广 东 视 安 通 智 慧 显 控 股 份 有 限 公 司
Guangdong SAT Intelligent Display Control Co., Ltd

产品规格书
Specification



产品名称 Produce Name	产品型号 Product Description	制式 Standard
彩色显示模组	SAT-630A-B0043I-P0-N-8045A1	PAL/NTSC 自 动

使用方 USER			承制方 MANUFACTURER		
品质 Quality Inspector	工程 Engineer	审批 Approved by	制表 Prepared	审核 Checked	批准 Approved by

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产 品 承 认 书
Product Approval

产品名称 DESCRIPTION	产品型号 PRODUCT MODEL	制式 Standard
液晶彩色显示模组 LCD color display module	SAT-630A-B0043I-P0-N-8045A1	PAL/NTSC automatic

使用方 User			承制方 Contractor		
品质 Quality	审核 Review	批准 Approval	拟制 Fictional	审核 Review	批准 Approval

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一. Product Description

SAT-630A-B0043I-P0-N-8045A1 color LCD module is composed of SAT-630A-043-40DS-B5 driver board and SAT043B040I08B26-30671T052IN-435 digital screen. It supports PAL and NTSC formats and can realize automatic conversion. Using high-brightness white LED as backlight source, it consumes less power and has less interference. Mainly used in: video doorbells, video phones, car monitors, portable DVDs, instruments, meters and measuring instruments and other products.

二. Technical Parameters

number	project	parameter	Remark
1	display resolution	480*272	
2	Interface type	TTL RGB-24bit	
3	display ratio	16：9	
4	Display brightness	260cd/m2 （TYPE）	
5	Viewing range	40/50/60/60	**(up/down/left/right)**
6	Main control plan	AMT630A	ARK
7	Video signal type	CVBS（PAL/NTSC）	automatic recognition
8	Input signal amplitude range	0.5Vpp~2.0Vpp	Type：1Vpp
9	No signal status	blue screen	No signal output
10	Supply voltage	DC 9~18V	Type：12V
11	Working current	100±10mA（DC12V）	
12	Start time	≤1.9S	
13	Operating temperature range	-20℃～60℃	
14	Storage temperature	-30℃～70℃	

	range		
15	Working humidity range	≤80%（RH）	
16	weight	TBC	

三. Product Picture (Only for reference)

Front view:

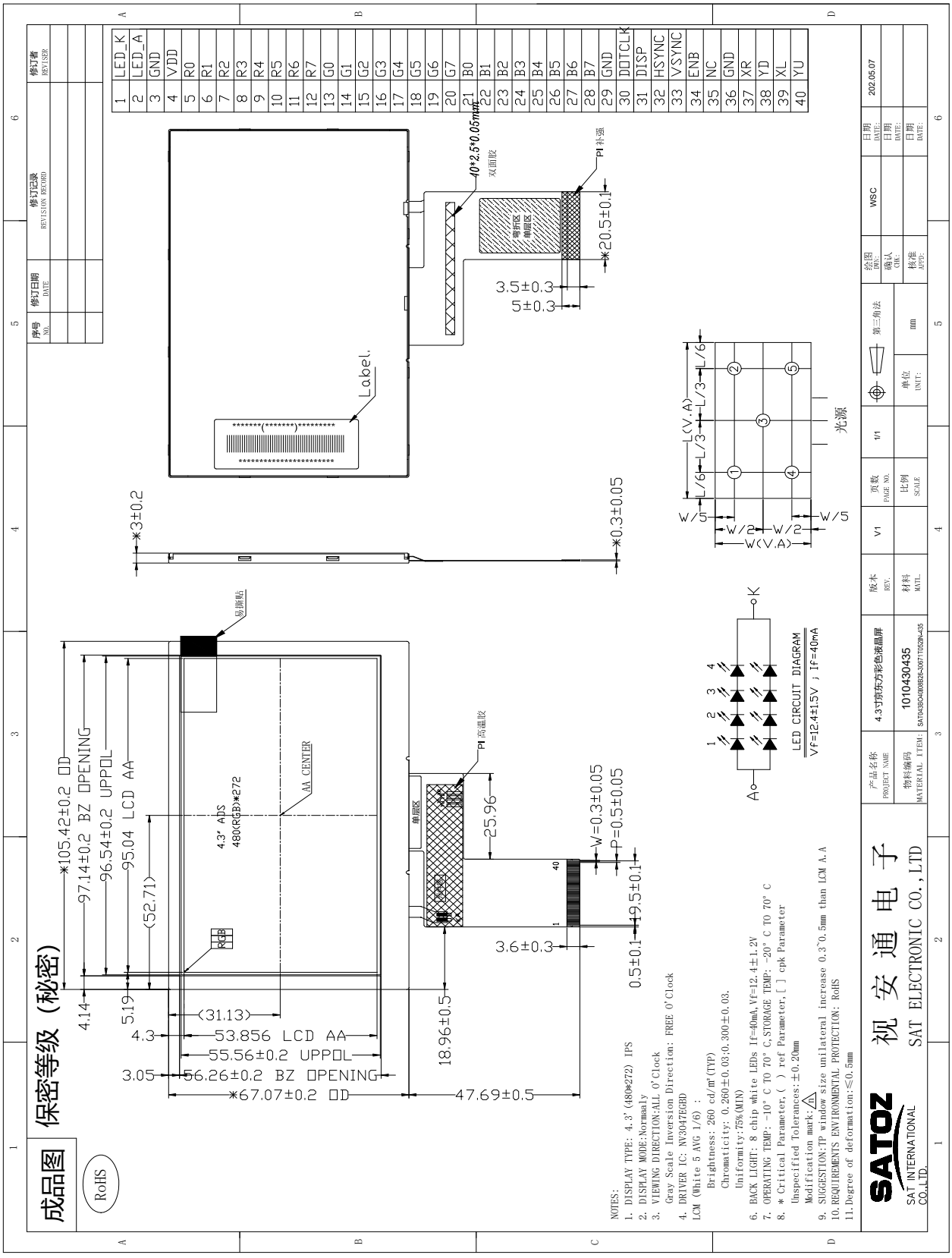


Back view:

