




























Standard TFT LCD

A TFT LCD Module is a type of liquid-crystal display (LCD) using thin-film-transistor (TFT) technology to improve image qualities such as addressability and contrast.

Bolymin offers TFT from small (0.96" TFT LCD) to mid-size (10.1" TFT LCD) in its standard catalog.

Inch	Display Format	Model No.	Outline Dimension (mm)	Active Area (mm)	Typ. Brightness (module surface, cd/m ²)	View Angle	Interface	IC Part No. or Compatible with Controller	remark	Download Flyer
0.96	80x160	BTF0096A- GHN\$	13.5x27.95x1.5	10.8x21.7	400	All	SPI	ST7735S		
1,7	128x160	BTF0177A-EHN\$	34.7x46.7x2.5	28.03x35.04	320	6H	Parallel	ST7735S		
2,0	240x320	BTF020A-JAN\$	35.7x51.2x2.4	30.6x40.8	250	ALL	Parallel / SPI	ST7789V		
2,4	240x320	BTF024A-EHN\$	42.72x60.26x2.55	36.72x48.96	350	6H	Parallel / SPI	ST7789V		
2,8	240x320	BTF028B-EHN\$	50x69.2x2.2	43.2x57.6	280	6H	Parallel	ST7789V		
3,5	320x240	BTF035A-AWN\$	76.9x63.9x3.2	70.08x52.56	320	12H	RGB+SPI	HX8238D		
3,5	320x240	BTF035A-AWR\$	76.9x63.9x4.35	70.08x52.56	250	12H	RGB+SPI	HX8238D	RTP	
3,5	320x240	BTF035A-AWC\$	76.9x63.9x5.1	70.08x52.56	250	12H	RGB+SPI	HX8238D	CTP	
3,5	320x240	BTF035B-BWN\$	76.9x63.9x3.2	70.08x52.56	450	6H	RGB+SPI	SSD2119		
3,5	320x240	BTF035B-BWR	76.9x63.9x4.3	70.08x52.56	360	12H	RGB+SPI	SSD2119	RTP	
4,3	480x272	BTF043A-AWN\$	105.5x67.2x2.90	95.04x53.86	550	12H	RGB	ILI6480BQ		
4,3	480x272	BTF043A-AWR\$	105.5x67.2x4.1	95.04x53.86	450	12H	RGB	ILI6480BQ	RTP	
4,3	480x272	BTF043B-AWN\$	105.5x67.2x2.92	95.04x53.86	300	12H	RGB	ILI6480BQ		
4,3	480x272	BTF043B-AWR\$	105.5x67.2x4.1	95.04x53.86	250	12H	RGB	ILI6480BQ	RTP	
4,3	480x272	BTF043C-AUN\$	105.5x67.2x2.92	95.04x53.86	550	ALL	RGB	SC7283		
5,0	800x480	BTF050A-AWN\$	120.7x75.8x2.8	108.0x64.8	450	12H	RGB	ILI5960+ILI6122		
5,0	800x480	BTF050A-AWR\$	120.7x75.8x4.0	108.0x64.8	360	12H	RGB	ILI5960+ILI6122	RTP	
5,6	640x480	BTF056A-AHN\$	126.5x100x5.7	112.896x84.672	350	6H	18bits RGB			
5,7	640x480	BTF057A-AHN\$	127.0x98.43x5.8	115.2x86.4	700	6H	18bits RGB	HX8250A01+HX8678A		

5,7	640x480	BTF057A-AHR\$	127.0x98.43x9.2	115.2x86.4	560	6H	18bits RGB	HX8250A+HX8678B	RTP	
7,0	800x480	BTF070A-AWN\$	164.8x99.8x5.5	154.08x85.92	420	12H	RGB	EK9713+EK73002		
7,0	800x480	BTF070A-AWR\$	164.8x99.8x7.0	154.08x85.92	350	12H	RGB	EK9713+EK73002	RTP	
7,0	800x480	BTF070A-AWC\$	164.8x99.8x7.5	154.08x85.92	350	12H	RGB	EK9713+EK73002		
7,0	800x480	BTF070B-ABR\$	164.8x99.8x4.55	153.84x85.92	350	12H	RGB		CTP	
8,0	800x600	BTF080A-AWN\$	183x141x6.2	162.0x121.5	500	12H	RGB	HX8264-D/HX8696-A		

BTF0096A-GHN\$



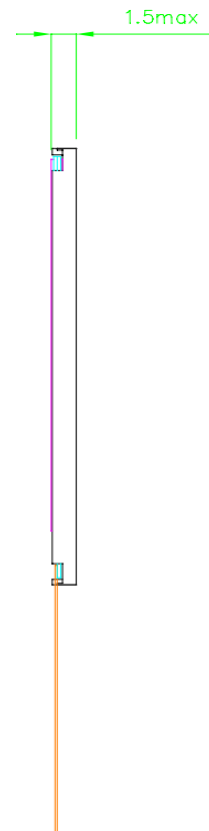
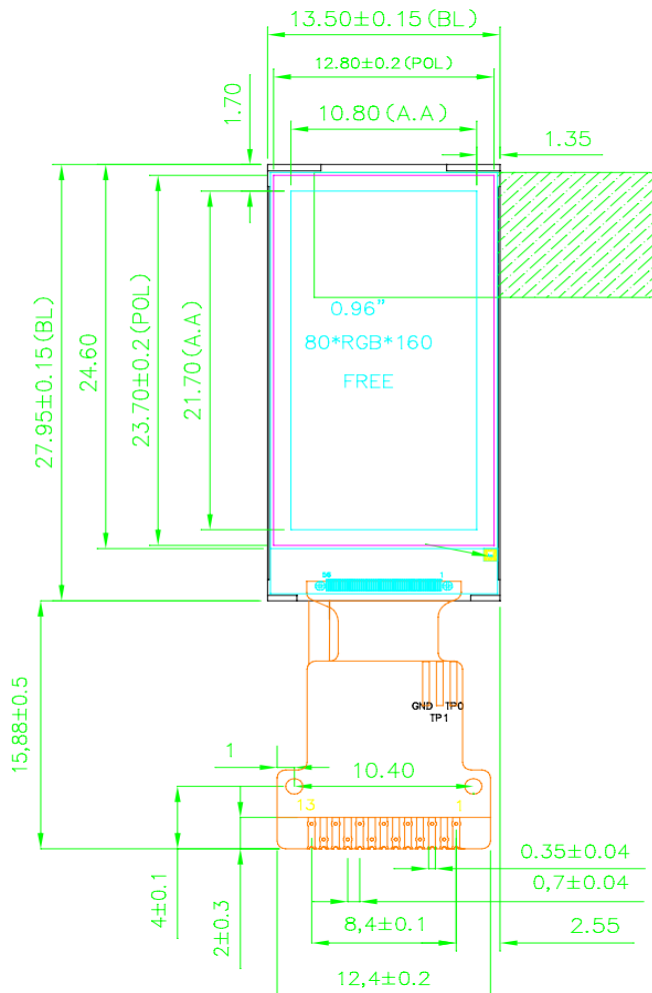
● Feature

1. 0.96" TFT LCD
2. Resolution:80(H)RGB*160(V)
3. Display Type:TFT/Transmissive/Normal Black
4. Interface Type:4 line SPI
5. Drive IC:ST7735S
6. Surface Luminance:400cd/m²
7. Viewing Direction:ALL
8. Top:-20°C~70°C

● Mechanical Data

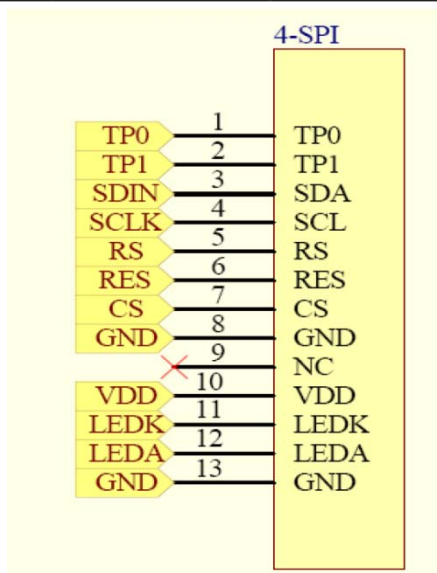
1. Module(WxHxT)(mm):13.5*27.95*1.5
2. Active Area(mm):10.8*21.7
3. LED Numbers:1 LED

● Mechanical Drawing



● Interface Pin Function

NO.	Symbol	Description
1	TP0	Touch Pin, If not used, please open this pin.
2	TP1	Touch Pin, If not used, please open this pin.
3	SDA	SPI interface input/output pin.
4	SCL	This pin is used to be serial interface clock.
5	RS	Display data/command selection pin in 4-line serial interface.
6	RESET	This signal will reset the device, Signal is active low.
7	CS	Chip selection pin, Low enable, High disable.
8	GND	Power Ground.
9	NC	No Connect.
10	VDD	Power Supply for Analog
11	LEDK	LED Canthode
12	LEDA	LED Anode
13	GND	Power Ground.



● Electrical Characteristics

Parameter	Symbol	Min	TYP	MAX	Unit	Notes
Voltage for LED backlight	V_{bL}	2.9	3.0	3.1	V	
Supply Voltage for Logic	VDD	2.5	2.8	3.3	V	
Interface Operation Voltage	VDDIO	1.65	1.8	3.3	V	
Gate Driver High Voltage	VGH	10	-	15	V	
Gate Driver Low Voltage	VGL	-13	-	-7.5	V	
Operating Current for V_{DD}	I_{DD}	--	2	3	mA	
Current for LED backlight	I_{bL}	15	-	20	mA	1 LED
Brightness	L_{br}	350	400	--	cd/m ²	
Sleep In Mode VDD	I_{dd}	--	15	30	uA	
Sleep In Mode VDDIO	I_{ddio}	--	5	10	uA	



BTF0177A-EHN\$

● Feature

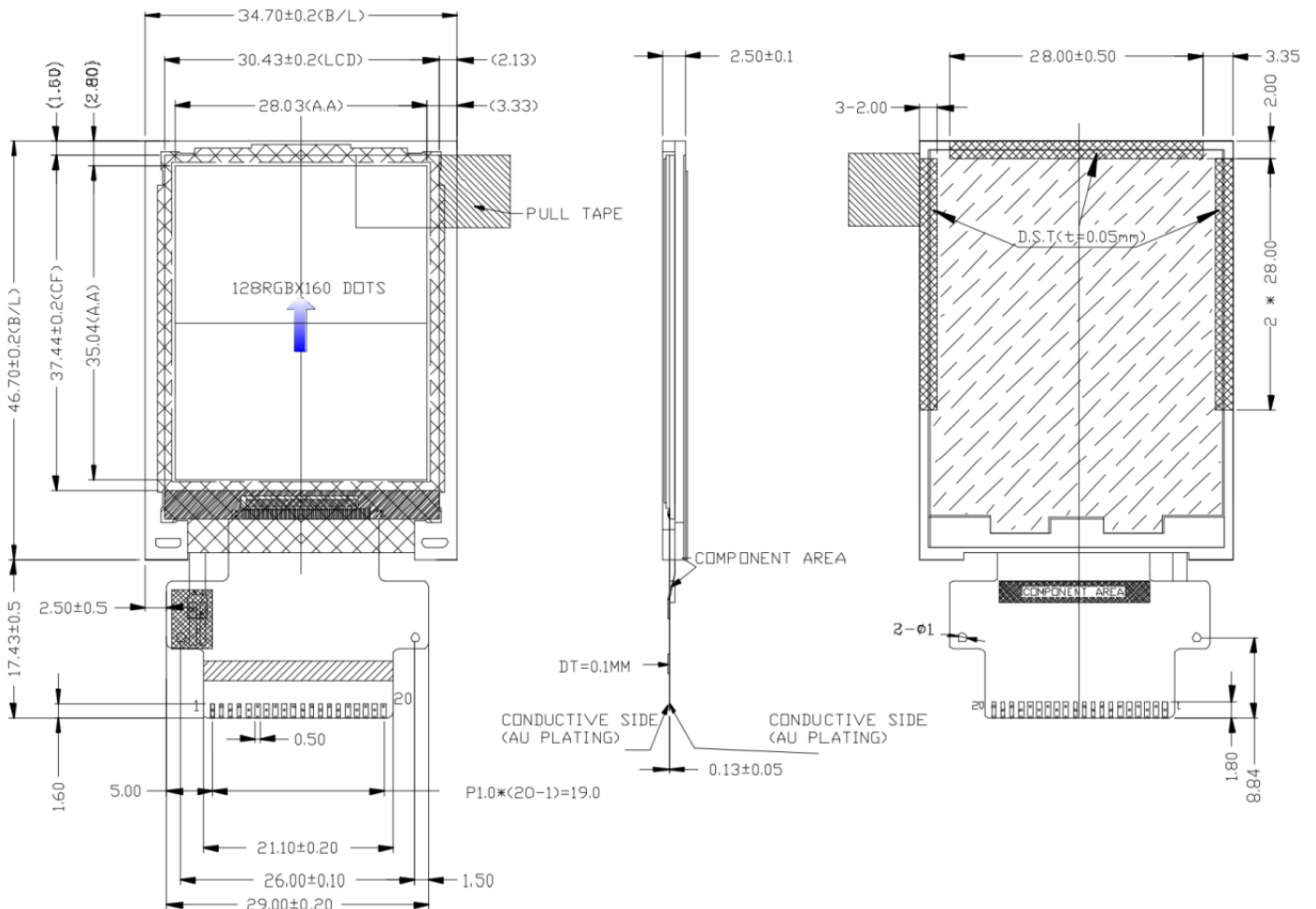
1. 1.77" TFTLCD
2. Resolution:128*RGB*160
3. DisplayType:TFT/Transmissive/Positive
4. Colors:65K
5. Interface Type:8-BIT MCU
6. Drive IC:ST7735S
7. Surface Luminance:320cd/m²
8. Top:-20°C~70°C

● Mechanical Data

1. Module(WxHxT)(mm):34.7*46.7*2.5
2. Active Area(mm):28.03*35.04
3. LED Numbers:2 LEDs



● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description
1	LED_K	Cathode of LED backlight
2	LED_A	Anode of LED backlight
3	GND	Power ground
4	VDD	Power supply
5	TE	Tearing effect output pin to synchronies MCU to frame rate, activated by S/W command.
6	NC	No connect
7	/CS	Chip select pin
8	/RESET	This signal will reset the device and must be applied to properly initialize the chip.
9	RS	-Display data/command Selection Pin in MCU Interface. -D/CX='1': Display Data or Parameter. -D/CX='0': Command Data.
10	/WR	-Write Enable in MCU Parallel Interface.
11	/RD	Read Enable in 8080 MCU Parallel Interface.
12	DB7	Data bus
13	DB6	Data bus
14	DB5	Data bus
15	DB4	Data bus
16	DB3	Data bus
17	DB2	Data bus
18	DB1	Data bus
19	DB0	Data bus
20	GND	Power ground

● Electrical Characteristics

Input Power

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Analog	VDD	2.5	2.8	3.3	V	
Supply Voltage for Logic	VDD	1.65	1.8/2.8	3.3	V	
Input Voltage	V _{IL}	GND	-	0.3VDD	V	
	V _{IH}	0.8 VDD	-	VDD		
Input leakage Current	I _{LKG}	-1		1	μA	

Backlight Driving Conditions

Item	Symbol	Value			Unit	Remark
		Min.	Typ.	Max.		
Voltage for LED Backlight	V _F	-	6.4	-	V	I _L =15mA
Current for LED Backlight	I _L		15	-	mA	
Power Consumption	P		0.096		W	
LED Life Time		30,000			Hr	Note

BTF020A-JAN\$



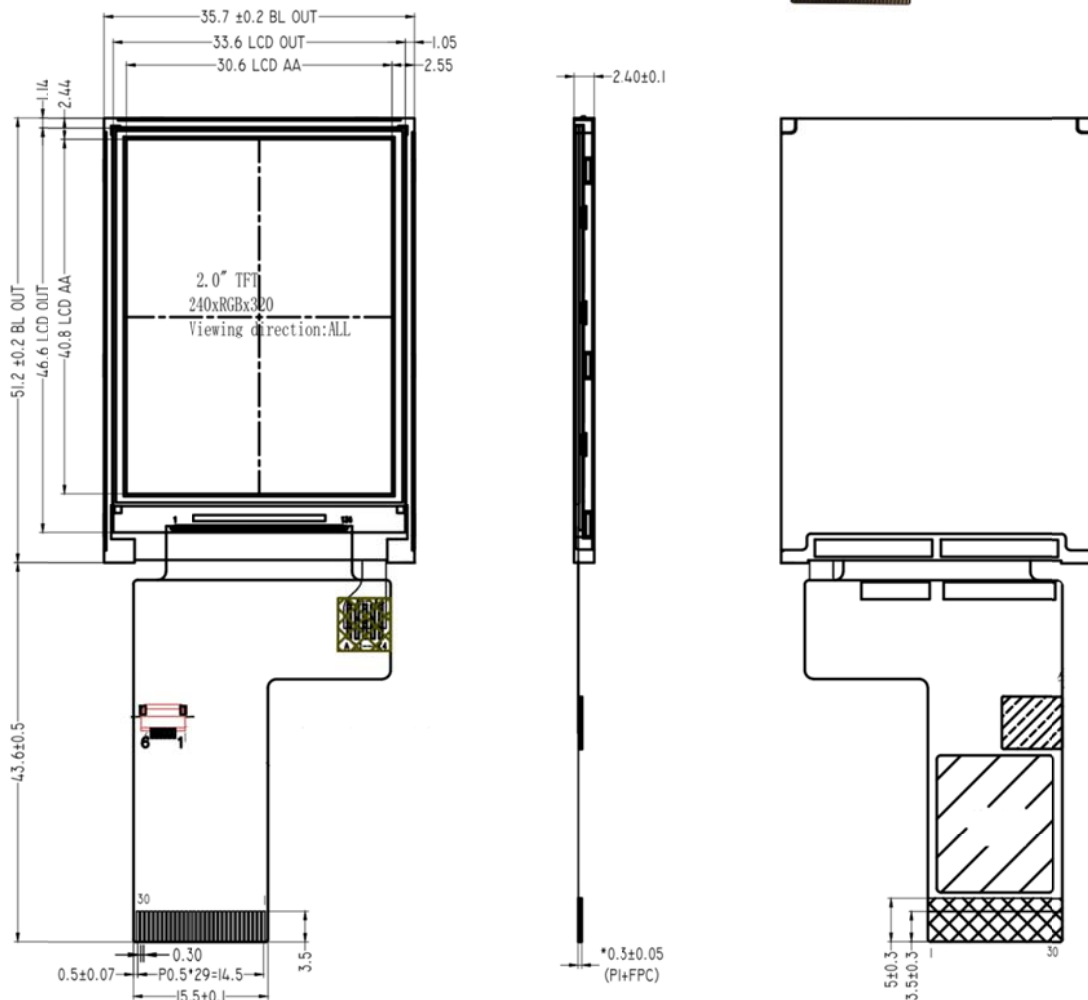
● Feature

1. 2.0" TFT LCD
2. Resolution:240*RGB*320
3. Display Type:TFT/Transmissive
4. Interface Type:MCU
5. Drive IC:ST7789V
6. Surface Luminance:250cd/m²
7. Viewing Direction:ALL
8. Top:-10°C~60°C

