

SPECIFICATION FOR IPS050A102R

Customer Approval:

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	SIGNATURE	DATE
PREPARED BY		2021.06.11
CHECKED BY		2021.06.11
APPROVED BY		2021.06.11

Notes:

Please contact GTK before assigning your product based on this module specification.

2、 To improve the quality of product, and this product specification is subject to change without any notice.

Rev No.	Rev date	Contents	Remarks
O	2021.04.24	First release	Preliminary
A	2021.06.11	Increase the brightness and contrast information	

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1. Product presentation

This solution is a 5-inch touch display module, suitable for retail self-help, POS machine, access control, conditional access, industrial automation and so on.

2. Interface definition

2.1 Power Supply Interface (12V IN)



2.2 Touch Panel Interface (TP)

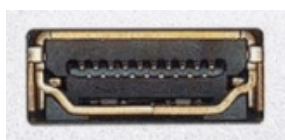
Pin No.	Symbol	Description
1	VBUS	Power supply 5V
2	D-	USB data-
3	D+	USB data+
4	NC	NC
5	GND	Ground



Micro USB

2.3 HD DIS Interface

Pin No	Symbol	Pin No	Symbol
1	TMDS Data 2+	11	GND
2	GND	12	TMDS Clock -
3	TMDS Data 2-	13	CEC
4	TMDS Data 1+	14	Reserved
5	GND	15	SCL
6	TMDS Data 1-	16	SDA
7	TMDS Data 0+	17	GND
8	GND	18	+5V
9	TMDS Data 0-	19	Hot Plug Detect
10	TMDS Clock +		



TYPE-A

3. LCD Parameter

NO.	Item	content	unit
1	LCD size	5.0inch (Diagonal)	/
2	LCD type	IPS/Normally Black/Transmissive	/
3	Viewing direction(eye)	FREE	/
4	Resolution(H*V)	800*480 Pixels	/
5	Module size (L*W*H)	120.70*75.80*2.80	mm
6	Active area (L*W)	108.00*64.8	mm
7	Pixel pitch (L*W)	0.135*0.135	mm
8	Contrast ratio	1500(Typ)	
9	Surface luminance	1000	cd/m2
10	Interface type	RGB 24Bit interface	/
11	Color Depth	16.7M	/
12	Back light type	LED	/

