EVERVISION VGG107617-A

Application

This specification is applied to the 15.0 inch XGA supported TFT-LCD module, and can display true 16.2M colors(8 bit/ color) or 262k colors(6 bit/ color). The module is designed for OA, Car TV application and other electronic products which require flat panel display of digital signal interface. This module is composed of a 15.0” TFT-LCD panel, a driver circuit and backlight unit.

Features

- XGA (1024×768 pixels) resolution.
- 6 bit & 8 bit LVDS Interface
- DE(Data Enable) only mode

General Specifications

Item	Specifications	Unit
Screen Size	15.0 (Diagonal)	inch
Display Format	1024RGB(H)×768(V)	dot
Active Area	304.1(H)×228.1(V)	mm
PIXEL Pitch	0.297(H)×0.297(V)	mm
Pixel Configuration	RGB Vertical Stripe	-
Display Mode	MVA Type / Transmissive Mode / Normally Black	-
Surface Treatment	Anti-Glare(3H)	-
Viewing Direction	Full view angle	-
Outline Dimension	326.5(W)×253.5(H)×9.1(D)	mm
Weight	（962.6.）	g
RoHS Compliance	Eversion certifies this product to be in compliance with European Union Directive 2015/863/EU on the restriction of certain hazardous substances in electrical and electronic equipment.	-

Absolute Maximum Ratings

Absolute Ratings of Environment

Items	Symbol	Values			Unit	Note
		Min.	Typ.	Max.		
Operation temperature	TOP	-30	-	60	℃	Ambient temperature
Storage temperature	TST	-40	-	70	℃	

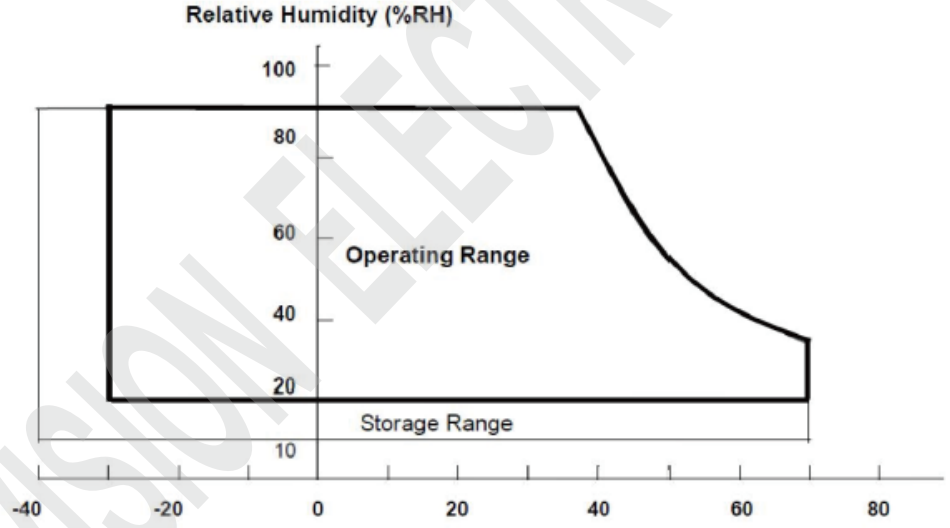
Note: (1) Temperature and relative humidity range is shown in the figure below.

(2) 90 %RH Max. (Ta < 40℃).

(3) Wet-bulb temperature should be 39℃ Max.

(4) No condensation.

(5) The absolute maximum rating values of this product are not allowed to be exceeded at any times. The module should not be used over the absolute maximum rating value. It will cause permanently unrecoverable function fail in such a condition.