● Mechanical Data

1. Module(WxHxT)(mm):35.7*51.2*2.4
2. Active Area(mm):30.6*40.8
3. LED Numbers:3 LED

● Mechanical Drawing



● Interface Pin Function

No	Symbol	I/O	Description
1	GND	P	Ground
2	VCC	P	Power Supply
3	IM2	I	Interface Select
4	IM1	I	
5	RESET	I	Reset
6	CS	I	Chip Select
7	DC	I	Data/Command Select pin(SPI-SCL)
8	WR	I/O	Write Signal And Write Data(SPI-RS)
9	RD	I/O	Read Signal And Write Data
10	SDA	I/O	SPI Date
11	DB0	I	Data Bus Serial
12	DB1	I	
13	DB2	I	
14	DB3	I	
15	DB4	I	
16	DB5	I	
17	DB6	I	
18	DB7	I	
19	SDO	O	-
20	LEDA	P	GND
21	LEDK	P	GND
22	LEDK	P	GND
23	LEDK	P	GND
24	LEDK	P	GND
25	GND	P	GND
26	NC	I	TP Control
27	NC	I	
28	NC	I/O	
29	NC	I	
30	GND	P	GND

Note 1: I—Input, O—Output, P—Power/Ground, VCC=VDD

● Electrical Characteristics

Item	Symbol	Min	Type	Max	Unit	Test condition
Operating voltage	V_{DD}	2.6	2.8	3.3	V	-
Supply current	I_{DD}	-	-	5	mA	$V_{DD}=2.8V, T_a=25^{\circ}C$
Input voltage	V_{IH}	$0.8V_{DD}$	-	V_{DD}	V	-
	V_{IL}	0	-	$0.2V_{DD}$	V	
Input leakage current	I_{IL}	-1.0	-	1.0	μA	$V_{IN}=V_{DD}$ or V_{SS}



BTF024A-EHN\$

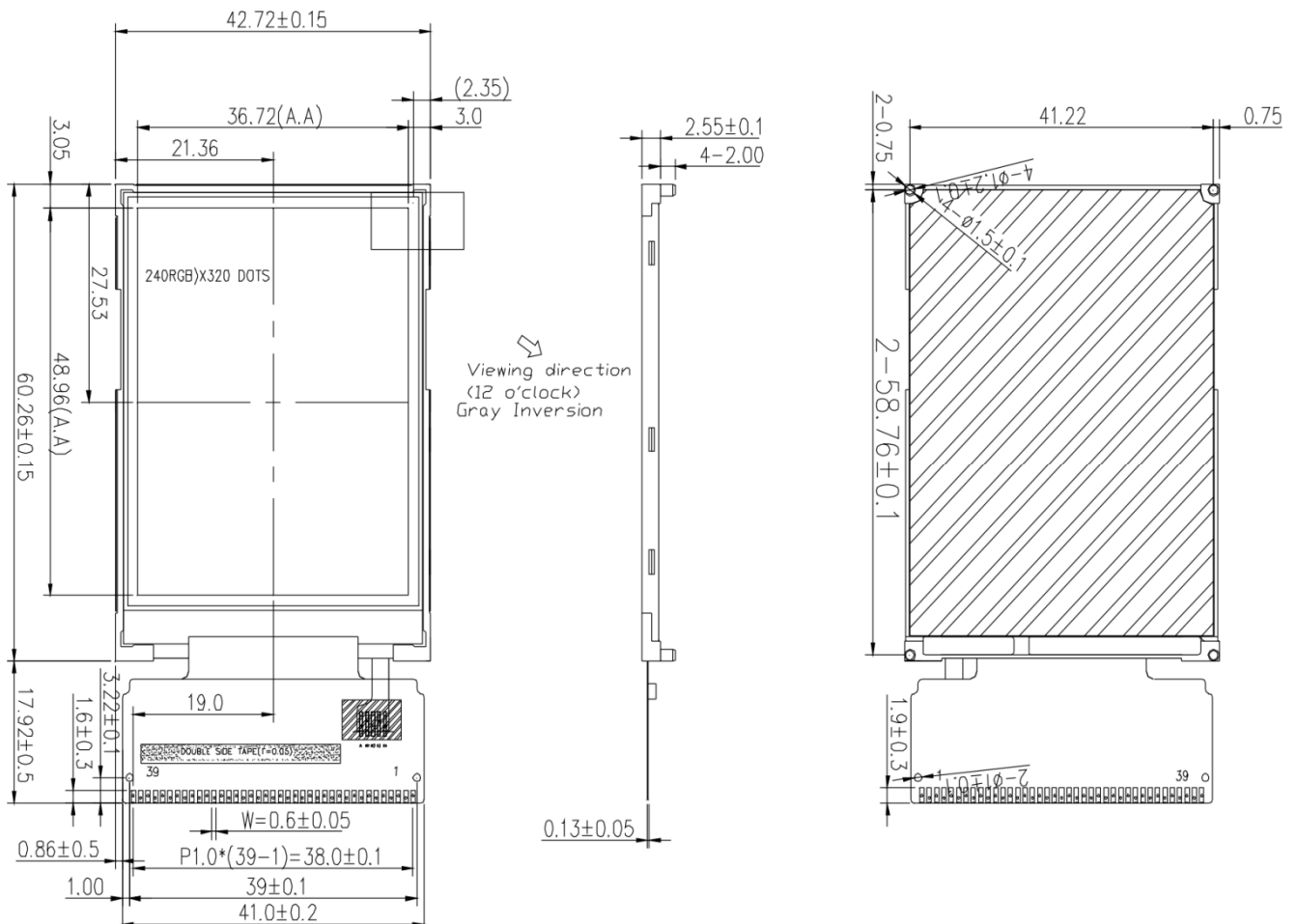
● Feature

1. 2.4" TFTLCD
2. Resolution:240*RGB*320
3. DisplayType:TFT/Transmissive/Normally white
4. Colors:262K
5. InterfaceType:MCU
6. Drive IC:ST7789V
7. Surface Luminance:350cd/m²
8. Top:-20°C~70°C

● Mechanical Data

1. Module(WxHxT)(mm):42.72*60.26*2.55
2. Active Area(mm):36.72*48.96
3. LED Numbers:4 LEDs

● Mechanical Drawing



● Interface Pin Function

PIN	Symbol	IO	Functions
1	GND	P	Power ground
2	LEDA	P	Power for LED backlight anode
3	LEDK4	P	Power for LED backlight cathode
4	LEDK3	P	Power for LED backlight cathode
5	LEDK2	P	Power for LED backlight cathode
6	LEDK1	P	Power for LED backlight cathode
7	GND	P	Power ground
8	NC	-	No connection
9	IM0	I	Select the MCU interface mode
10	RESET	I	Reset signal
11	D15	I/O	Data input
12	D14	I/O	Data input
13	D13	I/O	Data input
14	D12	I/O	Data input
15	D11	I/O	Data input
16	D10	I/O	Data input
17	D9	I/O	Data input
18	D8	I/O	Data input
19	D7	I/O	Data input
20	D6	I/O	Data input
21	D5	I/O	Data input
22	D4	I/O	Data input
23	D3	I/O	Data input
24	D2	I/O	Data input
25	D1	I/O	Data input
26	D0	I/O	Data input
27	RD	I	Read signal
28	WR	I	Write signal
29	RS	I	Command/date Select
30	CS	I	Chip select
31	NC	-	No connection
32	VDDI	P	Low voltage power supply for interface logic circuits
33	VCI	P	High voltage power supply for analog circuit blocks
34	NC	-	No connection
35	NC	-	No connection
36	NC	-	No connection
37	NC	-	No connection
38	NC	-	No connection
39	GND	P	Power ground

● Electrical Characteristics

Item	Symbol	Min.	Typ.	Max.	Unit	Remark
Power supply	VCI	2.4	2.75	3.3	V	
	IOVCC	1.65	1.8	3.3	V	
	IDD	--	--	30	mA	
Input Voltage for logic	H Level	V_{IH}	0.7x IOVCC	--	IOVCC	V
	L Level	V_{IL}	VSS	--	0.3x IOVCC	V
Output Voltage for logic	H Level	V_{OH}	0.8x IOVCC	--	IOVCC	V
	L Level	V_{OL}	VSS	--	0.2x IOVCC	V
Power consumption	8 Color Mode	--	16.8	22.5	mW	
	Sleeping Mode	--	140	165	uW	

BTF028B-EHN\$



● Feature

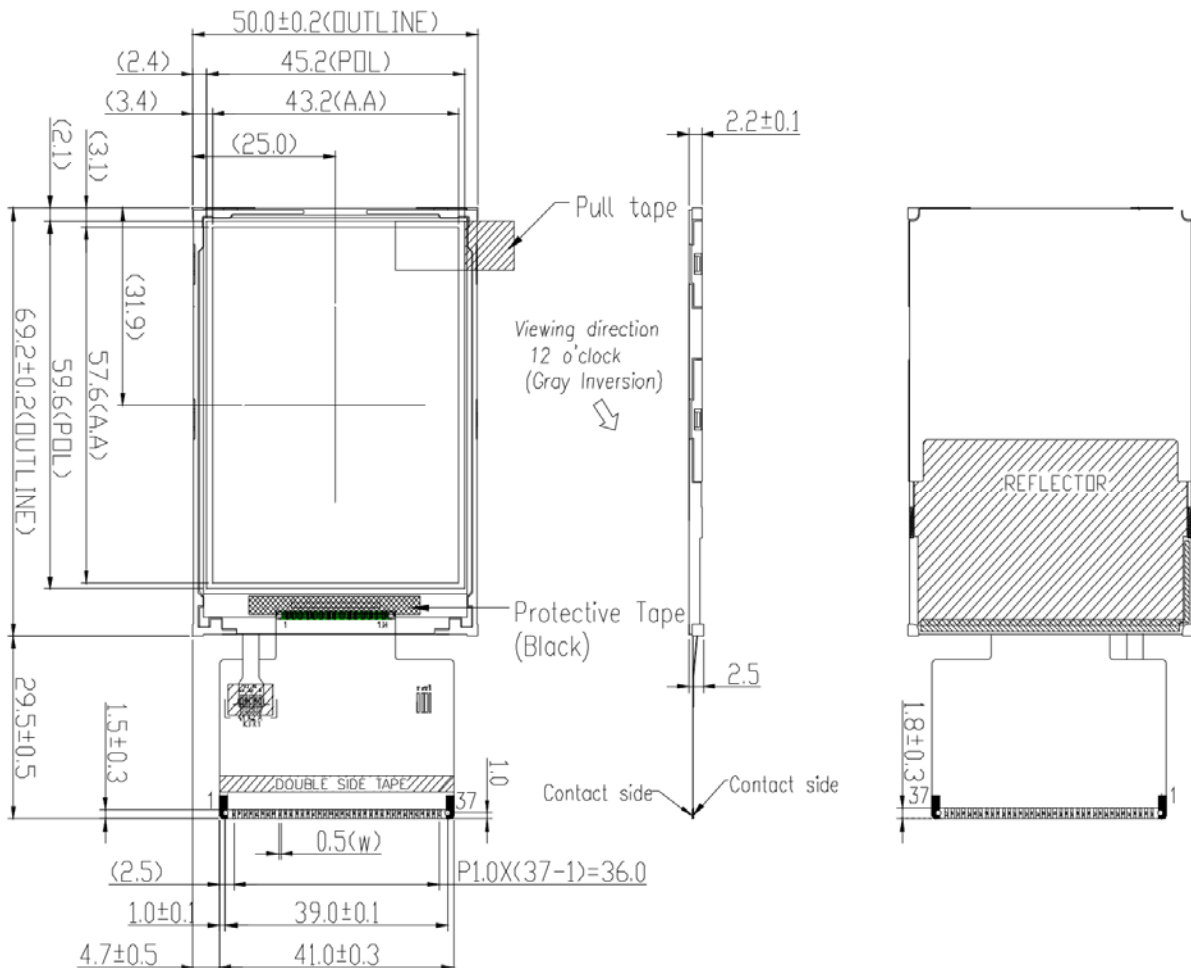
1. 2.8" TFTLCD
2. Resolution:240*RGB*320
3. DisplayType:TFT/Transmissive/Normally white
4. Colors:262K
5. InterfaceType:MCU
6. Drive IC:ST7789V
7. Surface Luminance:280cd/m²
8. Top:-20°C~70°C

● Mechanical Data

1. Module(WxHxT)(mm):50.0*69.2*2.2
2. Active Area(mm):43.2*57.6
3. LED Numbers:4 LEDs



● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	I/O	Function	Remark
1	DB1	I/O	Data bus.	
2	DB2	I/O	Data bus.	
3	DB3	I/O	Data bus.	
4	DB4	I/O	Data bus.	
5	GND	P	Ground	
6	VCC	P	Power supply for logic voltage.	
7	/CS	I	A chip select signal. Low: the ILI9341 is selected and accessible. High: the ILI9341 is not selected and not accessible	
8	RS	I	A register select signal. Low: select an index or status register, High: select a control register.	
9	/WR	I	A write strobe signal and enables an operation to write data when the signal is low.	
10	/RD	I	A read strobe signal and enables an operation to read out data when the signal is low.	
11	NC	-	No connection	
12	NC	-	No connection	
13	NC	-	No connection	
14	NC	-	No connection	
15	NC	-	No connection	
16	LEDA	P	Anode of LED backlight.	
17	LEDK4	P	Cathode of LED backlight.	
18	LEDK3	P	Cathode of LED backlight.	
19	LEDK2	P	Cathode of LED backlight.	
20	LEDK1	P	Cathode of LED backlight.	
21	NC	-	No connection	
22	DB5	I/O	Data bus.	
23	DB10	I/O	Data bus.	
24	DB11	I/O	Data bus.	
25	DB12	I/O	Data bus.	
26	DB13	I/O	Data bus.	
27	DB14	I/O	Data bus.	
28	DB15	I/O	Data bus.	
29	DB16	I/O	Data bus.	
30	DB17	I/O	Data bus.	
31	/RESET	I	A reset pin. Initializes the ILI9341 with a low input. Be sure to execute a power-on reset after supplying	
32	VCC	P	Power supply voltage.	
33	VCC	P	Power supply voltage.	
34	GND	P	Ground	
35	DB6	I/O	Data bus.	
36	DB7	I/O	Data bus.	
37	DB8	I/O	Data bus.	

