

Application

This specification is applied to the 13.3 inch FHD supported TFT-LCD module, and can display true 16.7M colors(RGB 8-bits data driver). 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 13.3" TFT-LCD panel, a driver circuit and backlight unit.

Features

- FHD 16:9(1920×1080 pixels) resolution.
- HDMI Interface(Compliance HDMI V1.4 and include HDCP decryption)
- LED driver circuit is built in this module to provide PWM Dimmer function

General Specifications

Item	Specifications	Unit
Screen Size	13.3 (Diagonal)	inch
Display Format	1920RGB(H)×1080(V)	dot
Active Area	293.76(H)×165.24(V)	mm
Pixel Pitch	0.153(H)×0.153(V)	mm
Pixel Configuration	RGB Vertical Stripe	-
Display Mode	IPS Type / Transmissive Mode / Normally Black	-
Surface Treatment	Anti-Glare (3H)	-
Viewing Direction	Full Angle	-
Outline Dimension	307.6(W)×183.05(H)×22.2(D)	mm
Weight	(435)	g
RoHS Compliance	RoHS Compliance	-

▼ Absolute Maximum Ratings

Absolute Ratings of Environment

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

Item	Symbol	Value		Unit	Note
		Min.	Max.		
Power Supply Voltage	VCC	10	14	V	-

Electrical Characteristics TFT-LCD Module

(Ta=25±2°C)

Item	Symbol	Value			Unit	Note
		Min.	Typ.	Max.		
Power Supply Voltage	VCC	11	12	13	V	-
PWM frequency	-	100	-	10K	Hz	-
PWM Duty	-	17	-	100	%	<17%=OFF
PWM Dimming Voltage	VPWM-IH	3.3	-	8	V	-
	VPWM-IL	-	0.3	-	V	-
Power Supply Current	ICC	-	1350	1890	mA	1
LED life time	-	-	50000	-	Hr	2

Note 1: The specified power consumption is under the conditions at VCC =12V,
Whereas a power dissipation check pattern below is displayed.

a. White Pattern



Active Area

Note 2: The "LED life time" is defined as the module brightness decrease to 50% original brightness that the ambient temperature is 25°C 60% RH.

Input / Output Terminals Pin Assignment

HDMI

Connector: HDMI A TYPE:PHD0911A2301E or compatible

No.	Symbol	Description
1	TMDS 2+	TMDS Data2+
2	TMDS Data2 Shield	Ground
3	TMDS 2-	TMDS Data2-
4	TMDS 1+	TMDS Data1+
5	TMDS Data1 Shield	Ground
6	TMDS 1-	TMDS Data1-
7	TMDS 0+	TMDS Data0+
8	TMDS Data0 Shield	Ground
9	TMDS 0-	TMDS Data0-
10	TMDS CLK+	TMDS Clock+
11	TMDS Clock Shield	Ground
12	TMDS CLK-	TMDS Clock-
13	N.C.	Not Connection
14	N.C.	Not Connection
15	DDC_SCL	IIC SCL to EDID ROM
16	DDC_SDA	IIC SDA to EDID ROM
17	GND	Ground
18	HD_5V	+5V Power
19	HPD	Hot Plug Detect

Power Input

Connector: DC JACK:SCD480CCS000B00GE or compatible

No.	Symbol	I/O	Description	Note
1	VCC	P	Power Supply +12V	12.0V 
2	GND	P	Ground	

Back-light Control(LED CONTROL)

Connector: WAFER P2.0mm:2001S-03-RTE or compatible

No.	Symbol	I/O	Description	Note
1	GND	P	Ground	
2	PWM	I	Back-light Dimming control (internal pull up to 3.3V)	1
3	N.C.	-	Not Connection	

Note 1: When PWM not connected, back-light default is typical brightness and normally turn on.

Outline Drawing

