SPECIFICATION

CUSTOMER : _____

MODULE NO.: WF70-800480A9D#0SPW8-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 8.9(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	
CTP IC	ILI2511 or equivalent	
CTP Interface	USB (I2C available)	
CTP FW Version:	6.0.0.0.0.0.0.1	
With /Without TP	With CTP	
Surface	Glare	

*Color tone slight changed by temperature and driving voltage.

Absolute Maximum Ratings

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

Note: Device is subject to be damaged permanently if stresses beyond those absolute maximum ratings listed above

1. Temp. ≦60℃, 90% RH MAX. Temp.＞60℃, Absolute humidity shall be less than 90% RH at 60℃

Electrical Characteristics

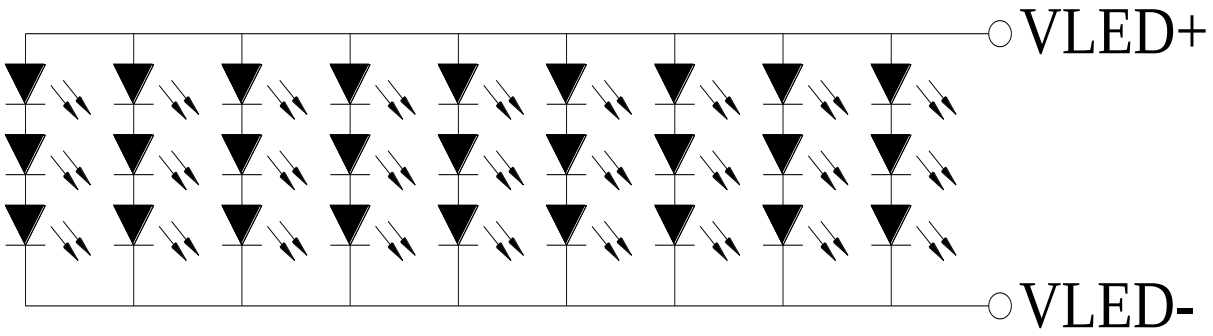
5.1. Operating conditions

Item	Symbol	Min	Typ	Max	Unit	Note
Supply Voltage	Vcc	2.7	3.3	3.6	V	
Current of power supply	IDD	—	101	150	mA	Vcc =3.3V
Supply CTP	USB_VDD 5V	4.4	5.0	5.5	V	USB type
	$I_{VDD\ 5V}$	—	83.6	126	mA	

5.2. LED driving conditions

Parameter	Symbol	Min	Typ	Max	Unit	Remark
LED current	—	—	450	—	mA	
LED voltage	A~K	8.1	9.3	10.2	V	Note 1
LED Life Time	—	40000	—	—	Hr	Note 2,3,4

Note 1 : There are 1 Groups LED



CIRCUIT DIAGRAM

Note 2 : Ta = 25 ℃

Note 3 : Brightness to be decreased to 50% of the initial value

Note 4 : The single LED lamp case

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	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	
32	R3	Red data	

<table>
<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>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><td></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><td></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>