● Electrical Characteristics

Item	Symbol	Min.	Typ.	Max.	Unit	Remark
Power supply	VCI	2.5	2.8	3.3	V	
	IOVCC	1.65	2.8	3.3	V	
	IDD	--	--	20	mA	
Input Voltage for logic	H Level	V_{IH}	$0.7 \times IOVCC$	--	IOVCC	V
	L Level	V_{IL}	VSS	--	$0.3 \times IOVCC$	V
Output Voltage for logic	H Level	V_{OH}	$0.8 \times IOVCC$	--	IOVCC	V
	L Level	V_{OL}	VSS	--	$0.2 \times IOVCC$	V
Power consumption	8 Color Mode	--	20.72	29.7	mW	
	Sleeping Mode	--	19.6	28.05	uW	

BTF035A-AWN\$



● Feature

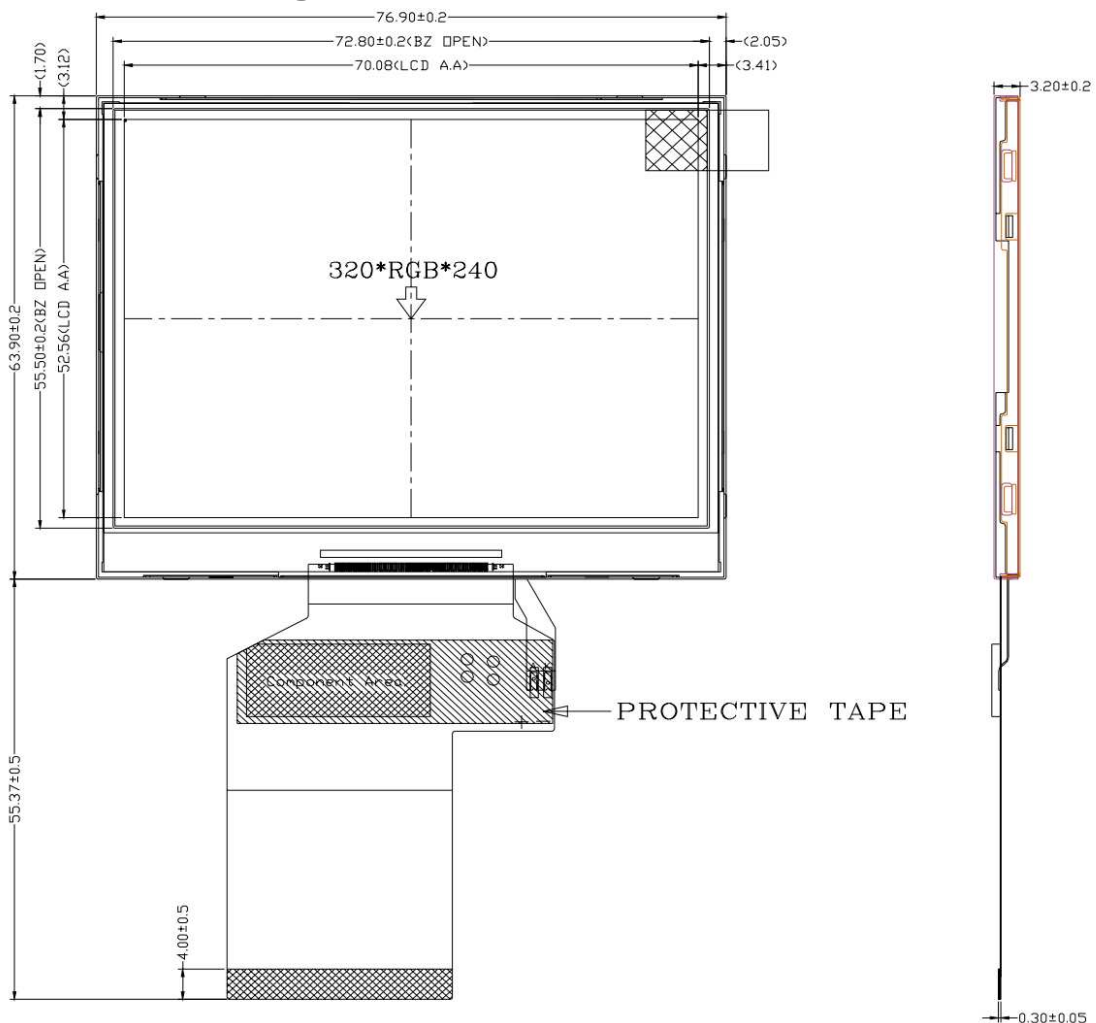
1. 3.5" TFT LCD
2. Resolution:320*240
3. Display Type:TFT/Transmissive/Positive
4. Interface Type:24BIT RGB+SPI
5. Drive IC:HX8238D
6. Surface Luminance:300cd/m²
7. Top:-20°C~70°C

● Mechanical Data

1. Module(WxHxT)(mm):76.9*63.9*3.2
2. Active Area(mm):70.08*52.56
3. LED Numbers:6 LEDs



● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description
1	LEDK	Cathode of LED backlight
2	LEDK	Cathode of LED backlight
3	LEDA	Anode of LED backlight
4	LEDA	Anode of LED backlight
5	NC	No connect
6	NC	No connect
7	NC	No connect
8	RESET	RESET PIN
9	SPENA	Chip select of serial interface
10	SPCLK	Clock pin of serial interface
11	SPDAT	Data input pin of serial interface
12~19	B0~B7	Blue data bus
20~27	G0~G7	Green data bus
28~35	R0~R7	Red data bus
36	HSYNC	Horizontal sync signal; negative polarity
37	VSYNC	Vertical sync signal; negative polarity
38	DCLK	Clock signal; latching data at the falling edge
39	NC	Touch panel control PIN: XL
40	NC	Touch panel control PIN: YU
41	VDD	Power supply
42	VDD	Power supply
43	NC	No connect
44	NC	No connect
45	NC	No connect
46	NC	No connect
47	NC	No connect
48	SEL2	Interface mode select(*Note)
49	SEL1	
50	SEL0	
51	NC	No connect
52	DEN	Display enable pin from controller
53	GND	Power ground
54	GND	Power ground

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Analog	VDD	3.0	3.3	3.6	V	
Supply Voltage for Logic	VDD	3.0	3.3	3.6	V	
Input Voltage	V _{IL}	GND	-	0.3VCC	V	
	V _{IH}	0.7 VCC	-	VCC		
Input leakage Current	I _{LKG}	-1		1	μA	

BTF035A-AWR\$



● Feature

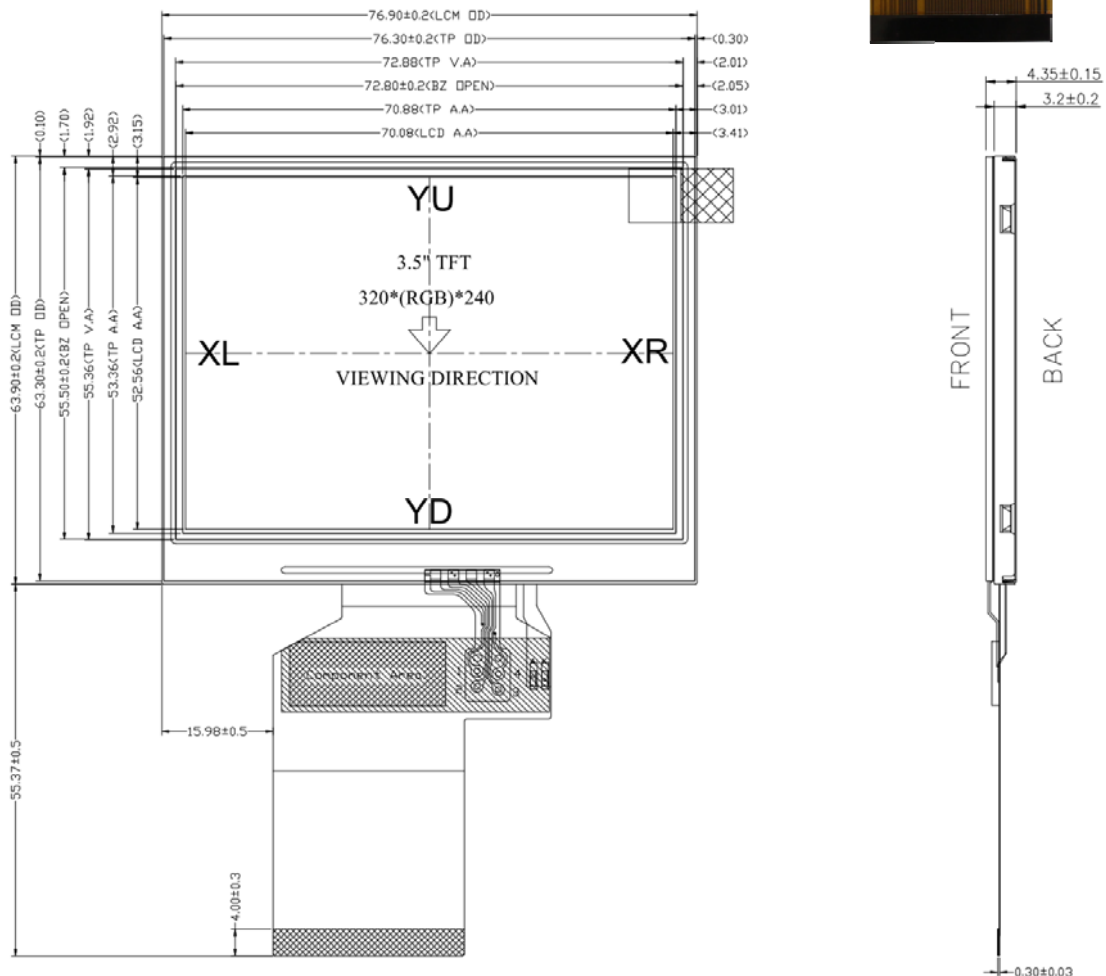
1. 3.5" TFTLCD
2. Resolution:320*240
3. DisplayType:TFT/Transmissive/Positive
4. Interface Type:24BIT RGB+SPI
5. Drive IC:HX8238D
6. Surface Luminance:240cd/m²
7. Top:-20°C~70°C
8. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):76.9*63.9*4.35
2. Active Area(mm):70.08*52.56
3. LED Numbers:6 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description
1	LEDK	Cathode of LED backlight
2	LEDK	Cathode of LED backlight
3	LEDA	Anode of LED backlight
4	LEDA	Anode of LED backlight
5	YU	Touch panel control PIN: YU
6	XR	Touch panel control PIN: XR
7	NC	No connect
8	RESET	RESET PIN
9	SPENA	Chip select of serial interface
10	SPCLK	Clock pin of serial interface
11	SPDAT	Data input pin of serial interface
12~19	B0~B7	Blue data bus
20~27	G0~G7	Green data bus
28~35	R0~R7	Red data bus
36	HSYNC	Horizontal sync signal; negative polarity
37	VSYNC	Vertical sync signal; negative polarity
38	DCLK	Clock signal; latching data at the falling edge
39	NC	Touch panel control PIN: XL
40	NC	Touch panel control PIN: YU
41	VCC	Power supply
42	VCC	Power supply
43	YD	Touch panel control PIN: YD
44	XL	Touch panel control PIN: XL
45	NC	No connect
46	NC	No connect
47	NC	No connect
48	SEL2	Interface mode select(note)
49	SEL1	
50	SEL0	
51	NC	No connect
52	DEN	Display enable pin from controller
53	GND	Power ground
54	GND	Power ground

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Analog	VDD	3.0	3.3	3.6	V	
Supply Voltage for Logic	VDD	3.0	3.3	3.6	V	
Input Voltage	V _{IL}	GND	-	0.3VCC	V	
	V _{IH}	0.7 VCC	-	VCC		
Input leakage Current	I _{LKG}	-1		1	μA	



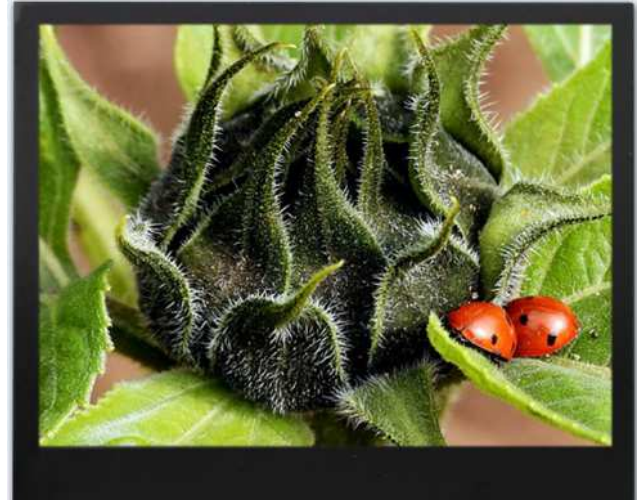
BTF035A-AWC\$

● Feature

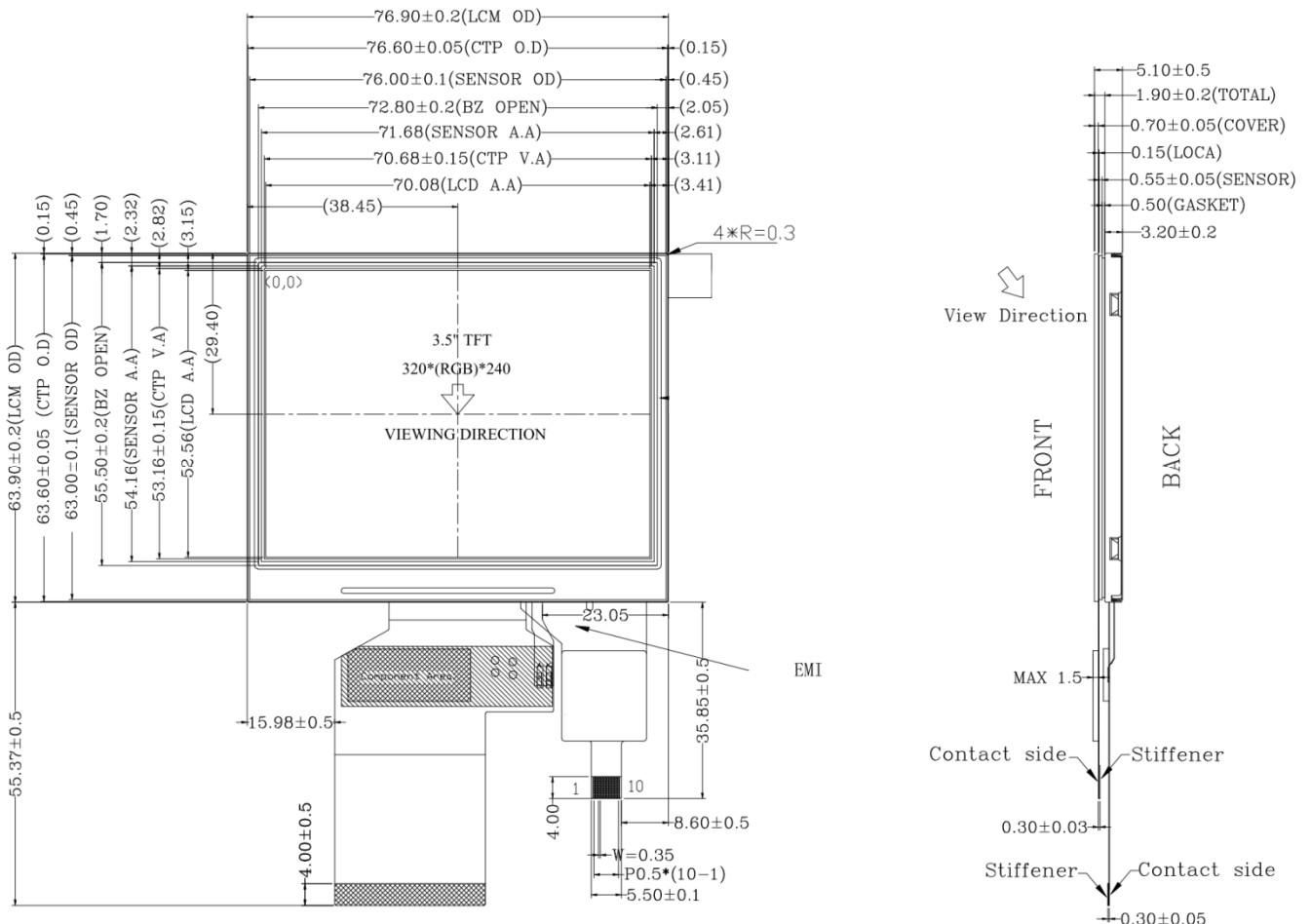
1. 3.5" TFT LCD
2. Resolution:320*240
3. Display Type:TFT/Transmissive/Positive
4. Interface Type:24BIT RGB+SPI
5. LCM Drive IC:HX8238D
6. CTP Drive IC:FT5446DQS
7. Surface Luminance:250cd/m²
8. Top:-20°C~70°C
9. Support Capacitive Touch Panel

● Mechanical Data

1. Module(WxHxT)(mm):76.9*63.9*5.1
2. Active Area(mm):70.08*52.56
3. LED Numbers:6 LEDs



● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description
1	LEDK	Cathode of LED backlight
2	LEDK	Cathode of LED backlight
3	LEDA	Anode of LED backlight
4	LEDA	Anode of LED backlight
5	NC	No connect
6	NC	No connect
7	NC	No connect
8	RESET	RESET PIN
9	SPENA	Chip select of serial interface
10	SPCLK	Clock pin of serial interface
11	SPDAT	Data input pin of serial interface
12~19	B0~B7	Blue data bus
20~27	G0~G7	Green data bus
28~35	R0~R7	Red data bus
36	HSYNC	Horizontal sync signal; negative polarity
37	VSYNC	Vertical sync signal; negative polarity
38	DCLK	Clock signal; latching data at the falling edge
39	NC	No connect
40	NC	No connect
41	VDD	Power supply
42	VDD	Power supply
43	NC	No connect
44	NC	No connect
45	NC	No connect
46	NC	No connect
47	NC	No connect
48	SEL2	Interface mode select(note)
49	SEL1	
50	SEL0	
51	NC	No connect
52	DEN	Display enable pin from controller
53	GND	Power ground
54	GND	Power ground

CTP PIN

Pin No.	Symbol	Description
1	VSS	Ground electrode.
2	VDD	Power supply for analog voltage.
3	SCL	I2C clock input.
4	NC	No connect.
5	SDA	I2C data input and output.
6	NC	External Reset, Low is active.
7	RST	External Reset, Low is active.
8	NC	No connect.
9	INT	Interrupt request to the host, or Wakeup request from the host.
10	VSS	Ground electrode.

