








## HDMI Interface TFT LCD

HDMI (High Definition Multimedia Interface) is a connector and cable definition that supports high-quality and high-bandwidth streams of uncompressed video data and compressed or uncompressed digital audio data between devices.

Inch	Display Format	Model No.	Outline Dimension (mm)	Active Area (mm)	Typ. Brightness (module surface, cd/m <sup>2</sup> )	View Angle	Interface	download flyer
4,3	480x272	BTH043A-DHC\$	105.5x67.2x15.76	95.04x53.856	850	6H	HDMI	
5,0	800x480	BTH050A-DHC\$	121x75.9x15.4	108x64.8	1000	6H	HDMI	
7,0	800x480	BTH070A-DHC\$	186.8x110.56x20.45	154.08x85.92	1000	6H	HDMI	
7,0	1024x600	BTH070B-DWC\$	164.9x100x21.2	154.21x85.92	350	12H	HDMI	
10,1	1280x800	BTH101A-DHC\$	254.96x173.6x26.2	216.96x135.6	450	ALL	HDMI	



# BTH043A-DHC\$

## ● Feature

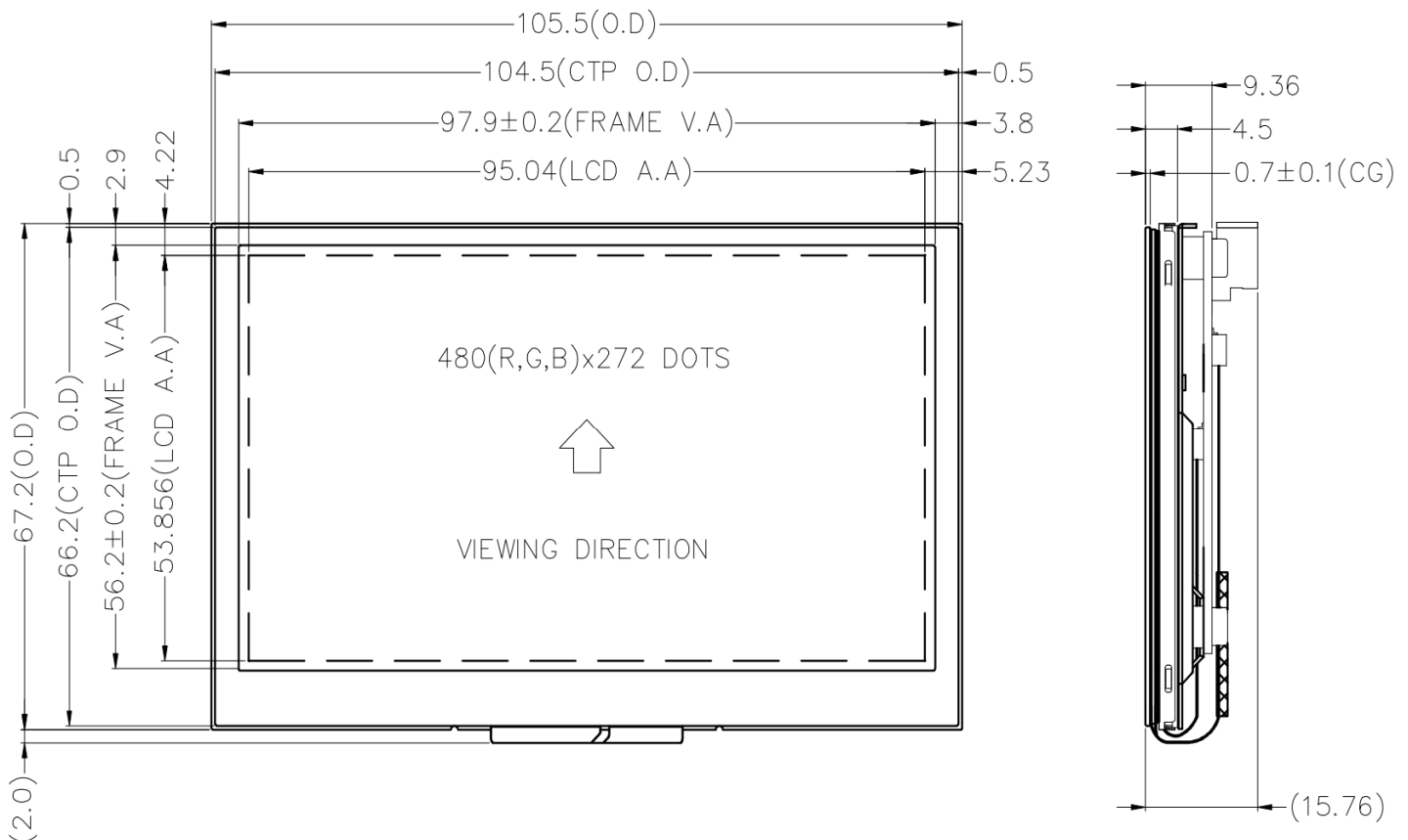
1. 4.3" TFTLCD Module
2. Resolution:480\*3(RGB)\*272
3. DisplayType:TFT/Transmissive/Normally white
4. Interface Type:HDMI
5. Surface Luminance:680cd/m<sup>2</sup>
6. Top:-20°C~70°C
7. Support Capacitive Touch Panel
8. CTP Drive IC:HYCON 4635