2. Backlight PIN Definition

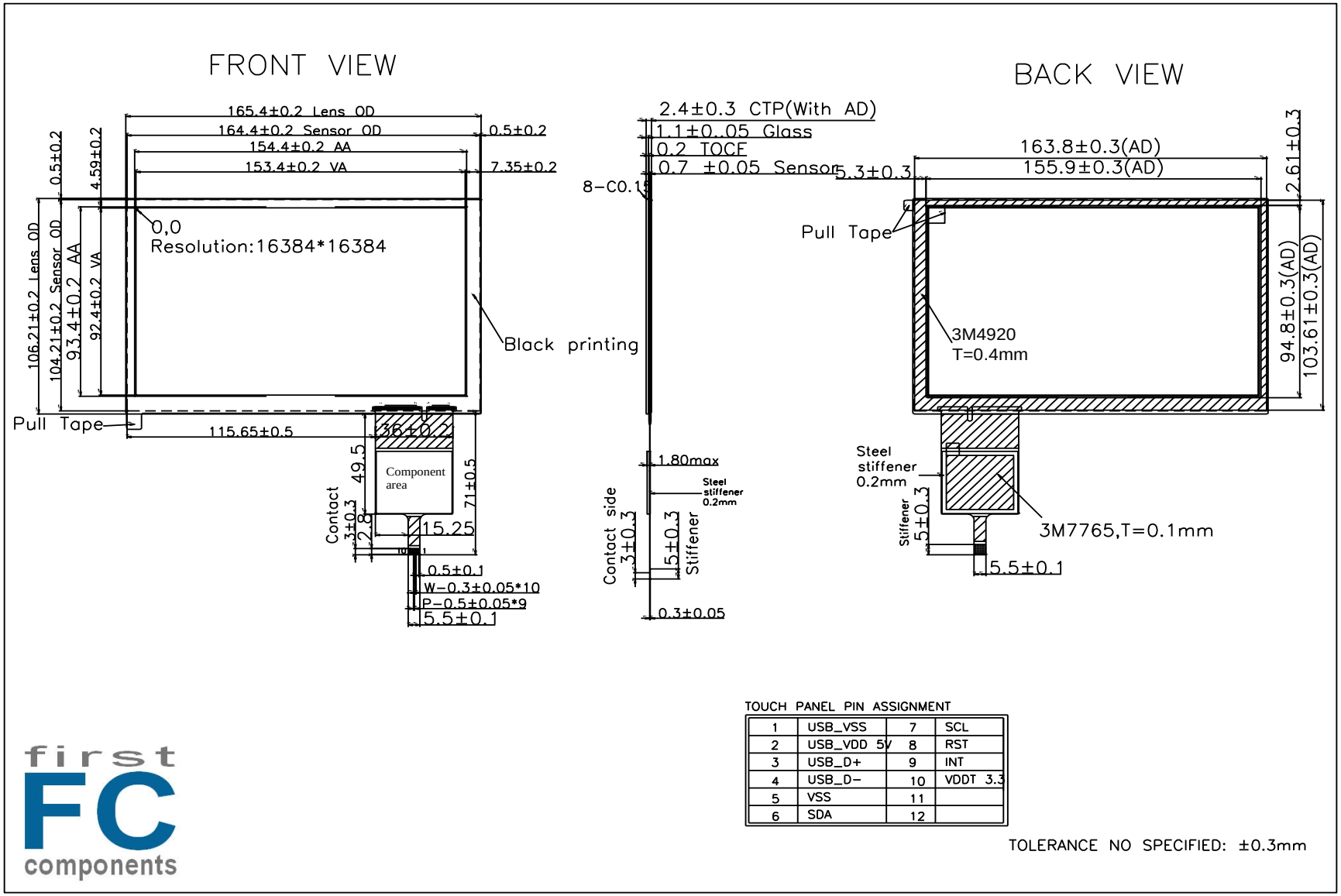
Pin	Symbol	Description
1	VLED+	Red, LED_ Anode
2	VLED-	Black, LED_ Cathode

3. CTP PIN Definition

Pin	Symbol	Function	Remark
1	USB_VSS	System ground	
2	USB_VDD 5V	Power supply	
3	USB_D+	Data +	
4	USB_D-	Data -	
5	VSS	System ground	
6	SDA	I2C data input and output	
7	SCL	I2C clock input	
8	RST	External Reset, Low is active	
9	INT	External interrupt to the host	
10	VDDT 3.3	Power supply	

