



偉同科技股份有限公司

WAYTON TECHNOLOGY CO.,LTD.



3. General specifications

3.1 General specifications

It is a color active matrix TFT (Thin Film Transistor) liquid crystal display (LCD) that uses the amorphous silicon TFT as a switching devices. This model is composed of a Transmissive type TFT-LCD Panel, a driver circuit and a back-light unit.

3.2 Features

- High image quality a-Si TFT LCD module.
- 16.7M color number.
- Support 24-bits(RGB) input mode
- High contrast, high brightness
- Low power consumption.

3.3 Applications

- PDA
- Hand-held Device

4. Mechanical data

No	Item	Specification	Remark
1	Type	Transmissive	--
2	Display Mode	Normally White	--
3	Pixel Element	a-Si TFT	--
4	Screen Size	3.5inch	--
5	Resolution	320(RGB) x240	--
6	Color Number	16.7M	--
7	Active Area	70.08 (W) x 52.56(H) (mm)	--
8	Pixel Size	0.219 x 0.219 (mm)	--
9	Color Arrangement	RGB-stripe	--
10	Assembly Type	COG	--
11	Back Light	LED(AOT3806)	--
12	Viewing Direction	12 o'clock	--
13	Weight	TBD	--
14	Module Dimension	76.9(W) x 63.9(H) x 3.2(D) (mm)	--
15	Panel Maker	CMI	--

6. Electrical characteristics

(1) TFT-LCD Module

Ta=25°C

Item	Symbol	Min.	Typ.	Max.	Unit	Remark
Power supply voltage	VDDIO	3.0	3.3	3.6	V	--
Operating Current	IDDIO	--	10	12	mA	--
Vcom High Voltage	VCOMH	--	--	4.5	V	--
Vcom Low Voltage	VCOML	-3.0	--	--	V	--

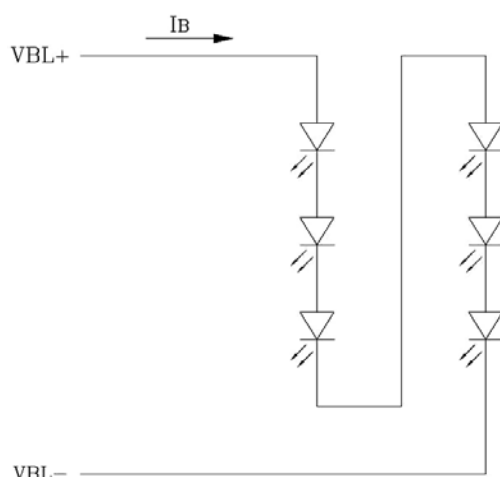
(2) Back-Light Unit

Item	Symbol	Min.	Typ.	Max.	Unit	Remark
Forward Voltage	VB	18.0	19.2	20.4	V	NOTE (1)
Forward current	IB	--	20	--	mA	--
Power Consumption	P _{BL}	--	(420)	--	mW	--
Life Time	Lf	--	(20,000)	--	Hrs	NOTE (2)

NOTE (1) : The LED is serial type.

NOTE (2) : The "LED life time" is defined as the module brightness decreases to 50% of original brightness that the ambient temperature is 25°C and IB=20mA .
The LED lifetime could be decreased if operating IB is larger than 20mA.

NOTE (3) : Back-light circuit



10. Input Terminal Pin Assignment

10.1 Input Signal & Power

Pin no	Symbol	Description	Remark
1	VBL-	Backlight LED ground	-
2	VBL-	Backlight LED ground	-
3	VBL+	Backlight LED power	-
4	VBL+	Backlight LED power	-
5	NC	NO CONNECTION	-
6	NC	NO CONNECTION	-
7	NC	NO CONNECTION	-
8	/RESET	Hardware reset	-
9	SPENA	SPI Interface Data Enable Signal	-
10	SPCLK	SPI Interface Data Clock	-
11	SPDAT	SPI Interface Data	-
12	B0	Blue data bit 0	-
13	B1	Blue data bit 1	-
14	B2	Blue data bit 2	-
15	B3	Blue data bit 3	-
16	B4	Blue data bit 4	-
17	B5	Blue data bit 5	-
18	B6	Blue data bit 6	-
19	B7	Blue data bit 7	-
20	G0	Green data bit 0	-
21	G1	Green data bit 1	-
22	G2	Green data bit 2	-
23	G3	Green data bit 3	-
24	G4	Green data bit 4	-
25	G5	Green data bit 5	-
26	G6	Green data bit 6	-
27	G7	Green data bit 7	-
28	R0	Red data bit 0	-
29	R1	Red data bit 1	-
30	R2	Red data bit 2	-
31	R3	Red data bit 3	-
32	R4	Red data bit 4	-
33	R5	Red data bit 5	-

Pin no	Symbol	Description	Remark
34	R6	Red data bit 6	-
35	R7	Red data bit 7	-
36	HSYNC	Horizontal sync input	-
37	VSYNC	Vertical sync input	-
38	DOTCLK	Dot data clock	-
39	NC	NO CONNECTION	-
40	NC	NO CONNECTION	-
41	VDDIO	Digital power	-
42	VDDIO	Digital power	-
43	NC	NO CONNECTION	-
44	NC	NO CONNECTION	-
45	NC	NO CONNECTION	-
46	NC	NO CONNECTION	-
47	NC	NO CONNECTION	-
48	NC	NO CONNECTION	-
49	NC	NO CONNECTION	-
50	NC	NO CONNECTION	-
51	NC	NO CONNECTION	-
52	ENB	Data enable control	-
53	VSS	Ground	-
54	VSS	Ground	-