## ● Mechanical Data

1. Module(WxHxT)(mm):105.5\*67.2\*15.76
2. Active Area(mm):95.04\*53.856
3. LED Numbers: 12 LEDs

## ● Mechanical Drawing



## ● HDMI Interface Pin Function

Pin#	Name	Description
1	TX2+	TMDS Data 2+
2	TX2 Shield	TMDS Data 2 Shield
3	TX2-	TMDS Data 2-
4	TX1+	TMDS Data 1+
5	TX1 Shield	TMDS Data 1 Shield
6	TX1-	TMDS Data 1-
7	TX0+	TMDS Data 0+
8	TX0 Shield	TMDS Data 0 Shield
9	TX0-	TMDS Data 0-
10	TXC+	TMDS Clock+
11	TXC Shield	TMDS Clock Shield
12	TXC-	TMDS Clock-
13	CEC	CEC
14	NC	No connection
15	SCL	Serial Clock for DDC
16	SDA	Serial Data for DDC
17	GND	Power ground
18	V5V	+5V Power
19	Hot Plug Detect	Hot Plug Detect

## ● Capacitive Touch Panel Pin Function

Pin#	Name	Description
1	V <sub>Bus</sub>	V <sub>Bus</sub> 4.4V-5.25V
2	D-	Data-
3	D+	Data+
4	ID	No connection
5	GND	Power ground.

## ● Electrical Characteristics

### Module

Item	Symbol	Min.	Typ.	Max.	Unit
Input Signal Voltage	V <sub>Bus</sub>	4.5	5.0	5.5	V
Supply Current	I <sub>VBus</sub>	350	370	450	mA

### Backlight

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =40mA	17.6	19.2	20.4	V
LED Life Time	-		50000	-	-	hr
Color	White					



