Winstar Display Co., LTD
華凌光電股份有限公司
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SPECIFICATION

MODULE NO.: WF70-800480A9D#0SPW0-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 6.5(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	Without Touch Panel	
Surface	Anti-Glare	

*Color tone slight changed by temperature and driving voltage.

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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	IDD	—	101	150	mA

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Interface

LCM PIN Definition

Pin	Symbol	Function
1-4	NC	No connection
5	GND	Power Ground
6	NC	No connection
7	VCC	Power voltage
8	NC (MODE)	Input timing mode selection. Effective when FCS=1. 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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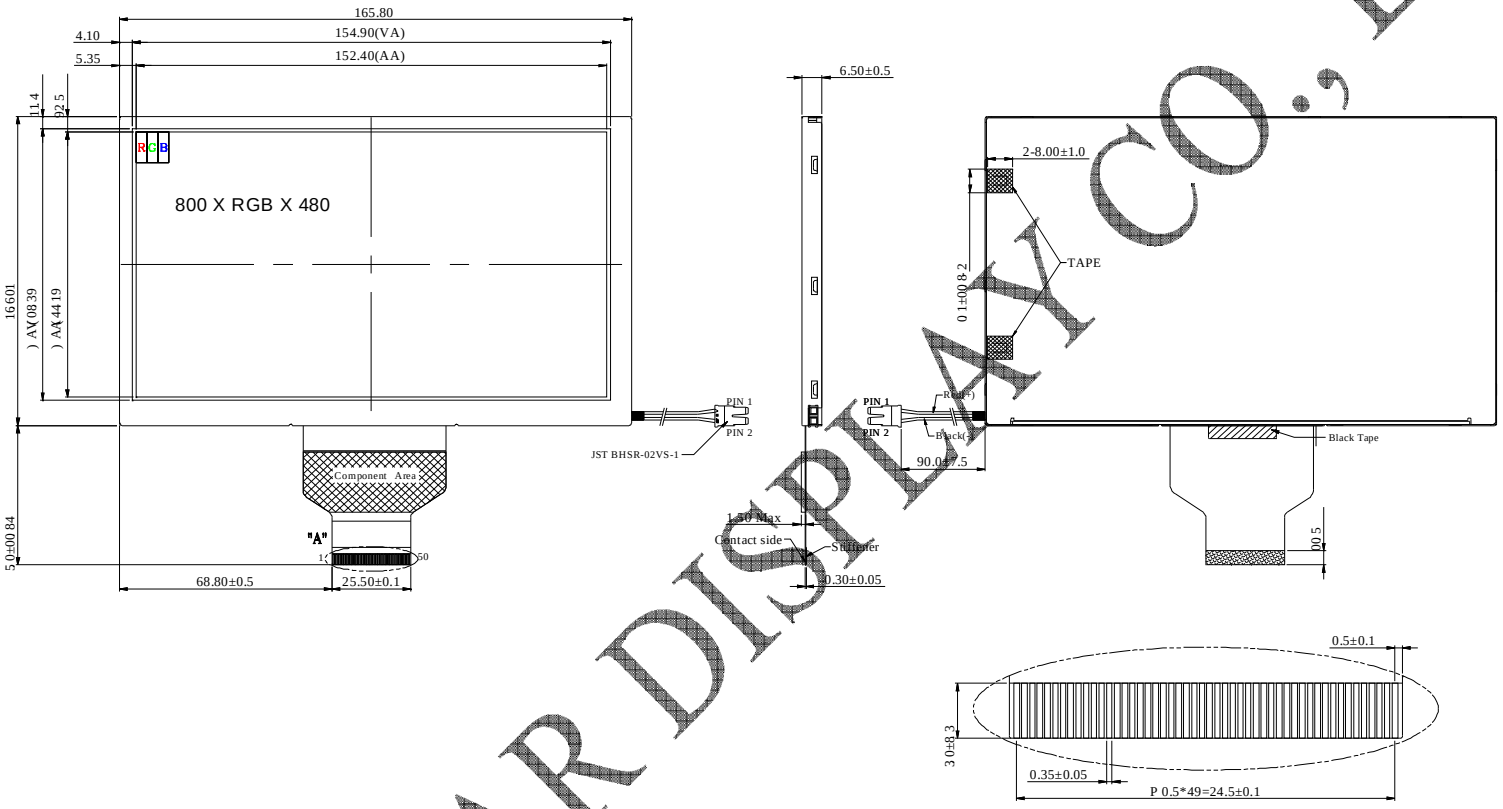
<table>
<tr><td>32</td><td>R3</td><td>Red data</td></tr>
<tr><td>33</td><td>R2</td><td>Red data</td></tr>
<tr><td>34</td><td>R1</td><td>Red data</td></tr>
<tr><td>35</td><td>R0</td><td>Red data (LSB)</td></tr>
<tr><td>36</td><td>GND</td><td>Power Ground</td></tr>
<tr><td>37</td><td>DCLK</td><td>Sample clock</td></tr>
<tr><td>38</td><td>GND</td><td>Power Ground</td></tr>
<tr><td>39</td><td>NC
(L/R)</td><td>Horizontal shift direction (source output) selection. Effective when FCS=1.
<table>
<tr><th>L/R</th><th>Source output sequence and data order</th><th>Note</th></tr>
<tr><td>1</td><td>SOUT1→SOUT2→ …→ SOUT2400</td><td>Default</td></tr>
<tr><td>0</td><td>SOUT2400→SOUT2399→ …→ SOUT1</td><td>-</td></tr>
</table></td></tr>
<tr><td>40</td><td>NC
(U/D)</td><td>Vertical shift direction (gate output) selection. Effective when FCS=1.
<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></tr>
<tr><td>41</td><td>NC</td><td>No connection</td></tr>
<tr><td>42</td><td>NC</td><td>No connection</td></tr>
<tr><td>43</td><td>NC</td><td>No connection</td></tr>
<tr><td>44</td><td>RESET</td><td>Reset pin. The chip is in reset state when RESETB=0.</td></tr>
<tr><td>45</td><td>NC</td><td>No connection</td></tr>
<tr><td>46</td><td>NC</td><td>No connection</td></tr>
<tr><td>47</td><td>DITHB</td><td>STBYB Standby mode setting pin. The chip is in standby mode when S TBYB=0.</td></tr>
<tr><td>48</td><td>GND</td><td>Power Ground</td></tr>
<tr><td>49</td><td>NC</td><td>No connection</td></tr>
<tr><td>50</td><td>NC</td><td>No connection</td></tr>
</table>

Backlight PIN Definition

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

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Contour Drawing



A:SCALE:5X

PIN NO	SYMBOL
1	NC
2	NC
3	NC
4	NC
5	GND
6	NC
7	VCC
8	MODE NC
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 NC
40	U/D NC
41	NC
42	NC
43	NC
44	RESET
45	NC
46	NC
47	DITHB
48	GND
49	NC
50	NC

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

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