Winstar Display Co., LTD
華凌光電股份有限公司
WEB: https://www.winstar.com.tw E-mail: sales@winstar.com.tw

SPECIFICATION

MODULE NO.: WF70-800480A9D#0SPW1-FC

General Specifications

Item	Dimension	Unit
Size	7.0	inch
Dot Matrix	800 x RGB x 480(TFT)	dots
Module dimension	165.8 (W) x 106.61 (H) x 8.0(D)	mm
Active area	152.40 x 91.44	mm
Pixel pitch	0.1905 x 0.1905	mm
LCD type	TFT, Normally Black, Transmissive	
View Direction	80/80/80/80	
TFT Interface	24-bit RGB	
TFT Driver IC	HX8249-A + HX8678-C or Equivalent	
Aspect Ratio	15:9	
Backlight Type	LED, Normally White	
Touch Panel	Resistive Touch Screen	
Surface	Anti-Glare	

*Color tone slight changed by temperature and driving voltage.

Represented by:
first FC components
FIRST Components srl Via Cavour 69, 21020 Buguggiate (VA)
T. +39 0332 1888005 web: www.first-components.com

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Absolute Maximum Ratings

Item	Symbol	Min	Typ	Max	Unit
Operating Temperature	TOP	-30	—	+80	℃
Storage Temperature	TST	-30	—	+80	℃

Electrical Characteristics

Operating conditions

Item	Symbol	Min	Typ	Max	Unit
Supply Voltage	Vcc	2.7	3.3	3.6	V
Current of power supply	Icc	—	101	150	mA

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Interface

1.LCM PIN Definition

Pin	Symbol	Function	Remark
1-4	NC	No connection	
5	GND	Power Ground	
6	NC	No connection	
7	VCC	Power voltage	
8	MODE	Input timing mode selection. MODE / Function / Note 0 / DE only / - 1 / HS+VS / Default	
9	DE	Data enable signal for TTL mode.	
10	VS	Vertical sync input	
11	HS	Horizontal sync input	
12	B7	Blue data(MSB)	
13	B6	Blue data	
14	B5	Blue data	
15	B4	Blue data	
16	B3	Blue data	
17	B2	Blue data	
18	B1	Blue data	
19	B0	Blue data(LSB)	
20	G7	Green data(MSB)	
21	G6	Green data	
22	G5	Green data	
23	G4	Green data	
24	G3	Green data	
25	G2	Green data	
26	G1	Green data	
27	G0	Green data(LSB)	
28	R7	Red data(MSB)	
29	R6	Red data	
30	R5	Red data	
31	R4	Red data	

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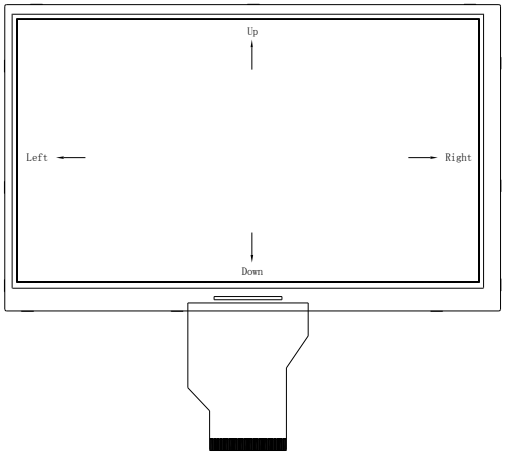
<table>
<tr><td>32</td><td>R3</td><td>Red data</td><td></td></tr>
<tr><td>33</td><td>R2</td><td>Red data</td><td></td></tr>
<tr><td>34</td><td>R1</td><td>Red data</td><td></td></tr>
<tr><td>35</td><td>R0</td><td>Red data (LSB)</td><td></td></tr>
<tr><td>36</td><td>GND</td><td>Power Ground</td><td></td></tr>
<tr><td>37</td><td>DCLK</td><td>Sample clock</td><td></td></tr>
<tr><td>38</td><td>GND</td><td>Power Ground</td><td></td></tr>
<tr><td>39</td><td>L/R</td><td>Horizontal shift direction (source output) selection.<table><tr><th>L/R</th><th>Source output sequence and data order</th><th>Note</th></tr><tr><td>1</td><td>Left to right</td><td>Default</td></tr><tr><td>0</td><td>Right to left</td><td>-</td></tr></table></td><td>Note1</td></tr>
<tr><td>40</td><td>U/D</td><td>Vertical shift direction (gate output) selection.<table><tr><th>U/D</th><th>Function</th><th>Note</th></tr><tr><td>1</td><td>Top→bottom</td><td>Default</td></tr><tr><td>0</td><td>Bottom→top</td><td>-</td></tr></table></td><td>Note2</td></tr>
<tr><td>41</td><td>NC</td><td>No connection</td><td></td></tr>
<tr><td>42</td><td>NC</td><td>No connection</td><td></td></tr>
<tr><td>43</td><td>NC</td><td>No connection</td><td></td></tr>
<tr><td>44</td><td>RESET</td><td>Reset pin. The chip is in reset state when RESETB=0.</td><td></td></tr>
<tr><td>45</td><td>NC</td><td>No connection</td><td></td></tr>
<tr><td>46</td><td>NC</td><td>No connection</td><td></td></tr>
<tr><td>47</td><td>DITHB</td><td>STBYB Standby mode setting pin. The chip is in standby mod e when STBYB=0.</td><td></td></tr>
<tr><td>48</td><td>GND</td><td>Power Ground</td><td></td></tr>
<tr><td>49</td><td>NC</td><td>No connection</td><td></td></tr>
<tr><td>50</td><td>NC</td><td>No connection</td><td></td></tr>
</table>