# BTH050A-DHC\$

## ● Feature

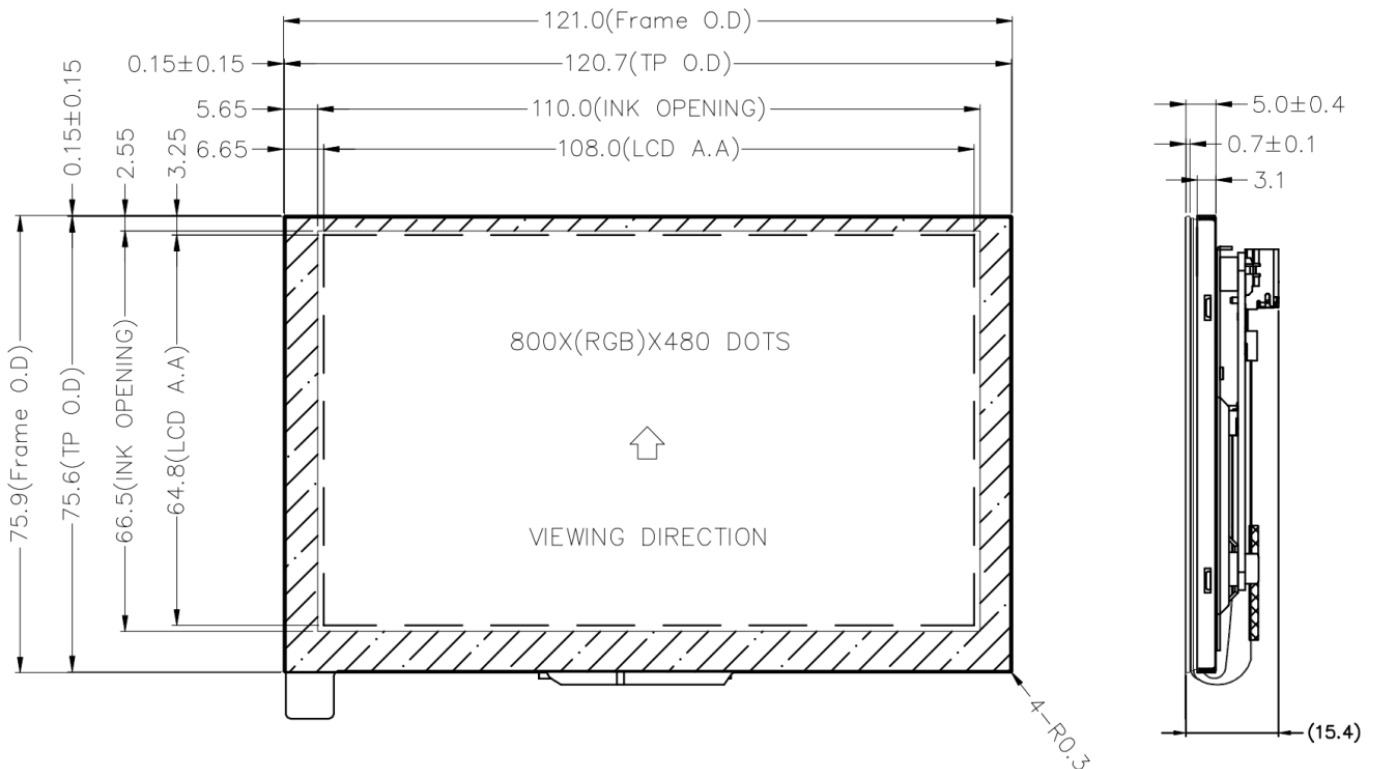
1. 5.0" TFTLCD Module
2. Resolution:800\*3(RGB)\*480
3. DisplayType:TFT/Transmissive/Normally white
4. Interface Type:HDMI
5. Surface Luminance:800cd/m<sup>2</sup>
6. Top:-20°C~70°C
7. Support Capacitive Touch Panel
8. CTP Drive IC:HYCON 4635

## ● Mechanical Data

1. Module(WxHxT)(mm):121.0\*75.9\*15.4
2. Active Area(mm):108.0\*64.8
3. LED Numbers: 18 LEDs



## ● Mechanical Drawing



## ● HDMI Interface Pin Function

Pin#	Name	Description
1	TX2+	TMDS Data 2+
2	TX2 Shield	TMDS Data 2 Shield
3	TX2-	TMDS Data 2-
4	TX1+	TMDS Data 1+
5	TX1 Shield	TMDS Data 1 Shield
6	TX1-	TMDS Data 1-
7	TX0+	TMDS Data 0+
8	TX0 Shield	TMDS Data 0 Shield
9	TX0-	TMDS Data 0-
10	TXC+	TMDS Clock+
11	TXC Shield	TMDS Clock Shield
12	TXC-	TMDS Clock-
13	CEC	CEC
14	NC	No connection
15	SCL	Serial Clock for DDC
16	SDA	Serial Data for DDC
17	GND	Power ground
18	V5V	+5V Power
19	Hot Plug Detect	Hot Plug Detect

## ● Capacitive Touch Panel Pin Function

Pin#	Name	Description
1	V <sub>Bus</sub>	V <sub>Bus</sub> 4.4V-5.25V
2	D-	Data-
3	D+	Data+
4	ID	No connection
5	GND	Power ground.

