





















TFT LCD with MCU Parallel Interface

MCU interface consist of two types of signals: data signals (4/8/9/16 bits) and control signals. The data signals are connected to the LCD data bus and sends RGB signals over 8, 9, 16 or 18-bit data lines. The control signals are used to define the operation type (read or write), data to internal memory.

Since Parallel MCU can store memory in its' internal frame, it is a good option for displaying images. The MCU interface is a simpler interface to command but it need RAM. It is used in Monochrome character and graphic LCD and well as TFT.

Inch	Display Format	Model No.	Outline Dimension (mm)	Active Area (mm)	Typ.Brightness (module surface,cd/m2)	View Angle	Interface	IC Part No. or Compatible with Controller	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-JBN\$	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	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	
3,5	320x240	BT035DGGAAHp\$	92.0x66.0x6.7	70.08x52.56	150		SPI	FT810	
3,5	320x240	BTC035CG-GFC\$	95.0x64.0x9.2	70.08*52.56	360		4-WIRE SPI	FT811	
4,3	480x272	BTC043BB-EWR\$	105.5x67.2x9.7	95.04x53.86	320		Parallel	RA8875	
4,3	480x272	BTC043BB-GWR\$	105.5x67.2x9.7	95.04x53.86	320		4-WIRE SPI	RA8875	
4,3	480x272	BT043DKFAHWcp\$	120.0x69.0x6.5	95.04x53.86	250		SPI	FT811	
5.0	800x480	BTC050AA-EWR\$	120.7x75.8x9.3	108.0x64.8	280		Parallel	RA8873	
5.0	800x480	BTC050AA-GWR\$	120.7x75.8x9.3	108.0x64.8	280		4-WIRE SPI	RA8873	

5.0	800x480	BTC050AB-EWR\$	120.7x75.8x9.3	108.0x64.8	280		Parallel	RA8875	
5.0	800x480	BTC050AB-GWR\$	120.7x75.8x9.3	108.0x64.8	280		4-WIRE SPI	RA8875	
5.0	800x480	BTC050AE-EWR\$	120.7x75.8x9.3	108.0x64.8	280		Parallel	RA8876	
5.0	800x480	BTC050AE-GWR\$	120.7x75.8x9.3	108.0x64.8	280		4-WIRE SPI	RA8876	
5.0	800x480	BT050DMGAHWp\$	133.0x80.0x5.8	108.0x64.8	280		SPI	FT810	
5.0	800x480	BTC050CG-GWC\$	133.0x80.0x8.7	108.0x64.8	240		SPI	FT811	
7.0	800x480	BTC070BA-EBR\$	164.8x99.8x9.85	153.84x85.632	280		Parallel	RA8873	
7.0	800x480	BTC070BA-GBR\$	164.8x99.8x9.85	153.84x85.632	280		4-WIRE SPI	RA8873	
7.0	800x480	BTC070BB-EBR\$	164.8x99.8x9.85	153.84x85.632	280		Parallel	RA8875	
7.0	800x480	BTC070BB-GBR\$	164.8x99.8x9.85	153.84x85.632	280		4-WIRE SPI	RA8875	
7.0	800x480	BTC070BE-EBR\$	164.8x99.8x9.85	153.84x85.632	280		Parallel	RA8876	
7.0	800x480	BTC070BE-GBR\$	164.8x99.8x9.85	153.84x85.632	280		4-WIRE SPI	RA8876	
7.0	1024x600	BTC070CF-EFC\$	190.08x121.92x10.4	154.21x85.92	640		Parallel	RA8877	
7.0	1024x600	BTC070CF-GFC\$	190.08x121.92x10.4	154.21x85.92	640		4-WIRE SPI	RA8877	
10,1	1280x800	BTC101AF-EAC\$	258x176.6x10.3	216.96x135.6	190		Parallel	RA8877	
10,1	1280x800	BTC101AF-GAC\$	258x176.6x10.3	216.96x135.6	190		4-WIRE SPI	RA8877	
10,1	1024x600	BTC101BE-EBN\$	235x143x9.8	222.72x125.28	360		Parallel	RA8876	
10,1	1024x600	BTC101BE-GBN\$	235x143x9.8	222.72x125.28	360		4-WIRE SPI	RA8876	

BTF0096A-GHN\$



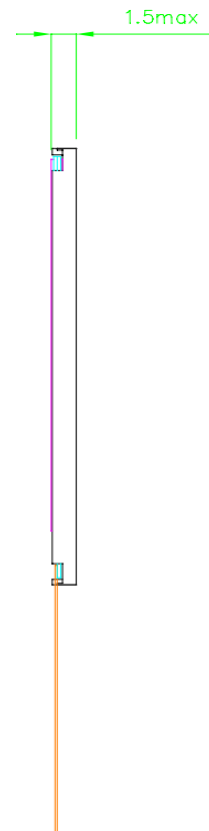
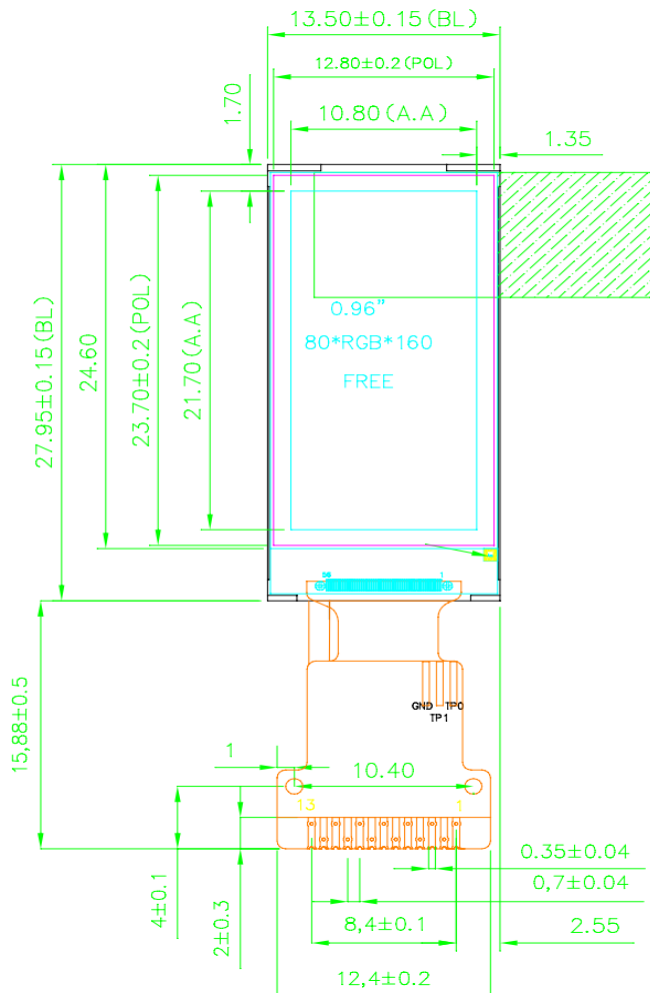
● Feature

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

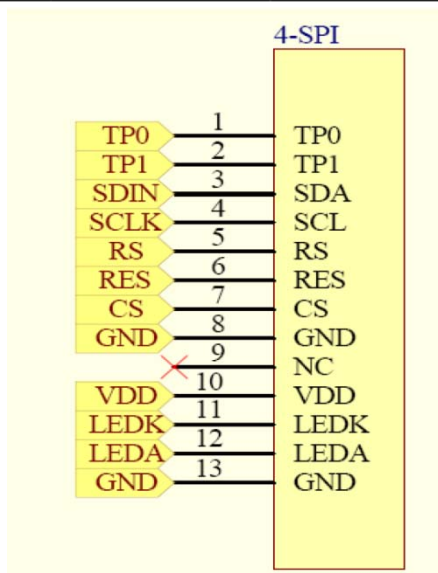
1. Module(WxHxT)(mm):13.5*27.95*1.5
2. Active Area(mm):10.8*21.7
3. LED Numbers:1 LED

● 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

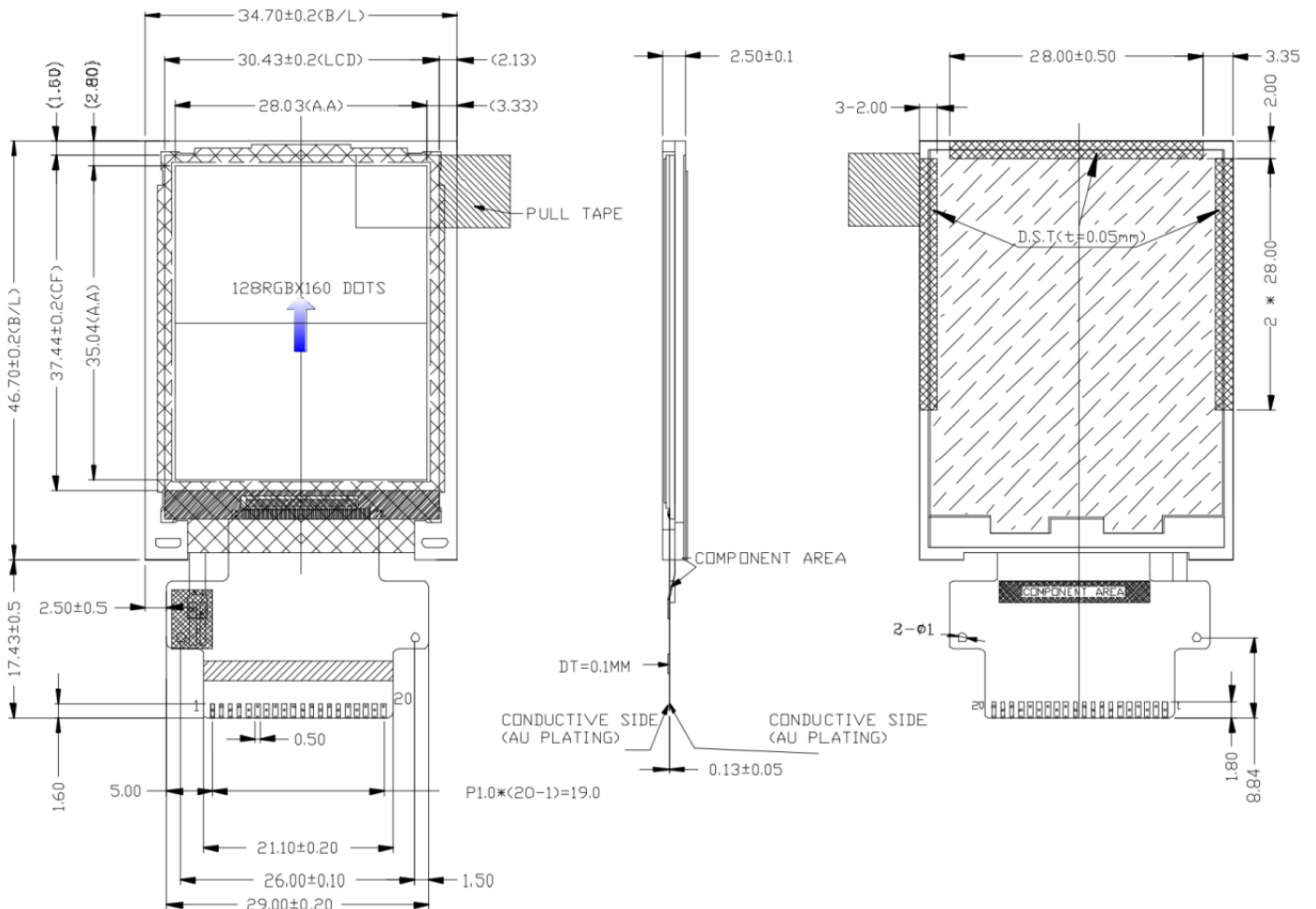
1. 1.77" TFTLCD
2. Resolution:128*RGB*160
3. DisplayType:TFT/Transmissive/Positive
4. Colors:65K
5. Interface Type:8-BIT MCU
6. Drive IC:ST7735S
7. Surface Luminance:320cd/m²
8. Top:-20°C~70°C

● 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

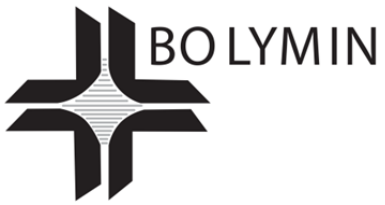
● Electrical Characteristics

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



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BTF020A-JBN\$

***This flyer is under construction
will be coming soon***

BTF024A-EHN\$



● Feature

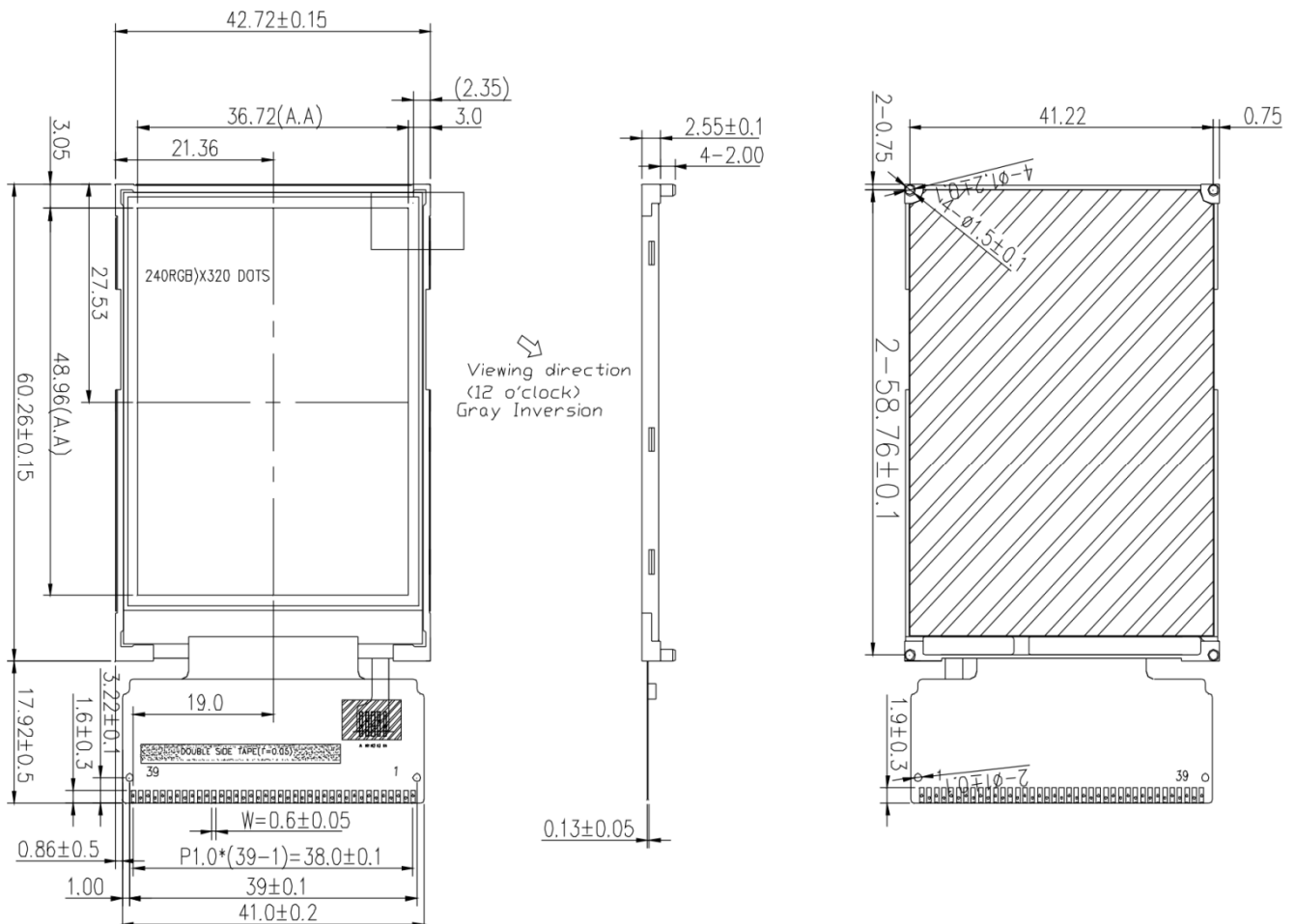
1. 2.4" TFTLCD
2. Resolution:240*RGB*320
3. DisplayType:TFT/Transmissive/Normally white
4. Colors:262K
5. InterfaceType:MCU
6. Drive IC:ST7789V
7. Surface Luminance:350cd/m²
8. Top:-20°C~70°C

● 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}	$0.7 \times IOVCC$	--	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	--	16.8	22.5	mW	
	Sleeping Mode	--	140	165	uW	

BTF028B-EHN\$



● Feature

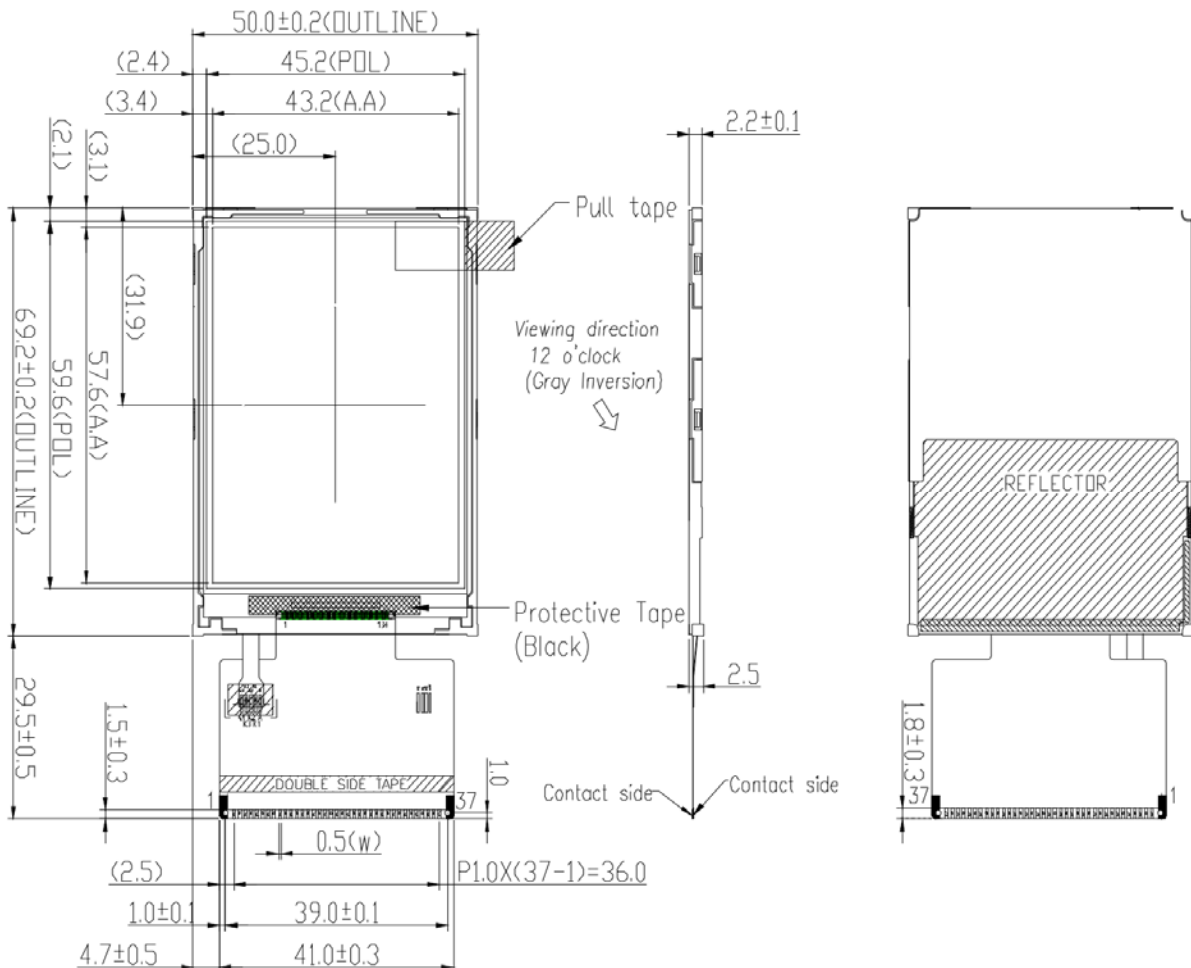
1. 2.8" TFTLCD
2. Resolution:240*RGB*320
3. DisplayType:TFT/Transmissive/Normally white
4. Colors:262K
5. InterfaceType:MCU
6. Drive IC:ST7789V
7. Surface Luminance:280cd/m²
8. Top:-20°C~70°C