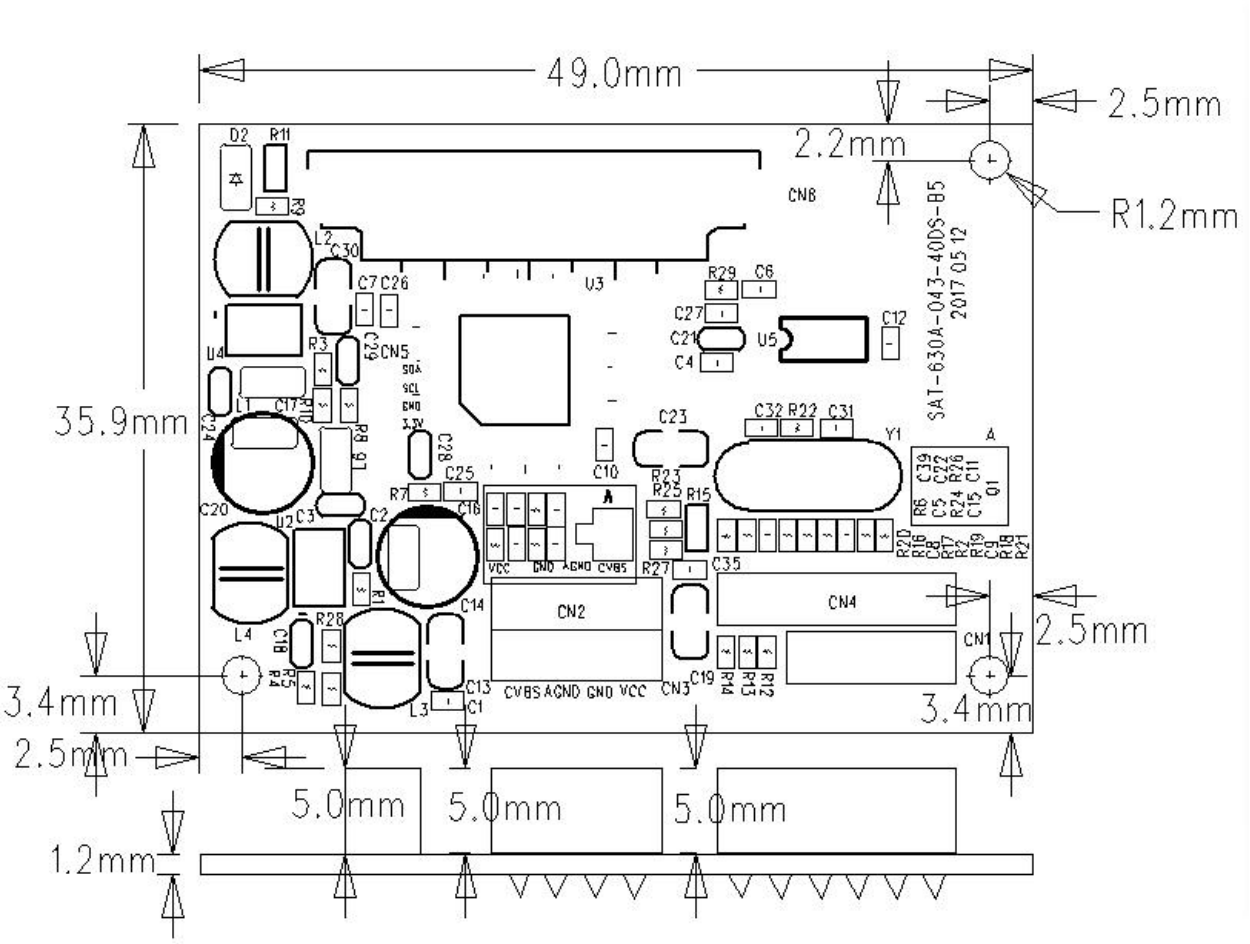


四. Structure Drawing

1. LCD screen



2. PCB



五． Driver Board Interface Definition

CN2 interface definition: 4-wire outlet socket (PH specification, 2.0mm pitch), used to connect power and video.

pin	symbol	Definition
1	VCC	9V~18V 电源输入
2	GND	电源地线
3	GND	视频地线
4	CVBS	PAL/NTSC 视频输入

CN4 interface definition: 6-wire socket (PH specification, 2.0mm spacing), used to connect the adjusting potentiometer.

pin	symbol	Definition	External potentiometer resistance
1		Chroma potentiometer minus	10—50K
2		Chroma potentiometer	
3		Chroma potentiometer plus	
4		Brightness potentiometer minus	10—50K
5		Brightness potentiometer	
6		Brightness potentiometer plus	

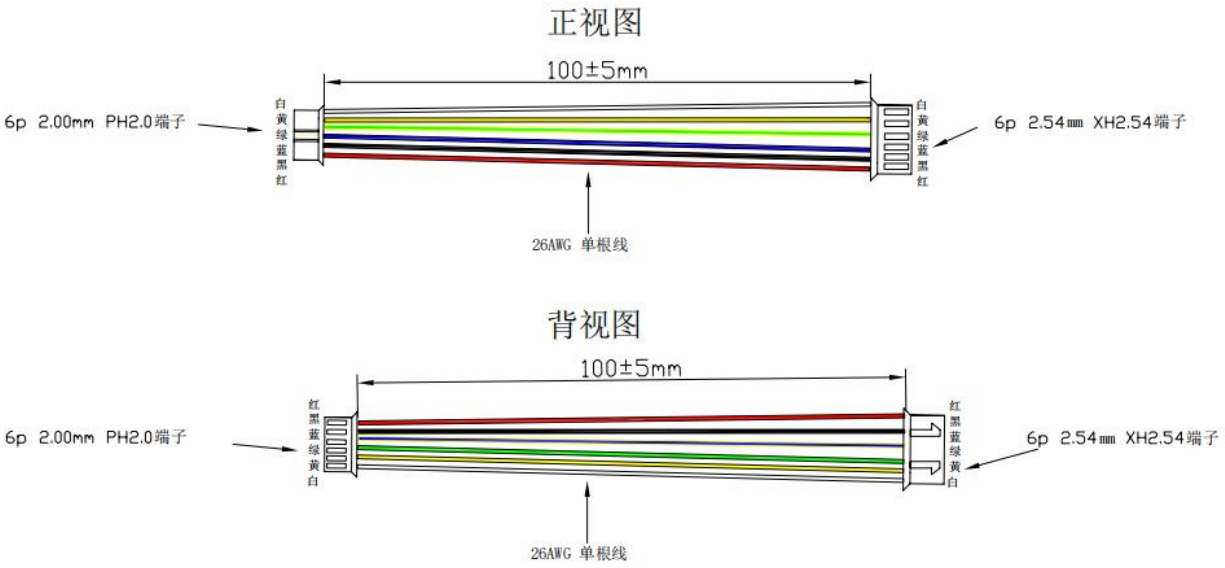
CN6 interface definition: 40pin FPC

pin	symbol	Definition	Remark
1	LED_K	Power for LED backlight(Cathode)	
2	LED_A	Power for LED backlight(anode)	
3	GND	Power Ground	
4	VDD	Power for Digital Circuit(3.3V)	
5~12	R0~R7	Red data	
13~20	G0~G7	Green data	
21~28	B0~B7	Blue data	
29	GND	Power Ground	
30	PCLK	Pixel clock	
31	DISP	DISP sets the display mode	
32	HSYNC	Horizontal Sync input	
33	VSYNC	Vertical Sync input	
34	OF	Data input enable	
35	NC	No connection	
36	GND	Power Ground	