## ● Electrical Characteristics

### Module

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage	VDD	GND=0V	3.0	3.3	3.6	V
	V <sub>Bus</sub>		4.5	5.0	5.5	V
Input Signal Voltage	V <sub>IH</sub>		0.7*VDD	-	VDD	V
	V <sub>IL</sub>		0	-	0.3*VDD	V
Supply Current	I <sub>VBus</sub>	V <sub>Bus</sub> =5.0V	-	700	1000	mA

### Backlight

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	V <sub>F</sub>	IF=90mA	16.2	18.0	19.2	V
CIE Color Coordinate (Without LCD)	X		0.25	0.28	0.31	-
	Y		0.25	0.28	0.31	
Color	White					



# BTH070A-DHC\$

## ● Feature

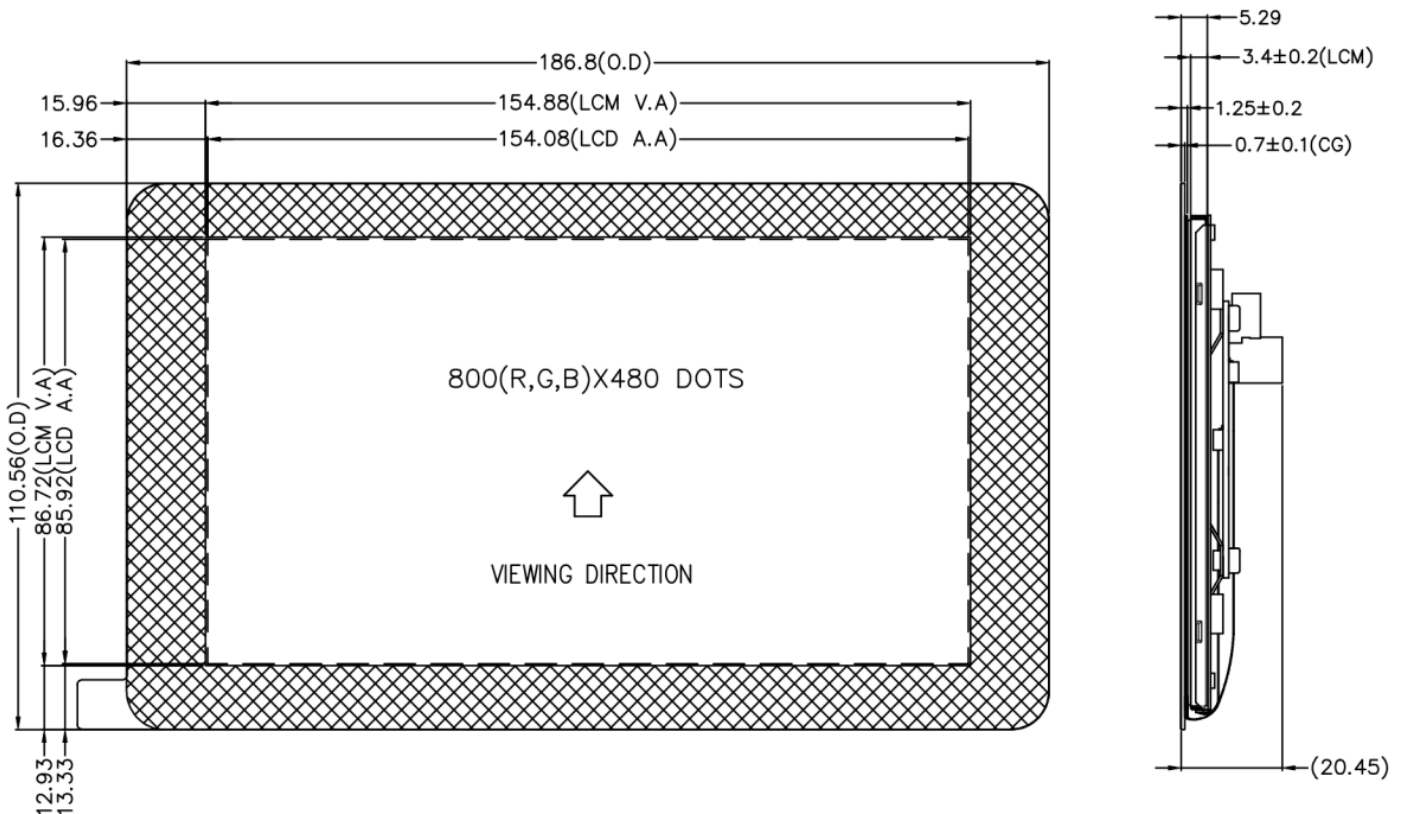
1. 7.0" TFTLCD Module
2. Resolution:800\*3(RGB)\*480
3. DisplayType:TFT/Transmissive/Normally white
4. Interface Type:HDMI
5. Surface Luminance:680cd/m<sup>2</sup>
6. Top:-20°C~70°C
7. Support Capacitive Touch Panel
8. CTP Drive IC:HYCON 4635