Note 1: Selection of scanning mode

Setting of scan control input		**Scanning direction**
U/D	**L/R**	
1	1	Top to Bottom, left to right
1	0	Top to Bottom, right to left
0	0	Bottom to Top, right to left
0	1	Bottom to Top, left to right

Note 2: Definition of scanning direction.
Refer to the figure as below:

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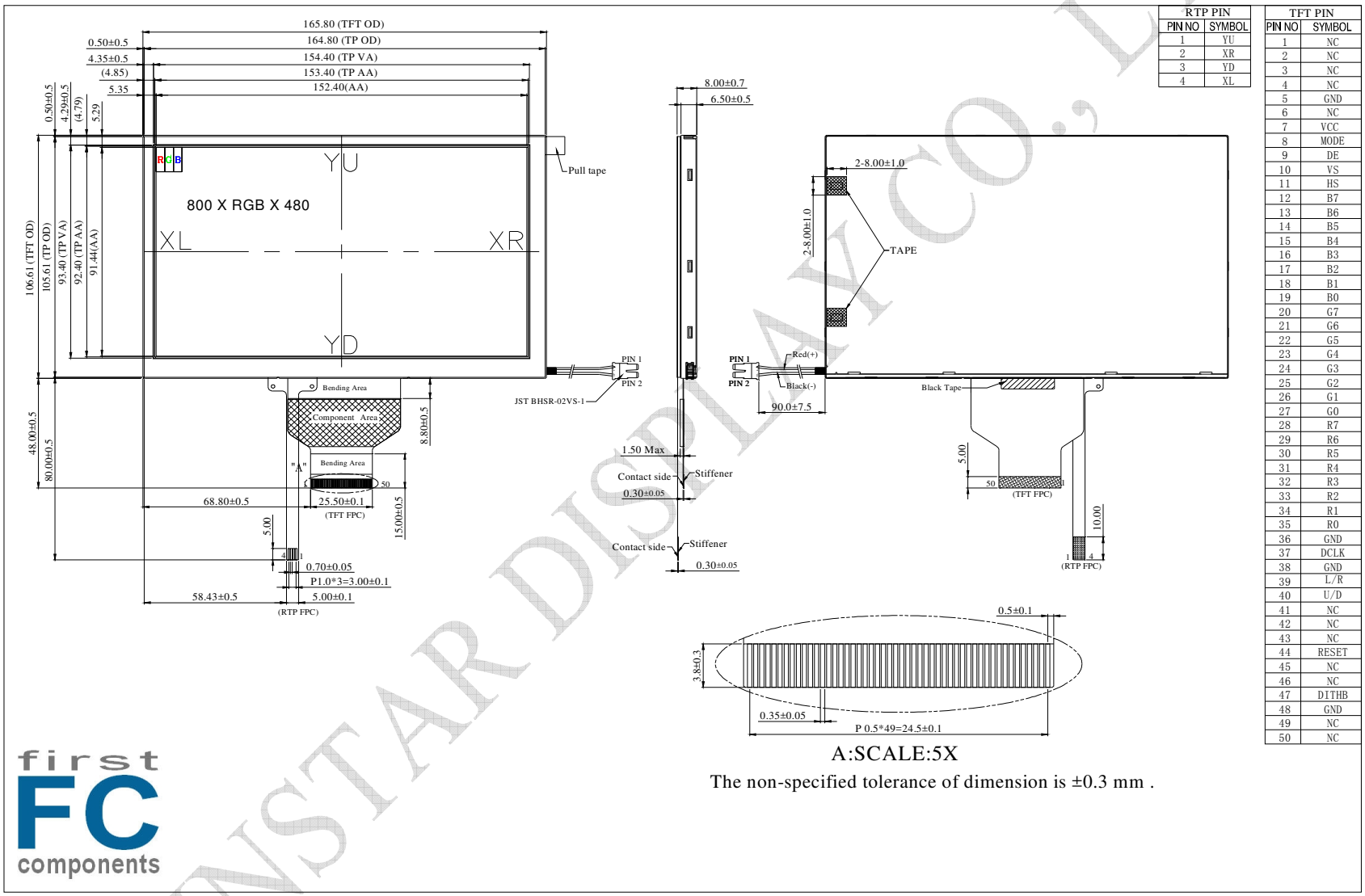


2. Backlight PIN Definition

Pin	Symbol	Description
1	VLED+	Red, LED_ Anode
2	VLED-	Black, LED_ Cathode

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Contour Drawing



RTP PIN	
PIN NO	SYMBOL
1	YU
2	XR
3	YD
4	XL

TFT PIN	
PIN NO	SYMBOL
1	NC
2	NC
3	NC
4	NC
5	GND
6	NC
7	VCC
8	MODE
9	DE
10	VS
11	HS
12	B7
13	B6
14	B5
15	B4
16	B3
17	B2
18	B1
19	B0
20	G7
21	G6
22	G5
23	G4
24	G3
25	G2
26	G1
27	G0
28	R7
29	R6
30	R5
31	R4
32	R3
33	R2
34	R1
35	R0
36	GND
37	DCLK
38	GND
39	L/R
40	U/D
41	NC
42	NC
43	NC
44	RESET
45	NC
46	NC
47	DITHB
48	GND
49	NC
50	NC

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