



RAYSTAR

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RFJ280E-ALW-DNF

General Specifications

- Size: 2.8"
- Dot Matrix: 240 x RGB x 320(TFT) dots
- Module dimension: 50.0(W) x 69.2(H) x 3.42(D) mm
- Active area: 43.2 x 57.6 mm
- Dot pitch: 0.06 x 0.18 mm
- LCD type: TFT, Normally White, Transmissive
- Control IC: ILI9341
- Interface: 8-bit/16-bit CPU (build in controller)
- View Direction: 6 o'clock
- Gray Scale Inversion Direction: 12 o'clock
- Aspect Ratio: Portrait
- Backlight Type: LED, Normally White
- PCAP IC: FT6336G
- PCAP Interface: I2C
- Touch Panel: Projected Capacitive Touch Panel, PCAP
- Surface: Glare

Interface

LCM PIN Definition

NO	Symbol	Function	I/O
1~4	DB8~DB11	Data bus	I/O
5	GND	Ground	P
6	IOVCC	power supply	P
7	/CS	Chip select signal.	I
8	RS	register select	I
9	/WR	Write data when WRX is Low.	I
10	/RD	Read strobe signal. Read out data when RDX is Low.	I
11	GND	Ground	P
12	NC	No connection	-
13	NC	No connection	-
14	NC	No connection	-
15	NC	No connection	-
16	LED A	Anode of LED backlight.	P
17~20	LED K1~4	Cathode of LED backlight.	P
21	IM0	IM0=0 8Bit DB0-7; IM0=1 16Bit DB0-DB15	P
22	DB12	Data bus	I/O
23~30	DB0~DB7	Data bus	I/O
31	/RESET	System reset pin.	I
32~33	VCI	power supply	P
34	GND	Ground	P
35~37	DB13~DB15	Data bus	I/O

PCAP PIN Definition

Pin	Symbol	Function
1	VSS	Ground for analog circuit
2	VDDT	Power Supply : +3.3V
3	SCL	I2C clock input
4	NC	No connect
5	SDA	I2C data input and output
6	NC	No connect
7	/RST	External Reset, Low is active
8	NC	No connect
9	/INT	External interrupt to the host
10	VSS	Ground for analog circuit

TP & TFT OUTLINE 50.0±0.5

TP VA 44.90
TFT AA 43.20

2.55±0.5 (3.40)

2.20±0.5 (3.05)

TP & TFT OUTLINE 69.20±0.5

TP VA 59.30
TFT AA 57.60

RGB

240 x RGB x 320

Black printing

Pull tape

4-R1.00

Component Area

0.40±0.05

2.00

22.75±0.5

37°

2-R0.50

49.56±0.5

10

3.50

0.35±0.05

4.50±0.1

4.60±0.5

5.50±0.1

3.42±0.5

2.30±0.2

1.35MAX

Contact side

Stiffener

0.1±0.03

0.30±0.05

2-3.00

D.S.T(T0.05mm)

(6.40)

43.00

COMPONENT AREA

COMPONENT AREA

20.80

67

6.70

1.70

1.00

1.50

3.39

32.25

30.70

34.82

42.88

5.00

4.11±0.5

Steel stiffener

P0.8*36=28.80±0.1

PIN NO.	SYMBOL	PIN NO.	SYMBOL
1	DB8	21	IMO
2	DB9	22	DB12
3	DB10	23	DB0
4	DB11	24	DB1
5	GND	25	DB2
6	IOVCC	26	DB3
7	/CS	27	DB4
8	RS	28	DB5
9	/WR	29	DB6
10	/RD	30	DB7
11	GND	31	/RESET
12	NC	32	VCI
13	NC	33	VCI
14	NC	34	GND
15	NC	35	DB13
16	LED-A	36	DB14
17	LED-K1	37	DB15
18	LED-K2		
19	LED-K3		
20	LED-K4		

PIN NO.	SYMBOL
1	VSS
2	VDDT
3	SCL
4	NC
5	SDA
6	NC
7	/RST
8	NC
9	/INT
10	VSS

The non-specified tolerance of dimension is ±0.3 mm .

Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-20	—	+70	°C
Storage Temperature	TST	-30	—	+80	°C

Electrical Characteristics

Operating conditions:

Item	Symbol	Condition	Min	Typ	Max	Unit
Supply Voltage For Analog	VCI	—	2.5		3.3	V
Supply Voltage For Logic	IOVCC		1.65		3.3	V
Supply Current For LCM	ICC	—	—	5	7.5	mA
Supply Voltage For Touch Logic	VDDT	—	3.0	3.3	3.6	V