● 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	



BTF035B-BWN\$

● Feature

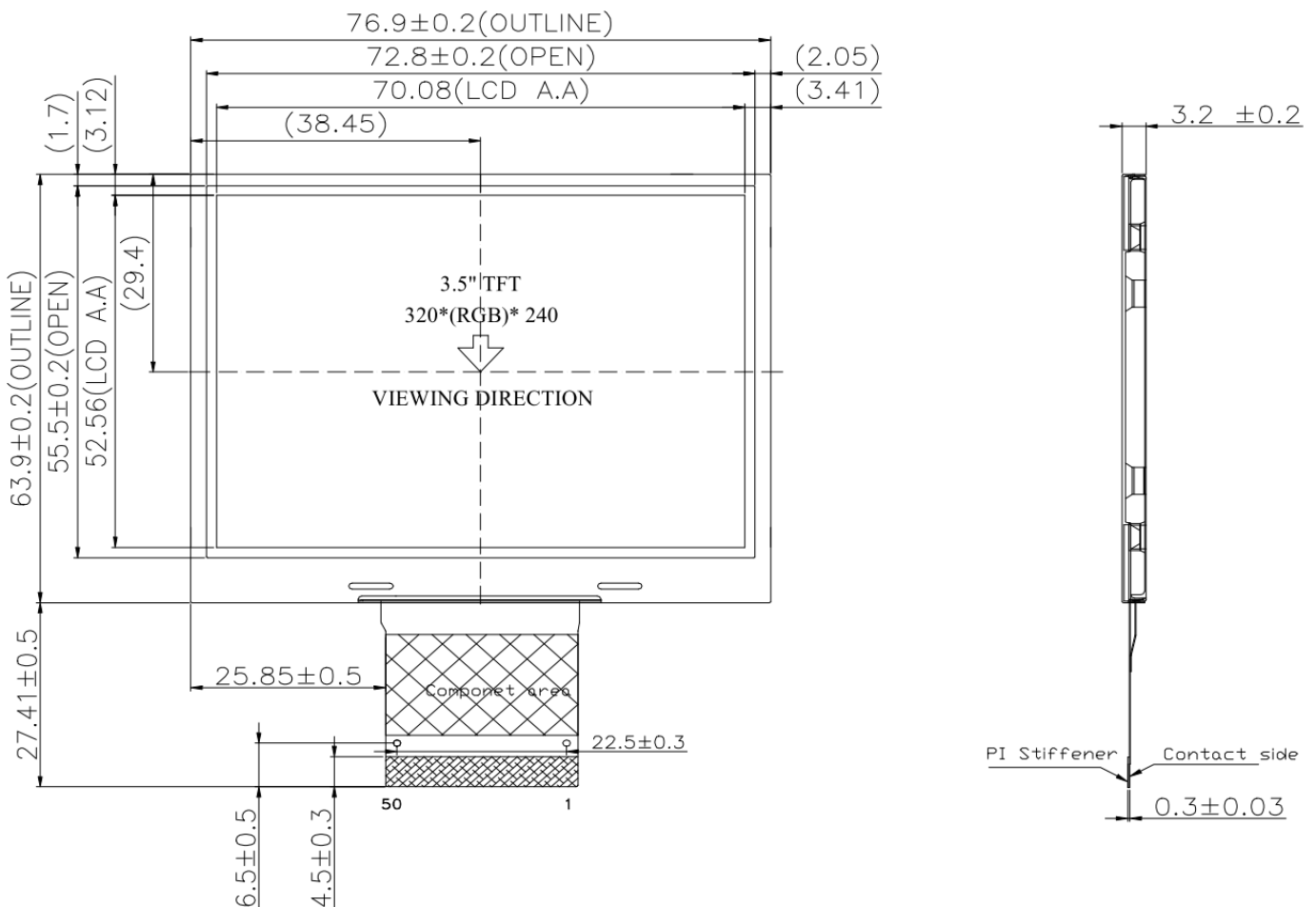
1. 3.5" TFTLCD
2. Resolution:320*240
3. Display Type:TFT/Transmissive/Positive
4. Interface Type:18BIT RGB+SPI
5. Drive IC:SSD2119
6. Surface Luminance:550cd/m²
7. Top:-20°C~70°C

● 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

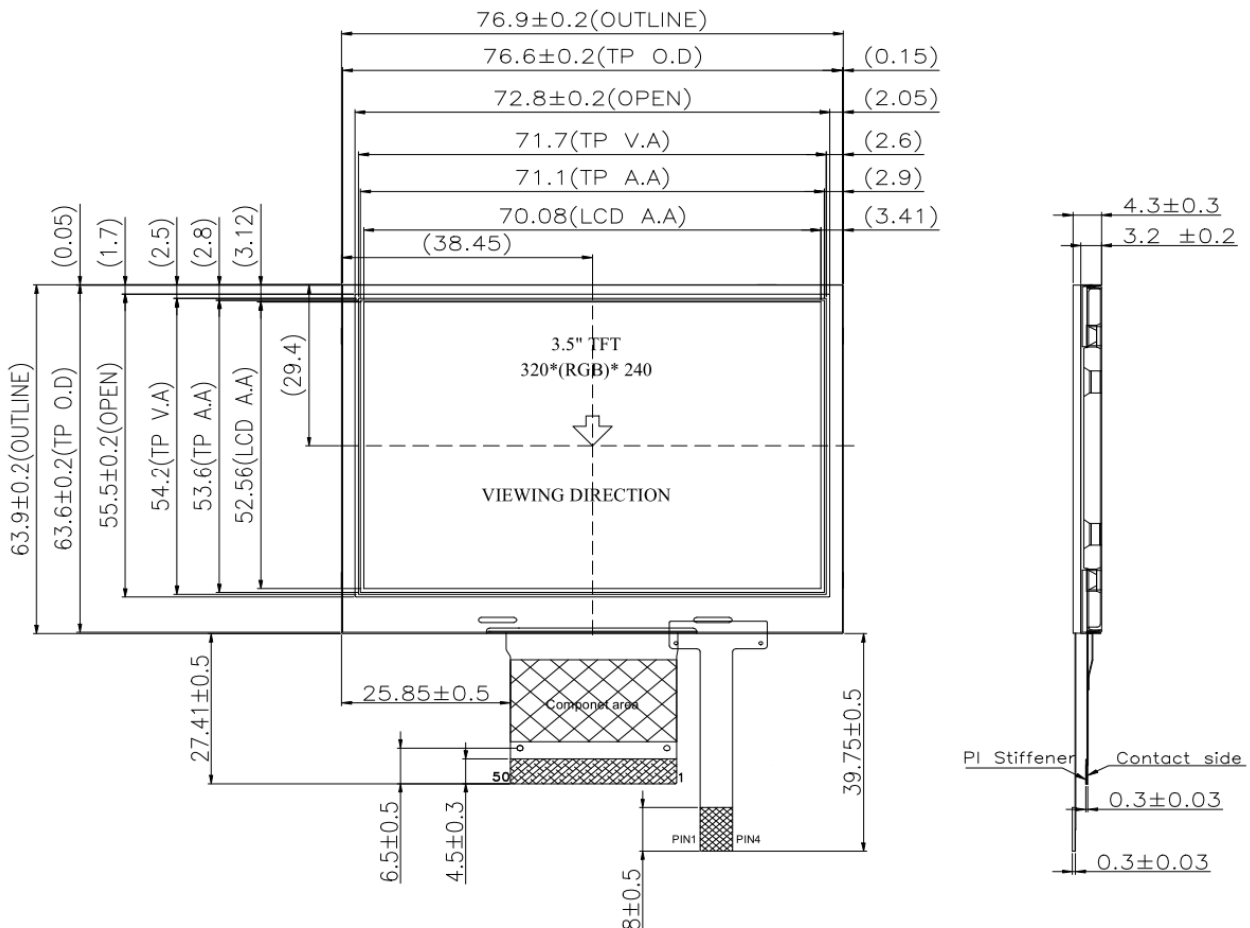
1. 3.5" TFTLCD
2. Resolution:320*240
3. Display Type:TFT/Transmissive/Positive
4. Interface Type:18BIT RGB+SPI
5. Drive IC:SSD2119
6. Surface Luminance:500cd/m²
7. Top:-20°C~70°C
8. Support Resistive Touch Panel



● 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	



BT035DGGAAHHP\$

● Feature

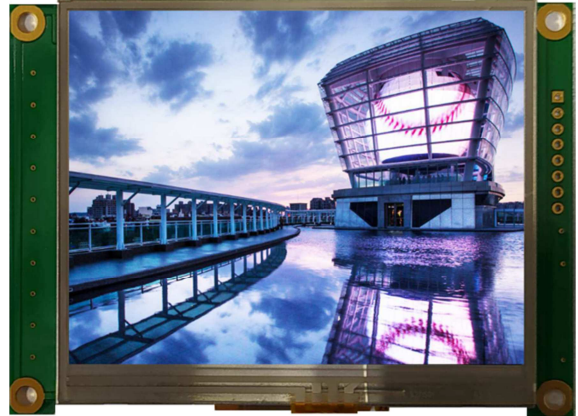
1. 3.5" TFT LCD Module.
2. Resolution:320*RGB*240
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type:SPI
5. Controller IC FT810
6. Top:-20°C~70°C
7. Support Resistive Touch Panel
8. Surface Luminance 150 cd/m²(min)

● Mechanical Data

Module(WxHxT)(mm): 92.0*66.0*6.7

Active Area(mm): 70.08*52.56

LED Numbers: 6 LEDs



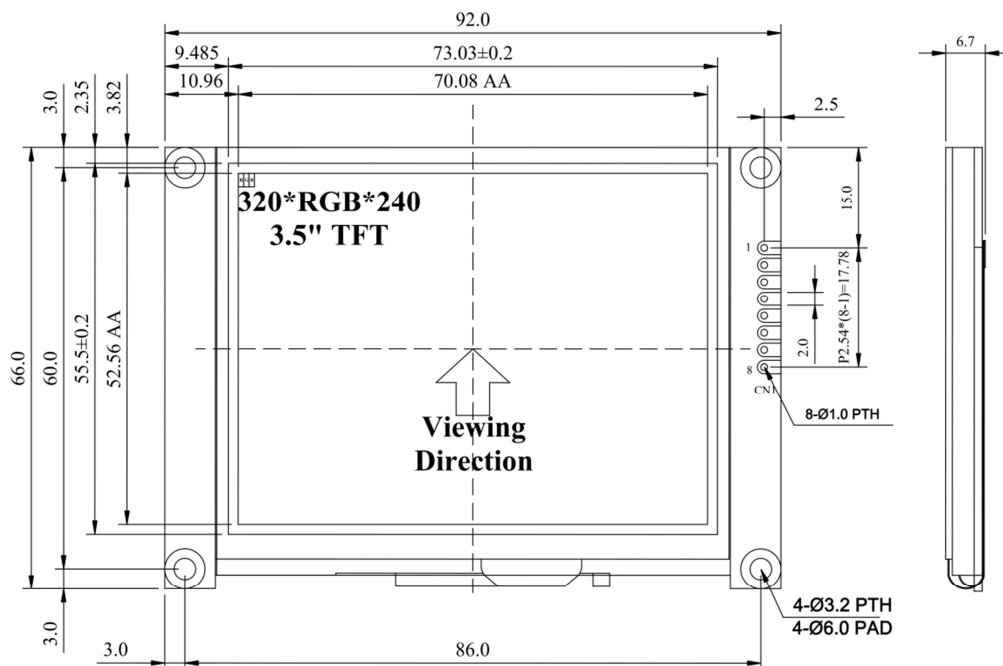
● Pin Assignment

Pin No.	Symbol	I/O Voltage	Function
1	VDD	-	Power supply voltage for logic.
2	VSS	-	Ground.
3	SCL	3.3V	SPI clock input.
4	MISO	3.3V	SPI MISO output.
5	MOSI	3.3V	SPI MOSI input.
6	/CS	3.3V	Chip select signal. Active low.
7	/PD	3.3V	Chip power down mode control input,active low.
8	/INT	3.3V	Interrupt to host,active low.

● Electronic Characteristics

Item	Symbol	Min.	Typ.	Max.	Unit
Power Supply	V _{DD}	3.3	5.0	5.5	V
Input signal Voltage	V _{IH}	2.0	-	-	V
	V _{IL}	-	-	0.8	V
Output signal Voltage	V _{OH}	2.9	-	-	V
	V _{OL}	-	-	0.4	V
Digital Current	I _{DD}	-	208	-	mA

● Dimension

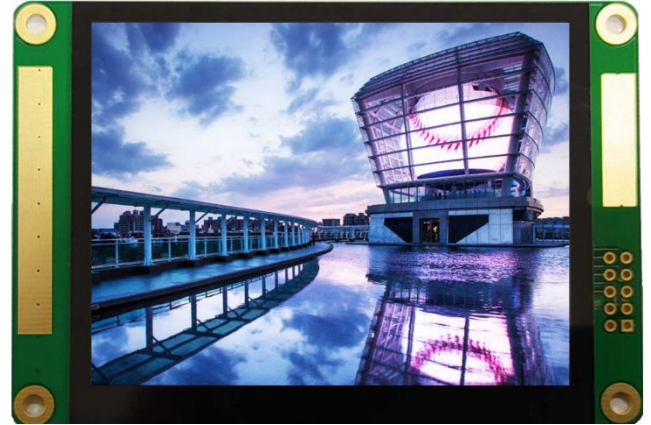




BTC035CG-GFC\$

● Feature

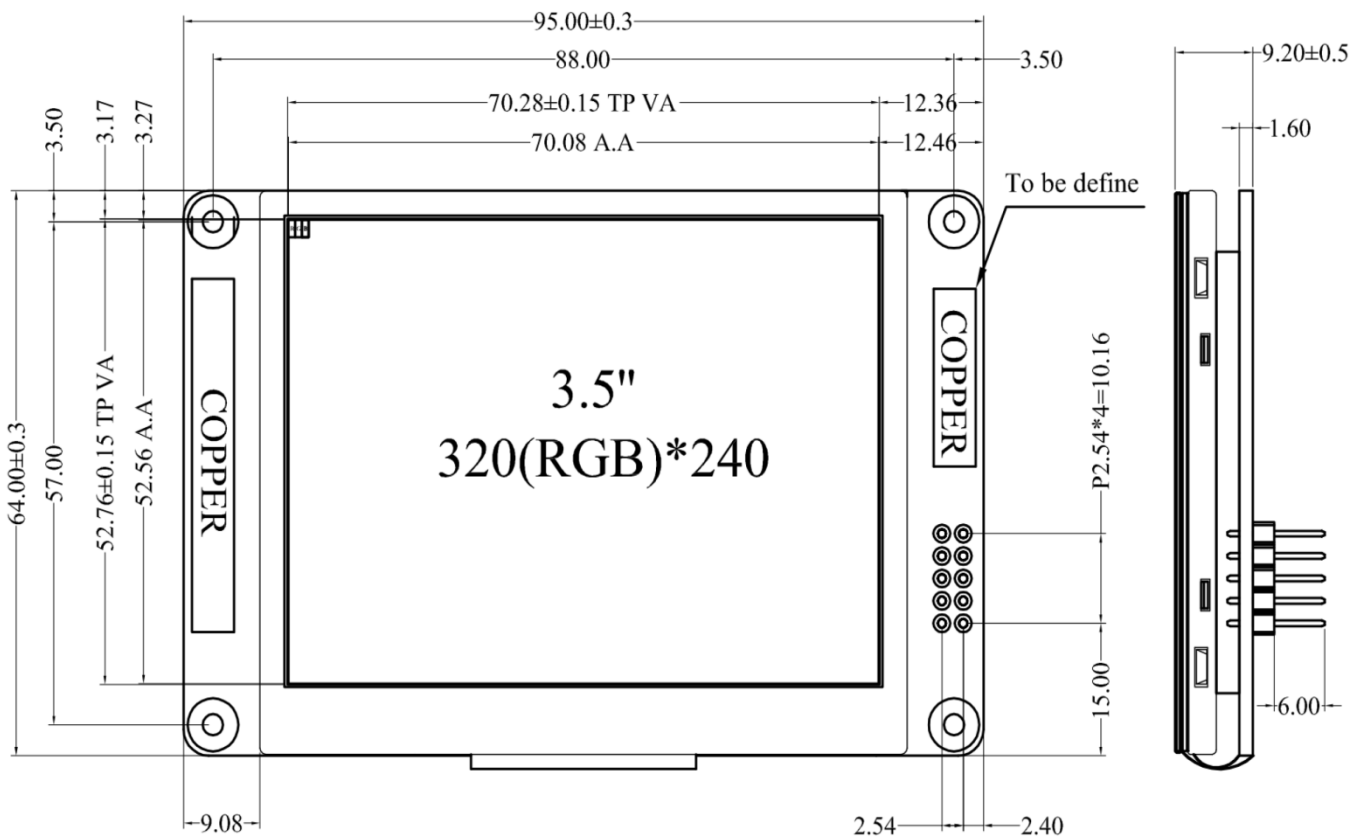
1. 3.5" IPS TFT LCD Module
2. Resolution:320*RGB*240
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type:4-Wire SPI
5. Controller IC: FT811
6. Top:-20°C~70°C
7. Support Capacitive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):95.0*64.0*9.2
2. Active Area(mm):70.08*52.56
3. LED Numbers: 6 LEDs

● Mechanical Drawing



● Interface Pin Function

CN1

Pin No.	Symbol	Type	Function
1	VSS	P	Ground.
2	VDD	P	Power supply voltage.
3	LCM_RST	I	Chip power down mode control input, active low.
4,5	NC	-	No connection.
6	INT	O	Interrupt to host, open drain output (default) or push-pull output, active low.
7	CSFT	I	Chip select signal. Active low.
8	MOSI	I	SPI MOSI input.
9	MISO	O	SPI MISO output.
10	SCK	I	SPI clock input.