4. Backlight Parameter

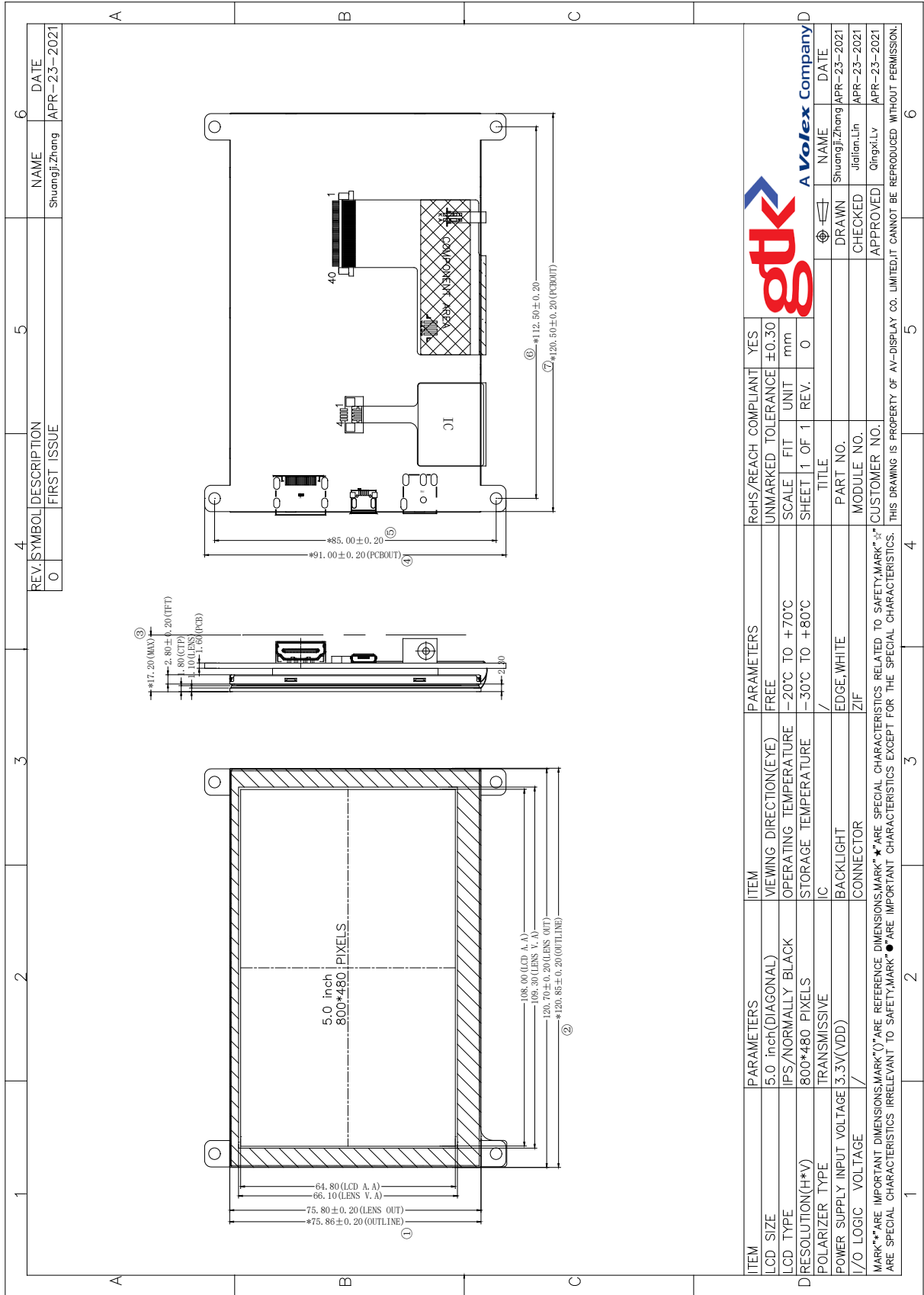
(at Ta=25°C,RH=60%)

Item	Symbol	Min.	Typ.	Max.	Unit	Note
LED forward voltage	VF	14.5	15.5	16.5	V	IF=20*4mA
LED forward current	IF	-	80	-	mA	
LED power consumption	PLED	-	1.24	-	W	Note1
Number of LED	-		20		PCS	
Connection mode	-	5 in series 4 in parallel			/	
LED life-time	-	20000	-	-	Hrs	Note2

5. Touch screen Parameter

NO.	Item	content
1	Type	Capacitive touch
2	Power	5V
3	Support finger number	5 Point
4	Touch System Interface	Micro USB

6. Mechanical structures



A Volex Company

ITEM	PARAMETERS	ITEM	PARAMETERS	RoHS/REACH COMPLIANT	YES
LCD SIZE	5.0 inch(DIAGONAL)	VIEWING DIRECTION(EYE)	FREE	UNMARKED TOLERANCE	± 0.30
LCD TYPE	IPS/NORMALLY BLACK	OPERATING TEMPERATURE	-20°C TO +70°C	SCALE	FIT
D RESOLUTION(H*V)	800*480 PIXELS	STORAGE TEMPERATURE	-30°C TO +80°C	SHEET 1 OF 1	REV. 0
POLARIZER TYPE	TRANSMISSIVE	IC	/	TITLE	
POWER SUPPLY INPUT VOLTAGE	3.3V(VDD)	BACKLIGHT	EDGE, WHITE	PART NO.	
I/O LOGIC VOLTAGE	/	CONNECTOR	ZIF	MODULE NO.	
MARK**ARE IMPORTANT DIMENSIONS,MARK(*) ARE REFERENCE DIMENSIONS,MARK(*) ARE SPECIAL CHARACTERISTICS RELATED TO SAFETY,MARK(*) ARE SPECIAL CHARACTERISTICS IRRELEVANT TO SAFETY,MARK(*) ARE IMPORTANT CHARACTERISTICS EXCEPT FOR THE SPECIAL CHARACTERISTICS. THIS DRAWING IS PROPERTY OF AV-DISPLAY CO. LIMITED,IT CANNOT BE REPRODUCED WITHOUT PERMISSION.					

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