

Specification

(Product) : **7inch HD TFT LCD Module With Touch**

(Driver board): JDLD70V02B

(Version): VER:1.00

(TFT LCD): JD070Q40D21AO-29XKE(48)

(Touch Screen): STC-070188-2

(Customer): _____

(Cust.P/N): _____

(Date): _____

Contents

Contents.....	2
Version.....	3
1. Profile.....	4
2. Specifications.....	4
3. Product Picture.....	5
4. Wiring Diagram.....	5
5. Interface Definition.....	6-9
6. Structure.....	10-13
7. Labels.....	14
8. Packing Shipping.....	14
9. JDLD70V02B Notes.....	14
10. 7.0"TFT- LCD PANEL Judgment.....	15

Version

Date	Ver.	Modification
2022-8-25	VER: 1. 00	First Version (official version)

1. Profile:

JDLD70V02B VER:1.00-JD070Q40D21AO-29XKE(48)- STC-070188-2 TFT touch LCD module is composed by JDLD70V02B VER:1.00 driver board and JD070Q40D21AO-29XKE(48) panel & STC-070188-2 capacitive Touch Screen. It can input 1 channel CVBS、1channel VGA、1 channel DVI、1channel HDMI signal; 1channel CVBS output , with PAL and NTSC system format (auto switch) . it's menu can be adjusted by pushbutton, OSD display. The product is mainly used for video door phone or other display electronic equipments.

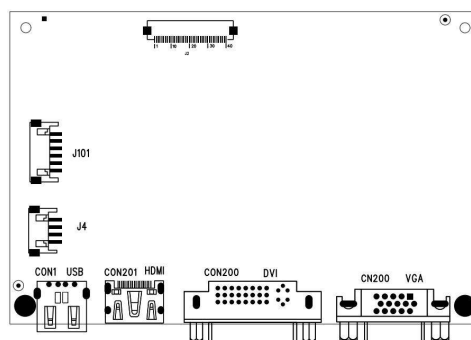
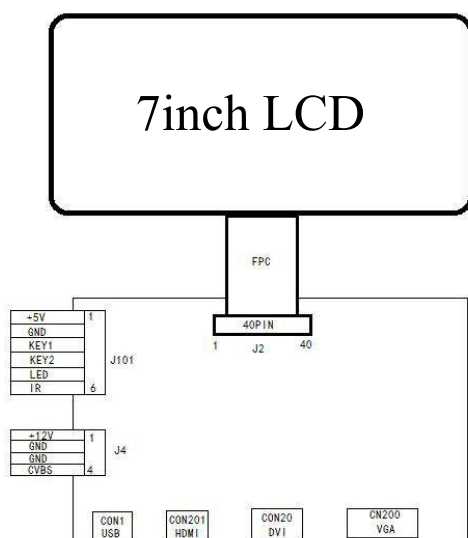
2.Specifications:

No.	Item	Description	Note
1	LCD Display	7inch	
2	Display Ratio	16:9	
3	Backlight	LED	
4	Brightness	180-230 cd/m ²	
5	Resolution	1024×600 (LVDS)	
6	View angle	(80 / 80 / 80/ 80)up/down/left/right	
7	LCD dimension	165 (W) ×100 (H) ×2.8 (D) mm	
8	Effect area	154.2 (W) × 86.5 (H) mm	
9	Driver board size	128.8(W)×85.5(H) ×15.78(D)mm	
10	Working Voltage (Wave<0.3VP-P)	Min:DC9V; Standard: DC12V; Max: DC18V;	
11	Working Current (DC 12V supply)	DC400mA±20mA	
12	Power Consumption	4.8W (TYP)	
13	Start Time	≤5s (Boot screen); ≤10s(Access channel screen)	
14	Working Temp.	-20℃~60℃	
15	Storage Temp.	-20℃~70℃	
16	ENV. Humidity	5~90%RH	