CN2

Pin No.	Symbol	Type	Function
1,2,19	VSS	P	Ground.
3,4,20	VDD	P	Power supply voltage.
5~12	NC	-	No connection.
13	LCM_RST	I	Chip power down mode control input, active low.
14	INT	O	Interrupt to host, open drain output (default) or push-pull output, active low.
15	CSFT	I	Chip select signal. Active low.
16	MOSI	I	SPI MOSI input.
17	MISO	O	SPI MISO output.
18	SCK	I	SPI clock input.

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage	V_{DD}		-	3.3	-	V
Input signal Voltage	V_{IH}		2	-	-	V
	V_{IL}		-	-	0.8	V
Output signal Voltage	V_{OH}	$I_{oh}=5mA$	$V_{DD}-0.4$	-	-	V
	V_{OL}	$I_{ol}=5mA$	-	-	0.4	V
Digital Current	I_{DD}		-	300	-	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	360	400	—	cd/m ²



BTC043BB-EWR\$

● Feature

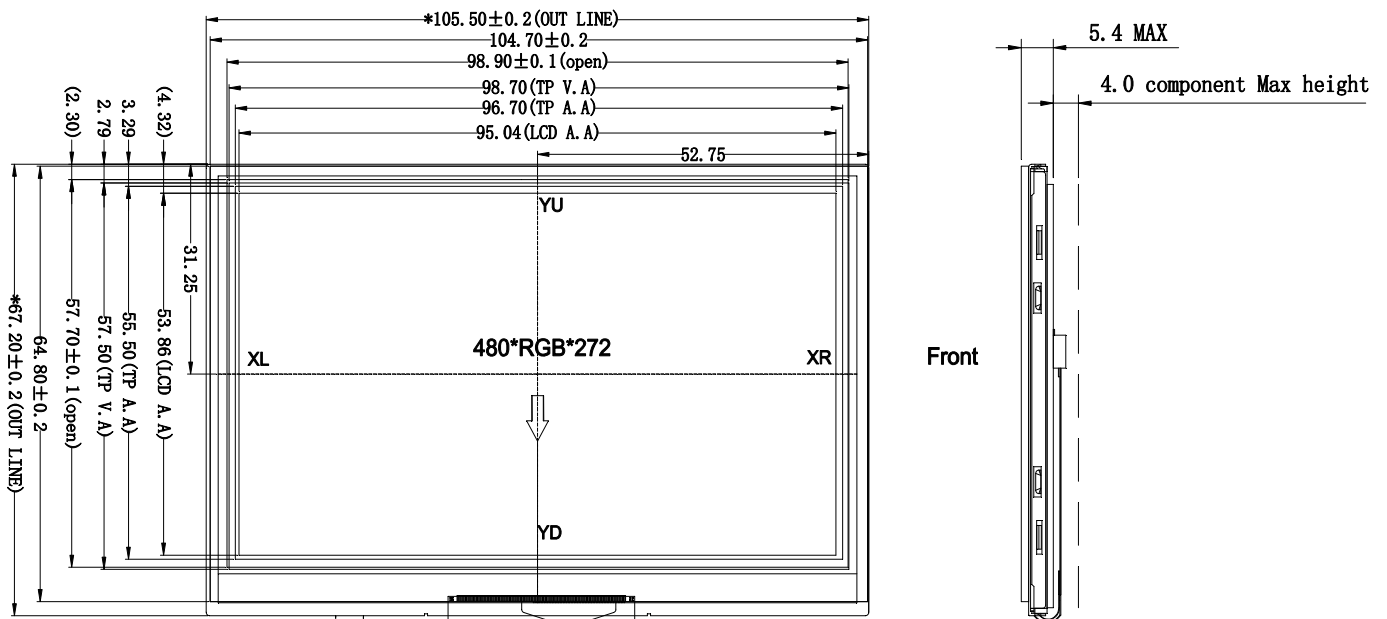
1. 4.3" TFT LCD Module
2. Resolution:480*RGB*272
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type:Parallel
5. Controller IC: RA8875
6. Top:-20°C~70°C
7. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):105.5*67.2*9.7
2. Active Area(mm):95.04*53.86
3. LED Numbers: 10 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1	VSS	-	Ground
2	VDD	-	Power supply for Logic,(3.3V)
3	BL_EN	H/L	Backlight control pin. H:On \ L: Off
4	RS	H/L	H: Data , L: Instruction
5	/WR	H/L	In 8080 series, this pin is used as /WR signal (data write) , active low.
6	/RD	H/L	In 8080 series, this pin is used as /RD signal (Data Read) , active low.
7~14	DB0~DB7	H/L	Data bus line
15	/CS	H/L	Chip Select input, Low active.
16	/RES	H/L	Reset signal
17	WAIT	-	Wait Signal Output This is a WAIT output to indicate the RA8875 is in busy state. The RA8875 can't access MCU cycle when WAIT pin is active. It is active low and could be used for MCU to poll busy status by connecting it to I/O port.
18	INT	-	Interrupt Signal Output The interrupt output for MCU to indicate the status of RA8875.
19	VLED+	-	Power supply for backlight driver.(3.0~5.0V)
20	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	250	320	390	cd/m ²



BTC043BB-GWR\$

● Feature

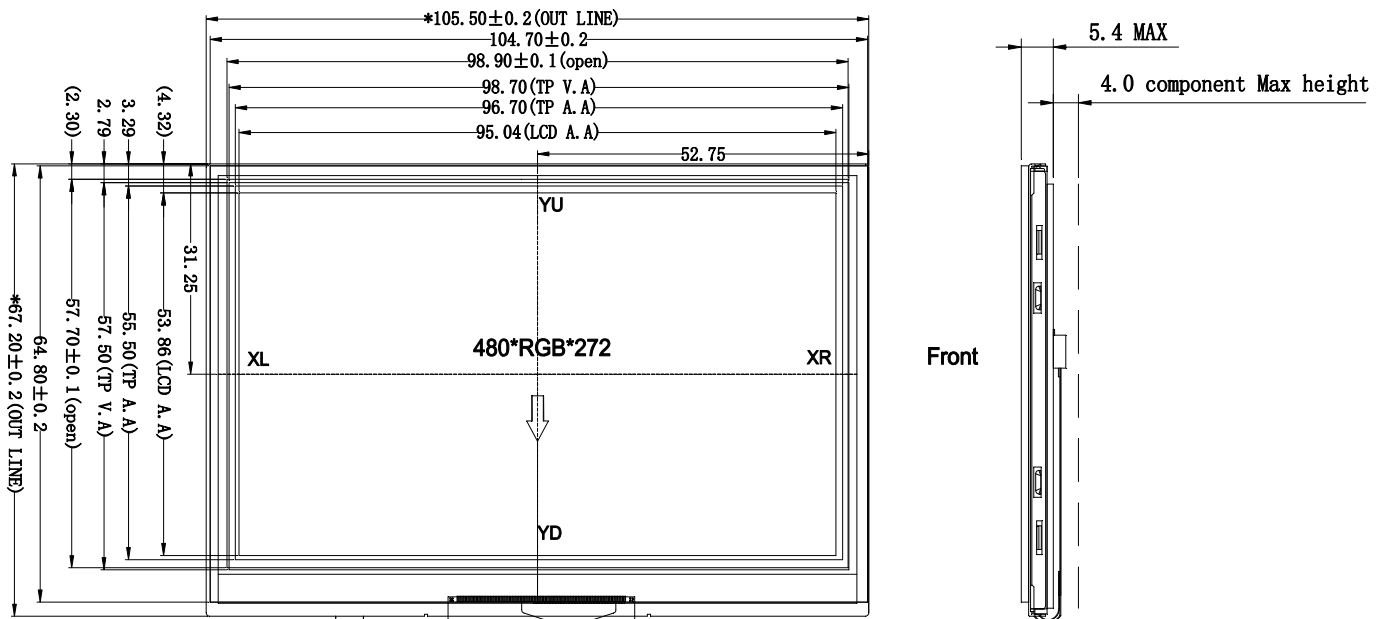
1. 4.3" TFT LCD Module
2. Resolution:480*RGB*272
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type:4-Wire SPI
5. Controller IC: RA8875
6. Top:-20°C~70°C
7. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):105.5*67.2*9.7
2. Active Area(mm):95.04*53.86
3. LED Numbers: 10 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1	VSS	-	Ground
2	VDD	-	Power supply for Logic,(3.3V)
3	SCS	I	SPI Chip Select. Chip select pin for 4-wire serial I/F.
4	SDO	O	Data output for 4-wire serial I/F.
5	SDI	I	Data input for 4-wire serial I/F.
6	SCL	I	SPI Clock input.
7	NC	I	NC, please connect it to VDD.
8	NC	I	NC, please connect it to VDD.
9	INT	-	Interrupt Signal Output The interrupt output for MCU to indicate the status of RA8875.
10	WAIT	-	Wait Signal Output This is a WAIT output to indicate the RA8875 is in busy state. The RA8875 can't access MCU cycle when WAIT pin is active. It is active low and could be used for MCU to poll busy status by connecting it to I/O port.
11	/RES	H/L	Reset signal
12	BL_EN	H/L	Backlight control pin. H:On \ L:Off
13	VLED+	-	Power supply for backlight driver.(3.0~5.0V)
14	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	250	320	390	cd/m ²



BT043DKFAHWcp\$

● Feature

1. 4.3" TFT LCD Module.
2. Resolution:480*RGB*272
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type:SPI
5. Controller IC FT811
6. Top:-20°C~70°C
7. Support Capacitive Touch Panel
8. Surface Luminance 250 cd/m²(min)

● Mechanical Data

Module(WxHxT)(mm): 120.0*69.0*6.5

Active Area(mm): 95.04*53.86

LED Numbers: 10 LEDs



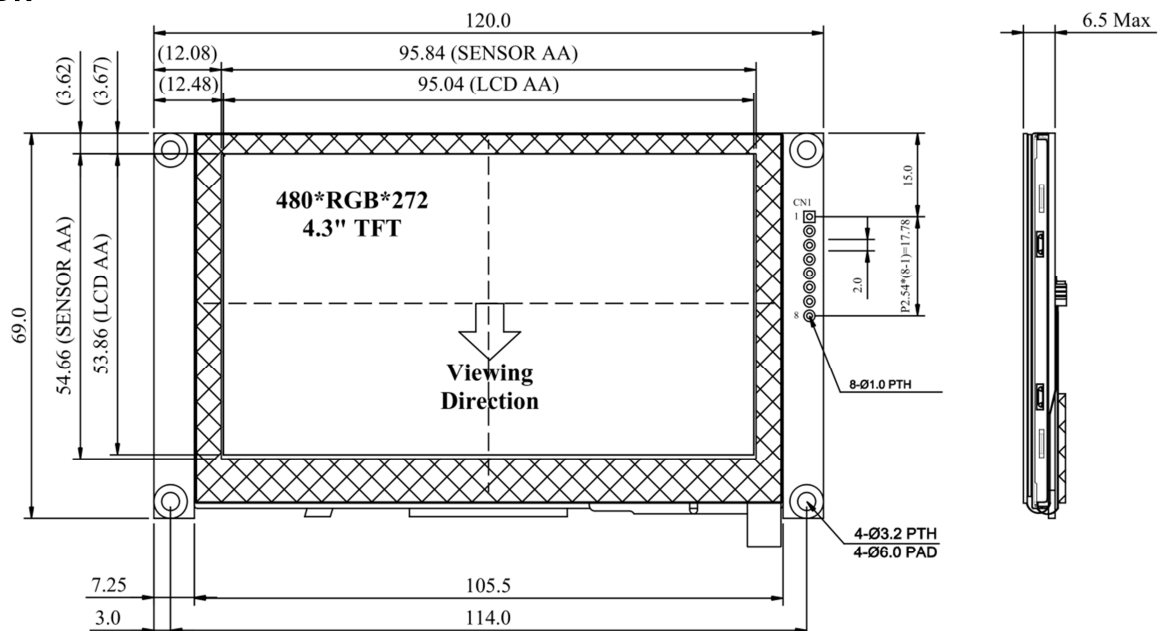
● Pin Assignment

Pin No.	Symbol	I/O Voltage	Function
1	VDD	-	Power supply voltage for logic.
2	VSS	-	Ground.
3	SCL	3.3V	SPI clock input.
4	MISO	3.3V	SPI MISO output.
5	MOSI	3.3V	SPI MOSI input.
6	/CS	3.3V	Chip select signal. Active low.
7	/PD	3.3V	Chip power down mode control input,active low.
8	/INT	3.3V	Interrupt to host,active low.

● Electronic Characteristics

Item	Symbol	Min.	Typ.	Max.	Unit
Power Supply	V _{DD}	3.3	5.0	5.5	V
Input signal Voltage	V _{IH}	2.0	-	-	V
	V _{IL}	-	-	0.8	V
Output signal Voltage	V _{OH}	2.9	-	-	V
	V _{OL}	-	-	0.4	V
Digital Current	I _{DD}	-	280	-	mA

● Dimension





BTC050AA-EWR\$

● Feature

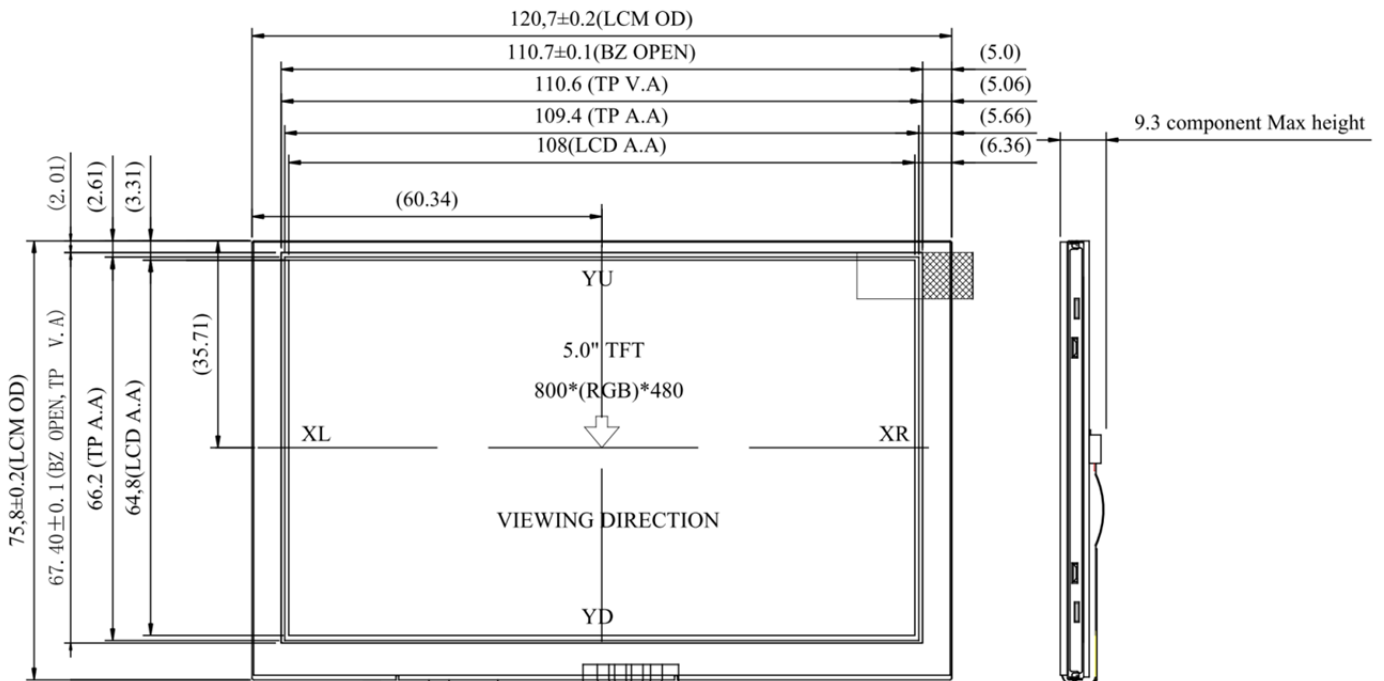
1. 5.0" TFT LCD Module
2. Resolution:800*RGB*480
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type: Parallel
5. Controller IC: RA8873
6. Top:-20°C~70°C
7. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):120.7*75.8*9.3
2. Active Area(mm):108.0*64.8
3. LED Numbers: 12 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1,2	VSS	-	Ground.
3,4	VDD	-	Power supply for Logic,(3.3V).
5	BL_EN	H/L	Backlight control pin. H:On \ L: Off.
6	RS	H/L	H: Data , L: Instruction.
7	/WR	H/L	In 8080 series, this pin is used as /WR signal (data write) , active low.
8	/RD	H/L	In 8080 series, this pin is used as /RD signal (Data Read) , active low.
9	/CS	H/L	Chip Select input, Low active.
10	INT	-	Interrupt Signal Output. The interrupt output for MCU to indicate the status of RA8873.
11	/RST	H/L	Reset signal.
12~27	DB0~DB15	H/L	Data bus line.
28	TP-CLK	H/L	External Clock Input for TP controller.
29	TP-CS	H/L	Chip Select Input for TP controller.
30	TP-INT	H/L	Interrupt output for TP controller.
31	TP-DI	H/L	Serial Data Input for TP controller.
32	TP-DO	H/L	Serial Data output for TP controller.
33,34	VLED+	-	Power supply for backlight driver.(3.0~5.0V)
35,36	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	220	280	—	cd/m ²



