TFT DISPLAY SPECIFICATION



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SPECIFICATION

MODULE NO.: WF70-800480A9D#0SPW3-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 8.5(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	
PCAP IC	ILI 2130 or Equivalent	
PCAP Interface	I2C	
PCAP FW Version	0x07.0x00. 0x00. 0x00. 0x00. 0x07. 0x68. 0xA1	
PCAP Resolution	16384*16384	
Touch Panel	Projected Capacitive Touch Panel (PCAP)	
Surface	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	-40	—	+85	℃

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
Supply PCAP	VDDT	3.1	3.3	3.5	V
	I_{VDDT}	—	62	93	mA

LED driving conditions

Parameter	Symbol	Min	Typ	Max	Unit
LED current	—	—	450	—	mA
LED voltage	VLED+	8.1	9.3	10.2	V
LED Life Time	—	40000	—	—	Hr

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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	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)

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<table>
<tr><td>28</td><td>R7</td><td>Red data(MSB)</td></tr>
<tr><td>29</td><td>R6</td><td>Red data</td></tr>
<tr><td>30</td><td>R5</td><td>Red data</td></tr>
<tr><td>31</td><td>R4</td><td>Red data</td></tr>
<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>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></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></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 m ode when STBYB=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

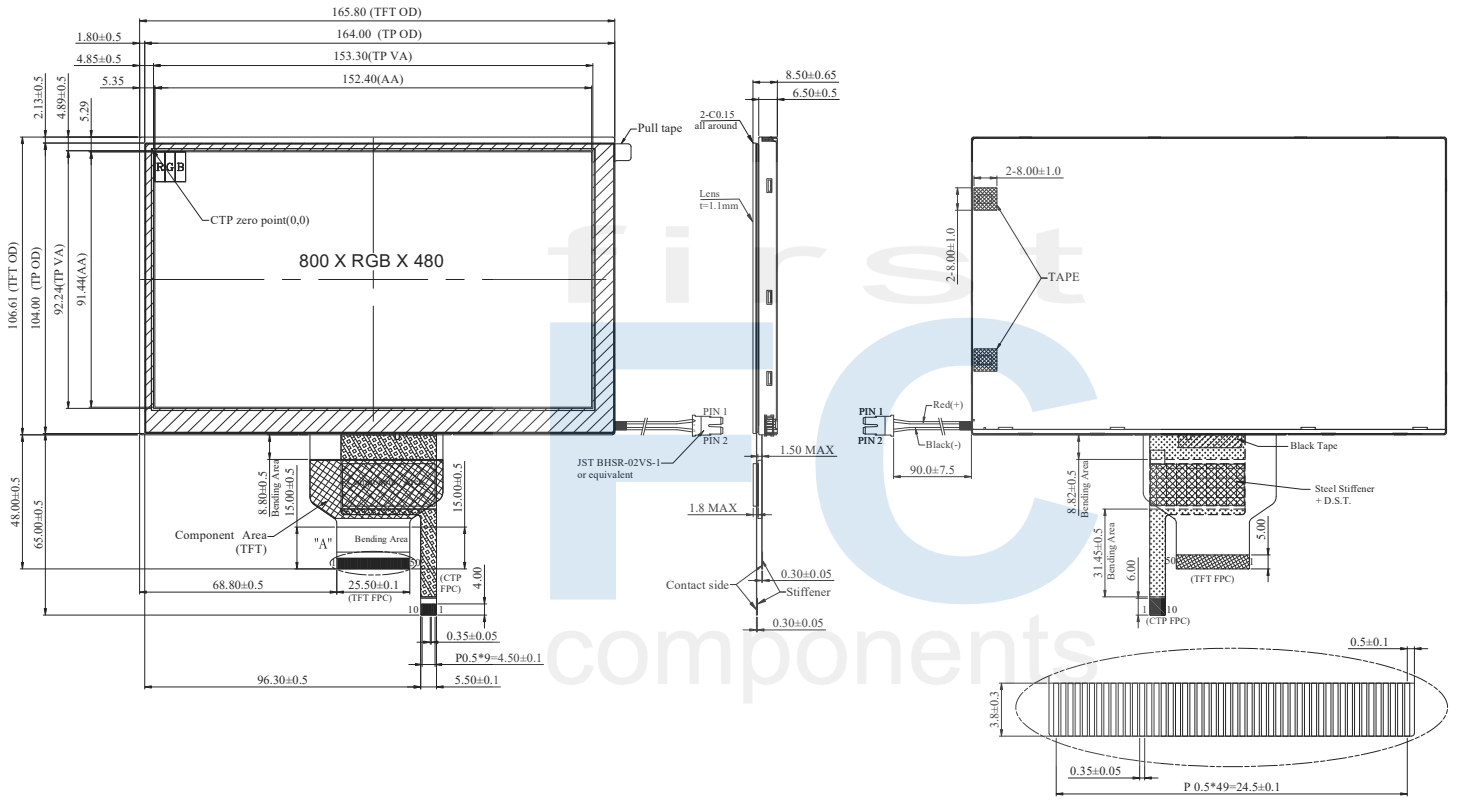
Pin	Symbol	Description
1	VLED+	Red, LED_ Anode
2	VLED-	Black, LED_ Cathode

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

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Contour Drawing



A:SCALE:5X

CTP FPC

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

TFT FPC

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

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

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