Application

This specification is applied to the 8.0 inch SVGA supported TFT-LCD module With projected capacitive touch (PCT) 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

- SVGA (800×600 pixels) resolution.
- Digital 24 bit parallel RGB.
- Dot inversion mode with stripe type.
- Projected Capacitive Touch
  - USB Interface
  - Multi Touch (Ten points)

General Specifications

Item	Specifications	Unit
Screen Size	8.0 (Diagonal)	inch
Display Format	800RGB(H)×600(V)	dot
Active Area	162.0(H)×121.5(V)	mm
Dot Pitch	0.0675(H)×0.2025(V)	mm
Pixel Configuration	RGB Vertical Stripe	-
Display Mode	TN Type Transmissive Mode Normally White	-
Surface Treatment	Clear(7H)	-
Viewing Direction	6 O’clock (The Gray Inversion will appear at this direction)	-
Outline Dimension	183.0(W)×141.0(H)×7.15(D)	mm
Weight	329	g
RoHS Compliance	Eversion certifies this product to be in compliance with European Union Directive 2002/95/EC on the restriction of certain hazardous substances in electrical and electronic equipment.	-

Absolute Maximum Ratings

Absolute Ratings of Environment

Item	Symbol	Value		Unit	Note
		Min.	Max.		
Storage Temperature	T_{ST}	-30	+80	℃	(1)(2)
Operating Ambient Temperature	T_{OP}	-20	+70	℃	(1)(2)

Note1: Background color changes slightly depending on ambient temperature. This phenomenon is reversible.

Note2: Please refer to item of RELIABILITY.

Electrical Absolute Ratings

TFT-LCD Module

(Ta=25±2℃, GND=V_{SS}=0V, Note 1)

Item	Symbol	Value		Unit	Note
		Min.	Max.		
Digital Power Supply Voltage	V_{CC}	-0.3	5.0	V	-
Analog Power Supply Voltage	AV_{DD}	-0.5	13.5	V	-
Gate High Voltage	V_{GH}	13.0	19.0	V	-
Gate Low Voltage	V_{GL}	-12.0	-2.0	V	-
Gate High To Gate Low Voltage	V_{GH} - V_{GL}	-	31.0	V	-

LED Driver Absolute Maximum Ratings

(Ta=25±2℃, Note 1)

Item	Symbol	Value		Unit	Note
		Min.	Max.		
LED Reverse Voltage	VR	-	1.2	V	Each LED (2)
LED Forward Current	IF	-	25	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: VR Conditions: Zener Diode 20mA

Input / Output Terminals Pin Assignment

TFT-LCD Module

Pin No.	Symbol	I/O	Function	Remark
1	LED +	P	LED Anode	
2	LED +	P	LED Anode	
3	LED -	P	LED Cathode	
4	LED -	P	LED Cathode	
5	GND	P	Power ground	
6	V_{COM}	I	Common voltage	
7	V_{CC}	P	Power for Digital circuit	
8	MODE	I	DE/SYNC mode select	Note3
9	DE	I	Data Input Enable	
10	VS	I	Vertical Sync Input	
11	HS	I	Horizontal Sync Input	
12	B7	I	Blue data(MSB)	
13	B6	I	Blue data	
14	B5	I	Blue data	
15	B4	I	Blue data	
16	B3	I	Blue data	
17	B2	I	Blue data	
18	B1	I	Blue data	
19	B0	I	Blue data(LSB)	
20	G7	I	Green data (MSB)	
21	G6	I	Green data	
22	G5	I	Green data	
23	G4	I	Green data	
24	G3	I	Green data	
25	G2	I	Green data	
26	G1	I	Green data	
27	G0	I	Green data (LSB)	
28	R7	I	Red data (MSB)	
29	R6	I	Red data	
30	R5	I	Red data	
31	R4	I	Red data	

32	R3	I	Red data	
33	R2	I	Red data	
34	R1	I	Red data	
35	R0	I	Red data (LSB)	
36	GND	P	Power ground	
37	DCLK	I	Sample clock	
38	GND	P	Power ground	
39	L/R	I	Right/ left selection	Note2,5
40	U/D	I	Up/down selection	Note2,5
41	V_{GH}	P	Gate ON voltage	
42	V_{GL}	P	Gate OFF voltage	
43	AV_{DD}	P	Power for Analog circuit	
44	RESET	I	Global reset pin.	Note1
45	NC	-	No connection	
46	V_{COM}	I	Common voltage	
47	DITHB	I	Dithering function	Note 4
48	GND	P	Power ground	
49	NC	-	No connection	
50	NC	-	No connection	

I: input, O: output, P: Power

Note 1: Global reset pin. Active Low to enter Reset State. Suggest to connecting with an RC reset circuit for stability. Normally pull high.

Note 2: Selection of scanning mode

Setting of scan control input		Scanning direction
U/D	R/L	
GND	V_{CC}	Up to down, left to right
V_{CC}	GND	Down to up, right to left
GND	GND	Up to down, right to left
V_{CC}	V_{CC}	Down to up, left to right

Note 3: DE/SYNC mode select, Normally pull high.

H: DE mode.

L: HS/VS mode.

Projected Capacitive Touch

No.	Symbol	Functions
1	GND	Ground
2	VDD	+5.0V power supply.
3	NC	Not Connected
4	NC	Not Connected
5	NC	Not Connected
6	NC	Not Connected
7	NC	Not Connected
8	D-	Data-
9	D+	Data+
10	GND	Ground

MODEL NO.

VGG806003-6UFLWE-FC

EVERVISION

first FC components