Electrical Absolute Ratings

TFT-LCD Module

Items	Symbol	Min.	Max.	Unit	Note
Logic / LCD driver voltage	VCC	-0.3	4.0	Volt	-

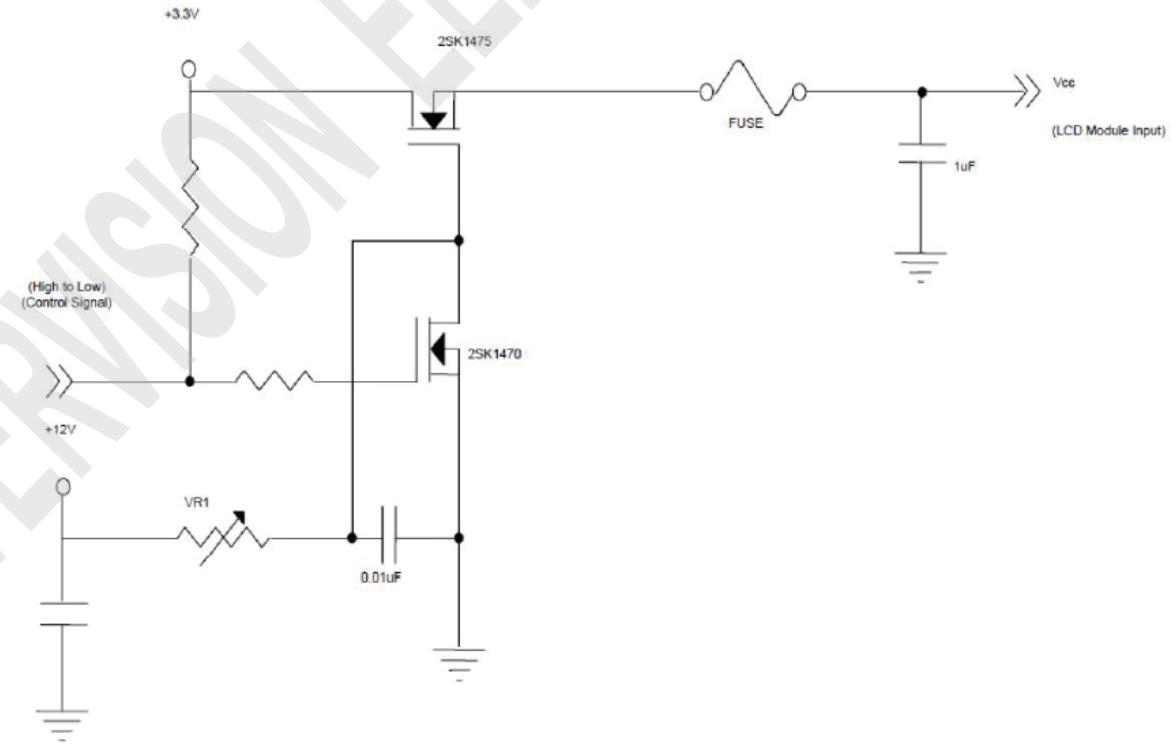
Electrical Characteristics

TFT-LCD Module

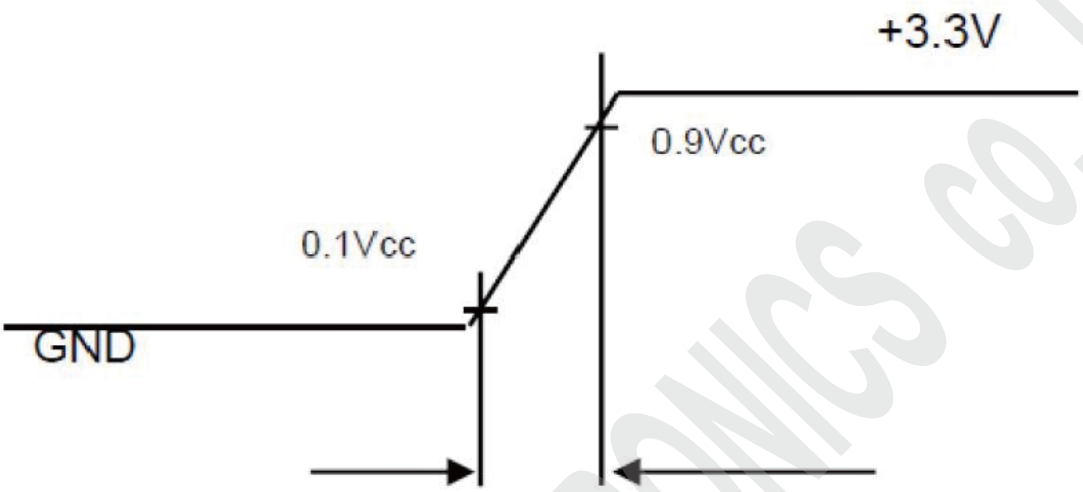
Item		Symbol	Min.	Typ.	Max.	Unit	Note
Power supply		VCC	3.0	3.3	3.6	V	
Rush Current		IRUSH	-	-	2.0	A	(2)
LVDS differential input voltage		VID	200	-	600	mV	
LVDS common input voltage		VIC	1.0	1.2	1.4	mV	
Input Voltage for logic	Differential Input High Threshold	VTH			+100	mV	
	Differential Input Low Threshold	VTL	-100			mV	
Power Supply current		White	-	800	960	mA	(3)a
		Black	-	670	800	mA	(3)b