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Analog	VDD	3.0	3.3	3.6	V	
Supply Voltage for Logic	VDD	3.0	3.3	3.6	V	
Input Voltage	V _{IL}	GND	-	0.3VCC	V	
	V _{IH}	0.7 VCC	-	VCC		
Input leakage Current	I _{LKG}	-1		1	μA	



BTF035B-BWN\$

● Feature

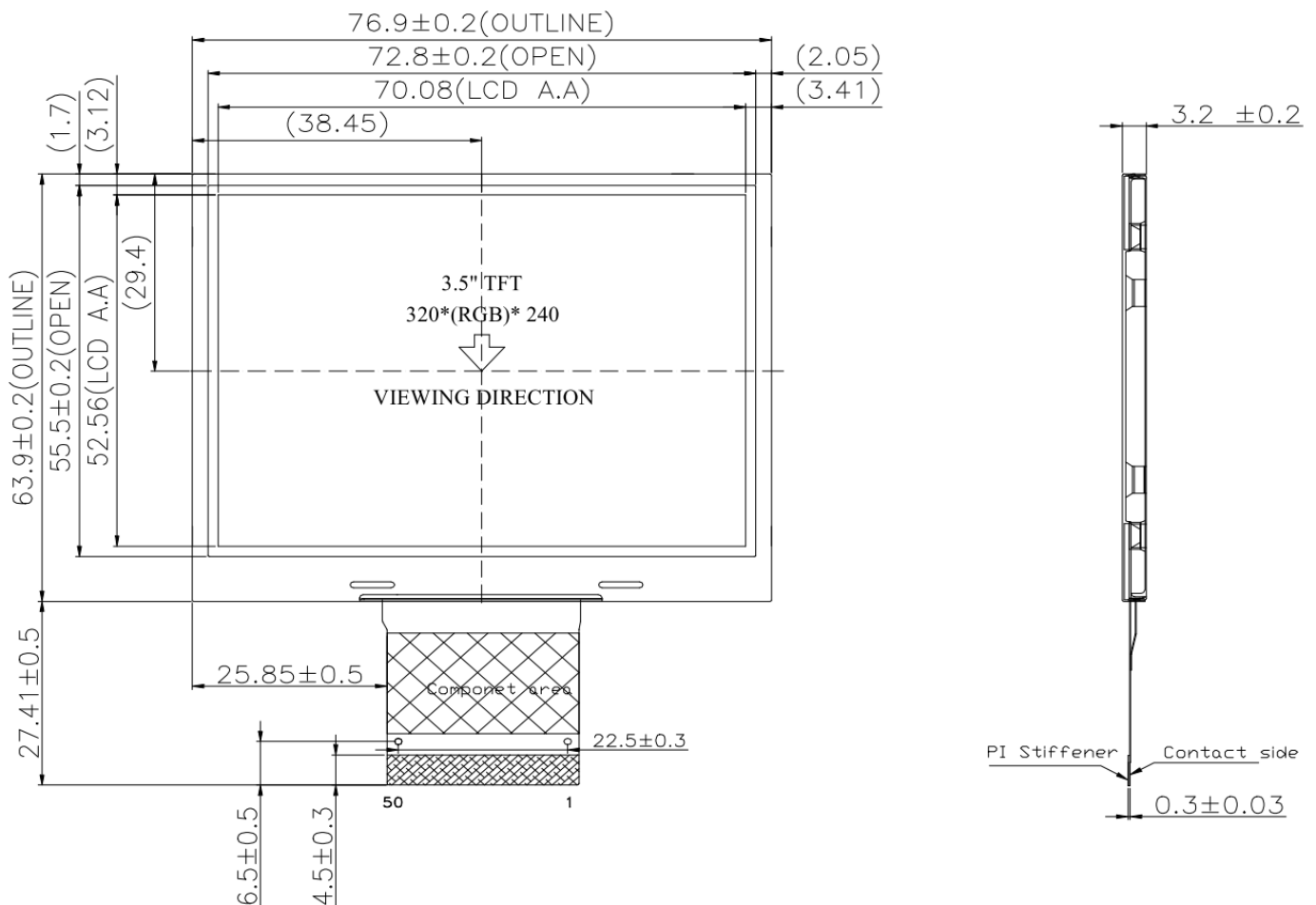
1. 3.5" TFTLCD
2. Resolution:320*240
3. Display Type:TFT/Transmissive/Positive
4. Interface Type:18BIT RGB+SPI
5. Drive IC:SSD2119
6. Surface Luminance:550cd/m²
7. Top:-20°C~70°C



● Mechanical Data

1. Module(WxHxT)(mm):76.9*63.9*3.2
2. Active Area(mm):70.08*52.56
3. LED Numbers:6 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description
1~2	VCI	Power supply for analog
3	VSS	Ground.
4	VDDIO	Voltage input pin for logic I/O
5	VSS	Ground.
6	RESB	System reset pin. - An active low pulse at this pin will reset the IC, Connect to VDDIO in normal operation
7	DC/SDC (RS)	A register select signal. Low: select an index or status register, High: select a control register.
8	E/\overline{RD}	6800-system : E (enable signal) 8080-system : RD (read strobe signal) Serial mode : Not used and should be connected to VDDIO or Vss
9	WR	8080-system : WR (write strobe signal)
10	CS	CS : Chip select pin
11	SCL	Serial clock input
12	SDO	Data output pin in serial interface
13	SDI	Data input pin in serial interface
14	WSYNC	Ram Write Synchronization output -Leave it OPEN when not used
15~32	DB17~DB0	Data bus.
33	VSS	Ground.
34	DOTCLK	Dot-clock signal and oscillator source.
35	HSYNC	Line Synchronization input
36	VSYNC	Frame/Ram Write Synchronization input
37	OE	Display enable pin from controller.
38	VSS	Ground.
39	PS0	Refer of Table1
40	PS1	
41	PS2	
42	PS3	
43	VSS	Ground.
44~47	NC	Not Connection
48	VSS	Ground.
49	LEDK	Cathode of LED backlight.
50	LEDA	Anode of LED backlight.

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Analog	VCI	3.0	3.3	3.6	V	
Supply Voltage for Logic	VDDIO	3.0	3.3	3.6	V	
Input Voltage	V_{IL}	GND	-	0.3VCI	V	
	V_{IH}	0.7 VCI	-	VCI		
Input leakage Current	I_{LKG}	-1		1	μA	



BTF035B-BWR\$

● Feature

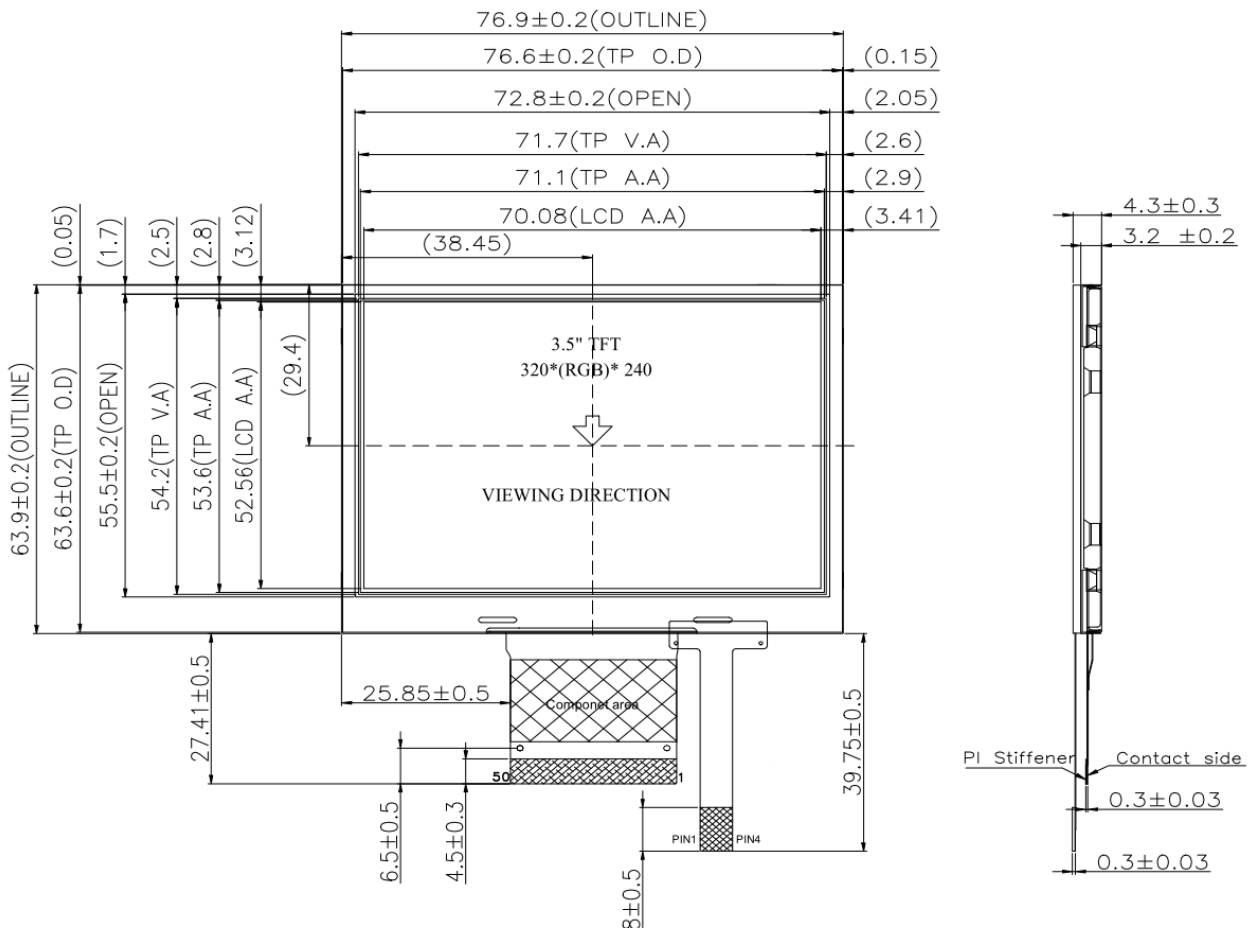
1. 3.5" TFTLCD
2. Resolution:320*240
3. Display Type:TFT/Transmissive/Positive
4. Interface Type:18BIT RGB+SPI
5. Drive IC:SSD2119
6. Surface Luminance:500cd/m²
7. Top:-20°C~70°C
8. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):76.9*63.9*4.3
2. Active Area(mm):70.08*52.56
3. LED Numbers:6 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description
1~2	VCI	Power supply for analog
3	VSS	Ground.
4	VDDIO	Voltage input pin for logic I/O
5	VSS	Ground.
6	RESB	System reset pin. - An active low pulse at this pin will reset the IC, Connect to VDDIO in normal operation
7	DC/SDC (RS)	A register select signal. Low: select an index or status register, High: select a control register.
8	E/\overline{RD}	6800-system : E (enable signal) 8080-system : RD (read strobe signal) Serial mode : Not used and should be connected to VDDIO or Vss
9	WR	8080-system : WR (write strobe signal)
10	CS	CS : Chip select pin
11	SCL	Serial clock input
12	SDO	Data output pin in serial interface
13	SDI	Data input pin in serial interface
14	WSYNC	Ram Write Synchronization output -Leave it OPEN when not used
15~32	DB17~DB0	Data bus.
33	VSS	Ground.
34	DOTCLK	Dot-clock signal and oscillator source.
35	HSYNC	Line Synchronization input
36	VSYNC	Frame/Ram Write Synchronization input
37	OE	Display enable pin from controller.
38	VSS	Ground.
39	PS0	Refer of Table 1
40	PS1	
41	PS2	
42	PS3	
43	VSS	Ground.
44~47	NC	Not Connection
48	VSS	Ground.
49	LEDK	Cathode of LED backlight.
50	LEDA	Anode of LED backlight.

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Analog	VCI	3.0	3.3	3.6	V	
Supply Voltage for Logic	VDDIO	3.0	3.3	3.6	V	
Input Voltage	V_{IL}	GND	-	$0.3V_{CI}$	V	
	V_{IH}	$0.7V_{CI}$	-	V_{CI}		
Input leakage Current	I_{LKG}	-1		1	μA	



BTF043A-AWN\$

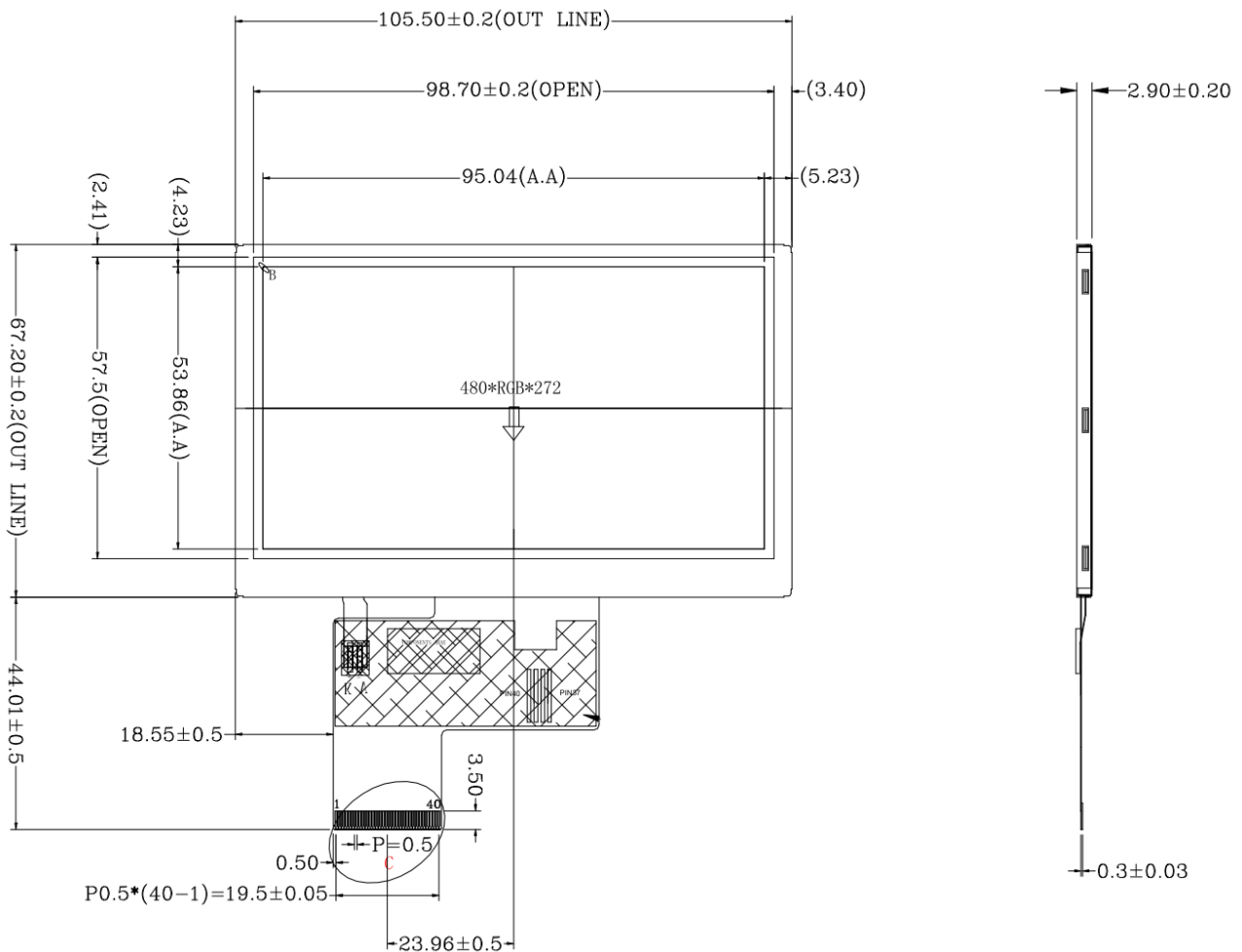
● Feature

1. 4.3" TFTLCD
2. Resolution:480*272
3. DisplayType:TFT/Transmissive/Positive
4. Interface Type:24-BIT RGB
5. Drive IC:ILI6480BQ
6. Surface Luminance:550cd/m²
7. Top:-20°C~70°C

● Mechanical Data

1. Module(WxHxT)(mm):105.5*67.2*2.9
2. Active Area(mm):95.04*53.86
3. LED Numbers:9 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description
1	LED-	Cathode of LED backlight
2	LED+	Anode of LED backlight
3	GND	Power ground
4	VDD	Power supply
5~12	R0~R7	8-bit digital Red data input,
13~20	G0~G7	8-bit digital Green data input,
21~28	B0~B7	8-bit digital Blue data input,
29	GND	Power ground
30	DCLK	Clock signal; latching data at the falling edge
31	DISP	Display control / standby mode selection. DISP = "Low" : Standby; DISP = "High" : Normal display(Default)
32	HSYNC	Horizontal sync signal; negative polarity
33	VSYNC	Vertical sync signal; negative polarity
34	DE	Data input enable. Active High to enable the data input.
35	NC	No connection.
36	GND	Power ground
37	NC	No connection.
38	NC	No connection.
39	NC	No connection.
40	NC	No connection.