BTC050AA-GWR\$

● Feature

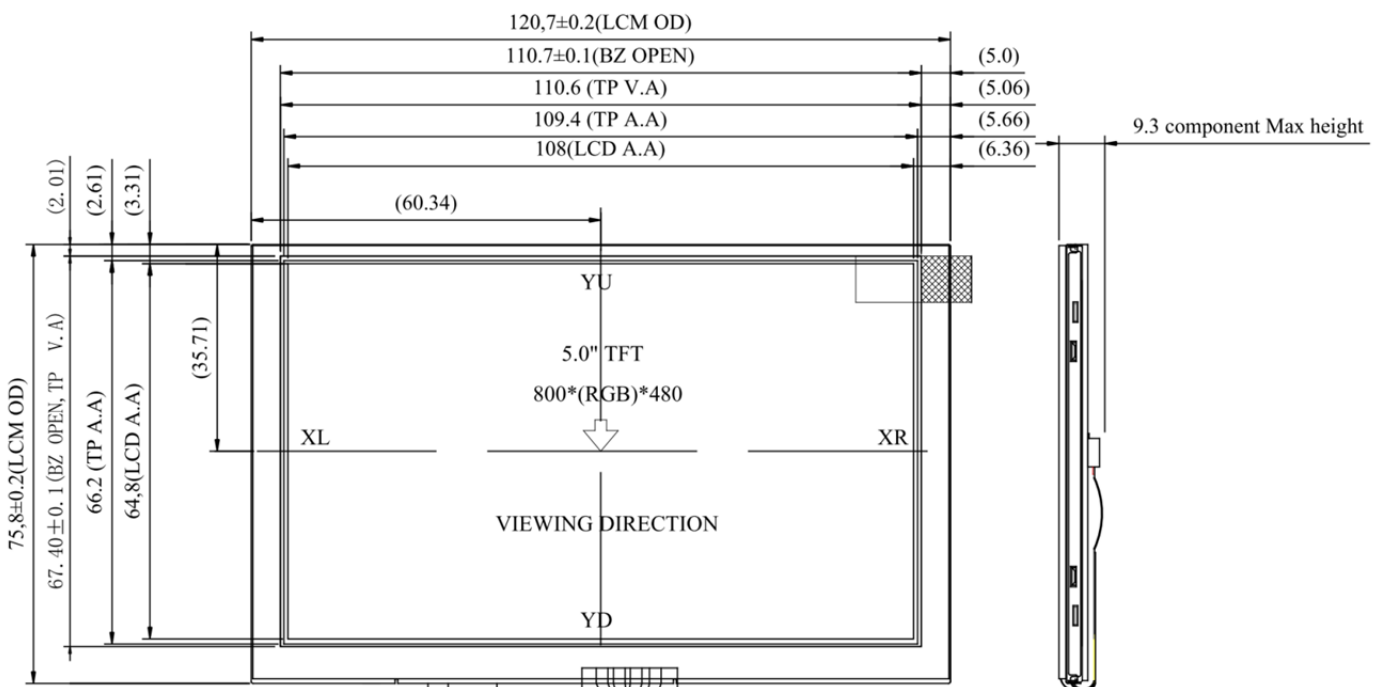
1. 5.0" TFT LCD Module
2. Resolution:800*RGB*480
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type: 4-Wire SPI
5. Controller IC: RA8873
6. Top:-20°C~70°C
7. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):120.7*75.8*9.3
2. Active Area(mm):108.0*64.8
3. LED Numbers: 12 LEDs

● Mechanical Drawung



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1,2	VSS	-	Ground.
3,4	VDD	-	Power supply for Logic.(3.3V)
5	BL_EN	H/L	Backlight control pin. H:On \ L: Off.
6~9	VSS	-	Ground.
10	INT	-	Interrupt Signal Output. The interrupt output for MCU to indicate the status of RA8873.
11	/RST	H/L	Reset signal.
12~15	VSS	-	Ground.
16	SCS	H/L	SPI Chip Select.
17	SDO	H/L	4-wire SPI Data Output.
18	SDI	H/L	4-wire SPI Data Input.
19	SCL	H/L	4-wire Serial clock.
20~27	VSS	-	Ground.
28	TP-CLK	H/L	External Clock Input for TP controller.
29	TP-CS	H/L	Chip Select Input for TP controller.
30	TP-INT	H/L	Interrupt output for TP controller.
31	TP-DI	H/L	Serial Data Input for TP controller.
32	TP-DO	H/L	Serial Data output for TP controller.
33,34	VLED+	-	Power supply for backlight driver.(3.0~5.0V)
35,36	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

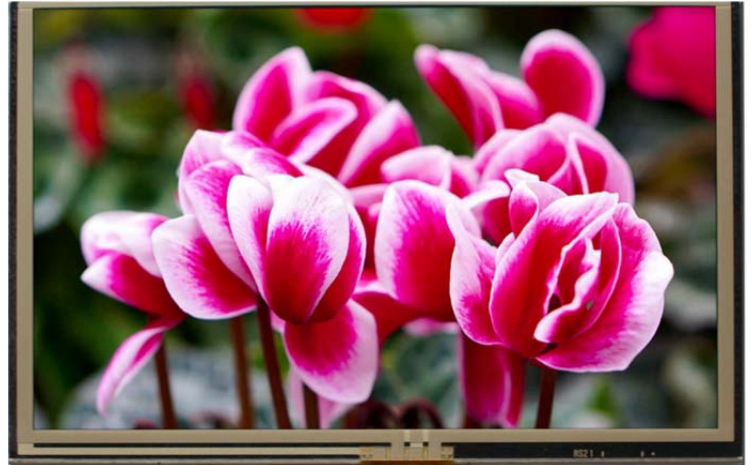
Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	220	280	—	cd/m ²



BTC050AB-EWR\$

● Feature

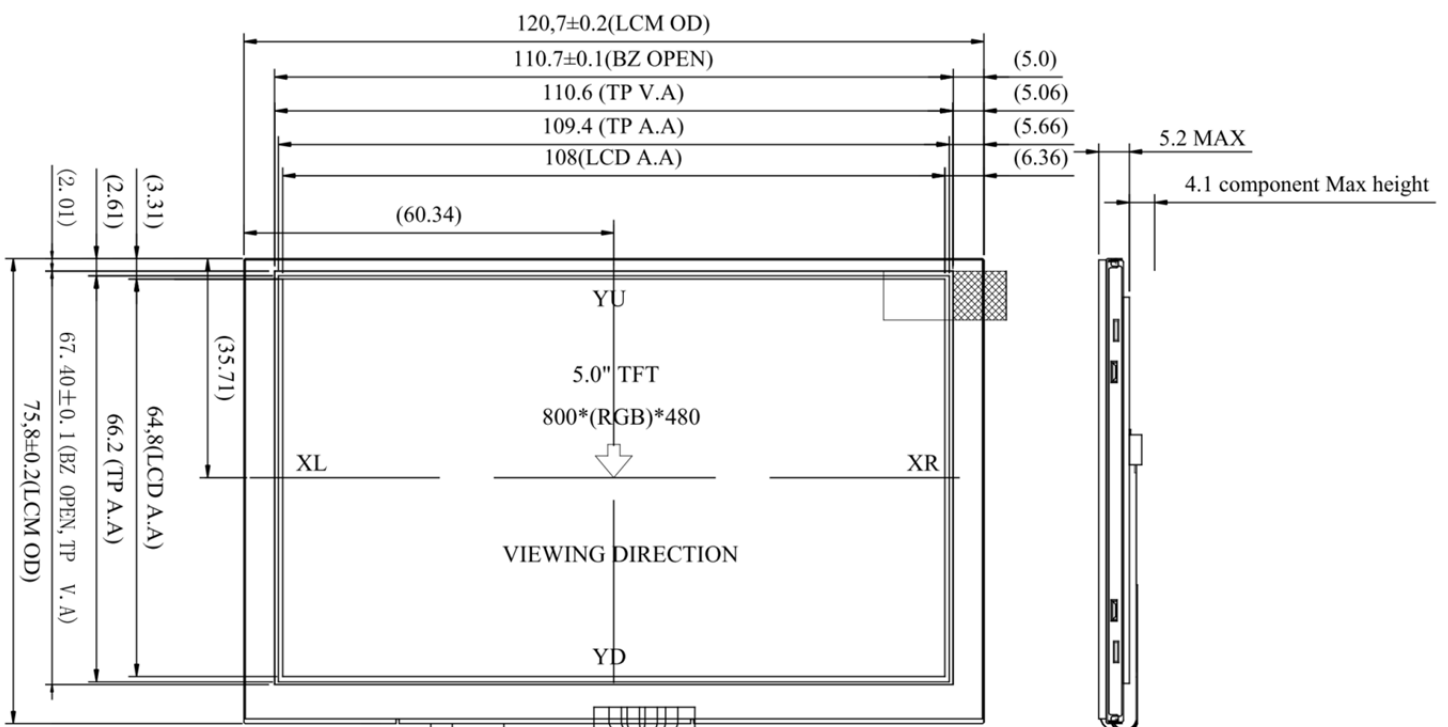
1. 5.0" TFT LCD Module
2. Resolution:800*RGB*480
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type: Parallel
5. Controller IC: RA8875
6. Top:-20°C~70°C
7. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):120.7*75.8*9.5
2. Active Area(mm):108.0*64.8
3. LED Numbers: 12 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1	VSS	-	Ground
2	VDD	-	Power supply for Logic,(3.3V)
3	BL_EN	H/L	Backlight control pin. H:On \ L: Off
4	RS	H/L	H: Data , L: Instruction
5	/WR	H/L	In 8080 series, this pin is used as /WR signal (data write) , active low.
6	/RD	H/L	In 8080 series, this pin is used as /RD signal (Data Read) , active low.
7~14	DB0~DB7	H/L	Data bus line
15	/CS	H/L	Chip Select input, Low active.
16	/RES	H/L	Reset signal
17	WAIT	-	Wait Signal Output This is a WAIT output to indicate the RA8875 is in busy state. The RA8875 can't access MCU cycle when WAIT pin is active. It is active low and could be used for MCU to poll busy status by connecting it to I/O port.
18	INT	-	Interrupt Signal Output The interrupt output for MCU to indicate the status of RA8875.
19	VLED+	-	Power supply for backlight driver.(3.0~5.0V)
20	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

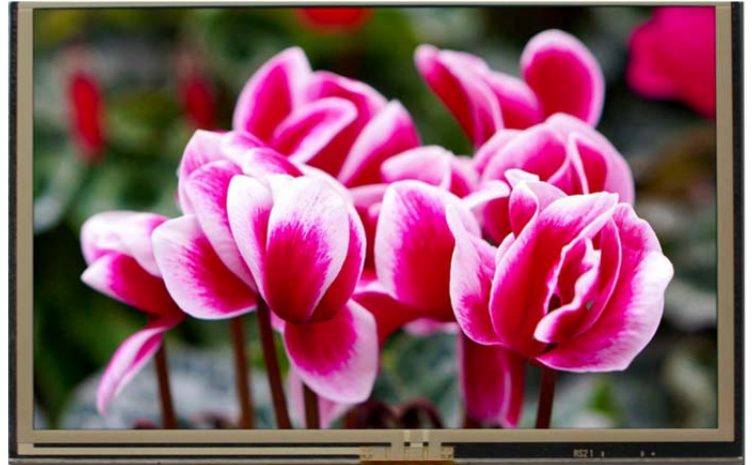
Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	220	280	350	cd/m ²



BTC050AB-GWR\$

● Feature

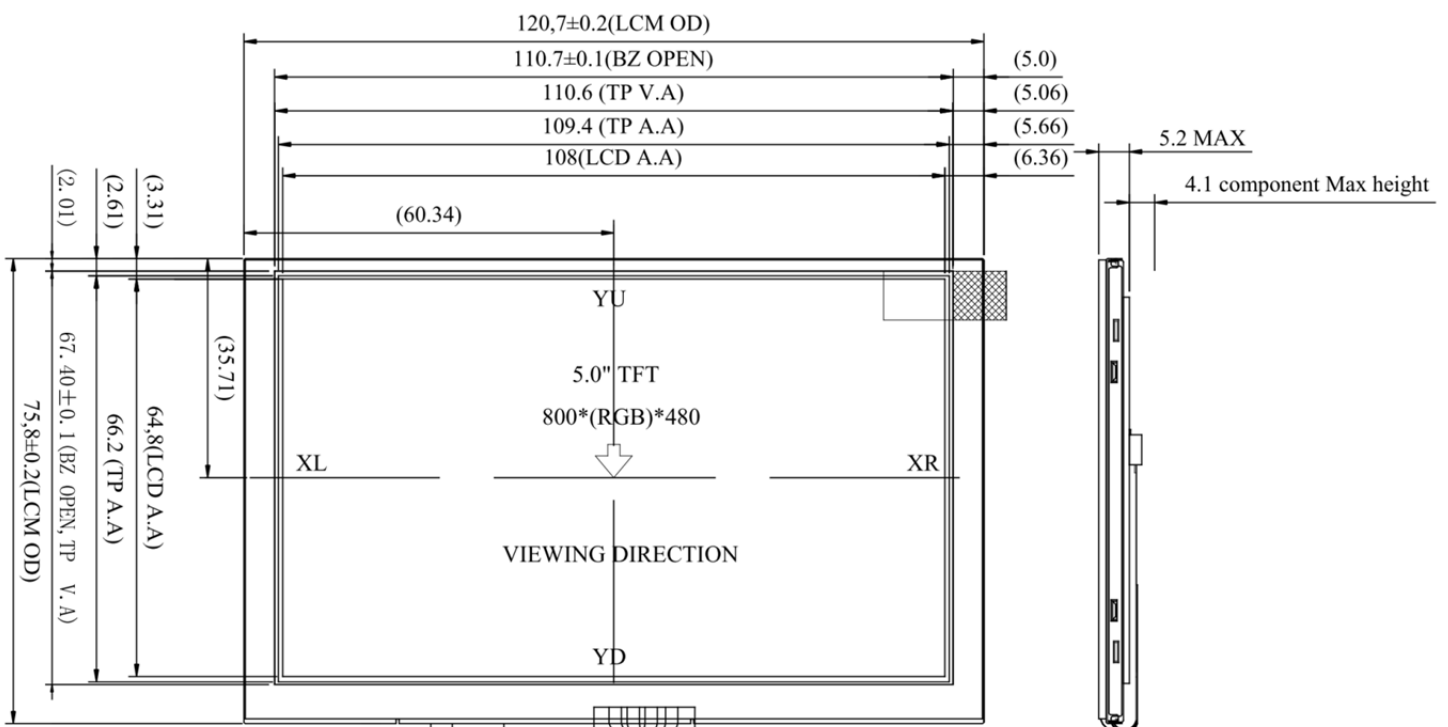
1. 5.0" TFT LCD Module
2. Resolution:800*RGB*480
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type:4-Wire SPI
5. Controller IC: RA8875
6. Top:-20°C~70°C
7. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):120.7*75.8*9.5
2. Active Area(mm):108.0*64.8
3. LED Numbers: 12 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1	VSS	-	Ground
2	VDD	-	Power supply for Logic,(3.3V)
3	SCS	I	SPI Chip Select.
			Chip select pin for 4-wire serial I/F.
4	SDO	O	Data output for 4-wire serial I/F.
5	SDI	I	Data input for 4-wire serial I/F.
6	SCL	I	SPI Clock input.
7	NC	I	NC, please connect it to VDD.
8	NC	I	NC, please connect it to VDD.
9	INT	-	Interrupt Signal Output
			The interrupt output for MCU to indicate the status of RA8875.
10	WAIT	-	Wait Signal Output
			This is a WAIT output to indicate the RA8875 is in busy state. The RA8875 can't access MCU cycle when WAIT pin is active. It is active low and could be used for MCU to poll busy status by connecting it to I/O port.
11	/RES	H/L	Reset signal
12	BL_EN	H/L	Backlight control pin. H:On \ L: Off
13	VLED+	-	Power supply for backlight driver.(Typ.5.0V)
14	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	220	280	350	cd/m ²



BTC050AE-EWR\$

● Feature

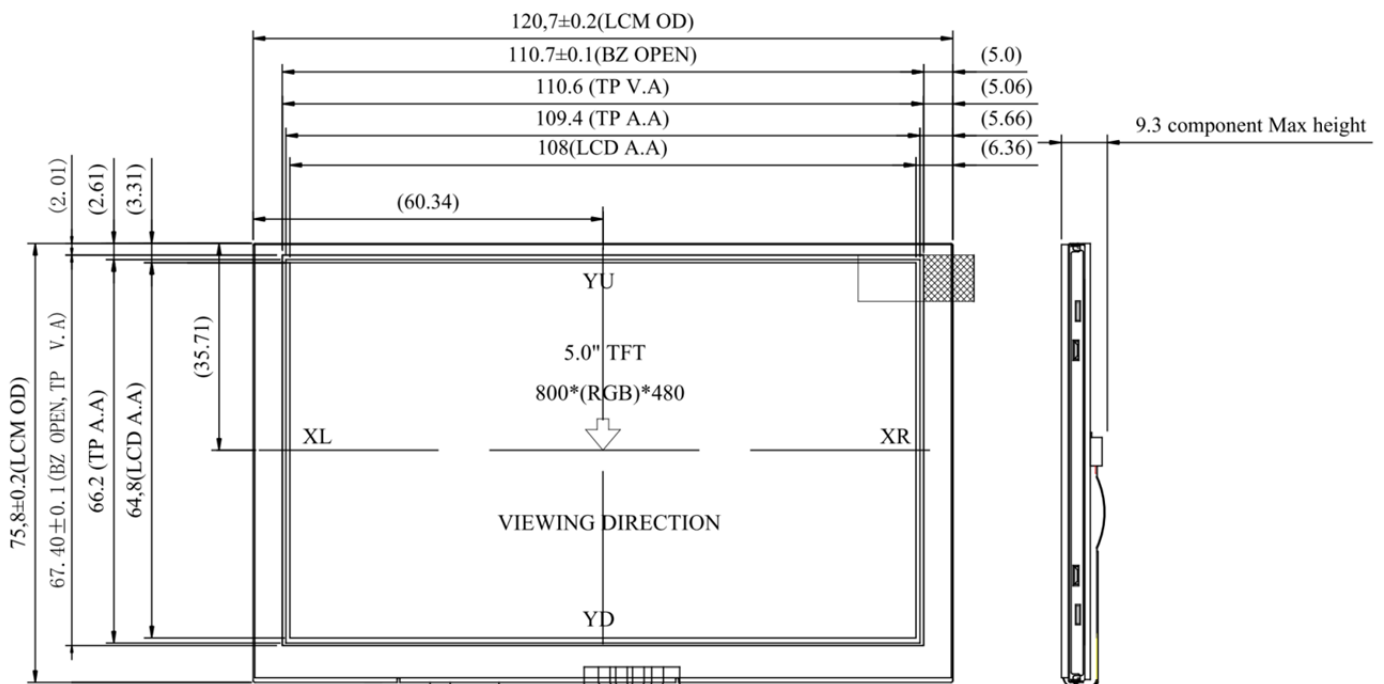
1. 5.0" TFT LCD Module
2. Resolution:800*RGB*480
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type: Parallel
5. Controller IC: RA8876
6. Top:-20°C~70°C
7. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm): 120.7*75.8*9.3
2. Active Area(mm): 108.0*64.8
3. LED Numbers: 12 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1,2	VSS	-	Ground.
3,4	VDD	-	Power supply for Logic,(3.3V).
5	BL_EN	H/L	Backlight control pin. H:On \ L: Off.
6	RS	H/L	H: Data , L: Instruction.
7	/WR	H/L	In 8080 series, this pin is used as /WR signal (data write) , active low.
8	/RD	H/L	In 8080 series, this pin is used as /RD signal (Data Read) , active low.
9	/CS	H/L	Chip Select input, Low active.
10	INT	-	Interrupt Signal Output. The interrupt output for MCU to indicate the status of RA8876.
11	/RST	H/L	Reset signal.
12~27	DB0~DB15	H/L	Data bus line.
28	TP-CLK	H/L	External Clock Input for TP controller.
29	TP-CS	H/L	Chip Select Input for TP controller.
30	TP-INT	H/L	Interrupt output for TP controller.
31	TP-DI	H/L	Serial Data Input for TP controller.
32	TP-DO	H/L	Serial Data output for TP controller.
33,34	VLED+	-	Power supply for backlight driver.(3.0~5.0V)
35,36	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	220	280	—	cd/m ²



