PARTS NO./LCM-2	APPD.			
6		12		180~	0.3	0.5	1024600B2				DATE

AMPiRE 晶采光電科技

適用品號

AM-1024600B2TMQW-01H

1024600B2 (10.1")

DWG. NO. \*101272MA SHEET 1 OF 1

## 12. EDID TABLE

EDID Table of 1024600L

Byte# (Decimal)	Byte# (HEX)	Field Name & Comments	Value (HEX)	Value (BIN)	Value (DEC)
0	00	Header	00	00000000	0
1	01	Header	FF	11111111	255
2	02	Header	FF	11111111	255
3	03	Header	FF	11111111	255
4	04	Header	FF	11111111	255
5	05	Header	FF	11111111	255
6	06	Header	FF	11111111	255
7	07	Header	00	00000000	0
8	08	ISA Manufacture Code LSB(3 character ID = AM#	05	00000101	5
9	09	Compressed ASCII	B0	10110000	176
10	0A	Product Code "1001"	60	01100000	96
11	0B	Hex, LSB first	12	00010010	18
12	0C	LCD module Serial No-Preferred but Optional	58	01011000	88
13	0D	LCD module Serial No-Preferred but Optional	A2	10100010	162
14	0E	LCD module Serial No-Preferred but Optional	0F	00001111	15
15	0F	LCD module Serial No-Preferred but Optional	00	00000000	0
16	10	Week of manufacture=25	19	00011001	25
17	11	Year of manufacture=2012	16	00010110	22
18	12	EDID Structure Version#=1	01	00000001	1
19	13	EDID revision#=3	03	00000011	3
20	14	Video input definition=Digital input, CRGB	80	10000000	128
21	15	Max H image size=22cm	16	00010110	22
22	16	Max V image size=13cm	0D	00001101	13
23	17	Display Gamma=2.2	78	01111000	120
24	18	Feature support(DPMS)=Active off, RGB color	0A	00001010	10
25	19	Red/green low bits(10000110)	86	10000110	134
26	1A	Blue/white low bits(00100110)	26	00100110	38
27	1B	Red x, Red x=0.592	97	10010111	151
28	1C	Red y, Red y=0.340	57	01010111	87
29	1D	Green x, Green x=0.341	57	01010111	87
30	1E	Green y, Green y=0.592	97	10010111	151
31	1F	Blue x, Blue x=0.156	28	00101000	40
32	20	Blue y, Blue y=0.127	20	00100000	32
33	21	White x, White x=0.321	52	01010010	82
34	22	White y, White y=0.33	54	01010100	84
35	23	Established timing 1	00	00000000	0
36	24	Established timing 2	00	00000000	0
37	25	Manufacturer's timings	00	00000000	0
38	26	Standard timing#1 was not used	01	00000001	1
39	27		01	00000001	1
40	28	Standard timing#2 was not used	01	00000001	1
41	29		01	00000001	1
42	2A	Standard timing#3 was not used	01	00000001	1
43	2B		01	00000001	1
44	2C	Standard timing#4 was not used	01	00000001	1
45	2D		01	00000001	1
46	2E	Standard timing#5 was not used	01	00000001	1
47	2F		01	00000001	1
48	30	Standard timing#6 was not used	01	00000001	1
49	31		01	00000001	1
50	32	Standard timing#7 was not used	01	00000001	1
51	33		01	00000001	1
52	34	Standard timing#8 was not used	01	00000001	1
53	35		01	00000001	1
54	36	Detailed timing/monitor(descriptor#1)	00	00000000	0
55	37	1024×600@60Hz: Pixel Clock=51.2MHz	14	00010100	20
56	38	Horizontal active= 1024 pixels (L8b)	00	00000000	0
57	39	Horizontal blanking= 320 pixels (L8b)	40	01000000	64



