

EVERVISION

TFT Display

DATASHEET

VGG804849-6UFLWB



Application

This specification is applied to the 7 inch WVGA supported TFT-LCD module, and can display true 16.7M colors. This module is composed of a 7" TFT-LCD panel, a driver circuit and backlight unit.

Features

- WVGA (800×480 pixels) resolution.
- Digital 18 bit parallel RGB.
- Transparent Touch panel
 - 4-Wire
 - Analog Resistive

General Specifications

Item	Specifications	Unit
Screen Size	7 (Diagonal)	inch
Display Format	800RGB(H)×480(V)	dot
Active Area	152.40(H)×91.44(V)	mm
Pixel Pitch	0.1905(H)×0.1905(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	166.6(W)×109.4(H)×11.5(D)	mm

Absolute Maximum Ratings

Absolute Ratings of Environment

Item	Symbol	Value		Unit
		Min.	Max.	
Storage Temperature	T _{ST}	-30	+80	°C
Operating Temperature	T _{OP}	-20	+70	°C

Electrical Absolute Ratings

TFT-LCD Module

(Ta=25±2°C, V_{SS}=0V)

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

Backlight Unit

(Ta=25±2°C)

Item	Symbol	Value		Unit
		Min.	Max.	
Current of Backlight Unit	IB	-	250	mA
Voltage of Backlight Unit	VB	-	3.6	V

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	-	105	147	mA
High level input voltage	V _{IH}	0.7VCC	-	VCC	V
Low level input voltage	V _{IL}	VSS	-	0.3VCC	V
VSYNC Frequency	FV	-	60	-	Hz

Backlight Unit

(Ta=25±2°C)

Item	Symbol	Value			Unit	Note
		Min.	Typ.	Max.		
Current of Backlight Unit	IB	-	200	-	mA	-
Voltage of Backlight Unit	VB	-	(9.0)	-	V	IB =200mA,(2)
LED Life Time(25°C)	-	50000	-	-	hr	(1)

Note (1) : LED life time is defined as under 25±2°C , when the average brightness decrease to 50% of original brightness

Note (2) : The BLU is driven by constant current, the voltage value is for reference only.

Transparent Touch panel

Electrical characteristics

Item		Value			Unit	Note
		Min.	Typ.	Max.		
Operating Voltage		3	-	5	V	-
Terminal Resistance	X-direction	200	-	1000	Ω	At connector
	Y-direction	200	-	1000	Ω	At connector
Insulation Resistance		≥ 20MΩ				at DC25V
Chatting		≤ 10 ms				At connector
Linearity		≤ 2%				(1)
Linearity Force		≤120gf less input with stylus pen (R0.8mm) Activation force guarantee area: 3 mm inside of Active Area.				
Activation Force		≤100 gf(Typical 20 gf) less individual point on with stylus pen(R0.8 mm). Activation force guarantee area: 3mm inside of Active Area.				

Input / Output Terminals Pin Assignment

TFT-LCD Module

Connector: JAE FA5B040HP1 or compatible connector

Pin No.	Symbol	I/O	Description
1	VCC	I	Power supply
2	VCC	I	Power supply
3	VCC	I	Power supply
4	VCC	I	Power supply
5	NC	I	No Connect
6	DE	I	Input data enable control
7	VSS	I	Ground
8	NC	I	No Connect
9	VSS	I	Ground
10	NC	I	No Connect
11	VSS	I	Ground
12	B5	I	Blue data(MSB)
13	B4	I	Blue data
14	B3	I	Blue data
15	VSS	I	Ground
16	B2	I	Blue data
17	B1	I	Blue data
18	B0	I	Blue data(LSB)
19	VSS	I	Ground
20	G5	I	GREEN data(MSB)
21	G4	I	GREEN data
22	G3	I	GREEN data
23	VSS	I	Ground
24	G2	I	GREEN data
25	G1	I	GREEN data
26	G0	I	GREEN data(LSB)
27	VSS	I	Ground
28	R5	I	RED data(MSB)
29	R4	I	RED data
30	R3	I	RED data

Pin No.	Symbol	I/O	Description
31	VSS	I	Ground
32	R2	I	RED data
33	R1	I	RED data
34	R0	I	RED data (LSB)
35	NC	I	No Connect
36	VSS	I	Ground
37	VSS	I	Ground
38	DCLK	I	Dot Clock
39	VSS	I	Ground
40	VSS	I	Ground

Backlight Unit

Connector: JST BHSR-02VS-1(N) or compatible connector

Pin No.	Symbol	I/O	Description	Wire Color
1	VLEDA	I	Backlight LED Anode.	Red
2	VLEDC	I	Backlight LED Cathode.	Black

Transparent Touch Panel

Connector: CVILUX CF25041D0R0-10 or compatible connector

Pin No.	Symbol
1	RIGHT
2	TOP
3	LEFT
4	BOTTOM

Technical drawing of a rectangular electronic component, showing multiple views and dimensions.

Top View Dimensions:

- Overall width: 166.6 ± 0.5
- Overall height: 155.5 ± 0.5
- Internal width (T/P A/A): 154.4
- Internal height (T/P A/A): 152.4
- Distance from bottom edge to internal feature: 65.0 ± 1
- Distance from left edge to internal feature: 83.7
- Distance from left edge to internal feature (A/A): 91.44
- Distance from left edge to internal feature (T/P A/A): 93.4
- Distance from left edge to internal feature (A/A): 94.5 ± 0.3
- Distance from left edge to internal feature (T/P outline): 109.4 ± 0.5

Side View Dimensions:

- Overall height: 10.3 ± 0.05
- Stiffener height: 10
- Conductive side height: 0.3

Detail Views:

- View "A":** Shows the component's profile with dimensions $11.5(\text{max})$, $10.0(\text{max})$, and 0.3 . It also shows a viewing direction of 6° clockwise.
- View "B":** Shows the component's profile with dimensions 5.0 ± 0.2 , 3.0 ± 0.1 , 1.0 ± 0.1 , and $W = 0.5 \pm 0.1$. It also shows a viewing direction of 2° clockwise.
- Detail "A":** Shows the component's profile with dimensions 0.1905 , 0.0635 , and 0.1905 .
- Detail "B":** Shows the component's profile with dimensions 0.1905 , 0.0635 , and 0.1905 .

Internal Features and Labels:

- Barcode label
- JST BHSR-02VS-1
- JAE FA5B040HP1
- PIN 1, PIN 2, PIN 3, PIN 4
- XR, YU, XL, YD