3. Product Picture:



4. Wiring Diagram:



5. Interface Definition:

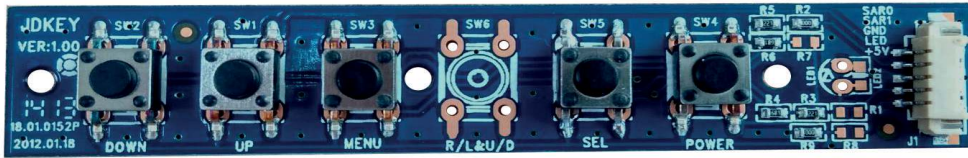
5.1. J4 Interface Definition: (4PIN 2.0mm)

PIN	Function	I/O/P	PIN Definition	Note
1	+12V IN	I	DC power input	9V~15V
2	GND	P	GND	
3	GND	P	GND	
4	CVBS	I	Video Signal input	0.5V~1.5VP-P

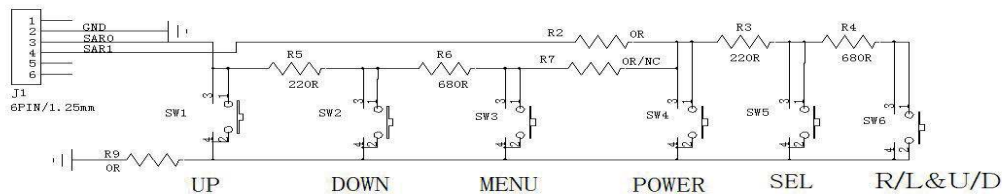
5.2. J101 Interface Definition: (6PIN 2.0mm)

PIN	Function	I/O	PIN Definition	Note
1	5V	O	5Vdirect-current output	
2	GND	P	Ground	
3	KEY1	I	keypad input	
4	KEY2	I	keypad input	
5	LED	O	Main board needs to be state indicator output	
6	IR	I	Infrared remote control signal input	

5.2.1. SJD-keypad



5.2.2. Wiring Diagram of keypad:



5.2.3. Keypad Description:

SW1: Up key. (UP) Press the key to increase the volume. The key is the menu option parameter increase key under the menu mode.

SW2:Down key. (DOWN) Press the key to decrease the volume. The key is the menu option parameter decrease key under the menu mode.

SW3: Menu key. (MENU) Press the key to chose contrast、brightness、color、definition.

SW4: Power key. (POWER) Press the key to open/close the screen.

SW5: Switch key. (SEL) This key is Video channel switch button, Press this key to choose CVBS1, VGA, DVI, HDMI channel.

5.3. VGA,DVI,HDMI connector Parameters

5.3.1.

Compatible with HDMI version: HDMI 1.3/1.4, compatible with HDCP 1.2. Supported formats are HDMI 3D input.

5.3.2.

Compatible with DVI version: DVI 1.0, Supported high resolution 1920×1080@60HZ and 1600×1200@60HZ.

5.3.3.

Supported computer RGB input, resolution at 800x600 60HZ, 1280x768 60HZ.

5.4. 2 Interface Definition:

Pin No.	Symbol	I/O	Function	Remark
1	VCOM	P	Common Voltage	
2	VDD	P	Power Voltage for digital circuit	
3	VDD	P	Power Voltage for digital circuit	
4	NC	--	No connection	
5	Reset	O	Global reset pin	
6	STBYB	O	Standby mode, Normally pulled high STBYB = "1", normal operation STBYB = "0", timing controller, source driver will turn off, all output are High-Z	
7	GND	P	Ground	
8	RXIN0-	O	-LVDS differential data input	
9	RXIN0+	O	+ LVDS differential data input	
10	GND	P	Ground	
11	RXIN1-	O	-LVDS differential data input	
12	RXIN1+	O	+ LVDS differential data input	
13	GND	P	Ground	
14	RXIN2-	O	-LVDS differential data input	