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Analog	VDD	3.0	3.3	3.6	V	
Supply Voltage for Logic	VDD	3.0	3.3	3.6	V	
Input Voltage	V _{IL}	GND	-	0.3VCC	V	
	V _{IH}	0.7 VCC	-	VCC		
Input leakage Current	I _{LKG}	-1		1	μA	



BTF043A-AWR\$

● Feature

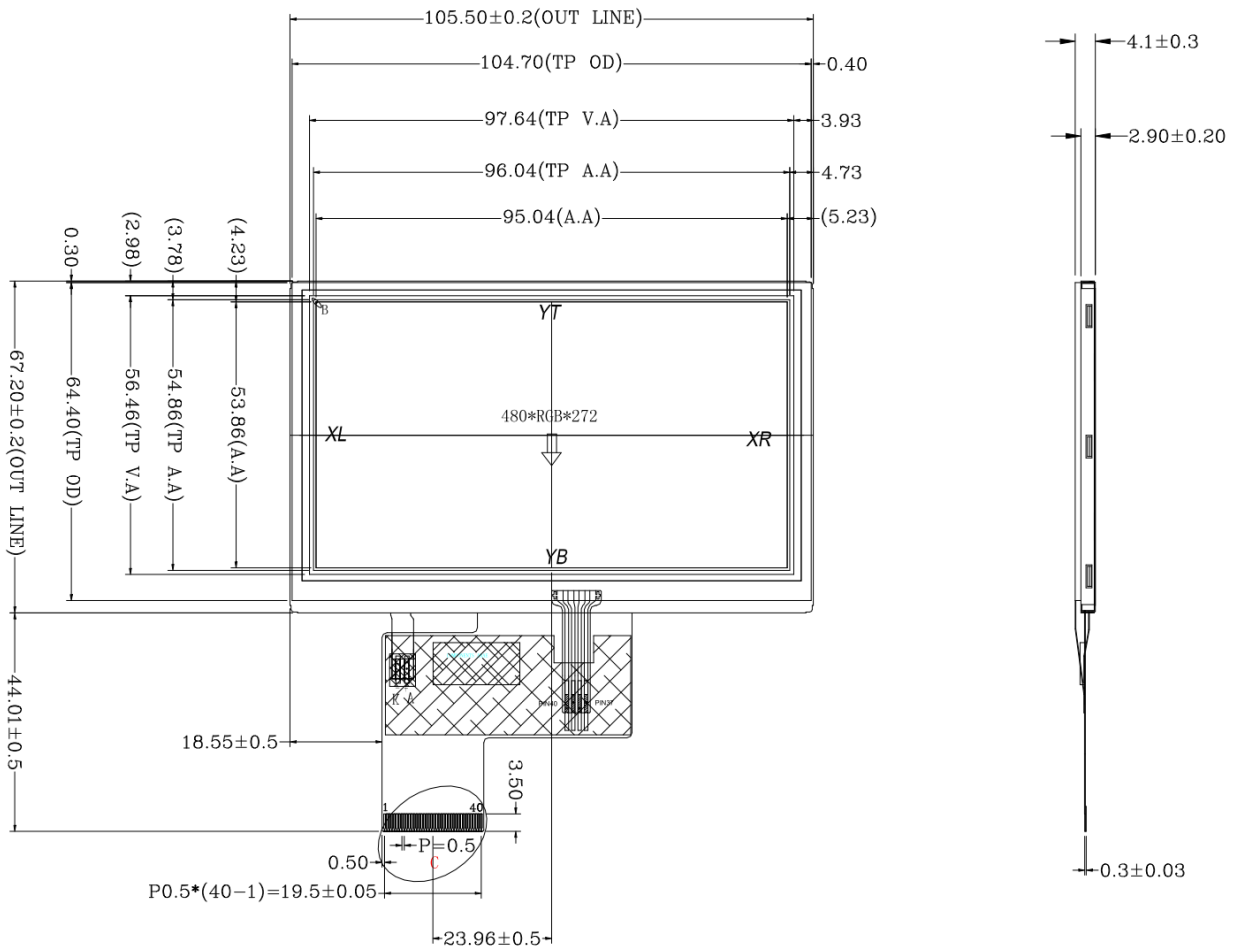
1. 4.3" TFTLCD
2. Resolution:480*272
3. DisplayType:TFT/Transmissive/Positive
4. Interface Type:24-BIT RGB
5. Drive IC:ILI6480BQ
6. Surface Luminance:440cd/m²
7. Top:-20°C~70°C
8. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):105.5*67.2*4.1
2. Active Area(mm):95.04*53.86
3. LED Numbers:9 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description
1	VLED-	Cathode of LED backlight
2	VLED+	Anode of LED backlight
3	GND	Power ground
4	VDD	Power supply
5~12	R0~R7	8-bit digital Red data input,
13~20	G0~G7	8-bit digital Green data input,
21~28	B0~B7	8-bit digital Blue data input,
29	GND	Power ground
30	DCLK	Clock signal; latching data at the falling edge
31	DISP	Display control / standby mode selection. DISP = "Low" : Standby; DISP = "High" : Normal display(Default)
32	HSYNC	Horizontal sync signal; negative polarity
33	VSYNC	Vertical sync signal; negative polarity
34	DE	Data input enable. Active High to enable the data input.
35	NC	No connection.
36	GND	Power ground
37	XR	Touch panel control pin
38	YB	Touch panel control pin
39	XL	Touch panel control pin
40	YT	Touch panel control pin

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Analog	VDD	3.0	3.3	3.6	V	
Supply Voltage for Logic	VDD	3.0	3.3	3.6	V	
Input Voltage	V _{IL}	GND	-	0.3VCC	V	
	V _{IH}	0.7 VCC	-	VCC		
Input leakage Current	I _{LKG}	-1		1	μA	

BTF043B-AWN\$



● Feature

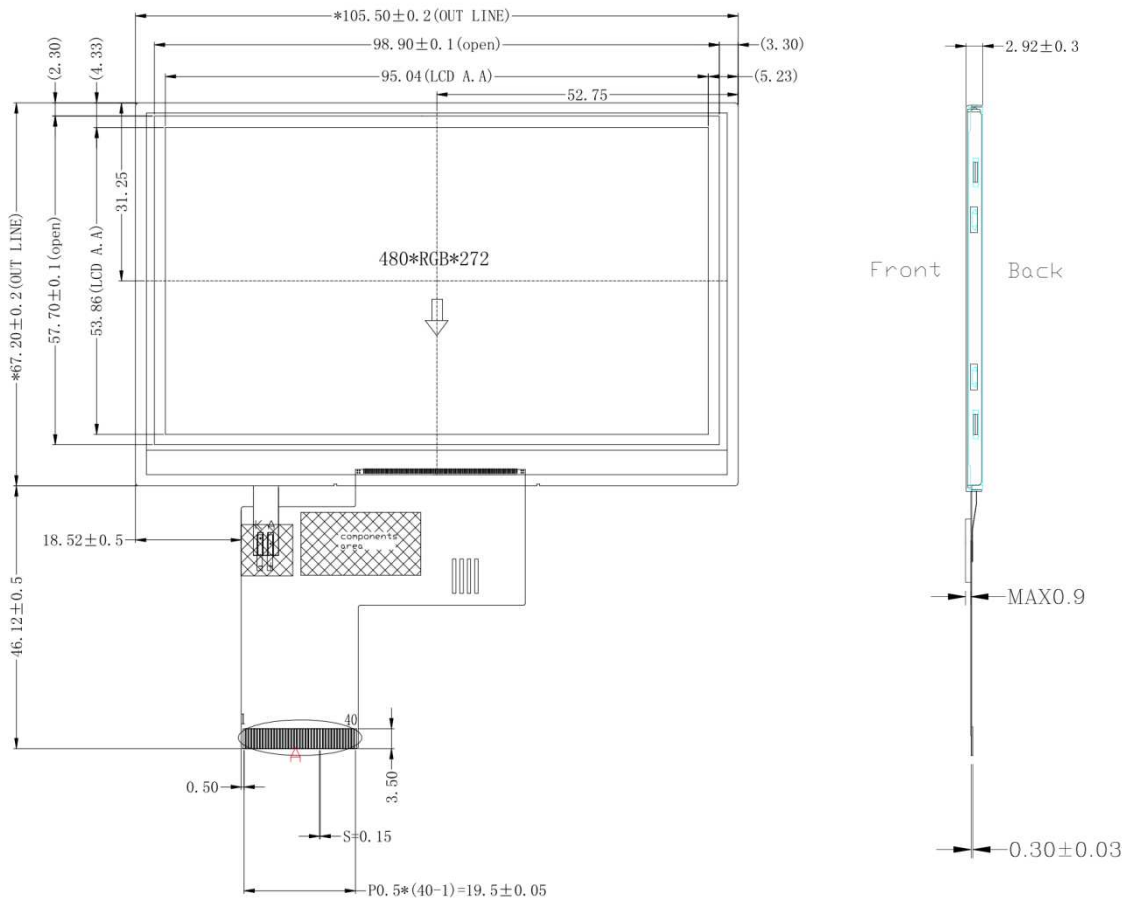
1. 4.3" TFT LCD
2. Resolution:480*272
3. Display Type:TFT/Normally/White/Transmissive
4. Interface Type:24-BIT RGB
5. Drive IC:ILI6480BQ
6. Surface Luminance:320cd/m²
7. Top:-20°C~70°C

● Mechanical Data

1. Module(WxHxT)(mm):105.5*67.2*2.92
2. Active Area(mm):95.04*53.86
3. LED Numbers:10 LEDs



● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description
1	VLED-	Cathode of LED backlight
2	VLED+	Anode of LED backlight
3	GND	Power ground
4	VDD	Power supply
5~12	R0~R7	8-bit digital Red data input,
13~20	G0~G7	8-bit digital Green data input,
21~28	B0~B7	8-bit digital Blue data input,
29	GND	Power ground
30	DCLK	Clock signal; latching data at the falling edge
31	DISP	Display control / standby mode selection. DISP = "Low" : Standby; DISP = "High" : Normal display(Default)
32	HSYNC	Horizontal sync signal; negative polarity
33	VSYNC	Vertical sync signal; negative polarity
34	DE	Data input enable. Active High to enable the data input.
35	NC	No connection.
36	GND	Power ground
37	NC(XR)	No connection.
38	NC(YD)	No connection.
39	NC(XL)	No connection.
40	NC(YU)	No connection.

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Analog	VDD	3.0	3.3	3.6	V	
Supply Voltage for Logic	VDD	3.0	3.3	3.6	V	
Input Voltage	V _{IL}	GND	-	0.3VDD	V	
	V _{IH}	0.7 VDD	-	VDD		
Input leakage Current	I _{LKG}	-1		1	μA	



BTF043B-AWR\$

● Feature

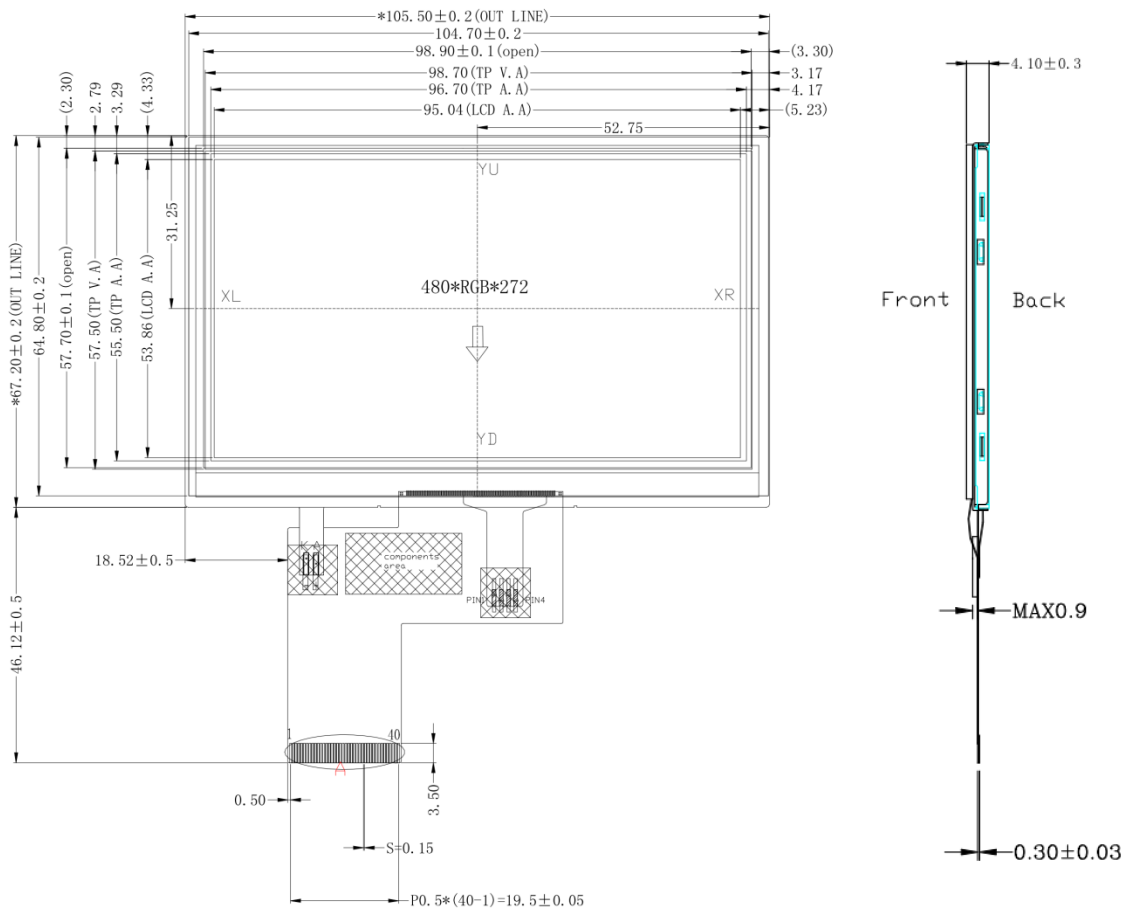
1. 4.3" TFTLCD
2. Resolution:480*272
3. DisplayType:TFT/Normally/White/Transmissive
4. Interface Type:24-BIT RGB
5. Drive IC:ILI6480BQ
6. Surface Luminance:400cd/m²
7. Top:-20°C~70°C
8. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):105.5*67.2*4.10
2. Active Area(mm):95.04*53.86
3. LED Numbers:10 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description
1	VLED-	Cathode of LED backlight
2	VLED+	Anode of LED backlight
3	GND	Power ground
4	VDD	Power supply
5~12	R0~R7	8-bit digital Red data input,
13~20	G0~G7	8-bit digital Green data input,
21~28	B0~B7	8-bit digital Blue data input,
29	GND	Power ground
30	DCLK	Clock signal; latching data at the falling edge
31	DISP	Display control / standby mode selection. DISP = "Low" : Standby; DISP = "High" : Normal display(Default)
32	HSYNC	Horizontal sync signal; negative polarity
33	VSYNC	Vertical sync signal; negative polarity
34	DE	Data input enable. Active High to enable the data input.
35	NC	No connection.
36	GND	Power ground
37	XR	TP pin.
38	YD	TP pin.
39	XL	TP pin.
40	YU	TP pin.

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Analog	VDD	3.0	3.3	3.6	V	
Supply Voltage for Logic	VDD	3.0	3.3	3.6	V	
Input Voltage	V _{IL}	GND	-	0.3VDD	V	
	V _{IH}	0.7 VDD	-	VDD		
Input leakage Current	I _{LKG}	-1		1	μA	



BTF043C-AUN\$

● Feature

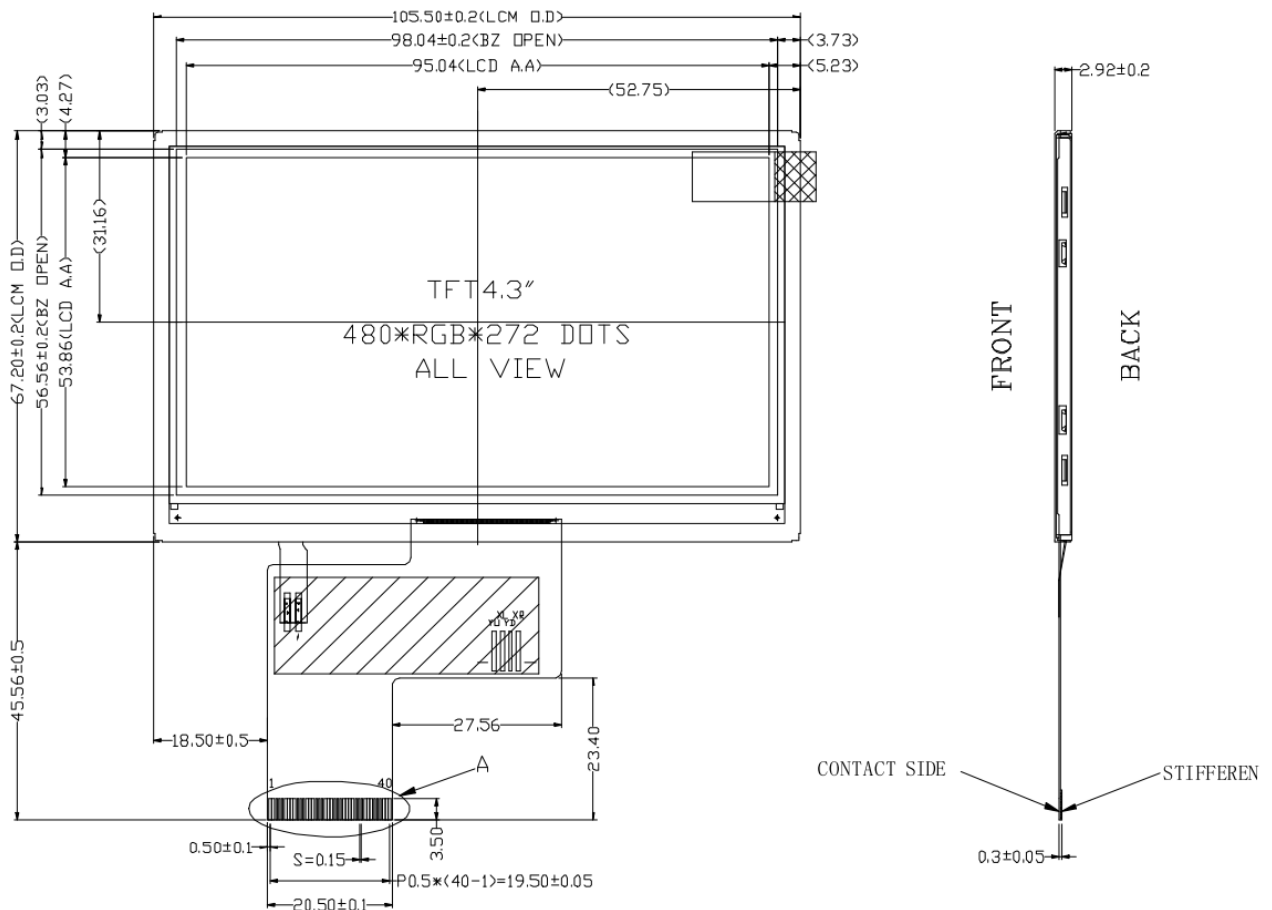
1. 4.3" TFT LCD
2. Resolution:480*272
3. Display Type:TFT/Normally/Black/Transmissive
4. Interface Type: 24-BIT RGB
5. Drive IC:SC7283
6. Surface Luminance:550cd/m²
7. Viewing Angle:All View Direction
8. Top:-30°C~85°C



