

DATASHEET

EVERVISION

— Sunlight Readable TFT

— High Brightness TFT

VGG804823-6UFLWL



Application

This specification is applied to the 8.0 inch WVGA supported TFT-LCD module, and can display true 262,144 colors(8 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 8.0" TFT-LCD panel, a driver circuit and LED backlight unit.

Features

- WVGA (800×480 pixels) resolution.
- Digital 24 bit parallel RGB.
- Dot inversion mode with stripe type.

General Specifications

Item	Specifications	Unit
Screen Size	8.0 (Diagonal)	inch
Display Format	800RGB(H)×480(V)	dot
Active Area	176.64(H)×99.36(V)	mm
Pixel Size	0.0736(H)×0.2070(V)	mm
Pixel Configuration	RGB Vertical Stripe	-
Display Mode	TN Type Transmissive Mode Normally White	-
Surface Treatment	Anti-Glare and Hard Coating(3H)	-
Viewing Direction	6 O'clock (The Gray Inversion will appear at this direction)	-
Outline Dimension	192.8(W)×116.9(H)×9.66(D)	mm

Absolute Maximum Ratings

Absolute Ratings of Environment

Item	Symbol	Value		Unit
		Min.	Max.	
Storage Temperature	T_{ST}	-30	+85	°C
Operating Ambient Temperature	T_{OP}	-30	+85	°C

Electrical Absolute Ratings

($T_a=25\pm2^{\circ}\text{C}$, $\text{GND}=V_{SS}=0\text{V}$)

Item	Symbol	Value		Unit	Note
		Min.	Max.		
Digital Power Supply Voltage	VCC	-0.3	5.0	V	-

LED Driver Absolute Maximum Ratings

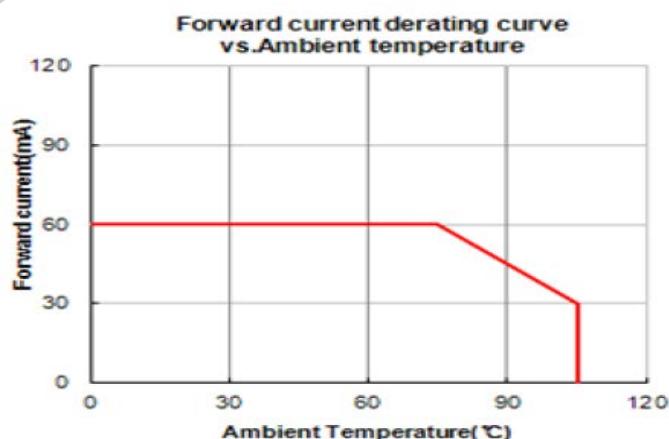
($T_a=25\pm2^{\circ}\text{C}$)

Item	Symbol	Value		Unit	Note
		Min.	Max.		
LED Reverse Voltage	VR	-	1.2	V	IR=10mA
LED Forward Current	IF	-	200	mA	Each LED

Note 1: 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.

Note 2: IF condition: pulse width $\leq 0.1\text{msec}$, duty cycle $\leq 1/10$.

Note 3: Each one operation must be follow diagram of Ambient Temperature and Allowable Forward Current



Electrical Characteristics

TFT-LCD Module

(Ta=25±2°C)

Item	Symbol	Value			Unit
		Min.	Typ.	Max.	
Power Supply Voltage	VCC	3.0	3.3	3.6	V
Power Supply Current	ICC	-	92	128.8	mA
Power Consumption	P _L	-	303.6	425	mW
Input High Threshold Voltage	V _{IH}	0.7 VCC	-	VCC	V
Input Low Threshold Voltage	V _{IL}	0	-	0.3 VCC	V
VSYNC Frequency	F _V	-	60	-	Hz
DCLK Frequency	DCLK	-	33.26	-	MHz

Backlight Unit

(Ta=25±2°C)

Item	Symbol	Value			Unit	Note
		Min.	Typ.	Max.		
Current of Backlight Unit	I _B	-	300	-	mA	-
Voltage of Backlight Unit	V _B	-	(15)	17	V	(1)
Power Consumption	P _{BL}	-	(4.5)	-	W	-
LED Life Time(25°C)	-	50000	-	-	hr	(2)

Note 1: The LED Supply Voltage is defined by the number of LED at Ta=25°C and IL = 300mA.

Note 2: The “LED life time” is defined as the module brightness decrease to 50% original brightness at Ta=25°C and IL =300mA. The LED lifetime could be decreased if operating IL is larger than 300mA.