## ● Mechanical Data

1. Module(WxHxT)(mm):186.8\*110.56\*20.45
2. Active Area(mm):154.08\*85.92
3. LED Numbers: 24 LEDs

## ● Mechanical Drawing



## ● HDMI Interface Pin Function

Pin#	Name	Description
1	TX2+	TMDS Data 2+
2	TX2 Shield	TMDS Data 2 Shield
3	TX2-	TMDS Data 2-
4	TX1+	TMDS Data 1+
5	TX1 Shield	TMDS Data 1 Shield
6	TX1-	TMDS Data 1-
7	TX0+	TMDS Data 0+
8	TX0 Shield	TMDS Data 0 Shield
9	TX0-	TMDS Data 0-
10	TXC+	TMDS Clock+
11	TXC Shield	TMDS Clock Shield
12	TXC-	TMDS Clock-
13	CEC	CEC
14	NC	No connection
15	SCL	Serial Clock for DDC
16	SDA	Serial Data for DDC
17	GND	Power ground
18	V5V	+5V Power
19	Hot Plug Detect	Hot Plug Detect

## ● Capacitive Touch Panel Pin Function

Pin#	Name	Description
1	V5V	V <sub>Bus</sub> 4.4V-5.25V
2	D-	Data-
3	D+	Data+
4	ID	No connection
5	GND	Power ground.

## ● Electrical Characteristics

### Module

Item	Symbol	Min.	Typ.	Max.	Unit	Remark
Input signal Voltage	V <sub>12V</sub>	11.5	12.0	12.5	V	-
Supply Current	I <sub>V12V</sub>	-	-	1500	mA	Pattern = Full Display

### Backlight

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
LED Voltage	V <sub>L</sub>	I <sub>L</sub> =140mA	14.7	18.0	19.2	V
LED life time	-		50000	-	-	hr