Note 1: The assembly should be always operated within above ranges.

Note 2: Measurement Conditions:



VCC rising time is 470us



Note (3) The specified power supply current is under the conditions at VCC =3.3V, Ta = 25 ± 2 ℃, DC. Current and fv = 60 Hz, whereas a power dissipation check pattern below is displayed.

a. White Pattern

Active Area

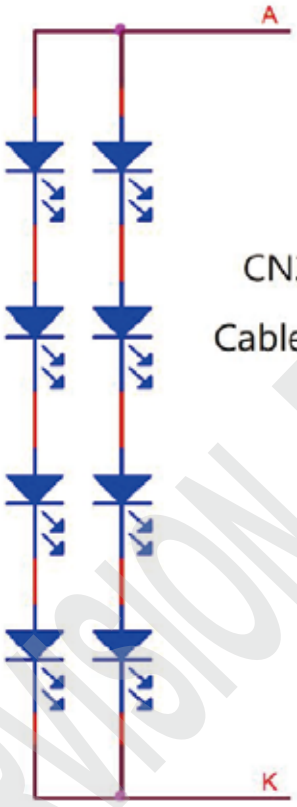
b. Black Pattern

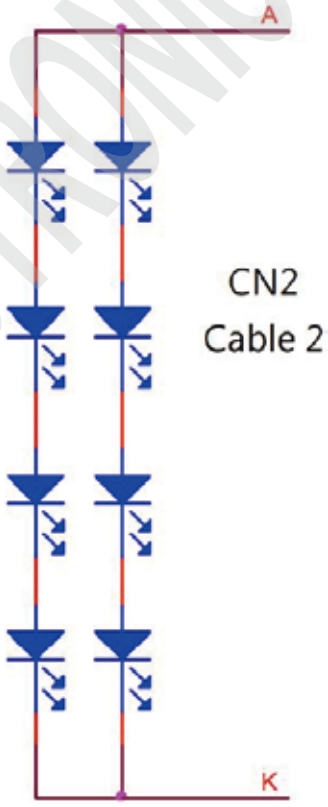
Active Area

Back-light Control(LED CONTROL)

Item	Symbol	Min.	Typ.	Max.	Unit	Note
Power Supply Voltage	V_I	21.2	24	26.4	V	
Power Supply Current	I_I	-	0.56	-	A	Cable 1 + 2
Backlight Power Consumption	PBL	-	13.5	-	W	
LED Life Time		50000	-	-	Hr	(1)

Note 1: The lifetime of LED is defined as the time when it continues to operate under the conditions at Ta = 25 ±2 ℃ and Duty 100% until the brightness becomes ≦ 50% of its original value. Operating LED under high temperature environment will reduce life time and lead to color shift.