Input/Output Terminals Pin Assignment

TFT-LCD Module

Connector: CVILUX CF25401D0R0-05 or Equivalent

Pin No.	Symbol	I/O	Description
1	V _{CC}	I	+3.3V power supply
2	V _{CC}	I	+3.3V power supply
3	GND	I	Ground
4	GND	I	Ground
5	MODE	I	DE/SYNC mode select (Note 1)
6	DE	I	Input data enable control
7	VS	I	Vertical Sync Input
8	HS	I	Horizontal Sync Input
9	B7	I	Blue data(MSB)
10	B6	I	Blue data
11	B5	I	Blue data
12	B4	I	Blue data
13	B3	I	Blue data
14	B2	I	Blue data
15	B1	I	Blue data
16	B0	I	Blue data(LSB)
17	G7	I	GREEN data(MSB)
18	G6	I	GREEN data
19	G5	I	GREEN data
20	G4	I	GREEN data

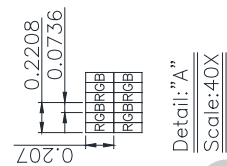
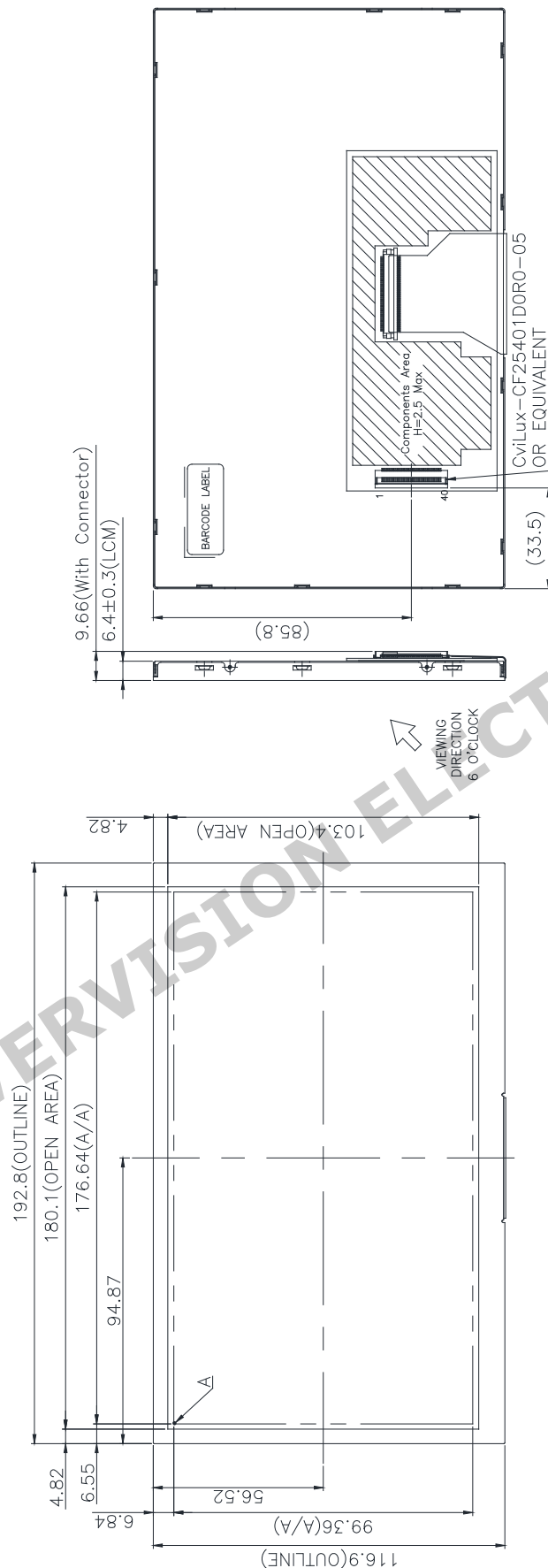
Pin No.	Symbol	I/O	Description
21	G3	I	GREEN data
22	G2	I	GREEN data
23	G1	I	GREEN data
24	G0	I	GREEN data(LSB)
25	R7	I	RED data(MSB)
26	R6	I	RED data
27	R5	I	RED data
28	R4	I	RED data
29	R3	I	RED data
30	R2	I	RED data
31	R1	I	RED data
32	R0	I	RED data (LSB)
33	DCLK	I	Dot Clock
34	VLED+	I	VLED+
35	VLED+	I	VLED+
36	VLED-	I	VLED-
37	VLED-	I	VLED-
38	NC	I	Not Connection
39	NC	I	Not Connection
40	NC	I	Not Connection

Note 1: DE/SYNC mode select. Normally pull high.

When select DE mode, MODE="1", VS and HS must pull high.

When select SYNC mode, MODE= "0", DE must be grounded.

Outline Drawing



Detail: "A"
Scale: 40X