# BTH070B-DHC\$

## ● Feature

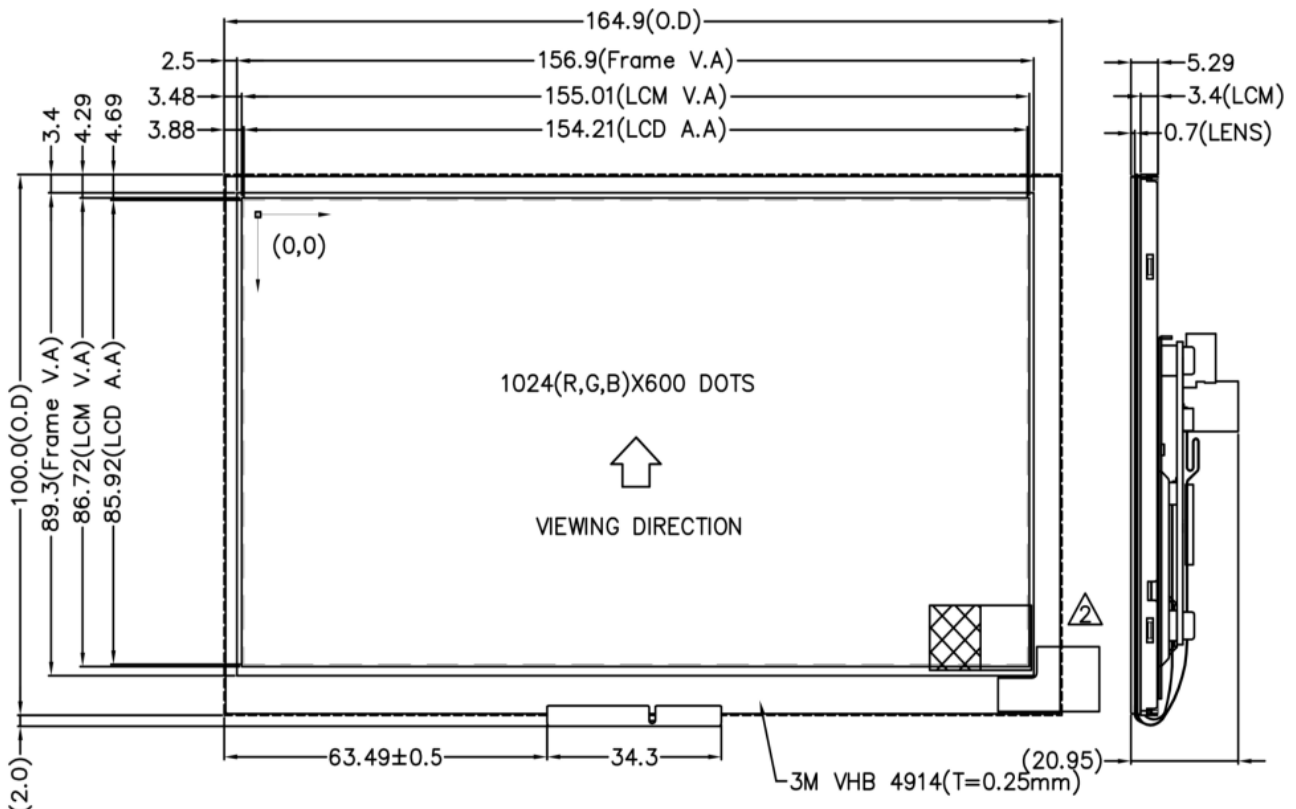
1. 7.0" TFTLCD Module
2. Resolution:1024\*3(RGB)\*600
3. DisplayType:TFT/Transmissive/Normally white
4. Interface Type:HDMI
5. Surface Luminance:300cd/m<sup>2</sup>
6. Top:-20°C~70°C
7. Support Capacitive Touch Panel



## ● Mechanical Data

1. Module(WxHxT)(mm):164.9\*100.0\*21.2
2. Active Area(mm):154.21\*85.92
3. LED Numbers: 30 LEDs

## ● Mechanical Drawing





## ● HDMI Interface Pin Function

Pin#	Name	Description
1	TX2+	TMDS Data 2+
2	TX2 Shield	TMDS Data 2 Shield
3	TX2-	TMDS Data 2-
4	TX1+	TMDS Data 1+
5	TX1 Shield	TMDS Data 1 Shield
6	TX1-	TMDS Data 1-
7	TX0+	TMDS Data 0+
8	TX0 Shield	TMDS Data 0 Shield
9	TX0-	TMDS Data 0-
10	TXC+	TMDS Clock+
11	TXC Shield	TMDS Clock Shield
12	TXC-	TMDS Clock-
13	CEC	CEC
14	NC	No connection
15	SCL	Serial Clock for DDC
16	SDA	Serial Data for DDC
17	GND	Power ground
18	V5V	+5V Power
19	Hot Plug Detect	Hot Plug Detect