58	3A	HA(U4b): HB(U4b)	41	01000001	65
59	3B	Vertical active= 600 lines (L8b)	58	01011000	88
60	3C	Vertical blanking= 35 lines (L8b)	23	00100011	35
61	3D	HA(U4b): HB(U4b)	20	00100000	32
62	3E	H sync. Offset=53 pixels	35	00110101	53
63	3F	H sync. Width=35 pixels	23	00100011	35
64	40	V sync. Offset=4 lines	45	01000101	69
65	41	V sync. Width=5 lines	00	00000000	0
66	42	H image size= 220 mm (L8b)	DC	11011100	220
67	43	V image size= 129 mm (L8b)	81	10000001	129
68	44	Horizontal Image (U4b): Vertical Image (U4b)	00	00000000	0
69	45	No Horizontal Border=0	00	00000000	0
70	46	No Vertical Border=0	00	00000000	0
71	47	Non-interlaced, Normal display, No stereo, Digital separate sync, H/V pol Negatives	19	00011001	25
72	48	Detailed timing/monitor(descriptor#2)	44	01000100	68
73	49	1024×600 @65Hz: Pixel Clock= 57MHz	16	00010110	22
74	4A	Horizontal active= 1024 pixels (L8b)	00	00000000	0
75	4B	Horizontal blanking= 340 pixels (L8b)	54	01010100	84
76	4C	HA(U4b): HB(U4b)	41	01000001	65
77	4D	Vertical active= 600 lines (L8b)	58	01011000	88
78	4E	Vertical blanking= 45 lines (L8b)	2D	00101101	45
79	4F	HA(U4b): HB(U4b)	20	00100000	32
80	50	H sync. Offset=93 pixels	5D	01011101	93
81	51	H sync. Width=35 pixels	23	00100011	35
82	52	V sync. Offset=17 lines	15	00010101	21
83	53	V sync. Width=5 lines	04	00000100	4
84	54	H image size= 220 mm (L8b)	DC	11011100	220
85	55	V image size= 129 mm (L8b)	81	10000001	129
86	56	Horizontal Image (U4b): Vertical Image (U4b)	00	00000000	0
87	57	No Horizontal Border=0	00	00000000	0
88	58	No Vertical Border=0	00	00000000	0
89	59	EDID Module revision	00	00000000	0
90	5A	Flag	00	00000000	0
91	5B	Flag	00	00000000	0
92	5C	Flag	00	00000000	0
93	5D	Dummy Descriptor	FE	11111110	254
94	5E	Flag	00	00000000	0
95	5F	PC Maker P/N 1st Character =M	00	00000000	0
96	60	PC Maker P/N 2nd Character =3	00	00000000	0
97	61	PC Maker P/N 3rd Character =4	00	00000000	0
98	62	PC Maker P/N 4th Character =9	00	00000000	0
99	63	PC Maker P/N 5th Character =5	00	00000000	0
100	64	LCD Supplier EEDID Revision # = 1.0	00	00000000	0
101	65	Manufacture P/N = 1	00	00000000	0
102	66	Manufacture P/N = 5	00	00000000	0
103	67	Manufacture P/N = P	00	00000000	0
104	68	Manufacture P/N = X	00	00000000	0
105	69	Manufacture P/N = 1	00	00000000	0
106	6A	Manufacture P/N = 4	00	00000000	0
107	6B	Manufacture P/N(If<13 char, then terminate with ASCII code, set remaining=20h)	00	00000000	0
108	6C	Flag	00	00000000	0
109	6D	Flag	00	00000000	0
110	6E	Flag	00	00000000	0
111	6F	Data Type Tag	FE	11111110	254
112	70	Flag	00	00000000	0
113	71	SMBUS Value = 20 nit	00	00000000	0
114	72	SMBUS Value = 28 nit	00	00000000	0
115	73	SMBUS Value = 40 nit	00	00000000	0
116	74	SMBUS Value = 56 nit	00	00000000	0

117	75	SMBUS Value = 79 nit	00	00000000	0
118	76	SMBUS Value = 111 nit	00	00000000	0
119	77	SMBUS Value = 156 nit	00	00000000	0
120	78	SMBUS Value = max nit	00	00000000	0
121	79	Number of LVDS channels=1	01	00000001	1
122	7A	Panel Self Test (00-Not Present, 01-Present)	00	00000000	0
123	7B	(If<13 char, then terminate with ASCII code 0Ah, set remaining char=20h)	00	00000000	0
124	7C	(If<13 char, then terminate with ASCII code 0Ah, set remaining char=20h)	00	00000000	0
125	7D	(If<13 char, then terminate with ASCII code 0Ah, set remaining char=20h)	00	00000000	0
126	7E	Extension Flag = 00	00	00000000	0
127	7F	Checksum	2E	00101110	46