



RAYSTAR

曜凌光電股份有限公司

Web: www.raystar-optronics.com E-mail: sales@raystar-optronics.com

RFF80B-AIW-DNN

SPECIFICATION

General Specifications

- Dot Matrix: 800 x RGB x 480(TFT)
- Module dimension: 192.80 x 116.90 x 6.4 mm
- Active area: 176.64 x99.36 mm
- Dot pitch: 0.0736 x 0.2070 mm
- LCD type: TFT, Normally White, Transmissive
- View Direction: 12 o'clock
- Gray Scale Inversion Direction: 6 o'clock
- Backlight Type: LED, Normally White

*Color tone slight changed by temperature and driving voltage.

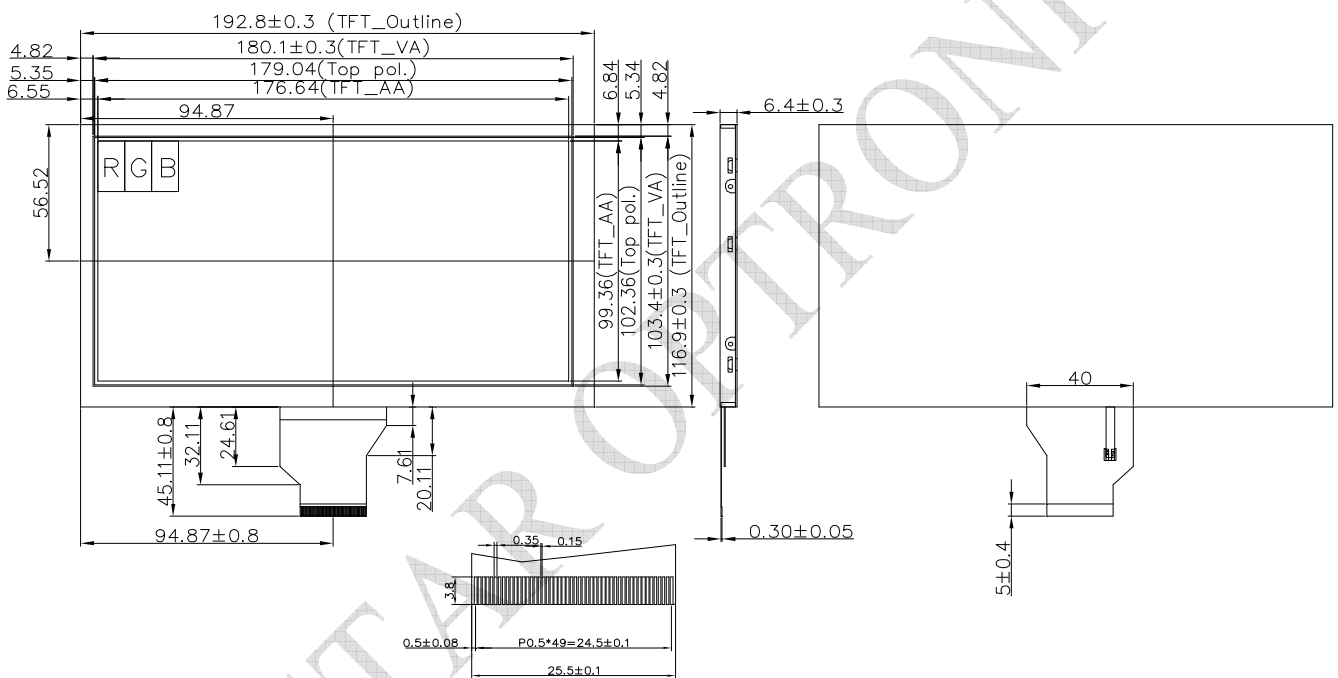
Interface

LCM PIN Definition

Pin	Symbol	I/O	Function
1	VLED+	P	Power for LED backlight(Anode)
2	VLED+	P	Power for LED backlight(Anode)
3	VLED-	P	Power for LED backlight(Cathode)
4	VLED-	P	Power for LED backlight(Cathode)
5	GND	P	Power ground
6	VCOM	I	Common voltage
7	DVDD	P	Power for Digital Circuit
8	MODE	I	DE/SYNC mode select
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	Left / right selection
40	U/D	I	Up/down selection
41	VGH	P	Gate ON Voltage
42	VGL	P	Gate OFF Voltage

43	AVDD	P	Power for Analog Circuit
44	RESET	I	Global reset pin.
45	NC	-	No connection
46	VCOM	I	Common Voltage
47	DITHB	I	Dithering function
48	GND	P	Power Ground
49	NC	-	No connection
50	NC	-	No connection

Contour Drawing



Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	T _{OP}	-30	—	+85	°C
Storage Temperature	T _{ST}	-30	—	+85	°C
Power voltage	DVDD	-0.3	—	5.0	V
	AVDD	6.5	—	13.5	V
	VGH	-0.3	—	40.0	V
	VGL	-20.0	—	0.3	V
	VGH-VGL	-	—	40.0	V

Electrical Characteristics

Operating conditions

Item	Symbol	Min	Typ	Max	Unit
Power voltage	DVDD	3.0	3.3	3.6	V
	AVDD	10.2	10.4	10.6	V
	VGH	15.3	16.0	16.7	V
	VGL	-7.7	-7.0	-6.3	V
Input signal voltage	VCOM	3.4	4.4	5.4	V
Input logic high voltage	VIH	0.7 DVDD		DVDD	V
Input logic low voltage	VIL	0		0.3 DVDD	V

LED driving conditions

Parameter	Symbol	Min	Typ	Max	Unit
LED current	IL	216	240	264	mA
Power Consumption	—	1814.4	2232	2692.8	mW
LED voltage	VBL+	8.4	9.3	10.2	V
LED Life Time	—	20,000	—	—	Hr