BTC050AE-GWR\$

● Feature

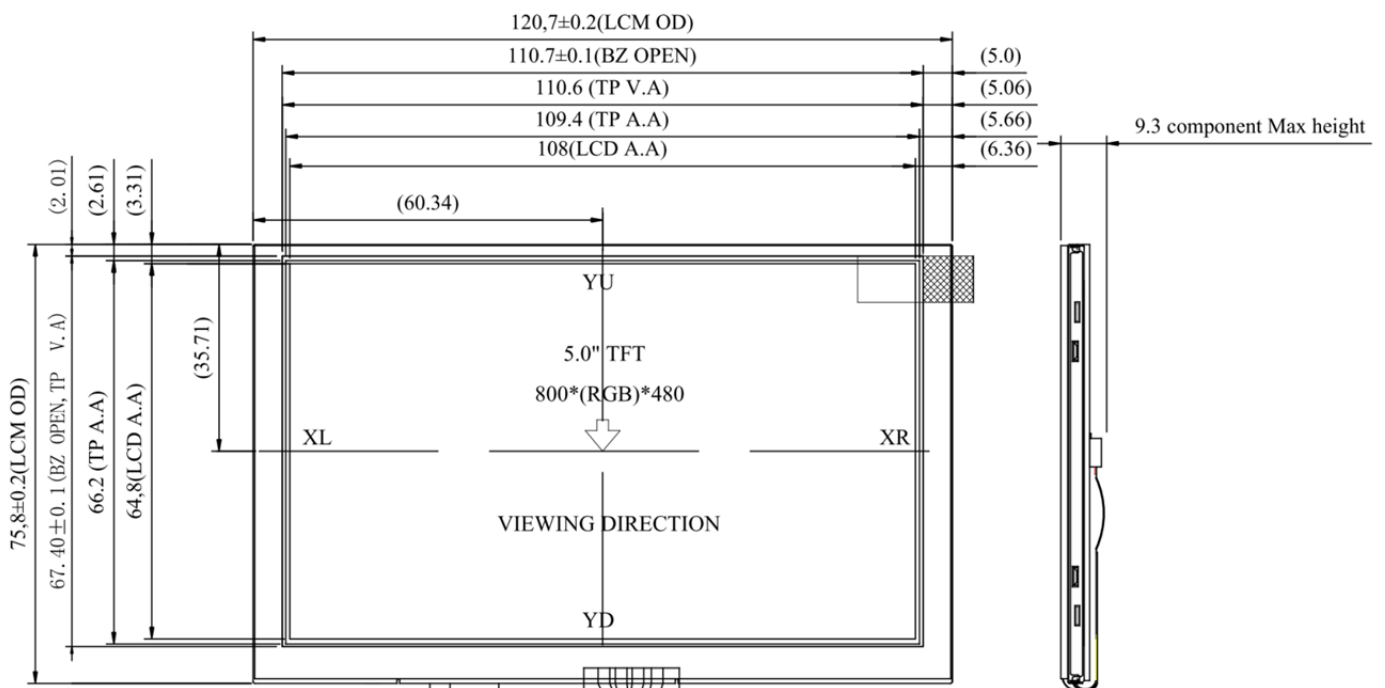
1. 5.0" TFT LCD Module
2. Resolution:800*RGB*480
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type: 4-Wire SPI
5. Controller IC: RA8876
6. Top:-20°C~70°C
7. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):120.7*75.8*9.3
2. Active Area(mm):108.0*64.8
3. LED Numbers: 12 LEDs

● Mechanical Drawung



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1,2	VSS	-	Ground.
3,4	VDD	-	Power supply for Logic.(3.3V)
5	BL_EN	H/L	Backlight control pin. H:On \ L: Off.
6~9	VSS	-	Ground.
10	INT	-	Interrupt Signal Output. The interrupt output for MCU to indicate the status of RA8876.
11	/RST	H/L	Reset signal.
12~15	VSS	-	Ground.
16	SCS	H/L	SPI Chip Select.
17	SDO	H/L	4-wire SPI Data Output.
18	SDI	H/L	4-wire SPI Data Input.
19	SCL	H/L	4-wire Serial clock.
20~27	VSS	-	Ground.
28	TP-CLK	H/L	External Clock Input for TP controller.
29	TP-CS	H/L	Chip Select Input for TP controller.
30	TP-INT	H/L	Interrupt output for TP controller.
31	TP-DI	H/L	Serial Data Input for TP controller.
32	TP-DO	H/L	Serial Data output for TP controller.
33,34	VLED+	-	Power supply for backlight driver.(3.0~5.0V)
35,36	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	220	280	—	cd/m ²

BT050DMGAHWp\$



● Feature

1. 5.0" TFT LCD Module.
2. Resolution:800*RGB*480
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type:SPI
5. Controller IC FT810
6. Top:-20°C~70°C
7. Support Resistive Touch Panel
8. Surface Luminance 280 cd/m²(Type)

● Mechanical Data

Module(WxHxT)(mm): 133.0*80.0*5.8

Active Area(mm): 108.0*64.8

LED Numbers: 12 LEDs



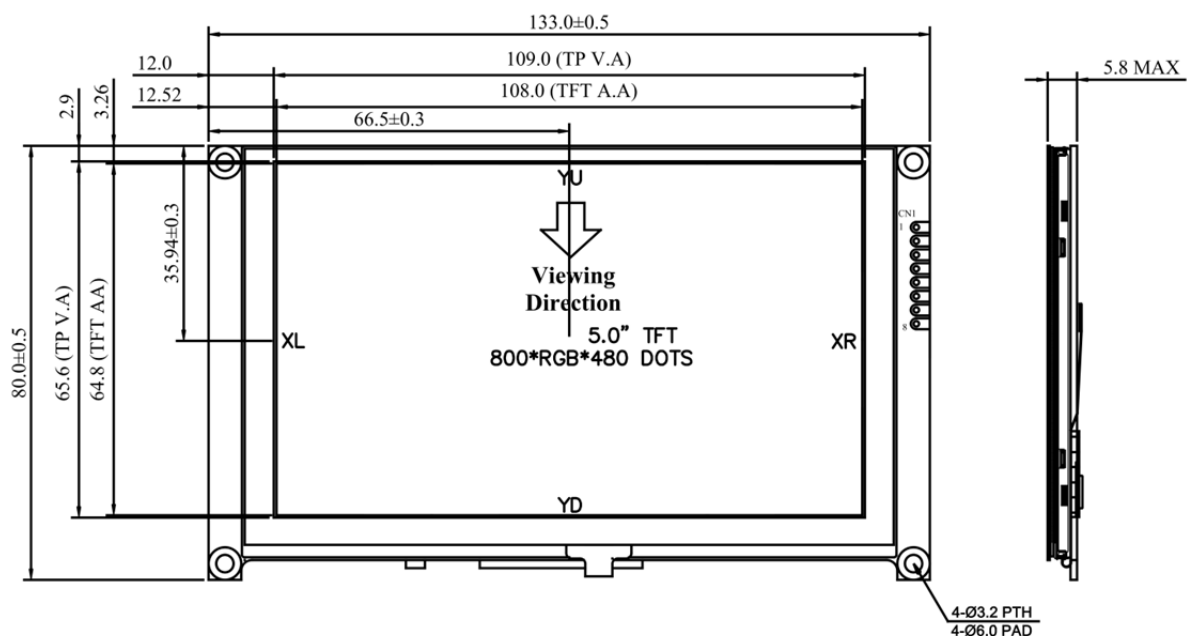
● Pin Assignment

Pin No.	Symbol	I/O Voltage	Function
1	VDD	-	Power supply voltage for logic.
2	VSS	-	Ground.
3	SCL	3.3V	SPI clock input.
4	MISO	3.3V	SPI MISO output.
5	MOSI	3.3V	SPI MOSI input.
6	/CS	3.3V	Chip select signal. Active low.
7	/PD	3.3V	Chip power down mode control input,active low.
8	/INT	3.3V	Interrupt to host,active low.

● Electronic Characteristics

Item	Symbol	Min.	Typ.	Max.	Unit
Power Supply	V _{DD}	4.5	5.0	5.5	V
Input signal Voltage	V _{IH}	2.0	-	-	V
	V _{IL}	-	-	0.8	V
Output signal Voltage	V _{OH}	2.9	-	-	V
	V _{OL}	-	-	0.4	V
Digital Current	I _{DD}	-	320	-	mA

● Dimension



BTC050CG-GWC\$



● Feature

1. 5.0" TFT LCD Module.
2. Resolution:800*RGB*480.
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type:SPI
5. Controller IC FT811
6. Top:-20°C~70°C
7. Support Capacitive Touch Panel
8. Surface Luminance 240cd/m²(min)

● Mechanical Data

Module(WxHxT)(mm): 133.0*80.0*8.7

Active Area(mm): 108.0*64.8

LED Numbers: 12 LEDs



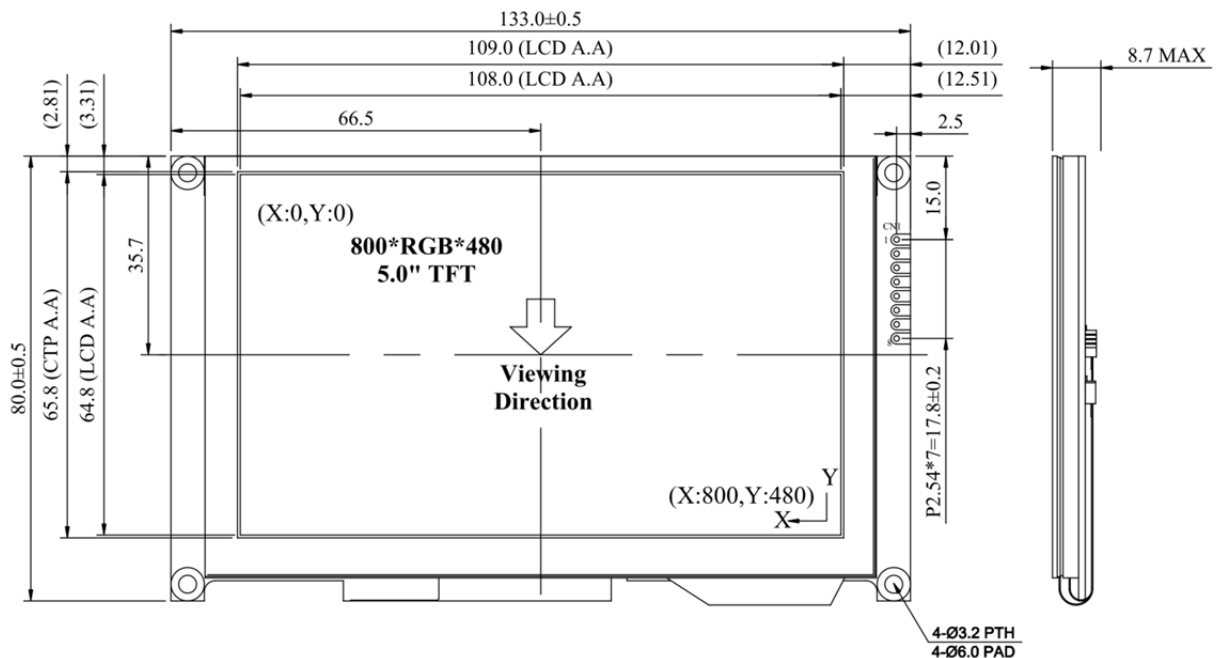
● Pin Assignment

Pin No.	Symbol	I/O Voltage	Function
1	VDD	-	Power supply voltage for logic.
2	VSS	-	Ground.
3	SCL	3.3V	SPI clock input.
4	MISO	3.3V	SPI MISO output.
5	MOSI	3.3V	SPI MOSI input.
6	/CS	3.3V	Chip select signal. Active low.
7	/PD	3.3V	Chip power down mode control input,active low.
8	/INT	3.3V	Interrupt to host,active low.

● Electronic Characteristics

Item	Symbol	Min.	Typ.	Max.	Unit
Supply Voltage	V _{DD}	4.5	5.0	5.5	V
Input signal Voltage	V _{IH}	2.0	-	-	V
	V _{IL}	-	-	0.8	V
Output signal Voltage	V _{OH}	2.9	-	-	V
	V _{OL}	-	-	0.4	V
Digital Current	I _{DD}	-	370	-	mA

● Dimension





BTC070BA-EBR\$

● Feature

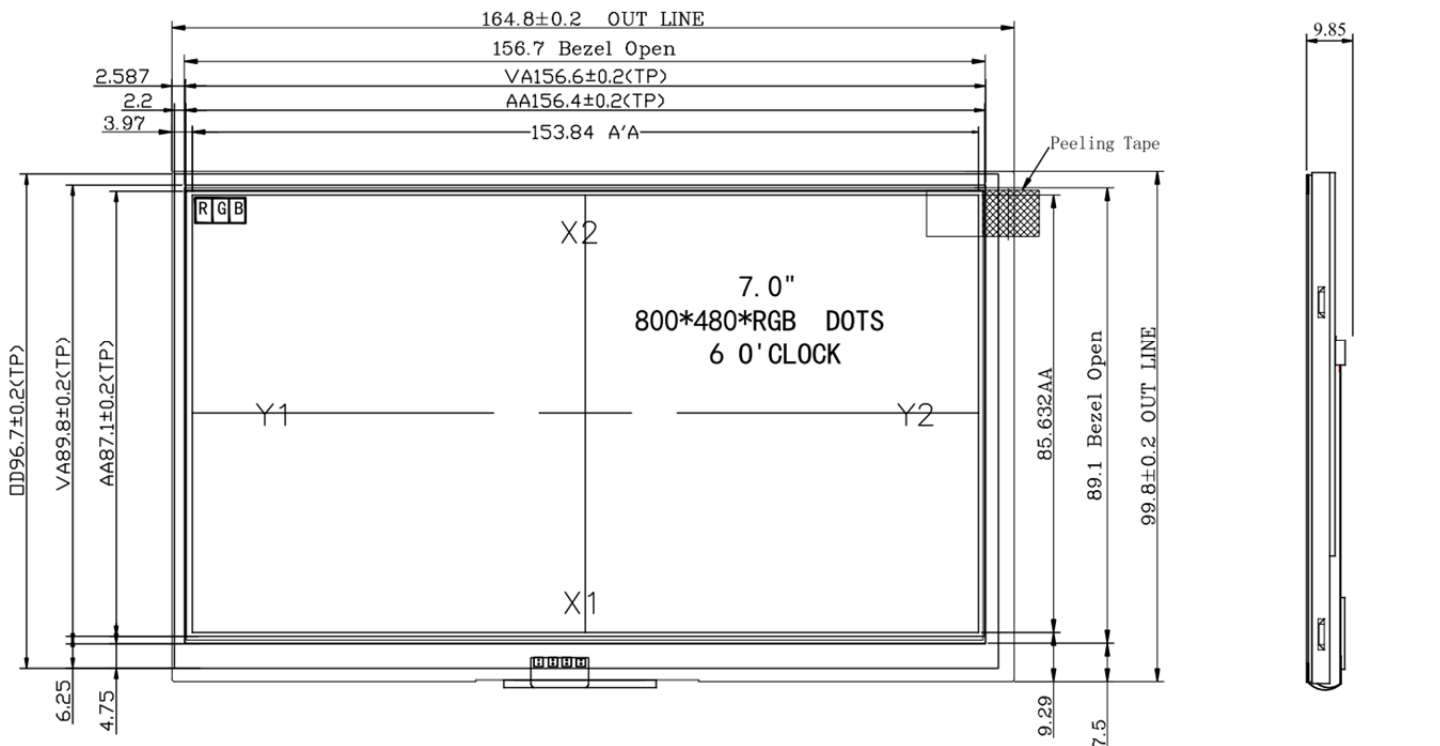
1. 7.0" TFT LCD Module
2. Resolution:800*RGB*480
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type: Parallel
5. Controller IC: RA8873
6. Top:-20°C~60°C
7. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):164.8*99.8*9.85
2. Active Area(mm):153.84*85.632
3. LED Numbers: 24 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1,2	VSS	-	Ground.
3,4	VDD	-	Power supply for Logic,(3.3V).
5	BL_EN	H/L	Backlight control pin. H:On \ L: Off.
6	RS	H/L	H: Data , L: Instruction.
7	/WR	H/L	In 8080 series, this pin is used as /WR signal (data write) , active low.
8	/RD	H/L	In 8080 series, this pin is used as /RD signal (Data Read) , active low.
9	/CS	H/L	Chip Select input, Low active.
10	INT	-	Interrupt Signal Output. The interrupt output for MCU to indicate the status of RA8873.
11	/RST	H/L	Reset signal.
12~27	DB0~DB15	H/L	Data bus line.
28	TP-CLK	H/L	External Clock Input for TP controller.
29	TP-CS	H/L	Chip Select Input for TP controller.
30	TP-INT	H/L	Interrupt output for TP controller.
31	TP-DI	H/L	Serial Data Input for TP controller.
32	TP-DO	H/L	Serial Data output for TP controller.
33,34	VLED+	-	Power supply for backlight driver.(3.0~5.0V)
35,36	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	250	280	—	cd/m ²

BTC070BA-GBR\$



● Feature

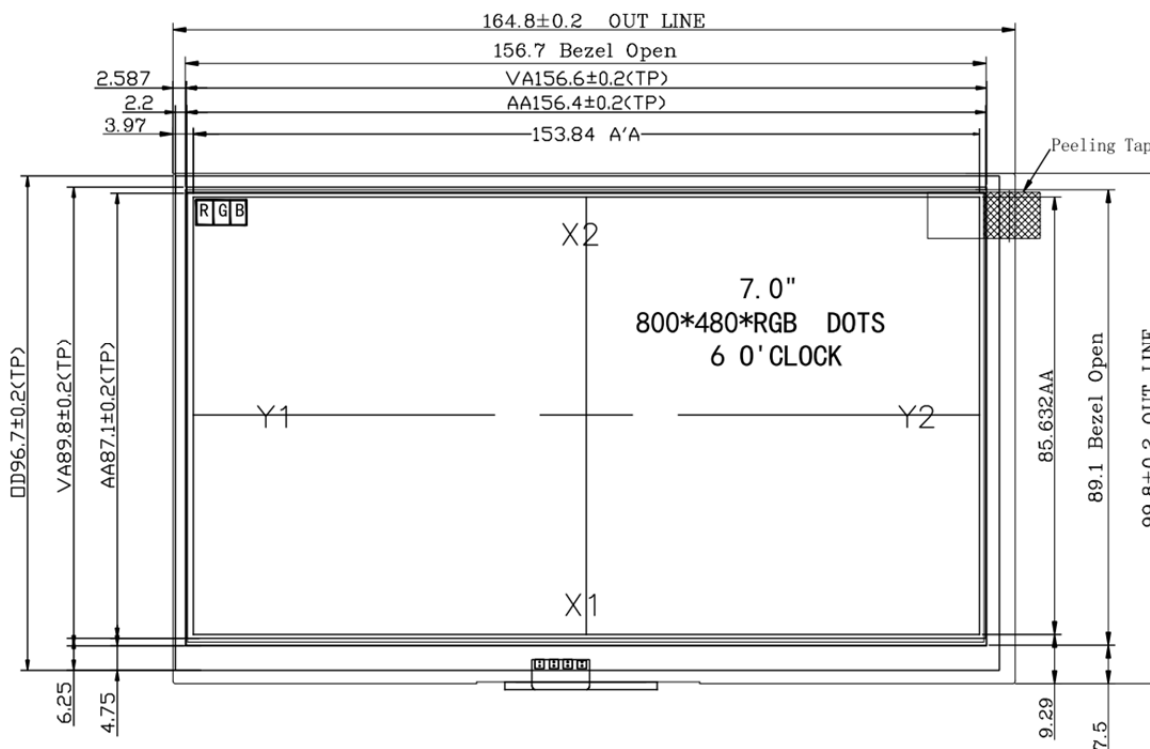
1. 7.0" TFT LCD Module
2. Resolution:800*RGB*480
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type: 4-Wire SPI
5. Controller IC: RA8873
6. Top:-20°C~60°C
7. Support Resistive Touch Panel