## ● Capacitive Touch Panel Pin Function

Pin#	Name	Description
1	V5V	V <sub>Bus</sub> 4.4V-5.25V
2	D-	Data-
3	D+	Data+
4	ID	No connection
5	GND	Power ground.

## ● Electrical Characteristics

### Module

Item	Symbol	Min.	Typ.	Max.	Unit	Remark
Input Signal Voltage	V <sub>12V</sub>	11.5	12.0	12.5	V	-
Supply Current	I <sub>V12V</sub>	250	350	500	mA	Pattern = Full Display
Input Signal Voltage	V <sub>COM</sub>	3.3	3.8	4.3	V	-
Logic Supply Voltage	DVDD	2.5	3.3	3.6	V	-
Analog Supply Voltage	AVDD	8.0	11.0	13.5	V	-
Low Supply Voltage	V <sub>GL</sub>	-7.1	-6.8	-6.5	V	-
High Supply Voltage	V <sub>GH</sub>	19.7	20.0	20.3	V	-
Logic Input Voltage	V <sub>IH</sub>	0.7*DVDD	-	DVDD	V	-
	V <sub>IL</sub>	GND	-	0.3*DVDD	V	-

### Backlight

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
LED Voltage	V <sub>L</sub>	I <sub>L</sub> =200mA	8.7	9.6	10.2	V
LED Life Time	-		20000	-	-	hr



# BTH101A-DHC\$

## ● Feature

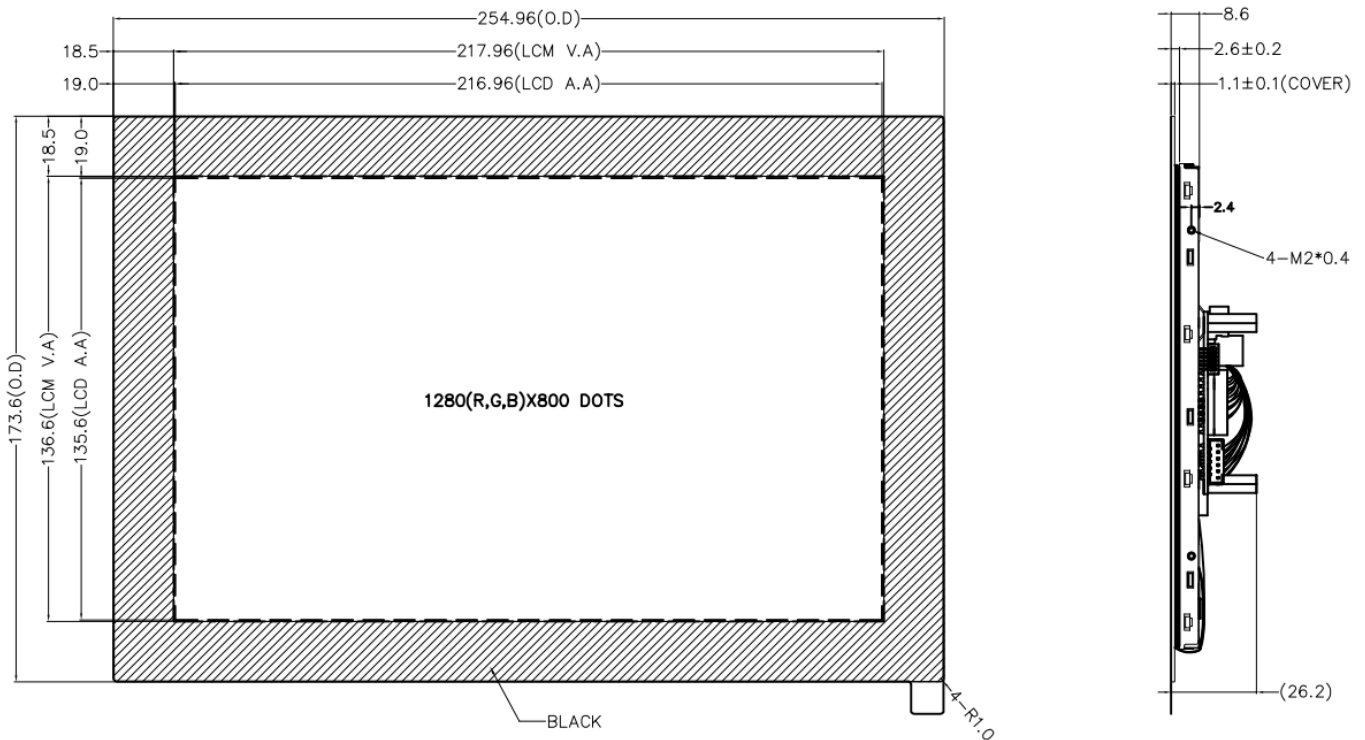
1. 10.1" TFTLCD Module
2. Resolution:1280\*(RGB)\*800
3. DisplayType:TFT/Transmissive/Normally Black
4. Interface Type:HDMI
5. Surface Luminance:350cd/m<sup>2</sup>
6. Top:-20°C~70°C
7. Support Capacitive Touch Panel
8. CTP Drive IC:ICNT8692+SAM D21E