Note: Interface can support both USB and I2C,USB is main function

Touch Panel Information



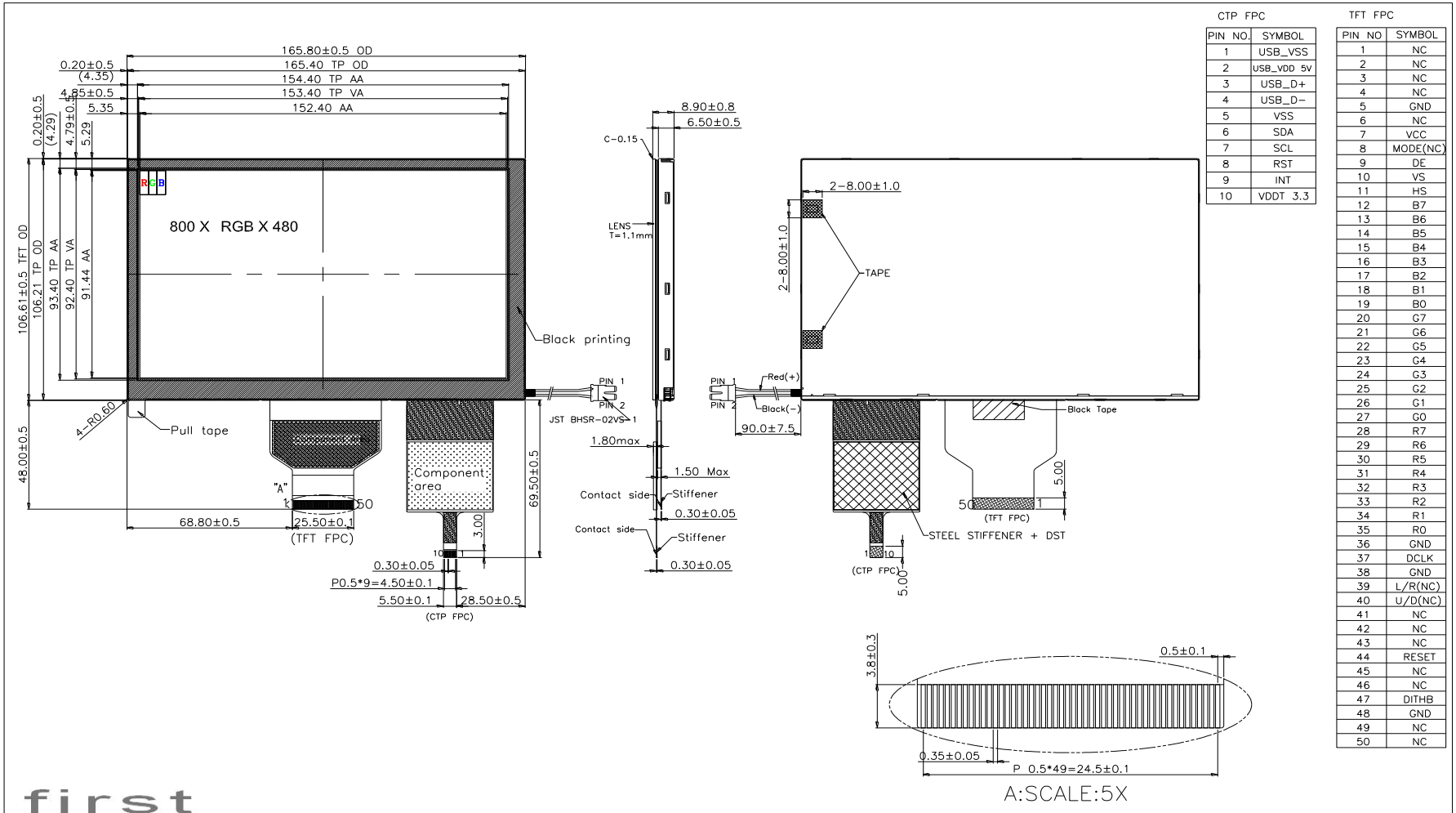
TOUCH PANEL PIN ASSIGNMENT

1	USB_VSS	7	SCL
2	USB_VDD 5V	8	RST
3	USB_D+	9	INT
4	USB_D-	10	VDDT 3.3
5	VSS	11	
6	SDA	12	

TOLERANCE NO SPECIFIED: ±0.3mm

first FC components

Contour Drawing



CTP FPC

PIN NO.	SYMBOL
1	USB_VSS
2	USB_VDD 5V
3	USB_D+
4	USB_D-
5	VSS
6	SDA
7	SCL
8	RST
9	INT
10	VDDT 3.3

TFT FPC

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 .