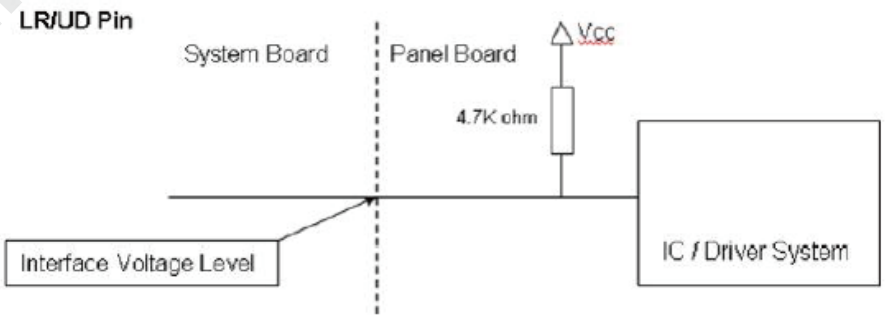
Input / Output Terminals Pin Assignment

TFT-LCD Module(CN1): CviLux CID520D1HR0-NH

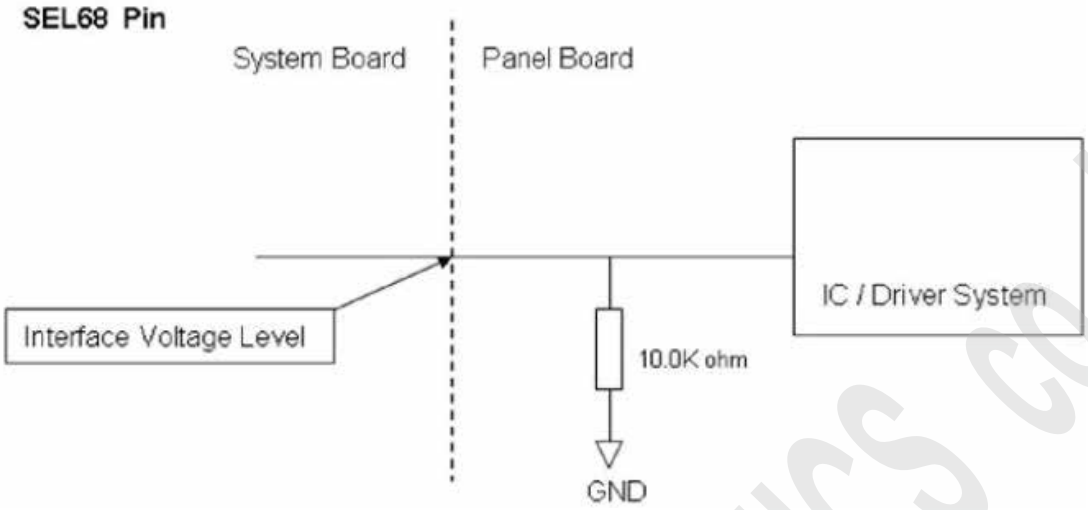
Pin	Symbol	I/O	Function	Note
1	VCC	P	Power Supply, 3.3V (typical)	
2	VCC	P	Power Supply, 3.3V (typical)	
3	GND	P	Ground	
4	LR/UD	I	Reverse Scan Control H or NC = Normal Mode. L = Horizontal/ Vertical Reverse Scan.	(2)
5	RX0-	I	- LVDS differential data input	
6	RX0+	I	+ LVDS differential data input	
7	GND	P	Ground	
8	RX1-	I	- LVDS differential data input	
9	RX1+	I	+ LVDS differential data input	
10	GND	P	Ground	
11	RX2-	I	- LVDS differential data input	
12	RX2+	I	+ LVDS differential data input	
13	GND	P	Ground	
14	RXCLK-	I	- LVDS differential clock input	
15	RXCLK+	I	+ LVDS differential clock input	
16	GND	P	Ground	
17	RX3-	I	- LVDS differential data input	
18	RX3+	I	- LVDS differential data input	
19	GND	P	Ground	
20	SEL68	I	LVDS 6/8 bit select function control, Low or NC → 8 bit Input Mode High → 6 bit Input Mode	(3)

Note 1: "Low" stands for 0V. "High" stands for 3.3V. "NC" stands for "No connection".

Note 2:



Note 3:



Backlight Unit(CN): A20D/HD2-2P OR EQUIVALENT

Pin No.	Symbol	I/O	Description	Wire Color
1	A	I	Backlight LED Anode.	Black
2	K	I	Backlight LED Cathode.	White

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Outline Drawing