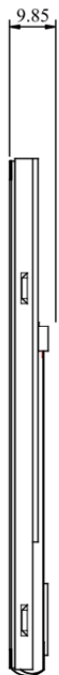
● Mechanical Data

1. Module(WxHxT)(mm):164.8*99.8*9.85
2. Active Area(mm):153.84*85.632
3. LED Numbers: 24 LEDs

● Mechanical Drawung



RTP+LCM



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1,2	VSS	-	Ground.
3,4	VDD	-	Power supply for Logic.(3.3V)
5	BL_EN	H/L	Backlight control pin. H:On \ L: Off.
6~9	VSS	-	Ground.
10	INT	-	Interrupt Signal Output. The interrupt output for MCU to indicate the status of RA8873.
11	/RST	H/L	Reset signal.
12~15	VSS	-	Ground.
16	SCS	H/L	SPI Chip Select.
17	SDO	H/L	4-wire SPI Data Output.
18	SDI	H/L	4-wire SPI Data Input.
19	SCL	H/L	4-wire Serial clock.
20~27	VSS	-	Ground.
28	TP-CLK	H/L	External Clock Input for TP controller.
29	TP-CS	H/L	Chip Select Input for TP controller.
30	TP-INT	H/L	Interrupt output for TP controller.
31	TP-DI	H/L	Serial Data Input for TP controller.
32	TP-DO	H/L	Serial Data output for TP controller.
33,34	VLED+	-	Power supply for backlight driver.(3.0~5.0V)
35,36	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	250	280	—	cd/m ²



BTC070BB-EBR\$

● Feature

1. 7.0" TFT LCD Module
2. Resolution:800*RGB*480
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type: Parallel
5. Controller IC: RA8875
6. Top:-20°C~60°C
7. Support Resistive Touch Panel

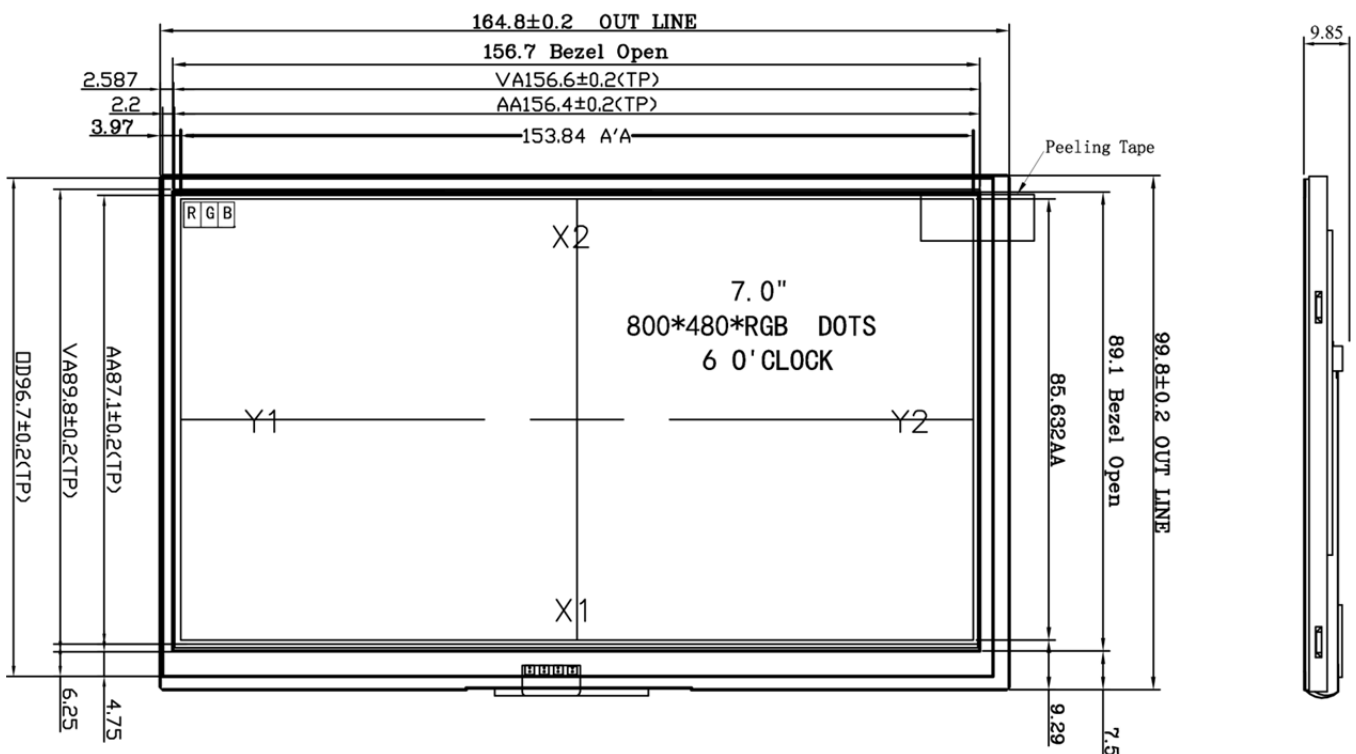


● Mechanical Data

1. Module(WxHxT)(mm):164.8*99.8*9.85
2. Active Area(mm):153.84*85.632
3. LED Numbers: 24 LEDs

● Mechanical Drawing

RTP+LCM



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1	VSS	-	Ground
2	VDD	-	Power supply for Logic,(3.3V)
3	BL_EN	H/L	Backlight control pin. H:On \ L: Off
4	RS	H/L	H: Data , L: Instruction
5	/WR	H/L	In 8080 series, this pin is used as /WR signal (data write) , active low.
6	/RD	H/L	In 8080 series, this pin is used as /RD signal (Data Read) , active low.
7~14	DB0~DB7	H/L	Data bus line
15	/CS	H/L	Chip Select input, Low active.
16	/RES	H/L	Reset signal
17	WAIT	-	Wait Signal Output This is a WAIT output to indicate the RA8875 is in busy state. The RA8875 can't access MCU cycle when WAIT pin is active. It is active low and could be used for MCU to poll busy status by connecting it to I/O port.
18	INT	-	Interrupt Signal Output The interrupt output for MCU to indicate the status of RA8875.
19	VLED+	-	Power supply for backlight driver.(3.0~5.0V)
20	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	250	280	—	cd/m ²



BTC070BB-GBR\$

● Feature

1. 7.0" TFT LCD Module
2. Resolution:800*RGB*480
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type: 4-Wire SPI
5. Controller IC: RA8875
6. Top:-20°C~60°C
7. Support Resistive Touch Panel

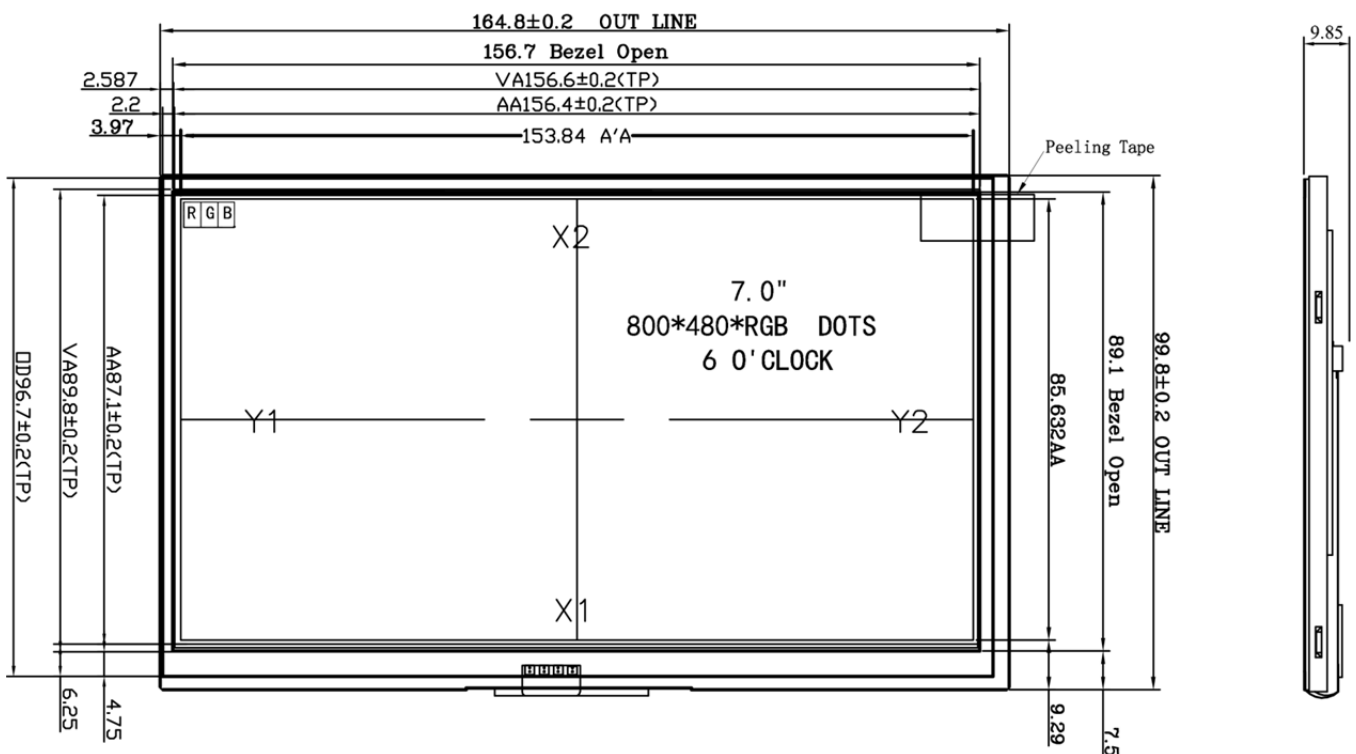


● Mechanical Data

1. Module(WxHxT)(mm):164.8*99.8*9.85
2. Active Area(mm):153.84*85.632
3. LED Numbers: 24 LEDs

● Mechanical Drawing

RTP+LCM



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1	VSS	-	Ground
2	VDD	-	Power supply for Logic,(3.3V)
3	SCS	I	SPI Chip Select. Chip select pin for 4-wire serial I/F.
4	SDO	O	Data output for 4-wire serial I/F.
5	SDI	I	Data input for 4-wire serial I/F.
6	SCL	I	SPI Clock input.
7	NC	I	NC, please connect it to VDD.
8	NC	I	NC, please connect it to VDD.
9	INT	-	Interrupt Signal Output The interrupt output for MCU to indicate the status of RA8875.
10	WAIT	-	Wait Signal Output This is a WAIT output to indicate the RA8875 is in busy state. The RA8875 can't access MCU cycle when WAIT pin is active. It is active low and could be used for MCU to poll busy status by connecting it to I/O port.
11	/RES	H/L	Reset signal
12	BL_EN	H/L	Backlight control pin. H:On \ L: Off
13	VLED+	-	Power supply for backlight driver.(Typ.5.0V)
14	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	250	280	—	cd/m ²



BTC070BE-EBR\$

● Feature

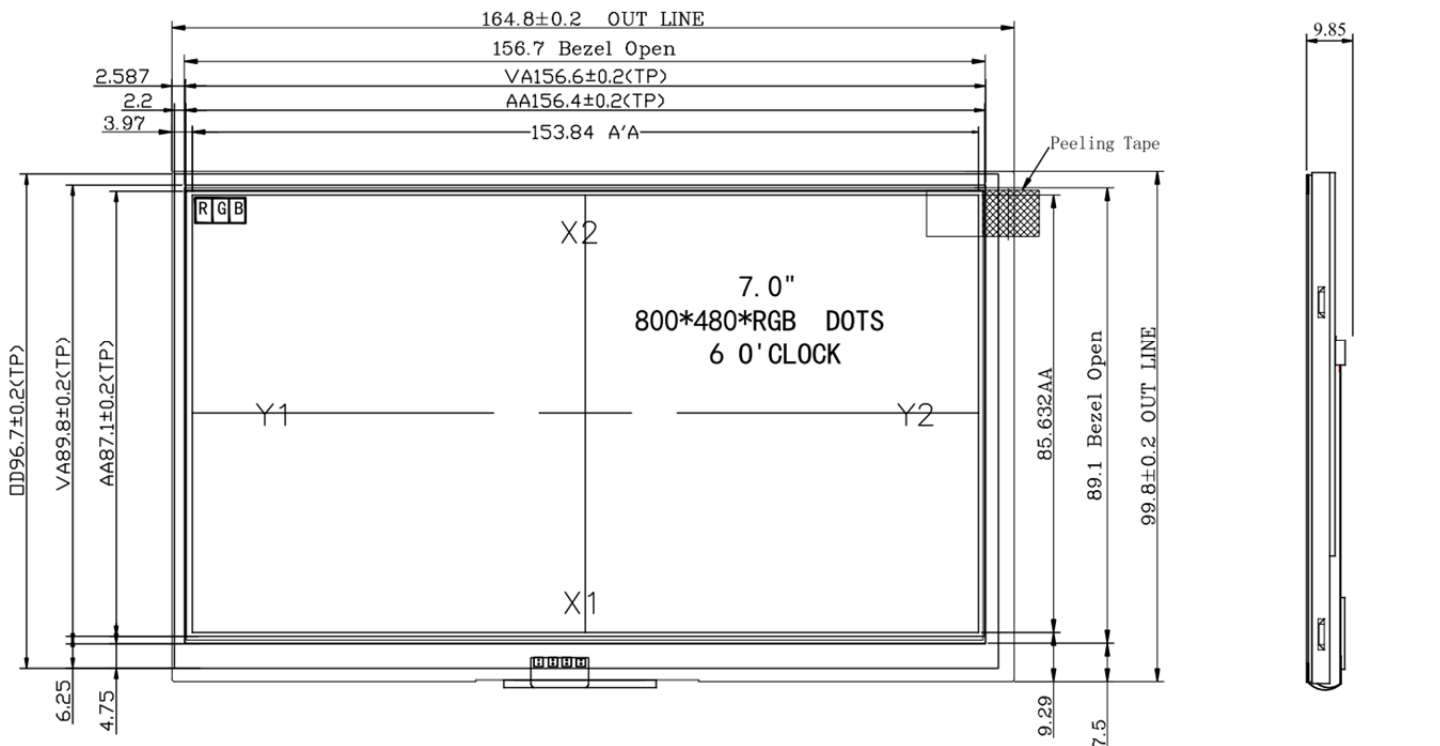
1. 7.0" TFT LCD Module
2. Resolution:800*RGB*480
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type: Parallel
5. Controller IC: RA8876
6. Top:-20°C~60°C
7. Support Resistive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):164.8*99.8*9.85
2. Active Area(mm):153.84*85.632
3. LED Numbers: 24 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1,2	VSS	-	Ground.
3,4	VDD	-	Power supply for Logic,(3.3V).
5	BL_EN	H/L	Backlight control pin. H:On \ L: Off.
6	RS	H/L	H: Data , L: Instruction.
7	/WR	H/L	In 8080 series, this pin is used as /WR signal (data write) , active low.
8	/RD	H/L	In 8080 series, this pin is used as /RD signal (Data Read) , active low.
9	/CS	H/L	Chip Select input, Low active.
10	INT	-	Interrupt Signal Output. The interrupt output for MCU to indicate the status of RA8876.
11	/RST	H/L	Reset signal.
12~27	DB0~DB15	H/L	Data bus line.
28	TP-CLK	H/L	External Clock Input for TP controller.
29	TP-CS	H/L	Chip Select Input for TP controller.
30	TP-INT	H/L	Interrupt output for TP controller.
31	TP-DI	H/L	Serial Data Input for TP controller.
32	TP-DO	H/L	Serial Data output for TP controller.
33,34	VLED+	-	Power supply for backlight driver.(3.0~5.0V)
35,36	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	250	280	—	cd/m ²

BTC070BE-GBR\$



● Feature

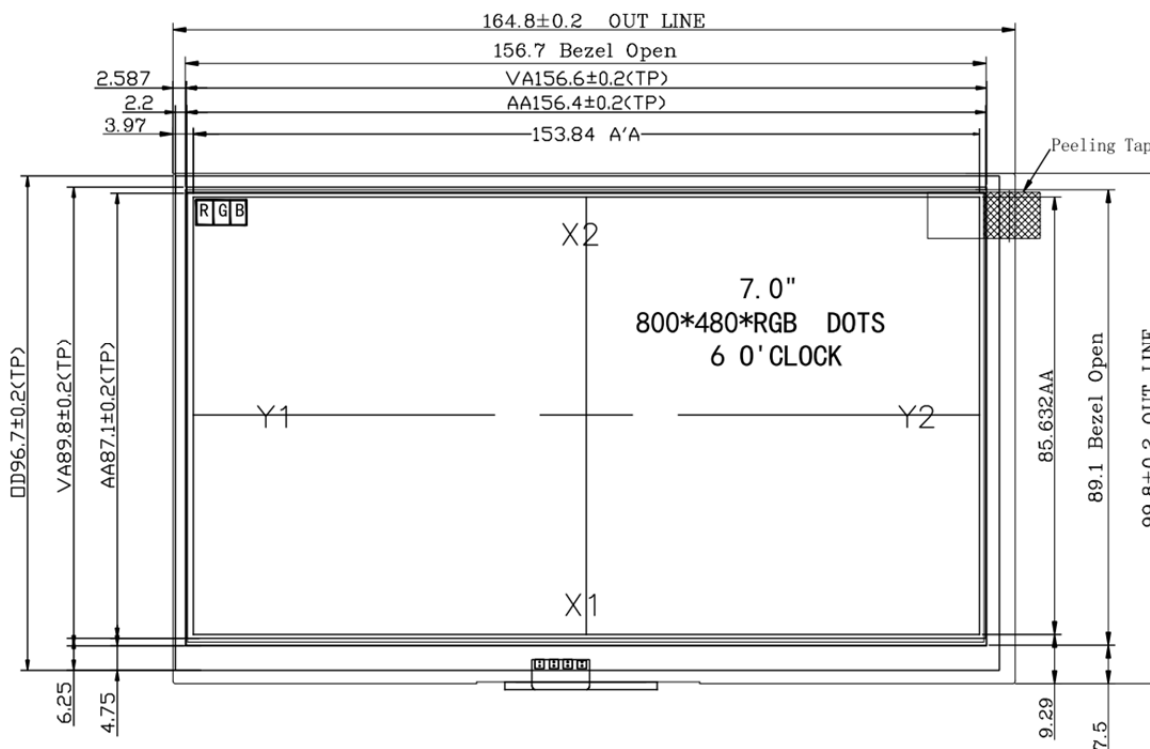
1. 7.0" TFT LCD Module
2. Resolution:800*RGB*480
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type: 4-Wire SPI
5. Controller IC: RA8876
6. Top:-20°C~60°C
7. Support Resistive Touch Panel