## ● Mechanical Data

1. Module(WxHxT)(mm):254.96\*173.6\*26.2
2. Active Area(mm):216.96\*135.6
3. LED Numbers: 40 LEDs

## ● Mechanical Drawing



## ● HDMI Interface Pin Function

Pin#	Name	Description
1	TX2+	TMDS Data 2+
2	TX2 Shield	TMDS Data 2 Shield
3	TX2-	TMDS Data 2-
4	TX1+	TMDS Data 1+
5	TX1 Shield	TMDS Data 1 Shield
6	TX1-	TMDS Data 1-
7	TX0+	TMDS Data 0+
8	TX0 Shield	TMDS Data 0 Shield
9	TX0-	TMDS Data 0-
10	TXC+	TMDS Clock+
11	TXC Shield	TMDS Clock Shield
12	TXC-	TMDS Clock-
13	CEC	CEC
14	NC	No connection
15	SCL	Serial Clock for DDC
16	SDA	Serial Data for DDC
17	GND	Power ground
18	V5V	+5V Power
19	Hot Plug Detect	Hot Plug Detect

## ● Capacitive Touch Panel Pin Function

Pin#	Name	Description
1	V <sub>Bus</sub>	V <sub>Bus</sub> 4.75V~5.25V
2	D-	Data-
3	D+	Data+
4	ID	No connection
5	GND	Power Ground.

## ● Electrical Characteristics

### Module

Item	Symbol	Status	Condition	Min.	Typ.	Max.	Unit
Power Supply Voltage	VCC	I	VCC-GND	11.5	12.0	12.5	V
	V <sub>Bus</sub>	I	V <sub>Bus</sub> -GND	4.75	5.0	5.25	V
	V <sub>5v</sub>	O	V <sub>5v</sub> -GND	4.75	5.0	5.25	V
Power Supply Current	ICC	I	VCC=12.0v	-	450	650	mA
	I <sub>Bus</sub>	I	V <sub>Bus</sub> =5.0v	-	50	100	mA
	I <sub>5v</sub>	O	V <sub>5v</sub> =5.0v	-	-	2	A

### Backlight

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Voltage for LED Backlight	VF	If=80mA	27.5	31.0	34.0	V
Current for LED Backlight	IF		-	80	-	mA
Color	White					