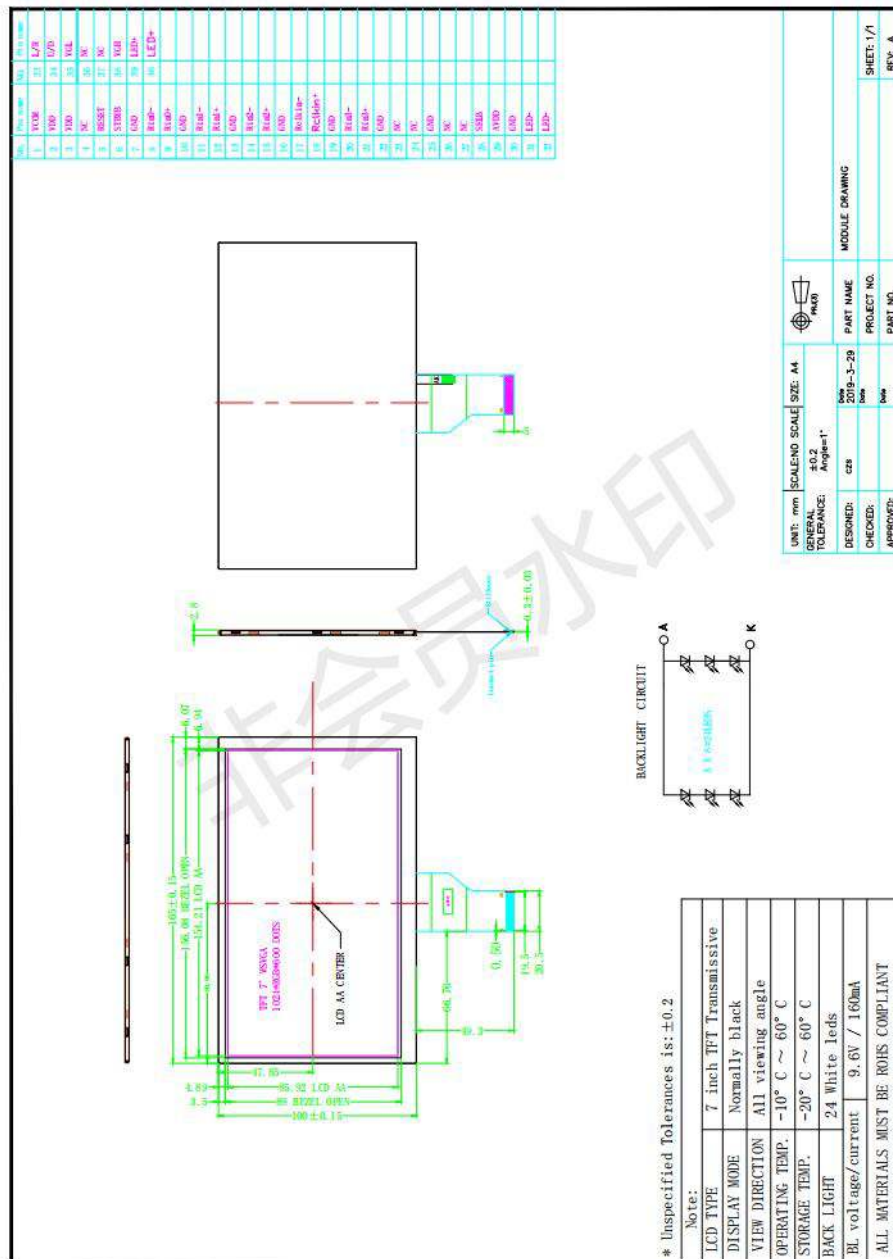
Pin No.	Symbol	I/O	Function	Remark
15	RXIN2+	O	+ LVDS differential data input	
16	GND	P	Ground	
17	RXCLKIN-	O	-LVDS differential clock input	
18	RXCLKIN+	O	+ LVDS differential clock input	
19	GND	P	Ground	
20	RXIN3-	O	-LVDS differential data input	
21	RXIN3+	O	+ LVDS differential data input	
22	GND	P	Ground	
23	NC	--	No connection	
24	NC	--	No connection	
25	GND	P	Ground	
26	NC	--	No connection	
27	DIMO	O	Backlight CABC controller signal output	
28	SELB	O	6bit/8bit mode select	
29	AVDD	P	Power for Analog Circuit	
30	GND	P	Ground	
31	LED-	P	LED Cathode	
32	LED-	P	LED Cathode	
33	L/R	O	Horizontal inversion	
34	U/D	O	Vertical inversion	
35	VGL	P	Gate OFF Voltage	
36	CABCEN1	O	CABC H/W enable	
37	CABCEN0	O	CABC H/W enable	
38	VGH	P	Gate ON Voltage	
39	LED+	P	LED Anode	
40	LED+	P	LED Anode	