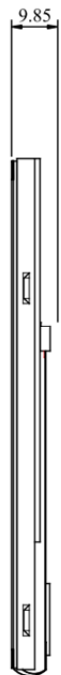
● Mechanical Data

1. Module(WxHxT)(mm):164.8*99.8*9.85
2. Active Area(mm):153.84*85.632
3. LED Numbers: 24 LEDs

● Mechanical Drawung



RTP+LCM



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1,2	VSS	-	Ground.
3,4	VDD	-	Power supply for Logic.(3.3V)
5	BL_EN	H/L	Backlight control pin. H:On \ L: Off.
6~9	VSS	-	Ground.
10	INT	-	Interrupt Signal Output. The interrupt output for MCU to indicate the status of RA8876.
11	/RST	H/L	Reset signal.
12~15	VSS	-	Ground.
16	SCS	H/L	SPI Chip Select.
17	SDO	H/L	4-wire SPI Data Output.
18	SDI	H/L	4-wire SPI Data Input.
19	SCL	H/L	4-wire Serial clock.
20~27	VSS	-	Ground.
28	TP-CLK	H/L	External Clock Input for TP controller.
29	TP-CS	H/L	Chip Select Input for TP controller.
30	TP-INT	H/L	Interrupt output for TP controller.
31	TP-DI	H/L	Serial Data Input for TP controller.
32	TP-DO	H/L	Serial Data output for TP controller.
33,34	VLED+	-	Power supply for backlight driver.(3.0~5.0V)
35,36	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

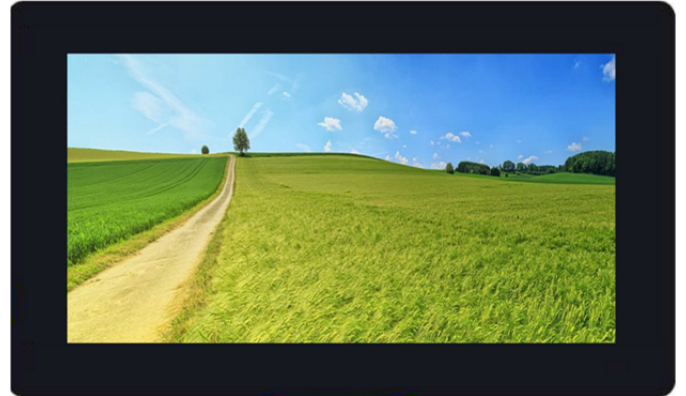
Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	250	280	—	cd/m ²



BTC070CF-EFC\$

● Feature

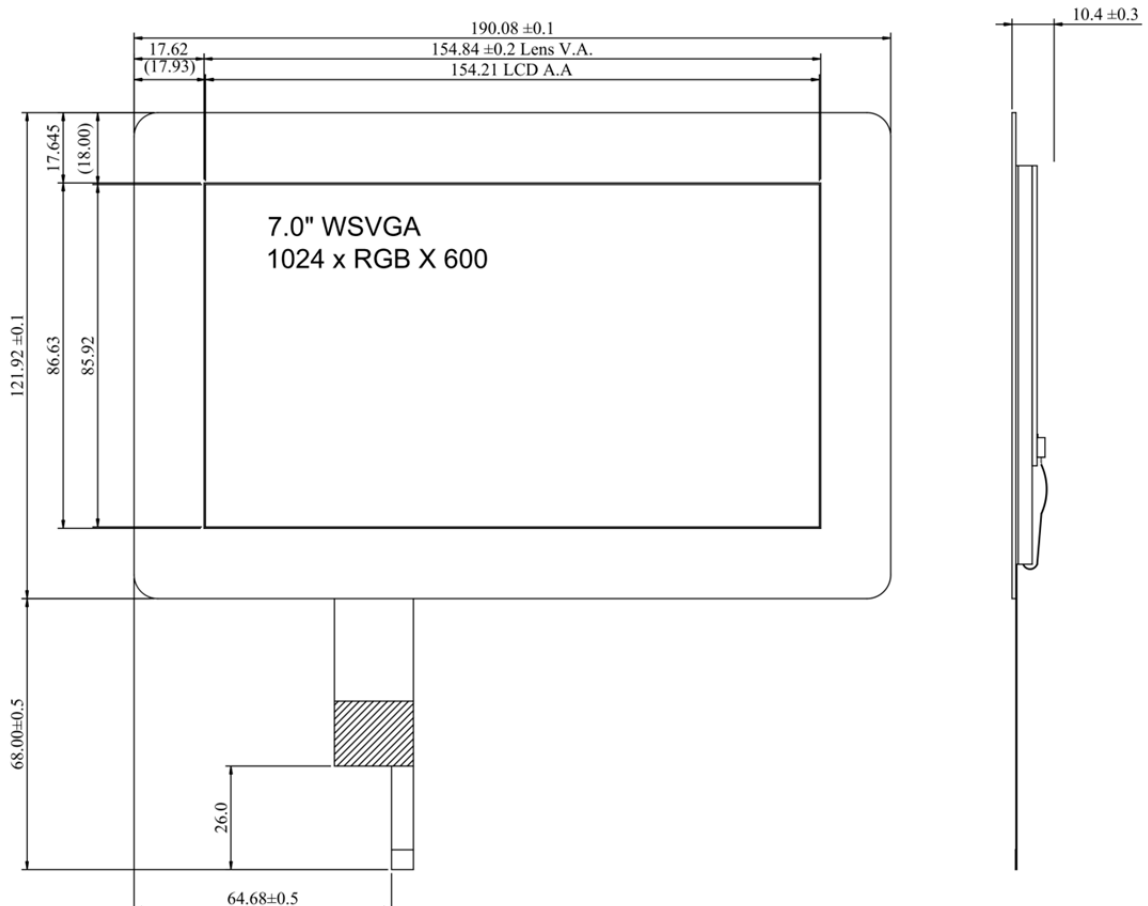
1. 7.0" IPS TFT LCD Module
2. Resolution:1024*RGB*600
3. Display Type:TFT/Transmissive/Normally/black
4. Interface Type: Parallel
5. Controller IC: RA8877
6. Top:-20°C~70°C
7. Support Capacitive Touch Panel



● Mechanical Data

1. Module(WxHxT)(mm):190.08*121.92*10.4
2. Active Area(mm):154.21*85.92
3. LED Numbers: 30 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1,2	VSS	-	Ground
3,4	VDD	-	Power supply for Logic,(3.3V)
5	BL_EN	H/L	Backlight control pin. H:On \ L: Off
6	RS	H/L	H: Data , L: Instruction
7	/WR	H/L	In 8080 series, this pin is used as /WR signal (data write) , active low.
8	/RD	H/L	In 8080 series, this pin is used as /RD signal (Data Read) , active low.
9	/CS	H/L	Chip Select input, Low active.
10	INT	-	Interrupt Signal Output. The interrupt output for MCU to indicate the status of RA8877.
11	/RST	H/L	Reset signal
12~27	DB0~DB15	H/L	Data bus line
28	TP-CLK	-	NC.
29	TP-CS	-	NC.
30	TP-INT	-	NC.
31	TP-DI	-	NC.
32	TP-DO	-	NC.
33,34	VLED+	-	Power supply for backlight driver.(5.0V)
35,36	VLED-	-	Power supply for backlight driver.(GND)

● CTP Pin Function

Pin No.	Symbol	I/O Level	Description
1	NC	-	NC
2	NC	-	NC
3	/RST	I	Reset pin.
4	GND	-	Ground
5	INT	O	Interrupt output.
6	SDA	I/O	I2C DATA signal input/output.
7	SCL	I	I2C CLOCK signal input.
8	GND	-	Ground
9	GND	-	Ground
10	VDD	-	Power supply pin.

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

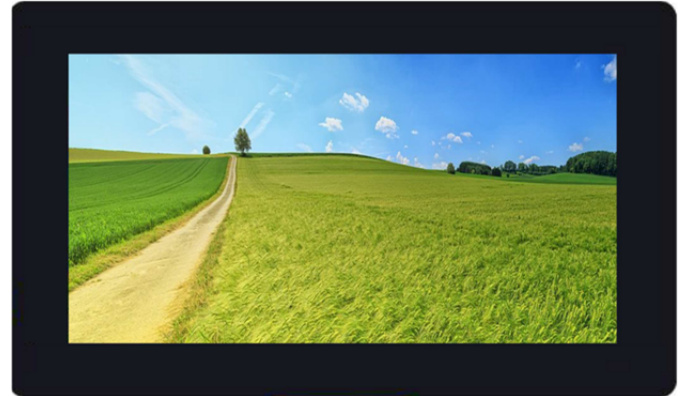
Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	570	640	—	cd/m ²

BTC070CF-GFC\$



● Feature

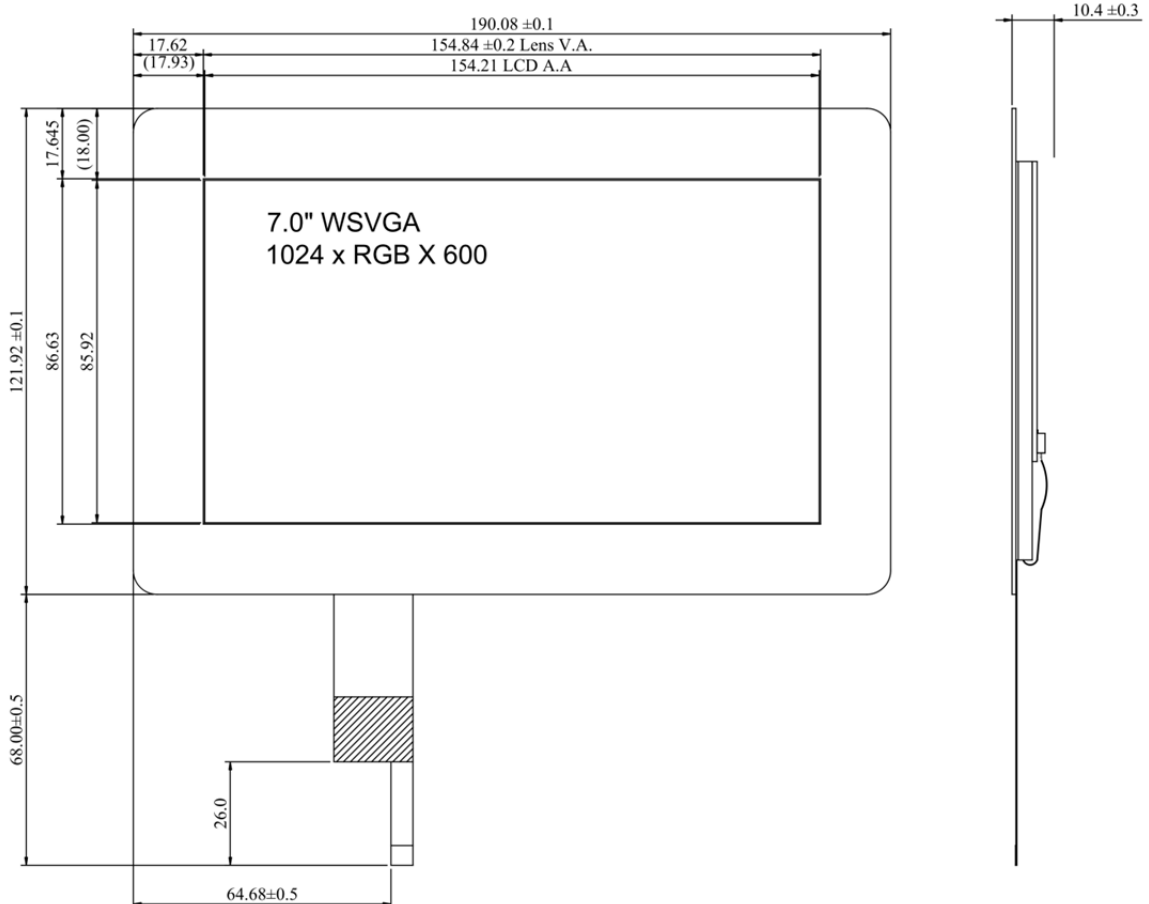
1. 7.0" IPS TFT LCD Module
2. Resolution: 1024*RGB*600
3. Display Type:TFT/Transmissive/Normally/black
4. Interface Type: 4-Wire SPI
5. Controller IC: RA8877
6. Top:-20°C~70°C
7. Support Capacitive Touch Panel



● Mechanical Data

- Module(WxHxT)(mm):190.08*121.92*10.4
- Active Area(mm):154.21*85.92
- LED Numbers: 30 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1	VSS	-	Ground
2	VDD	-	Power supply for Logic,(3.3V)
3	BL_EN	H/L	Backlight control pin. H:On \ L: Off
4~10	VSS	-	Ground
11	SCS	H/L	SPI Chip Select
12	SDO	H/L	4-wire SPI Data Output
13	SDI	H/L	4-wire SPI Data Input
14	SCL	H/L	4-wire Serial clock.
15	VSS	-	Ground
16	/RST	H/L	Reset signal
17	WAIT	-	Wait Signal Output. When high, it indicates that the controller is ready to transfer data.
18	INT	-	Interrupt Signal Output. The interrupt output for MCU to indicate the status of controller.
19	VLED+	-	Power supply for backlight driver.(5.0V)
20	VLED-	-	Power supply for backlight driver.(GND)

● CTP Pin Function

Pin No.	Symbol	I/O Level	Description
1	NC	-	NC
2	NC	-	NC
3	/RST	I	Reset pin.
4	GND	-	Ground
5	INT	O	Interrupt output.
6	SDA	I/O	I2C DATA signal input/output.
7	SCL	I	I2C CLOCK signal input.
8	GND	-	Ground
9	GND	-	Ground
10	VDD	-	Power supply pin.

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD = 3.3V	—	—	—	mA

Backlight

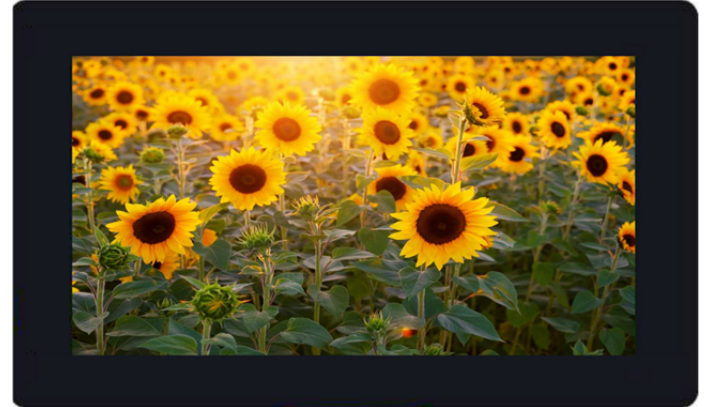
Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	570	640	—	cd/m ²

BTC101AF-EAC\$



● Feature

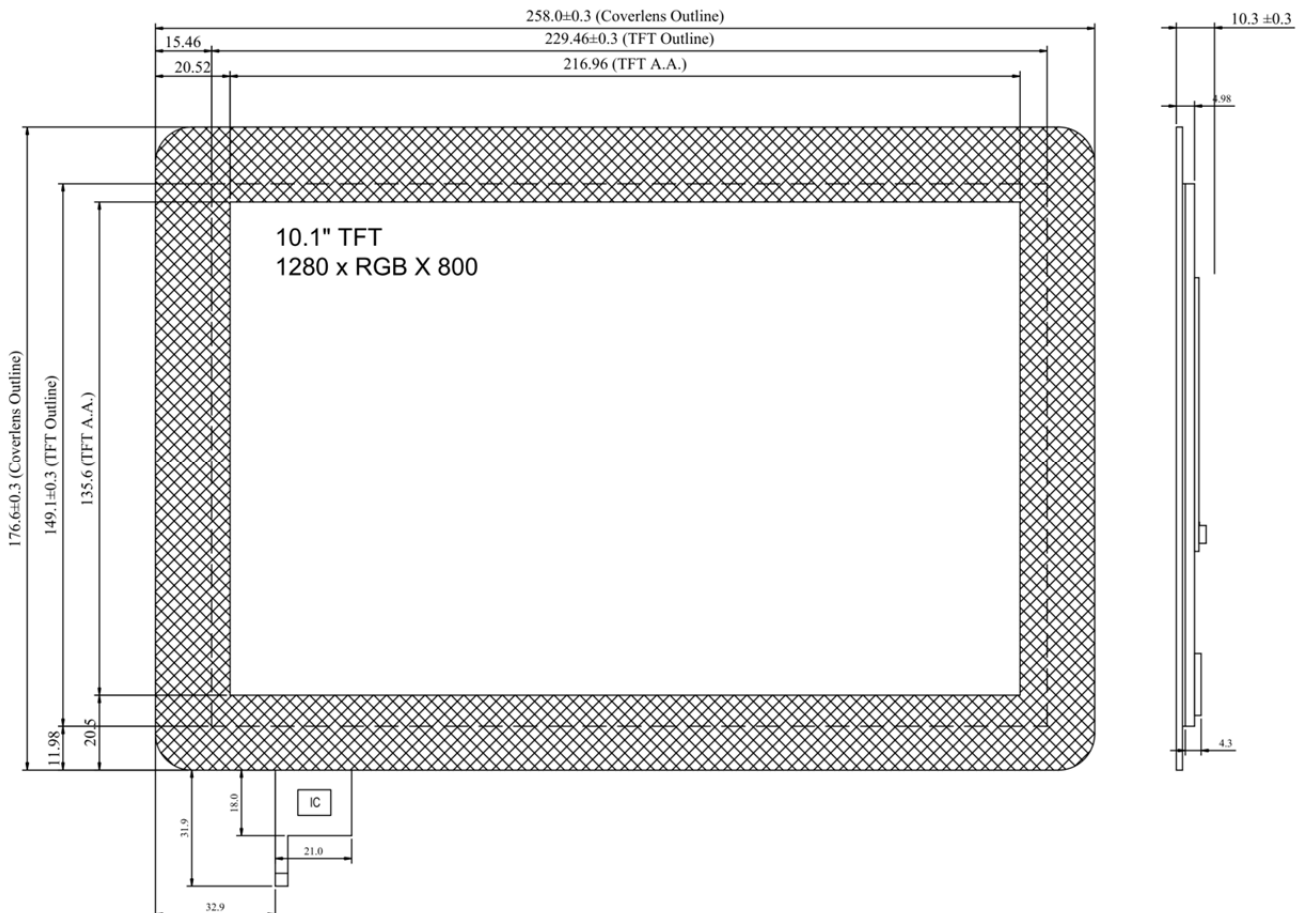
1. 10.1" IPS TFT LCD Module
2. Resolution: 1280*RGB*800
3. Display Type:TFT/Transmissive/Normally/black
4. Interface Type: Parallel
5. Controller IC: RA8877
6. Top: 0°C~50°C
7. Support Capacitive Touch Panel