● Mechanical Data

1. Module (WxHxT)(mm):105.5*67.2*2.92
2. Active Area(mm):95.04*53.86
3. LED Numbers:10 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description
1	VLED-	Cathode of LED backlight
2	VLED+	Anode of LED backlight
3	GND	Power ground
4	VDD	Power voltage
5	R0	Red data (LSB)
6	R1	Red data
7	R2	Red data
8	R3	Red data
9	R4	Red data
10	R5	Red data
11	R6	Red data
12	R7	Red data (MSB)
13	G0	Green data (LSB)
14	G1	Green data
15	G2	Green data
16	G3	Green data
17	G4	Green data
18	G5	Green data
19	G6	Green data
20	G7	Green data(MSB)
21	B0	Blue data(LSB)
22	B1	Blue data
23	B2	Blue data
24	B3	Blue data
25	B4	Blue data
26	B5	Blue data
27	B6	Blue data
28	B7	Blue data(MSB)
29	GND	Power ground
30	DCLK	Pixel clock
31	DISP	Display on/off
32	HSYNC	Horizontal sync signal
33	VSYNC	Vertical sync signal
34	DE	Data enable
35	NC	NO connect
36	GND	Power ground
37	NC	NO connect
38	NC	NO connect
39	NC	NO connect
40	NC	NO connect

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Analog	VDD	3.0	3.3	3.6	V	
Supply Voltage for Logic	VDD	3.0	3.3	3.6	V	
Input Voltage	V_{IL}	GND	-	0.3VDD	V	
	V_{IH}	0.7 VDD	-	VDD		
Input leakage Current	I_{LKG}	-1		1	μA	



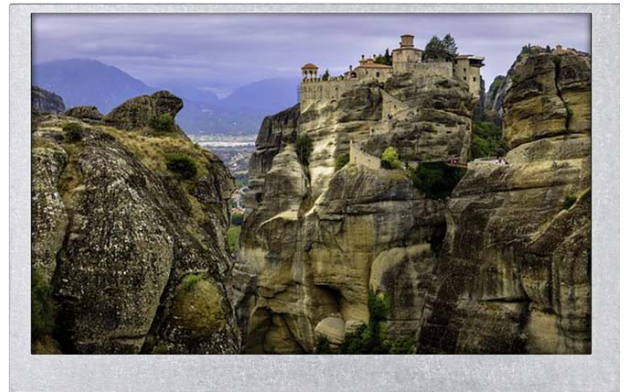
BTF050A-AWN\$

● Feature

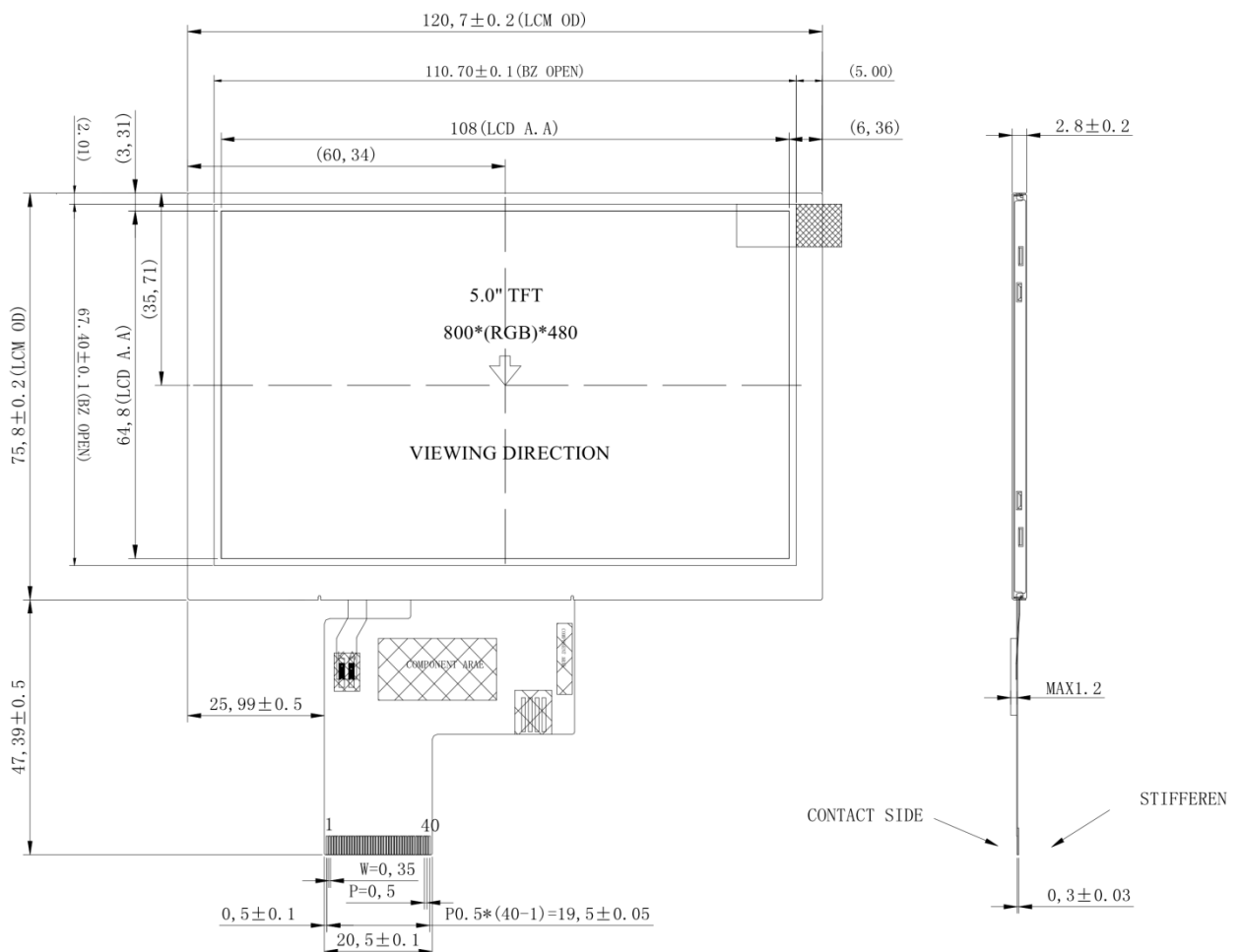
1. 5.0" TFTLCD
2. Resolution:800*480
3. DisplayType:TFT/Transmissive/Positive
4. Interface Type:24-BIT RGB
5. Drive IC:ILI5960+ILI6122
6. Surface Luminance:450cd/m²
7. Top:-20°C~70°C

● Mechanical Data

1. Module(WxHxT)(mm):120.7*75.8*2.8
2. Active Area(mm):108*64.8
3. LED Numbers:12LEDs



● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description
1	LED-	Cathode of LED backlight
2	LED+	Anode of LED backlight
3	GND	Power ground
4	VDD	Power voltage
5-12	R0-R7	Red data
13-20	G0-G7	Green data
21-28	B0-B7	Blue data
29	GND	Power ground
30	DCLK	Pixel clock
31	DISP	Display on/off
32	HSYNC	Horizontal sync signal
33	VSYNC	Vertical sync signal
34	DE	Data enable
35	NC	NO connect
36	GND	Power ground
37	NC	NO connect
38	NC	NO connect
39	NC	NO connect
40	NC	NO connect

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Analog	VDD	3.0	3.3	3.6	V	
Supply Voltage for Logic	VDD	3.0	3.3	3.6	V	
Input Voltage	V _{IL}	-0.3	-	0.2VDD	V	
	V _{IH}	0.8 VDD	-	VDD		
Input leakage Current	I _{LKG}	-		-	μA	



BTF050A-AWR\$

● Feature

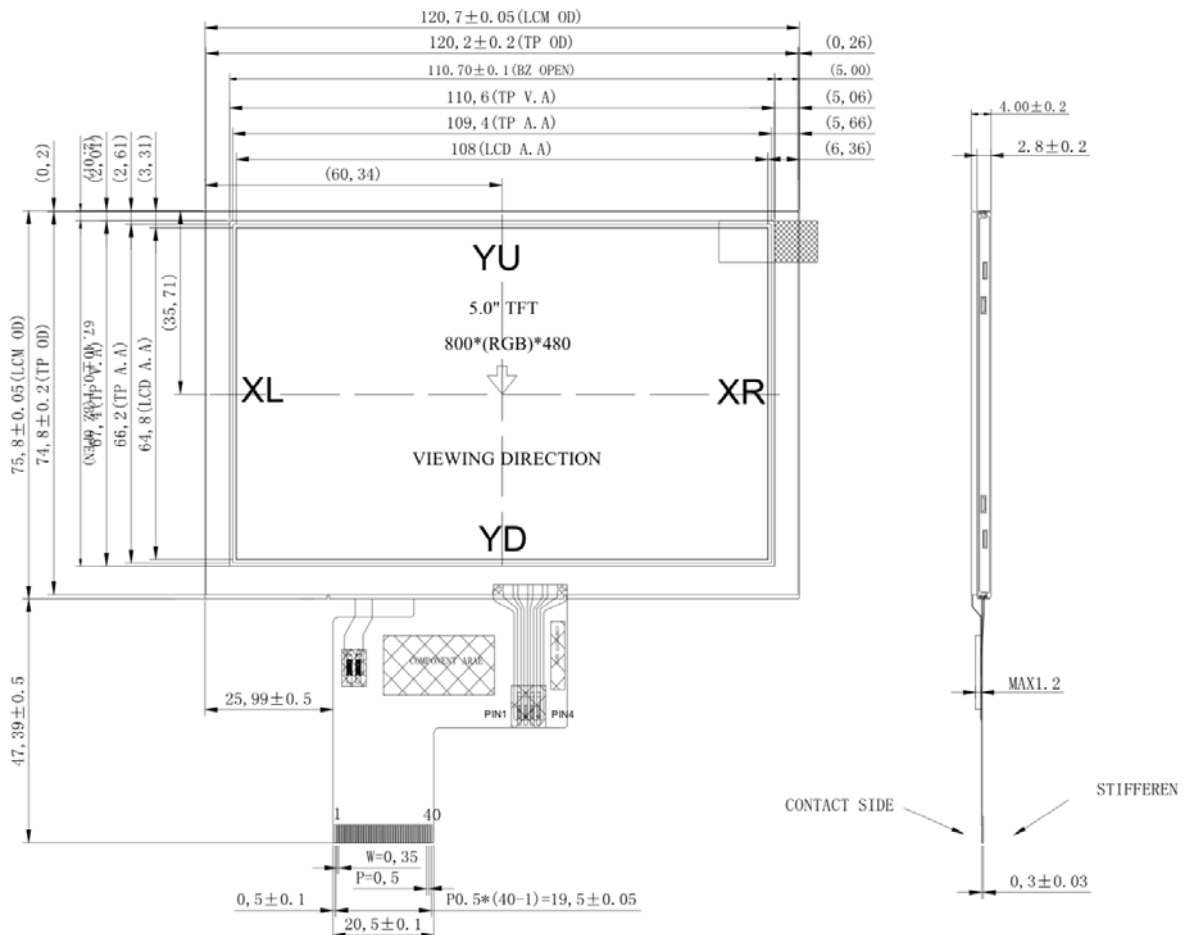
1. 5.0" TFTLCD
2. Resolution:800*480
3. DisplayType:TFT/Transmissive/Positive
4. Interface Type:24-BIT RGB
5. Drive IC:ILI5960+ILI6122
6. Surface Luminance:360cd/m²
7. Top:-20°C~70°C
8. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):120.7*75.8*4.0
2. Active Area(mm):108*64.8
3. LED Numbers:12 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description
1	LED-	Cathode of LED backlight
2	LED+	Anode of LED backlight
3	GND	Power ground
4	VDD	Power voltage
5-12	R0-R7	Red data
13-20	G0-G7	Green data
21-28	B0-B7	Blue data
29	GND	Power ground
30	DCLK	Pixel clock
31	DISP	Display on/off
32	HSYNC	Horizontal sync signal
33	VSYNC	Vertical sync signal
34	DE	Data enable
35	NC	NO connect
36	GND	Power ground
37	XR	Right electrode -differential analog
38	YD	Bottom electrode -differential analog
39	XL	Left electrode -differential analog
40	YU	Top electrode -differential analog

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Analog	VDD	3.0	3.3	3.6	V	
Supply Voltage for Logic	VDD	3.0	3.3	3.6	V	
Input Voltage	V _{IL}	-0.3	-	0.2VDD	V	
	V _{IH}	0.8 VDD	-	VDD		
Input leakage Current	I _{LKG}	-		-	μA	



BTF056A-AHN\$

● Feature

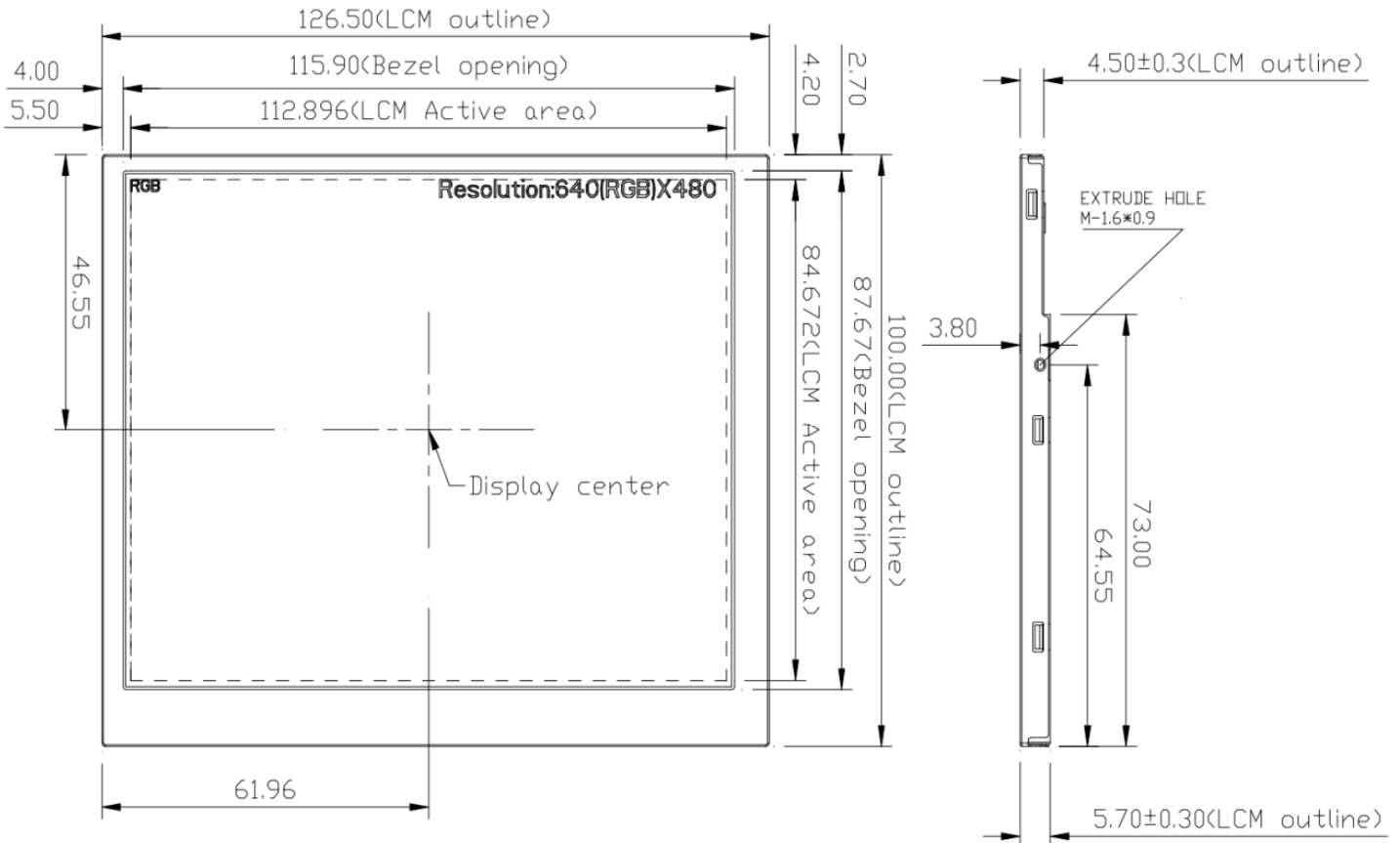
1. 5.6" TFTLCD
2. Resolution:640*480
3. DisplayType:TFT/Normally/White/Transmissive
4. Interface Type:18-BIT RGB
5. Surface Luminance:350cd/m²
6. Top:-20°C~70°C