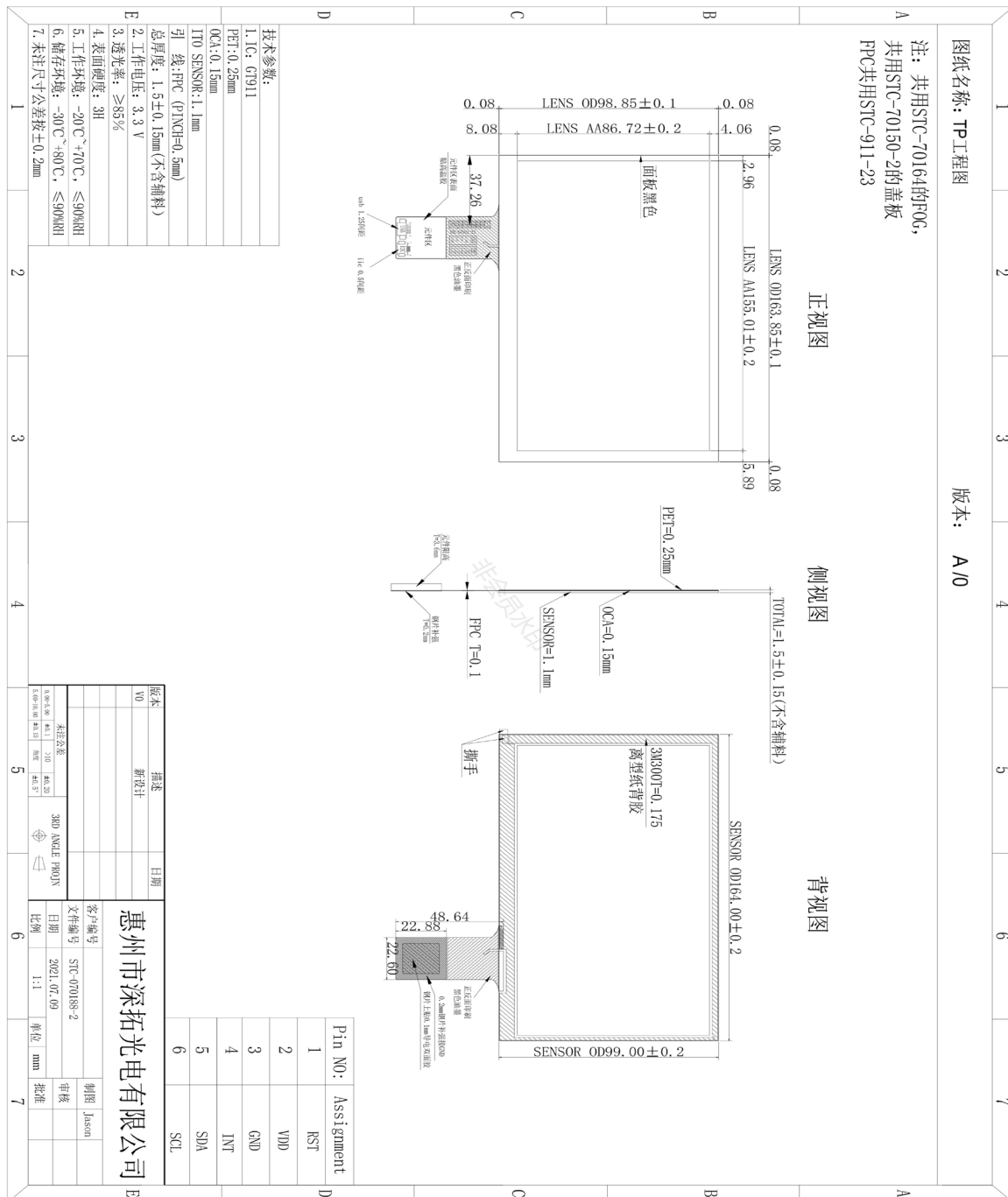
I: input, O: output, P: Power