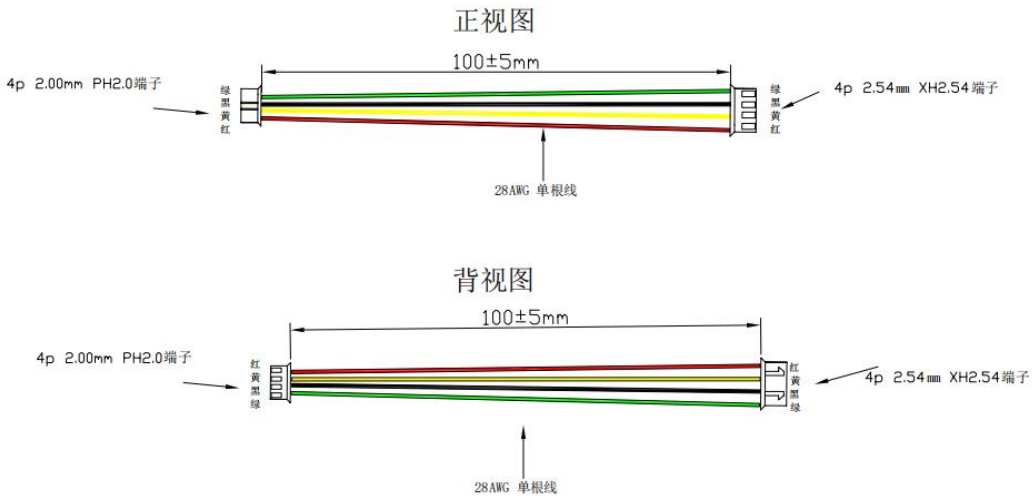
37	CS(NC)	No connection	
38	SCL(NC)	No connection	
39	SDA(NC)	No connection	
40	VPP(NC)	No connection	

六．Standard Cable（If necessary）

①STFT-SF-100-6P-200254-26



②TFT-SF-100-4P-200254-28



七．Package、Transportation & Storage：

1、Package

Single unit (sample) packaging specifications: 120*120*40mm

Module wiring: 1 test line each for SAT-250-DZ-4P-200-26 and SAT-250-DZ-6P-200-26

Large box packaging specifications: 413(L)*270(W)*280(H)mm

Large box packaging quantity: 80PCS (knife card packaging)

2、Transportation & Storage

During transportation, avoid collisions and exposure to rain and snow; it is strictly prohibited to store them in the same warehouse with chemicals and wet items.

八．Precautions：

☆The input voltage should not be higher than the product’s design upper limit.

☆ Pay attention to the location of the power cord and signal line. Reverse connection may cause the board to burn out.

☆ This driver board is an electronic product, so please pay attention to anti-static during processing, assembly and operation.

☆ The display screen is made of glass, please handle it with care to avoid damage.

☆ The connection line between the display and the circuit board is an FPC cable, which is easily broken or pulled. Be careful during processing and assembly to avoid damage.

☆ When using, pay attention to the input impedance matching of the signal. When R24 has a resistor, it is a 75 ohm input, and when there is no resistor, it is a high-impedance input. This model has a 75R input impedance matching resistor.

九．LCD Inspection Standard:

1、Test Condition：

Detection distance: 35CM±5CM;

Viewing angle: lighting inspection angle: ±5 degrees; appearance inspection angle: ±45 degrees. (Perpendicular to the screen surface is defined as 90 degrees)

2、Test Environment：

Temperature: 23 degrees ±5 degrees;

Humidity: 45% ~ 65%;

Brightness: appearance: 600LUX, lighting: 300 to 500LUX.

3、Test Methond：

Method for determining abnormal color points:

Under a 20W fluorescent lamp, observe vertically (or 45 degrees left and right) at a distance of 30CM from the PANEL. If no foreign matter or scratches are seen, it is judged OK, otherwise NG.

LED display black point, white point, color point detection method and judgment:

Inspection method: black spot. When the backlight is bright, place the MASK for black spot inspection near the LED black spot and visually observe the size. White point, color point: When the backlight is on, overlap the MASK for checking the black point on the white point (color point) of the LED, and visually observe whether the white point (color point) can be hidden.

4、Inspection Standard

Defect diameter (mm)		Acceptance range	
		Area A	Area B
black point	d≤0.2	Don't count	Don't count
	0.2<d≤0.3	4	4
	0.3<d≤0.5	2	3
	0.5d>0.8	0	2
white point	d≤0.2	Don't count	Don't count
	0.2<d≤0.3	3	3

color	0.3<d≤0.5	1	2
point	0.5d>0.8	0	1

Note: 1. Size: diameter = (longest diameter + minimum diameter) / 2

3. Total number of black points, white points, and color points: A+B area ≤ 4

5、Display Area