● Mechanical Data

1. Module(WxHxT)(mm):126.5*100*5.7
2. Active Area(mm):112.896*84.672



● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Function
1	VLED	Power Voltage for LED circuit
2	VLED	Power Voltage for LED circuit
3	ADJ	Adjust the LED brightness with PWM Pulse
4	GLED	Ground for LED circuit
5	GLED	Ground for LED circuit
6	VCC	Power Voltage for digital circuit
7	VCC	Power Voltage for digital circuit
8	MODE	DE or HV mode control
9	DE	Data enable
10	VS	Vsync signal input
11	HS	Hsync signal input
12	GND	Power ground
13	B5	Blue data input (MSB)
14	B4	Blue data input
15	B3	Blue data input
16	GND	Power ground
17	B2	Blue data input
18	B1	Blue data input
19	B0	Blue data input(LSB)
20	GND	Power ground
21	G5	Green data input(MSB)
22	G4	Green data input
23	G3	Green data input
24	GND	Power ground
25	G2	Green data input
26	G1	Green data input
27	G0	Green data input(LSB)
28	GND	Power ground
29	R5	Red data input(MSB)
30	R4	Red data input
31	R3	Red data input
32	GND	Power ground
33	R2	Red data input
34	R1	Red data input
35	R0	Red data input(LSB)
36	GND	Power ground
37	DCLK	Sample clock
38	GND	Power ground
39	L/R	Select left to right scanning direction
40	U/D	Select up or down scanning direction

● Electrical Characteristics

Item	Symbol	Values			Unit	Remark
		Min.	Typ.	Max.		
Power voltage	V _{CC}	3.1	3.3	3.5	V	
	V _{LED}	4.8	5.0	5.2	V	
Current Consumption	I _{CC}	-	200	250	mA	
	I _{LED}	-	380	450	mA	
Input logic high voltage	V _{IH}	0.7V _{CC}	-	1V _{CC}	V	
Input logic low voltage	V _{IL}	0	-	0.3V _{CC}	V	
LED life time	-	20,000	-	-	Hr	



BTF057A-AHN\$

● Feature

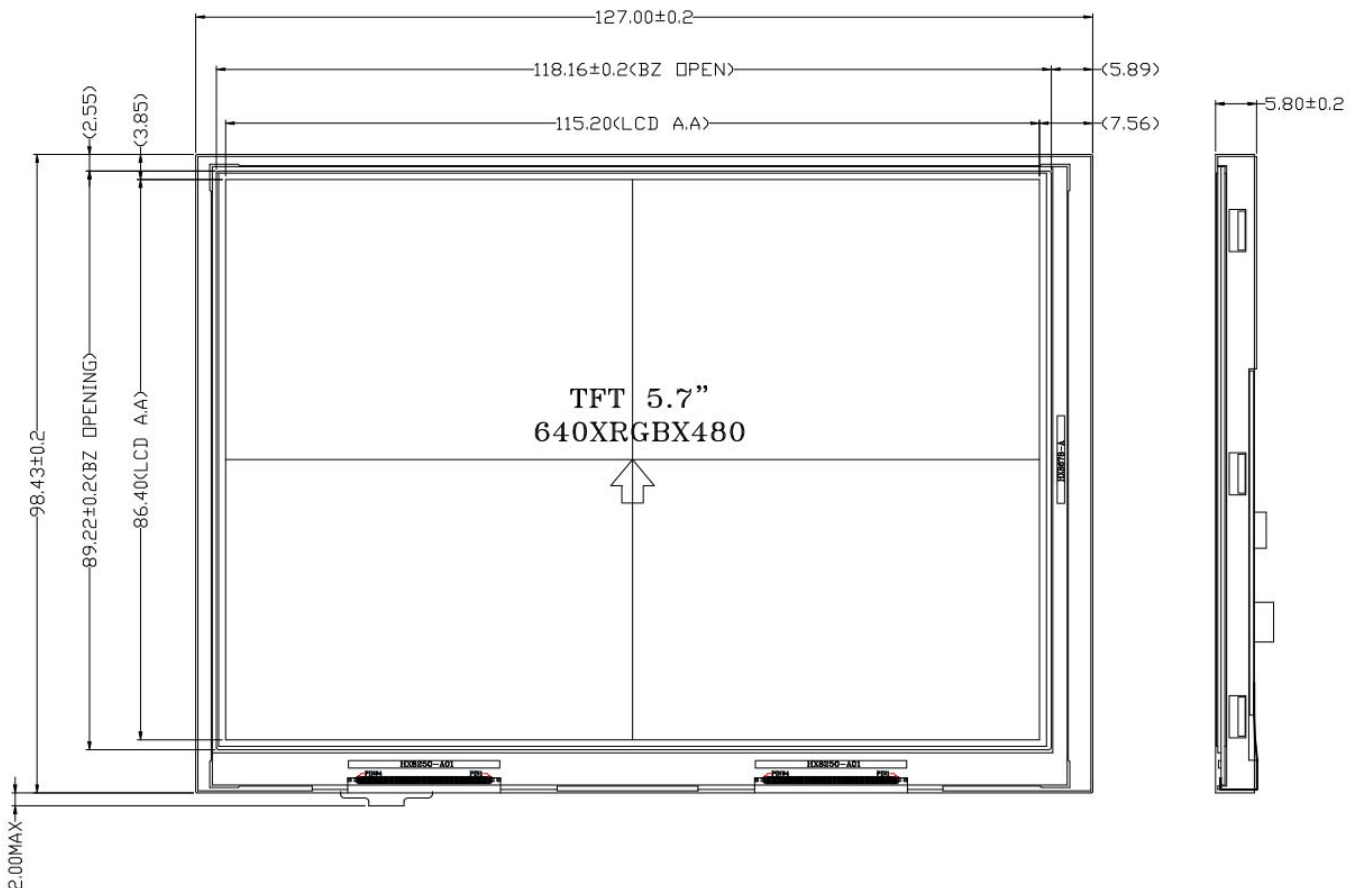
1. 5.7" TFTLCD
2. Resolution:640*480
3. DisplayType:TFT/Normally/White/Transmissive
4. Interface Type:18-BIT RGB
5. Drive IC:HX8250-A01*2+HX8678A
6. Surface Luminance:700cd/m²
7. Top:-20°C~70°C

● Mechanical Data

1. Module(WxHxT)(mm):127.0*98.43*5.8
2. Active Area(mm):115.2*86.4
3. LED Numbers:21 LEDs



● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description
1	U/D	Up/down scan setting. When U/D=H, reverse scan. When U/D=L, normal scan.
2	NC	No connection.
3	HSYNC	Horizontal sync input in digital RGB and CCIR601 mode. (Short to GND if not used)
4~6	VLED	Power supply for BLU LDO circuit.
7	VCC	Power supply.
8	VSYNC	Vertical sync input in digital RGB and CCIR601 mode. (Short to GND if not used)
9	DE	Input data enable control. When DE mode, active High to enable data input. Default pull low.
10	NC(X2)	No connection.(Touch panel control PIN: X2)
11	NC(Y1)	No connection.(Touch panel control PIN: Y1)
12	ADJ	Chip Enable (Active High).
13~15	B5~B3	Blue data input.
16	VSS	Power ground.
17~19	B2~B0	Blue data input.
20	VSS	Power ground.
21~23	G5~G3	Green data input.
24	VSS	Power ground.
25~27	G2~G0	Green data input.
28	VSS	Power ground.
29~31	R5~R3	Red data input.
32	VSS	Power ground.
33~35	R2~R0	Red data input.
36	NC(X1)	No connection.(Touch panel control PIN: X1)
37	NC(Y2)	No connection.(Touch panel control PIN: Y2)
38	DCLK	Clock signal. Latching data at the rising edge.
39	VSS	Power ground.
40	L/R	The shift direction of device internal shift register is controlled by this pin as shown below: L/R=H: STH->SO1->•••->SO960->STHO L/R=L: STH->SO960->•••->SO1->STHO

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Analog	VCC	2.7	3.3	3.6	V	
Supply Voltage for Logic	VCC	2.7	3.3	3.6	V	
Input Voltage	V _{IL}	-0.3	-	0.2VCC	V	
	V _{IH}	0.8 VCC	-	VCC		
Input leakage Current	I _{LKG}	-1		1	μA	



BTF057A-AHR\$

● Feature

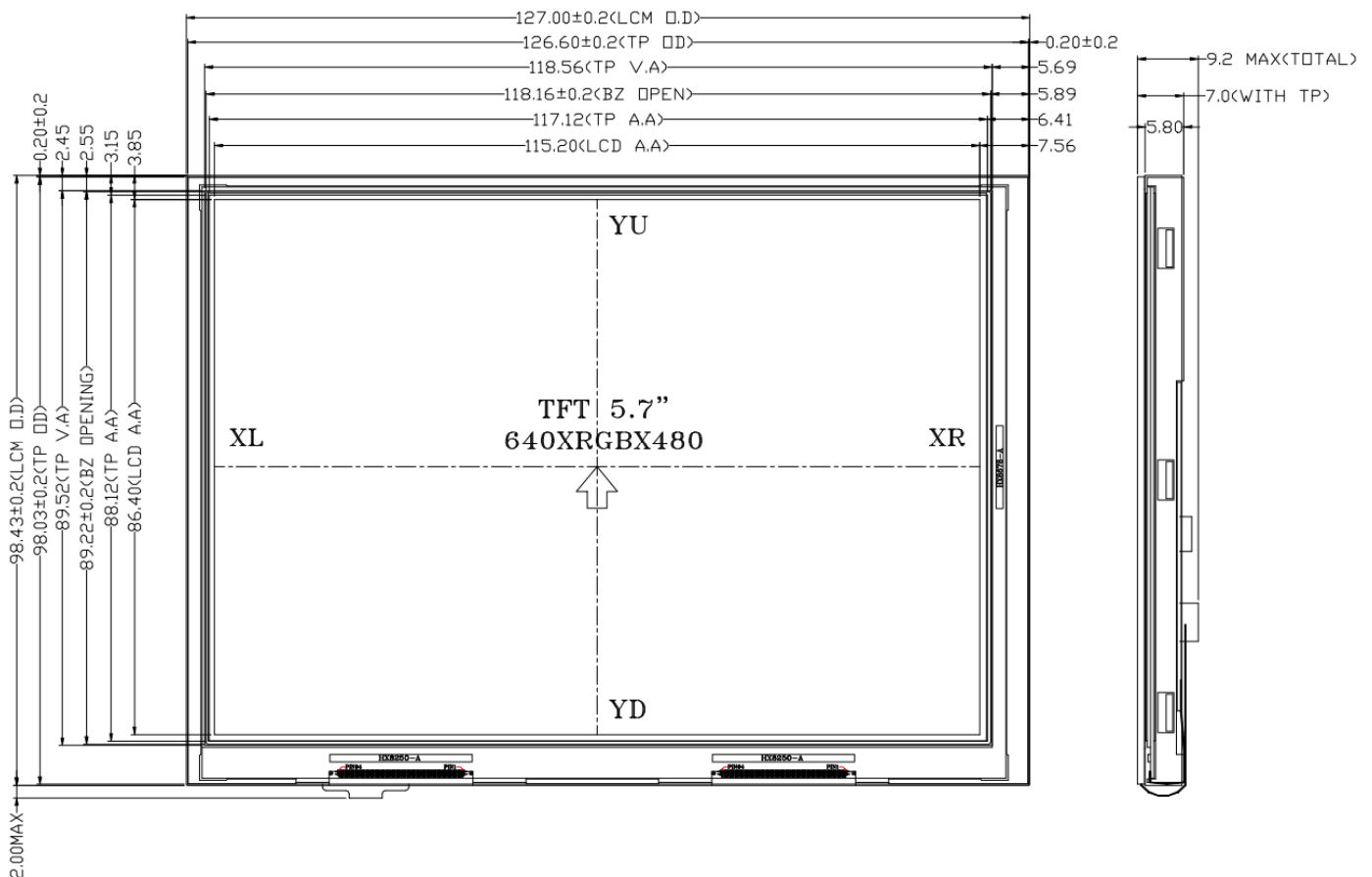
1. 5.7" TFTLCD
2. Resolution:640*480
3. DisplayType:TFT/Normally/White/Transmissive
4. Interface Type:18-BIT RGB
5. Drive IC:HX8250-A*2+HX8678B
6. Surface Luminance:560cd/m²
7. Top:-20°C~70°C
8. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):127.0*98.43*9.20
2. Active Area(mm):115.2*86.4
3. LED Numbers:21LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description
1	U/D	Up/down scan setting. When U/D=H, reverse scan. When U/D=L, normal scan.
2	NC	No connection.
3	HSYNC	Horizontal sync input in digital RGB and CCIR601 mode. (Short to GND if not used)
4~6	VLED	Power supply for BLU LDO circuit.
7	VCC	Power supply.
8	VSYNC	Vertical sync input in digital RGB and CCIR601 mode. (Short to GND if not used)
9	DE	Input data enable control. When DE mode, active High to enable data input. Default pull low.
10	XL	Touch panel control PIN: XL
11	YU	Touch panel control PIN: YU
12	ADJ	Chip Enable (Active High).
13~15	B5~B3	Blue data input.
16	VSS	Power ground.
17~19	B2~B0	Blue data input.
20	VSS	Power ground.
21~23	G5~G3	Green data input.
24	VSS	Power ground.
25~27	G2~G0	Green data input.
28	VSS	Power ground.
29~31	R5~R3	Red data input.
32	VSS	Power ground.
33~35	R2~R0	Red data input.
36	XR	Touch panel control PIN: XR
37	YD	Touch panel control PIN: YD
38	DCLK	Clock signal. Latching data at the rising edge.
39	VSS	Power ground.
40	L/R	The shift direction of device internal shift register is controlled by this pin as shown below: L/R=H: STH->SO1->•••->SO960->STHO L/R=L: STH->SO960->•••->SO1->STHO

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Analog	VCC	2.7	3.3	3.6	V	
Supply Voltage for Logic	VCC	2.7	3.3	3.6	V	
Input Voltage	V _{IL}	-0.3	-	0.2VCC	V	
	V _{IH}	0.8 VCC	-	VCC		
Input leakage Current	I _{LKG}	-1		1	μA	



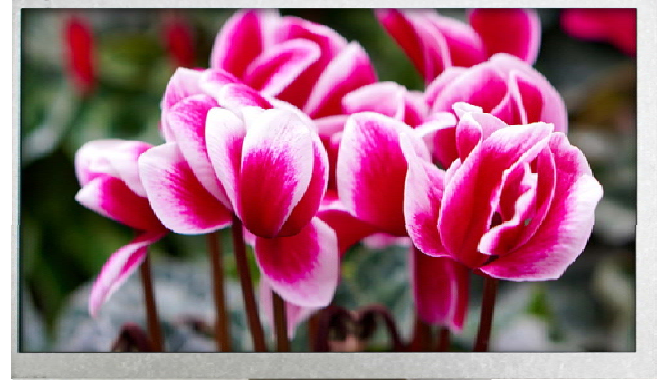
BTF070A-AWN\$

● Feature

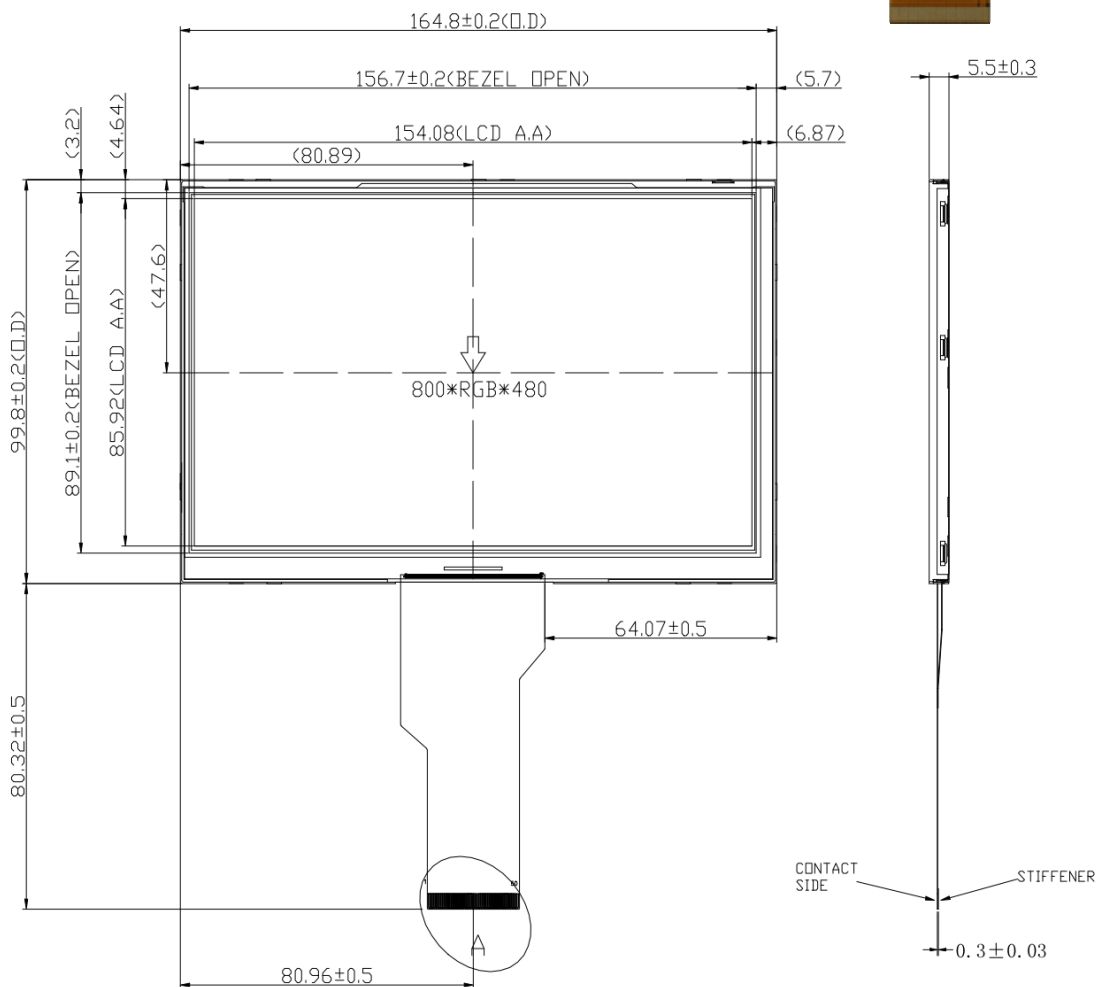
1. 7.0" TFTLCD
2. Resolution:800*480
3. DisplayType:TFT/Transmissive/Positive
4. Interface Type:24-BIT RGB
5. Drive IC:EK9713+EK73002
6. Surface Luminance:400cd/m²
7. Top:-20°C~70°C