Best.Nr. 120 964

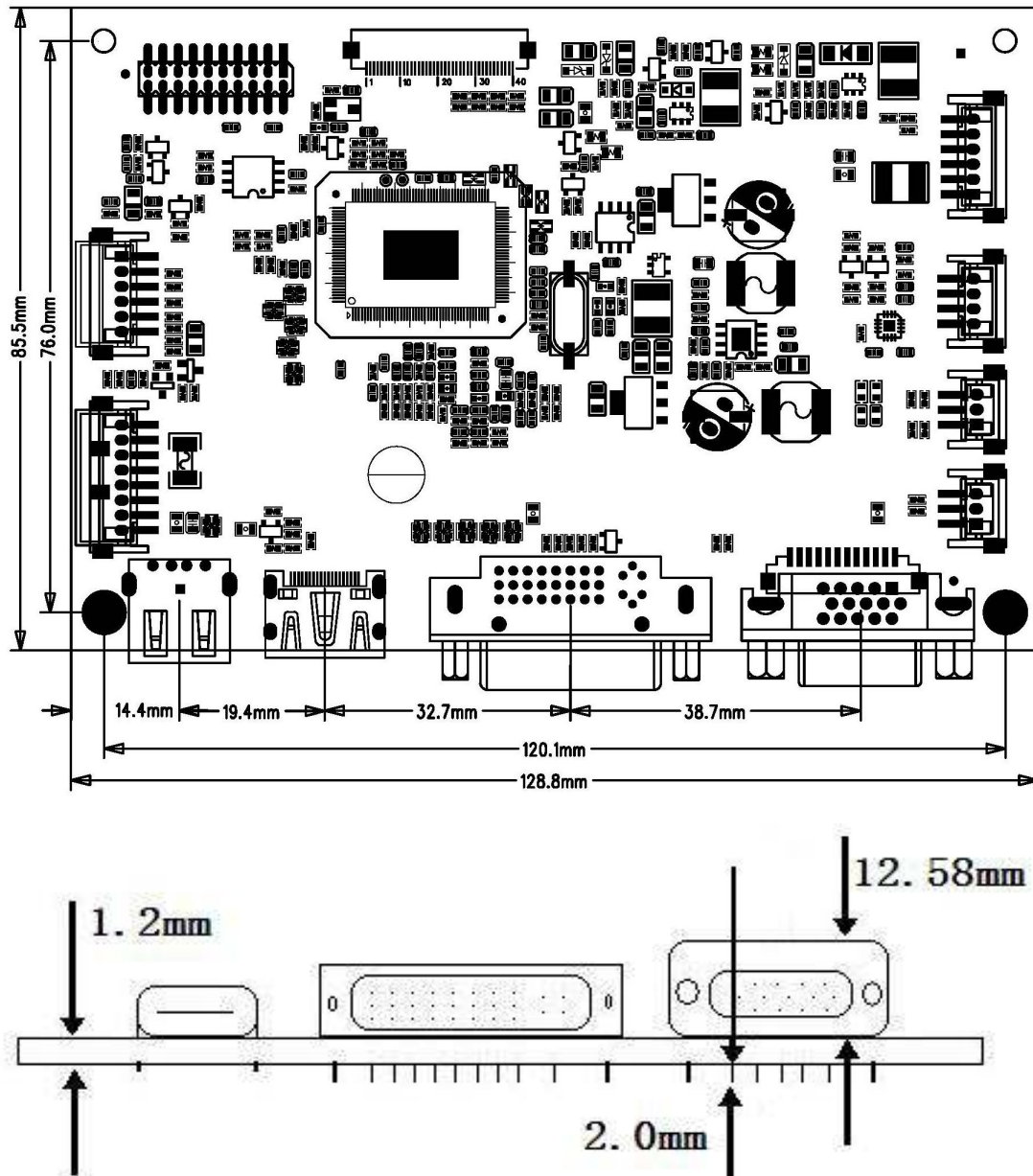
6. Structure:

6.1. TFT LCD Panel:





6.2. PCB size: 128.8(W)×85.5(H)×15.78(D)mm (with VGA)



7. Product Label:

JD070Q40D21AO-29XKE(48)-STC-070188-2

8. Packing Shipping

8.1. Packing

TBD

8.2. Shipping

Don't hit and rain when transportation: Don't storage with chemic goods and wet goods together.

9. JDLD70V02B Notes

9.1.

TFT have used by special instrument to adjust precision and aging, test before leave factory, no need adjust again.

9.2.

Please correctly connect power, video signal before you adjust, should be on/off power and video signal to check the image's effect.

9.3.

Due to this product is electronic product, please notice prevent static.

9.4.

7.0" TFT-LCD Panel is a glasswork, place carefully ,broken for fear

9.5.

Don't touch pushbutton's pin feet when you adjust potentiometers, due to person have resistance, you will effect pushbutton's function when touch it.

10. 7.0"TFT- LCD PANEL Judgment:

Aim: Make the panel standards to material purchasing, process inspecting and customer checking.

Ranges: apply to 7.0"TFT LCD modules

Determinant standard and method:

10.1.

Judgment standard and method:

10.1.1.

The method and determinant of inspecting the nick of panel of LCD:

Inspect vertically (or at 45°angle from left/right) under the light tube (the power is 20 W) in the distance of 30cm to the panel. If there is no nick, it determines "OK", otherwise "NG".

10.1.2.

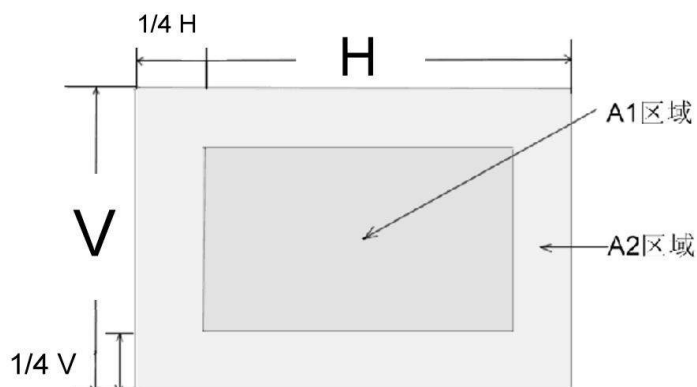
The method and determinative for black & white & color spots for the Panel of LCD:

1. Inspection Method:

Black spots: under the situation of "turn on the light", set the MASK of black spot inspection near the black spot then compare the big and small by eyes.

White & Color spots: under situation of "turn on the light", set the Mask of black spot inspection on the white spot (or color spot) then observe them by eyes if it can hide.

2. Division of LCD Panel:



Note:

A1 area: The center of the available area for the picture

A2 Area: The edge of the available area for the picture

10.2. Judgment:

(mm) Spot Diameter		Accept Range	
		A1 area	A2 area
Black spot	$d \leq 0.15$	Disregard	Disregard
	$0.15 < d \leq 0.3$	4	4
	$0.3 < d \leq 0.5$	2	3
	$0.5 < d < 0.8$	0	2
White spot or Color spot	$d \leq 0.15$	Disregard	Disregard
	$0.15 < d \leq 0.3$	3	3
	$0.3 < d \leq 0.5$	1	2
	$0.5 < d < 0.8$	0	1

Note:

1. Size: Average Diameter= (Max. Diameter + Min. Diameter) /2
2. Using information above as a standard in order to judge while the e spots are dense.
3. Black & White spot: To judge the obvious spots through the change of voltage by comparison.
4. Total quantity of Black & white & color spot: $A1+A2 \leq 4$.