● Mechanical Data

- Module(WxHxT)(mm):258*176.6*10.3
- Active Area(mm):216.96*135.6
- LED Numbers: 30 LEDs

● Mechanical Drawung



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1,2	VSS	-	Ground
3,4	VDD	-	Power supply for Logic,(3.3V)
5	BL_EN	H/L	Backlight control pin. H:On \ L: Off
6	RS	H/L	H: Data , L: Instruction
7	/WR	H/L	In 8080 series, this pin is used as /WR signal (data write) , active low.
8	/RD	H/L	In 8080 series, this pin is used as /RD signal (Data Read) , active low.
9	/CS	H/L	Chip Select input, Low active.
10	INT	-	Interrupt Signal Output. The interrupt output for MCU to indicate the status of RA8877.
11	/RST	H/L	Reset signal
12~27	DB0~DB15	H/L	Data bus line
28	TP-CLK	-	NC.
29	TP-CS	-	NC.
30	TP-INT	-	NC.
31	TP-DI	-	NC.
32	TP-DO	-	NC.
33,34	VLED+	-	Power supply for backlight driver.(5.0V)
35,36	VLED-	-	Power supply for backlight driver.(GND)

● CTP Pin Function

Pin No.	Symbol	I/O Level	Description
1	VDD	-	Power supply pin.
2	/RST	I	Reset pin.
3	INT	O	Interrupt output.
4	SDA	I/O	I2C DATA signal input/output.
5	SCL	I	I2C CLOCK signal input.
6	GND	-	Ground

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	150	190	—	cd/m ²

BTC101AF-GAC\$



● Feature

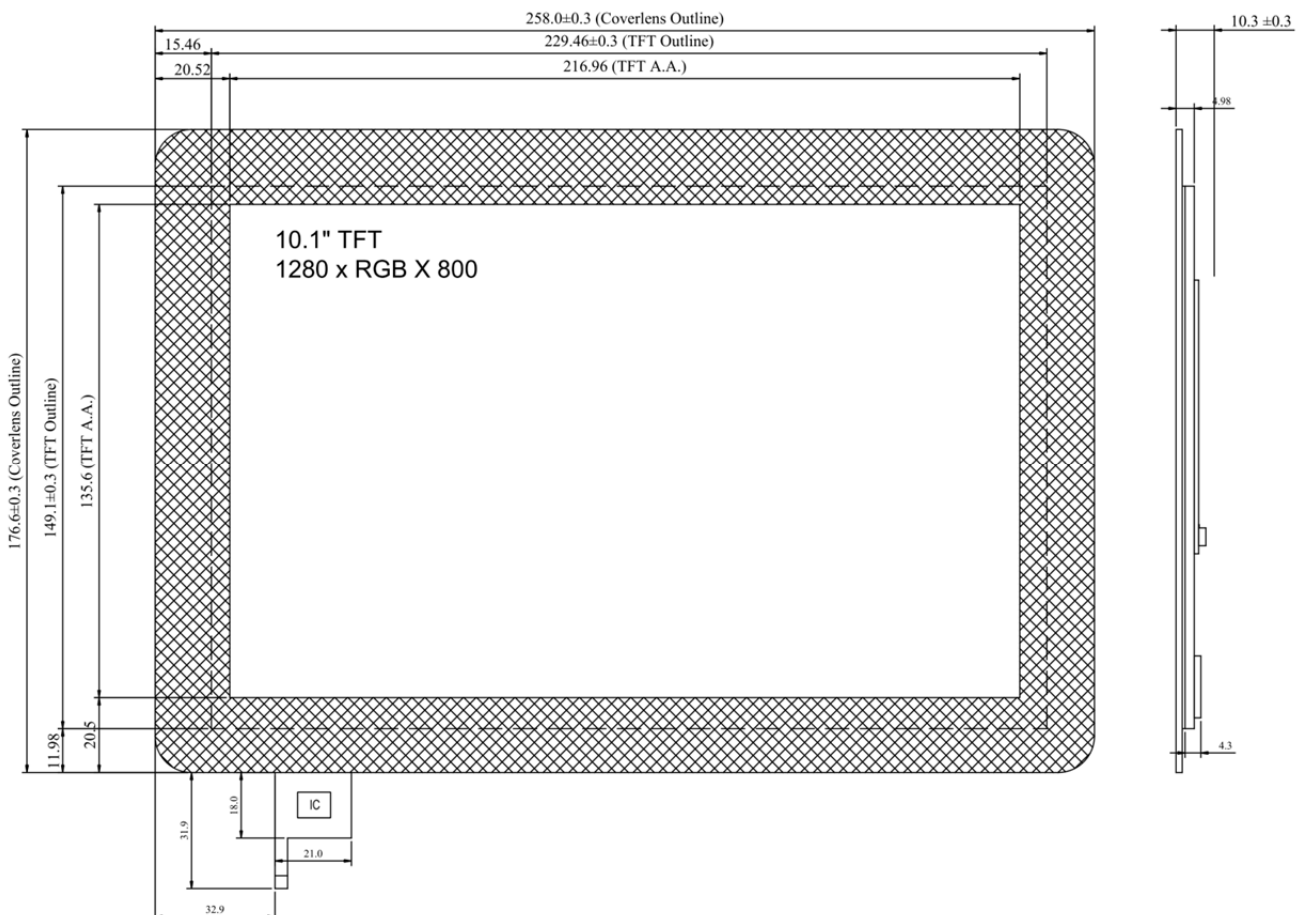
1. 10.1" IPS TFT LCD Module
2. Resolution: 1280*RGB*800
3. Display Type:TFT/Transmissive/Normally/black
4. Interface Type: 4-Wire SPI
5. Controller IC: RA8877
6. Top: 0°C~50°C
7. Support Capacitive Touch Panel



● Mechanical Data

- Module(WxHxT)(mm):258*176.6*10.3
- Active Area(mm):216.96*135.6
- LED Numbers: 30 LEDs

● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1	VSS	-	Ground
2	VDD	-	Power supply for Logic,(3.3V)
3	BL_EN	H/L	Backlight control pin. H:On \ L: Off
4~10	VSS	-	Ground
11	SCS	H/L	SPI Chip Select
12	SDO	H/L	4-wire SPI Data Output
13	SDI	H/L	4-wire SPI Data Input
14	SCL	H/L	4-wire Serial clock.
15	VSS	-	Ground
16	/RST	H/L	Reset signal
17	WAIT	-	Wait Signal Output. When high, it indicates that the controller is ready to transfer data.
18	INT	-	Interrupt Signal Output. The interrupt output for MCU to indicate the status of controller.
19	VLED+	-	Power supply for backlight driver.(5.0V)
20	VLED-	-	Power supply for backlight driver.(GND)

● CTP Pin Function

Pin No.	Symbol	I/O Level	Description
1	VDD	-	Power supply pin.
2	/RST	I	Reset pin.
3	INT	O	Interrupt output.
4	SDA	I/O	I2C DATA signal input/output.
5	SCL	I	I2C CLOCK signal input.
6	GND	-	Ground

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	150	190	—	cd/m ²

BTC101BE-EBN\$



● Feature

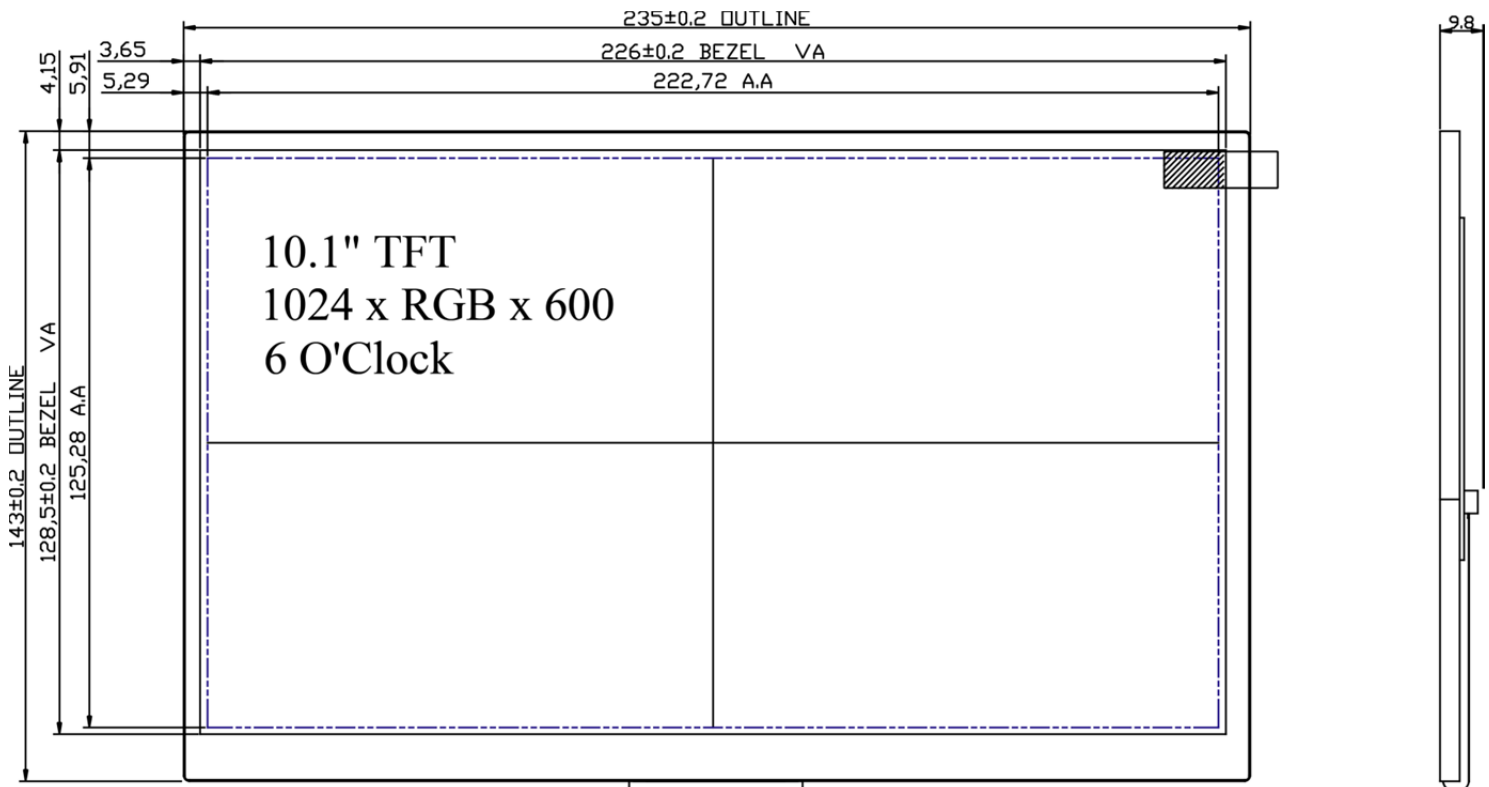
1. 10.1" TFT LCD Module
2. Resolution:1024*RGB*600
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type: Parallel
5. Controller IC: RA8876
6. Top:-20°C~60°C

● Mechanical Data

1. Module(WxHxT)(mm):235*143*9.8
2. Active Area(mm):222.72*125.28
3. LED Numbers: 42 LEDs



● Mechanical Drawing



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1,2	VSS	-	Ground.
3,4	VDD	-	Power supply for Logic,(3.3V).
5	BL_EN	H/L	Backlight control pin. H:On \ L: Off.
6	RS	H/L	H: Data , L: Instruction.
7	/WR	H/L	In 8080 series, this pin is used as /WR signal (data write) , active low.
8	/RD	H/L	In 8080 series, this pin is used as /RD signal (Data Read) , active low.
9	/CS	H/L	Chip Select input, Low active.
10	INT	-	Interrupt Signal Output. The interrupt output for MCU to indicate the status of RA8876.
11	/RST	H/L	Reset signal.
12~27	DB0~DB15	H/L	Data bus line.
28	TP-CLK	H/L	No connection
29	TP-CS	H/L	No connection
30	TP-INT	H/L	No connection
31	TP-DI	H/L	No connection
32	TP-DO	H/L	No connection
33,34	VLED+	-	Power supply for backlight driver.(3.0~5.0V)
35,36	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	340	360	—	cd/m ²

BTC101BE-GBN\$



● Feature

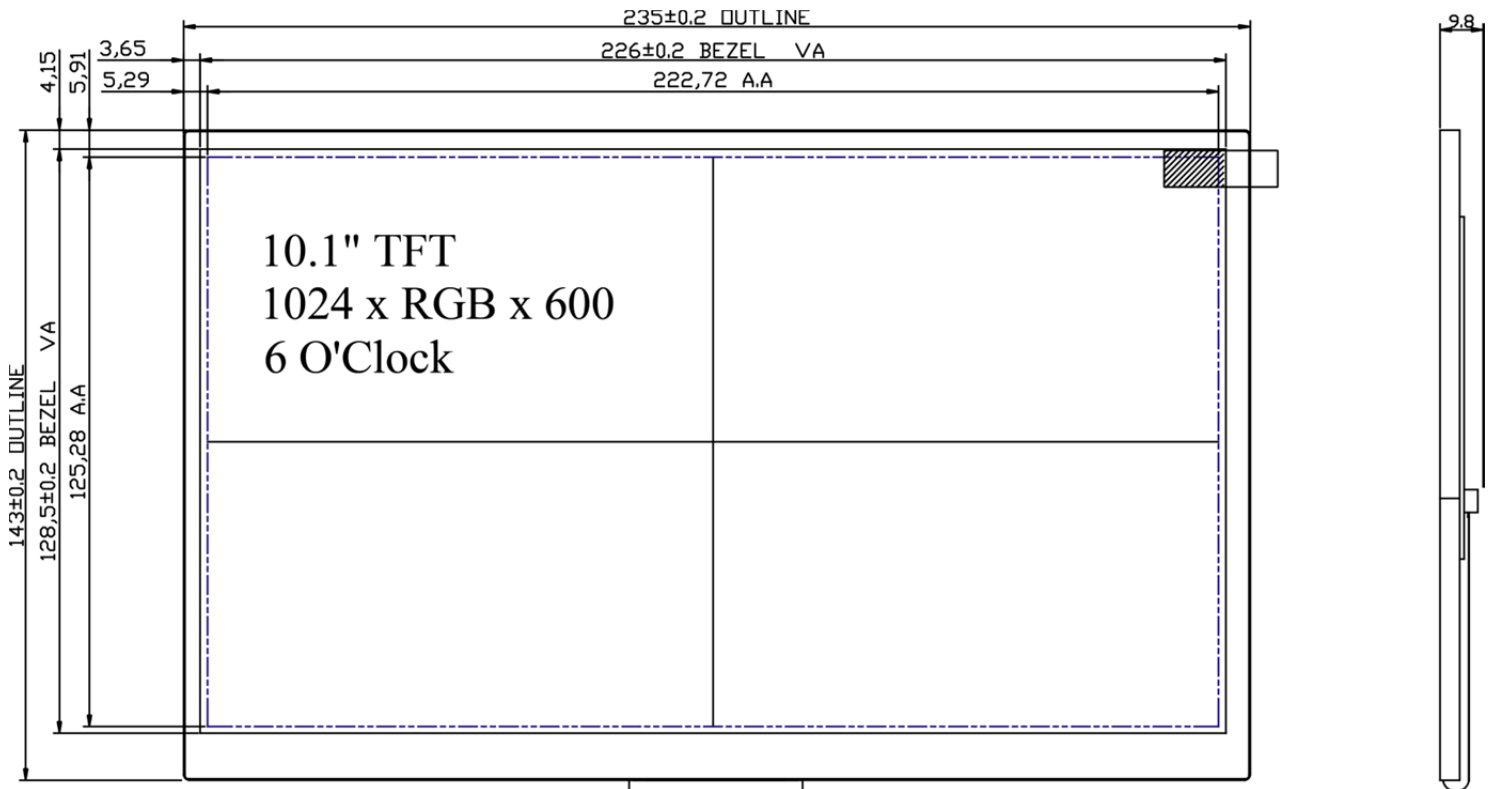
1. 10.1" TFT LCD Module
2. Resolution:1024*RGB*600
3. Display Type:TFT/Transmissive/Normally/white
4. Interface Type: 4-Wire SPI
5. Controller IC: RA8876
6. Top:-20°C~60°C

● Mechanical Data

1. Module(WxHxT)(mm):235*143*9.8
2. Active Area(mm):222.72*125.28
3. LED Numbers: 42 LEDs



● Mechanical Drawung



● Interface Pin Function

Pin No.	Symbol	I/O Level	Description
1,2	VSS	-	Ground.
3,4	VDD	-	Power supply for Logic.(3.3V)
5	BL_EN	H/L	Backlight control pin. H:On \ L: Off.
6~9	VSS	-	Ground.
10	INT	-	Interrupt Signal Output. The interrupt output for MCU to indicate the status of RA8876.
11	/RST	H/L	Reset signal.
12~15	VSS	-	Ground.
16	SCS	H/L	SPI Chip Select.
17	SDO	H/L	4-wire SPI Data Output.
18	SDI	H/L	4-wire SPI Data Input.
19	SCL	H/L	4-wire Serial clock.
20~27	VSS	-	Ground.
28	TP-CLK	H/L	No connection
29	TP-CS	H/L	No connection
30	TP-INT	H/L	No connection
31	TP-DI	H/L	No connection
32	TP-DO	H/L	No connection
33,34	VLED+	-	Power supply for backlight driver.(3.0~5.0V)
35,36	VLED-	-	Power supply for backlight driver.(GND)

● Electrical Characteristics

Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage For Logic	VDD	—	3.0	—	3.3	V
Input High Voltage	V _{IH}	—	0.7VDD	—	VDD	V
Input Low Voltage	V _{IL}	—	VSS	—	0.3VDD	V
Supply Current	I _{dd}	VDD =3.3V	—	—	—	mA

Backlight

Item	Symbol	Min.	Typ.	Max.	Unit
Luminance	L	340	360	—	cd/m ²