● Mechanical Data

1. Module(WxHxT)(mm):164.8*99.8*5.5
2. Active Area(mm):154.08*85.92
3. LED Numbers:21LEDs



● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	LED+	Anode of LED backlight	36	GND	Power Ground
2	LED+	Anode of LED backlight	37	DCLK	Sample clock
3	LED-	Cathode of LED backlight	38	GND	Power Ground
4	LED-	Cathode of LED backlight	39	L/R	Left / right selection
5	GND	Power ground	40	U/D	Up/down selection
6	VCOM	Common voltage	41	VGH	Gate ON Voltage
7	DVDD	Power for digital circuit	42	VGL	Gate OFF Voltage
8	MODE	DE/SYNC mode select	43	AVDD	Power for Analog Circuit
9	DE	Data input enable	44	RESET	Global reset pin
10	VS	Vertical sync input	45	NC	No connection
11	HS	Horizontal sync input	46	VCOM	Common Voltage
12	B7	Blue data(MSB)	47	DITHB	Dithering function
13~18	B6 ~B1	Blue data	48	GND	Power Ground
19	B0	Blue data(LSB)	49	NC	No connection
20	G7	Green data(MSB)	50	NC	No connection
21~26	G6~G1	Green data			
27	G0	Green data(LSB)			
28	R7	Red data(MSB)			
29~34	R6~R1	Red data			
35	R0	Red data(LSB)			

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Logic	DVDD	3.0	3.3	3.6	V	
Supply Voltage for Analog	AVDD	10.2	10.4	10.6	V	
Power supply	VGH	15.3	16	16.7		
Power supply	VGL	-7.7	-7	-6.3		
Power supply	VCOM	2.6	3.6	4.6		
Input Voltage	V _{IL}	GND	-	0.3DVDD	V	
	V _{IH}	0.7 DVDD	-	DVDD		
Input leakage Current	I _{LKG}	-		-	μA	



BTF070A-AWR\$

● Feature

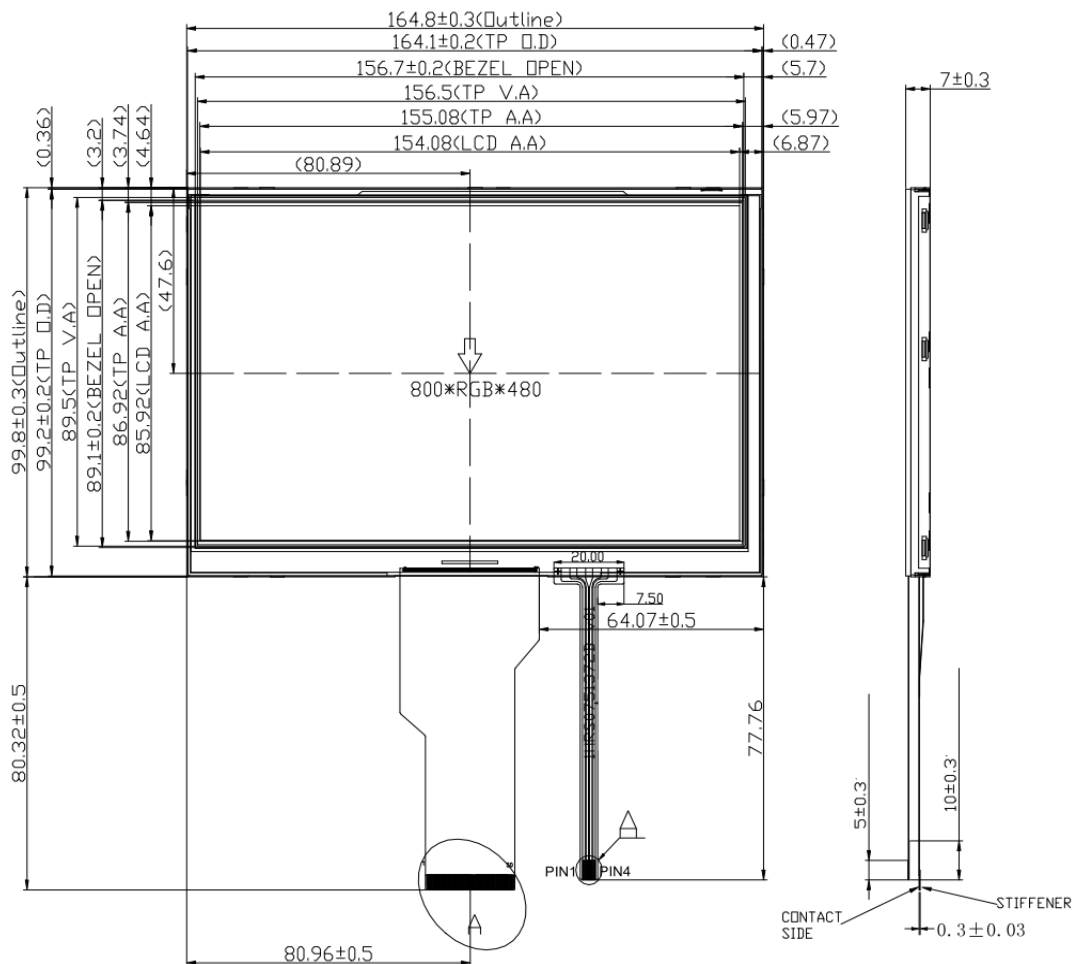
1. 7.0" TFT LCD
2. Resolution:800*480
3. Display Type:TFT/Transmissive/Positive
4. Interface Type: 24-BIT RGB
5. Drive IC: EK9713+EK73002
6. Surface Luminance:320cd/m²
7. Top:-20°C~70°C
8. Support Resistive Touch Panel



● Mechanical Data

1. Module (WxHxT)(mm):164.8*99.8*7.0
2. Active Area(mm):154.08*85.92
3. LED Numbers:21LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	LED+	Anode of LED backlight	36	GND	Power Ground
2	LED+	Anode of LED backlight	37	DCLK	Sample clock
3	LED-	Cathode of LED backlight	38	GND	Power Ground
4	LED-	Cathode of LED backlight	39	L/R	Left / right selection
5	GND	Power ground	40	U/D	Up/down selection
6	VCOM	Common voltage	41	VGH	Gate ON Voltage
7	DVDD	Power for digital circuit	42	VGL	Gate OFF Voltage
8	MODE	DE/SYNC mode select	43	AVDD	Power for Analog Circuit
9	DE	Data input enable	44	RESET	Global reset pin
10	VS	Vertical sync input	45	NC	No connection
11	HS	Horizontal sync input	46	VCOM	Common Voltage
12	B7	Blue data(MSB)	47	DITHB	Dithering function
13~18	B6 ~B1	Blue data	48	GND	Power Ground
19	B0	Blue data(LSB)	49	NC	No connection
20	G7	Green data(MSB)	50	NC	No connection
21~26	G6~G1	Green data			
27	G0	Green data(LSB)			
28	R7	Red data(MSB)			
29~34	R6~R1	Red data			
35	R0	Red data(LSB)			

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Logic	DVDD	3.0	3.3	3.6	V	
Supply Voltage for Analog	AVDD	10.2	10.4	10.6	V	
Power supply	VGH	15.3	16	16.7		
Power supply	VGL	-7.7	-7	-6.3		
Power supply	VCOM	2.6	3.6	4.6		
Input Voltage	V _{IL}	GND	-	0.3DVDD	V	
	V _{IH}	0.7 DVDD	-	DVDD		
Input leakage Current	I _{LKG}	-		-	μA	

● Interface Pin Function

Pin No.	Symbol	Description	Pin No.	Symbol	Description
1	LED+	Anode of LED backlight	36	GND	Power Ground
2	LED+	Anode of LED backlight	37	DCLK	Sample clock
3	LED-	Cathode of LED backlight	38	GND	Power Ground
4	LED-	Cathode of LED backlight	39	L/R	Left / right selection
5	GND	Power ground	40	U/D	Up/down selection
6	VCOM	Common voltage	41	VGH	Gate ON Voltage
7	DVDD	Power for digital circuit	42	VGL	Gate OFF Voltage
8	MODE	DE/SYNC mode select	43	AVDD	Power for Analog Circuit
9	DE	Data input enable	44	RESET	Global reset pin
10	VS	Vertical sync input	45	NC	No connection
11	HS	Horizontal sync input	46	VCOM	Common Voltage
12	B7	Blue data(MSB)	47	DITHB	Dithering function
13~18	B6 ~B1	Blue data	48	GND	Power Ground
19	B0	Blue data(LSB)	49	NC	No connection
20	G7	Green data(MSB)	50	NC	No connection
21~26	G6~G1	Green data			
27	G0	Green data(LSB)			
28	R7	Red data(MSB)			
29~34	R6~R1	Red data			
35	R0	Red data(LSB)			

CTP PIN

Pin No.	Symbol	Description
1	VSS(GND)	Ground
2	VDD	Power supply
3	SDA	12c data input and output
4	SCL	12c clock input
5	RST	External reset.low is active
6	INT	Interrupt request to the host,orwakeup request from the host
7	NC	No connection
8	VSS(GND)	Ground

● Electrical Characteristics

Item	Symbol	Min	Typ.	Max	Unit	Applicable terminal
Supply Voltage for Logic	DVDD	3.0	3.3	3.6	V	
Supply Voltage for Analog	AVDD	10.2	10.4	10.6	V	
Power supply	VGH	15.3	16	16.7		
Power supply	VGL	-7.7	-7	-6.3		
Power supply	VCOM	2.6	3.6	4.6		
Input Voltage	V _{IL}	GND	-	0.3DVDD	V	
	V _{IH}	0.7 DVDD	-	DVDD		
Input leakage Current	I _{LKG}	-		-	μA	



BTF070B-ABR\$

● Feature

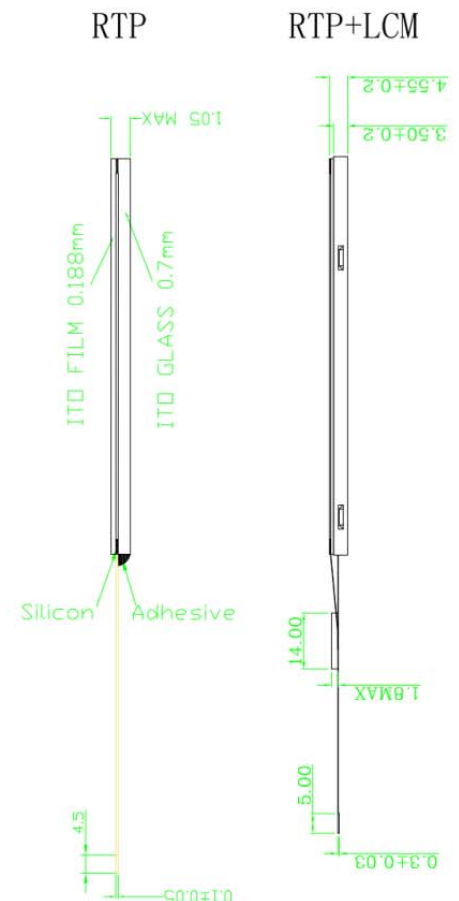
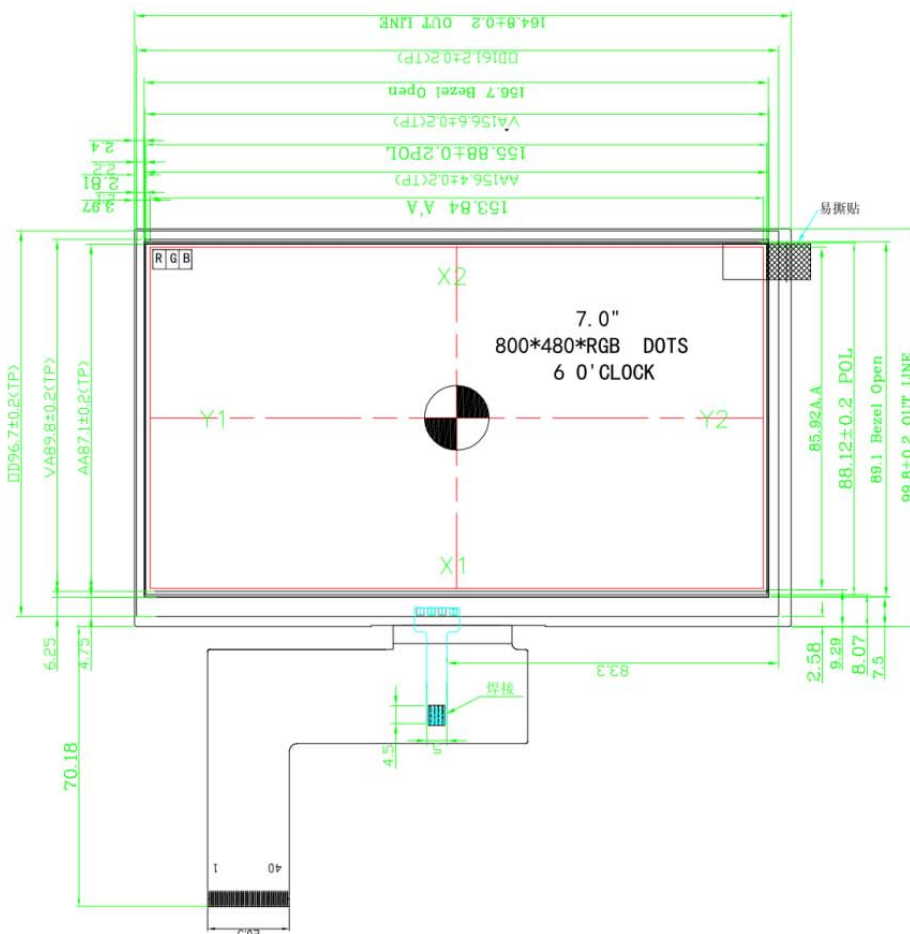
1. 7.0" TFTLCD
2. Resolution:800*480
3. DisplayType:TFT/Normally/White/Transmissive
4. Interface Type:24-BIT RGB
5. Surface Luminance:350cd/m²
6. Top:-20°C~60°C
7. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):164.8*99.8*4.55
2. Active Area(mm):153.84*85.92
3. LED Numbers:24LEDs

● Mechanical Drawing



● Interface Pin Function

Terminal No.	Symbol	IO	Functions
1	VLED-	P	Power for LED backlight (Cathode)
2	VLED+	P	Power for LED backlight (Anode)
3	AGND	P	Analog Ground
4	VCOM	I	Common voltage
5	R0	I	Red data(LSB)
6	R1	I	Red data
7	R2	I	Red data
8	R3	I	Red data
9	R4	I	Red data
10	R5	I	Red data
11	R6	I	Red data
12	R7	I	Red data(MSB)
13	G0	I	Green data (LSB)
14	G1	I	Green data
15	G2	I	Green data
16	G3	I	Green data
17	G4	I	Green data
18	G5	I	Green data
19	G6	I	Green data
20	G7	I	Green data(MSB)
21	B0	I	Blue data(LSB)
22	B1	I	Blue data
23	B2	I	Blue data
24	B3	I	Blue data
25	B4	I	Blue data
26	B5	I	Blue data
27	B6	I	Blue data
28	B7	I	Blue data(MSB)
29	GND	P	Ground
30	DCLK	I	Sample clock
31	DISP	I	Display on/off
32	HS	I	Horizontal Sync Input
33	VS	I	Vertical Sync Input
34	DE	I	Data Input Enable
35	NC	-	No connection
36	GND	P	Ground
37	X_R	P	Touch panel X-right
38	Y_D	P	Touch panel Y-bottom
39	X_L	P	Touch panel X-left
40	Y_U	P	Touch panel Y-up

● Electrical Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit
Supply Voltage	VDD	3.0	3.3	3.6	V
	VGH	17.5	18	19.5	V
	VGL	-8.5	-8	-7.5	V
	AVDD	10.0	10.3	10.6	V
VCOM	VCOM	3.2	3.38	3.8	V
Current of power supply	IVDD	-	4.0	10	mA
	IAVDD	-	50	100	mA
	IGH	-	0.2	1.0	mA
	IGL	-	0.2	1.0	mA
Input voltage 'H' level	VIH	0.7VDD	-	VDD	V
Input voltage 'L' level	VIL	0	-	0.3VDD	V



BTF080A-AWN\$

● Feature

1. 8.0" TFTLCD
2. Resolution:800*RGB*600
3. DisplayType:TFT/Transmissive/Positive
4. Interface Type:24-BIT RGB
5. Drive IC:HX8264-D/HX8696-A
6. Surface Luminance:500cd/m²
7. Top:-20°C~70°C

● Mechanical Data

1. Module(WxHxT)(mm):183.0*141.0*6.2
2. Active Area(mm):162.0*121.5
3. LED Numbers:27 LEDs(8.4~9.9V/180mA)



● Interface Pin Function

No.	Symbol	No.	Symbol	No.	Symbol	No.	Symbol
1	LED+	9	DE	38	GND	46	VCOM
2	LED+	10	VS	39	L/R	47	DITHB
3	LED-	11	HS	40	U/D	48	GND
4	LED-	12~19	B7 ~B0	41	VGH	49	NC
5	GND	20~27	G7 ~G0	42	VGL	50	NC
6	VCOM	28~35	R7~R0	43	AVDD		
7	VCC	36	GND	44	RESET		
8	MODE	37	DCLK	45	NC		

● Mechanical Drawing

