

7.0 inch TFT LCD



PROFILE

- Type: TN TFT/Normal White
- Display format: 800(RGB)×480
- Controller IC: EK97716/EK73202
- Interface: RGB 24bit
- +3.3V power supply
- Touch panel optional

FEATURES

NO.	ITEM	SPECIFICATION	UNIT
1	Panel Size	7.0	inch
2	Outline Dimension	164.9(W) x 100.0(H) x 5.5(T)	mm
	Viewing Area	156.88 x 89.12	mm
3	Active Area	153.84 x 85.632	mm
4	Number of Pixels	800(H) × 3(RGB) × 480(V)	pixels
5	Pixel Pitch	0.0641(H) × 0.1784(V)	mm
6	Pixel arrangement	RGB vertical stripe	-
7	Display Mode	Normal White	-
8	Viewing Direction	6 O'clock	-
9	Display Color	16.7M	-
10	Luminance(cd/m2)	500(TYP.)	nit
11	Contrast Ratio	500(TYP.)	-
13	Interface	RGB 24bit	-
15	Backlight	White LED	-
16	Drive IC	K7320EK97716/EK73202	-
18	Operation Temperature	-20~70	°C
19	Storage Temperature	-30~80	°C

MECHANICAL DATA		
ITEM	STANDARD VALUE	UNIT
Module Dimension	164.9 x 100.0	mm
Viewing Area	156.88 x 89.12	
Active Area	153.84 x 85.632	
Pixel Pitch	0.0641 × 0.1784	
Height	5.5	

ABSOLUTE MAXIMUM RATINGS					
ITEM	SYMBOL	MIN	TYP	MAX	UNIT
Digital Supply Voltage	VDD	3.0	3.3	3.6	V
Common Electrode Voltage	VCOM	3.5	3.8	4.2	

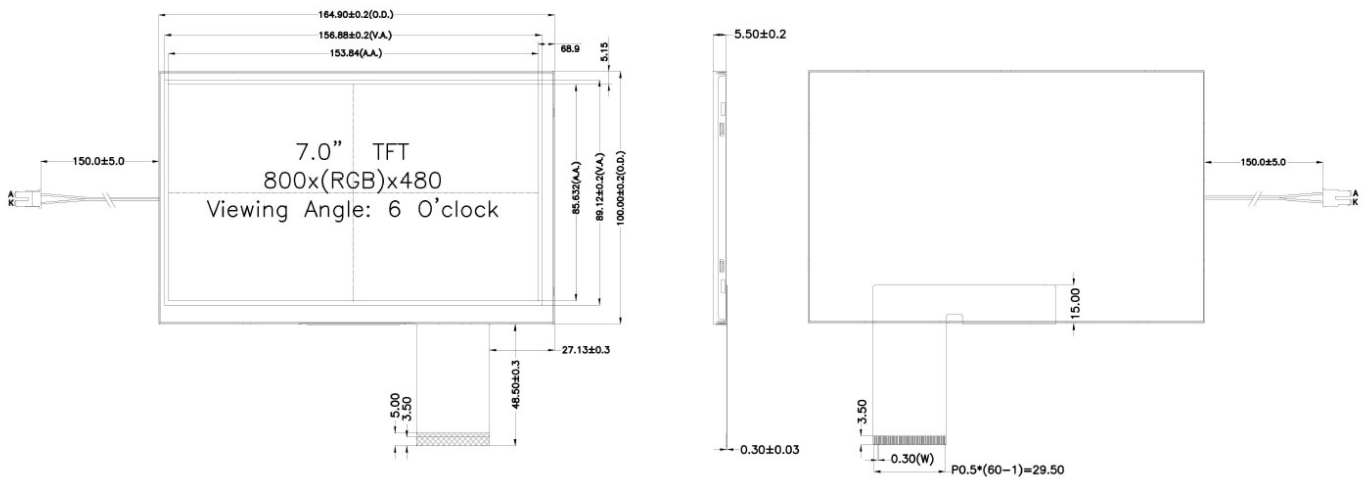
ELECTRICAL CHARACTERISTICS						
ITEM	SYMBOL	CONDITION	STANDARD VALUE			UNIT
			MIN	TYP	MAX	
Digital Supply Voltage	VDD	Ta =25℃	3.0	3.3	3.6	V
Common Electrode Voltage	VCOM		3.5	3.8	4.2	
LED Forward Voltage	Vf	Ta =25℃	-	9.0	-	V
LED Forward Current	If		-	180	-	mA

For detailed information, please refer to the “Product Numbering System” document.

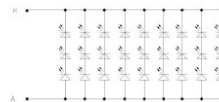
PIN DESCRIPTION		
NO.	SYMBOL	FUNCTION
1	GND	Power ground
2	AVDD	Analog power
3	VCC	Digital power
4	R0	Red data (LSB)
5	R1	Red data
6	R2	Red data
7	R3	Red data
8	R4	Red data
9	R5	Red data
10	R6	Red data
11	R7	Red data (MSB)
12	G0	Green data (LSB)
13	G1	Green data
14	G2	Green data
15	G3	Green data
16	G4	Green data
17	G5	Green data
18	G6	Green data
19	G7	Green data (MSB)
20	B0	Blue data (LSB)
21	B1	Blue data
22	B2	Blue data
23	B3	Blue data

24	B4	Blue data
25	B5	Blue data
26	B6	Blue data
27	B7	Blue data (MSB)
28	DCLK	Clock for input data
29	DE	Data enable signal
30	HSYNC	Horizontal sync input. Negative polarity
31	VSYSN	Vertical sync input. Negative polarity
32	MODE	DE/SYNC mode select. Normally pull high H: DE mode. L: HSD/VSD mode
33	RSTB	Global reset pin. Active low to enter reset state. Suggest to connecting with an RC reset circuit for stability. Normally pull high. (R=10K Ω , C=1 μ F)
34	STBYB	Display on/off
35	SHLR	Left / Right display control
36	VCC	Digital power
37	UPDN	Up / Down display control
38	GND	Power ground
39	GND	Power ground
40	AVDD	Analog power
41	VCOM	Common Voltage
42	DITH	Dithering setting, H: 6 bit resolution, L: 8 bit resolution
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	NC	No connection
53	NC	No connection
54	NC	No connection
55	NC	No connection
56	VGH	Positive power for TFT
57	VCC	Digital power
58	VGL	Negative power for TFT
59	GND	Power ground
60	NC	No connection

DIMENSIONS in millimeters



LED CIRCUIT DIAGRAM



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