

Specification

Driver Board Model: JD40M05

Driver Board Version: VER:1.02

LCD Screen' Model: JD040H54D08A0-32SAT(56)

USER			MANUFACTURER		
Quality	Project	Approved By	Prepared By	Checked By	Approved By

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Version

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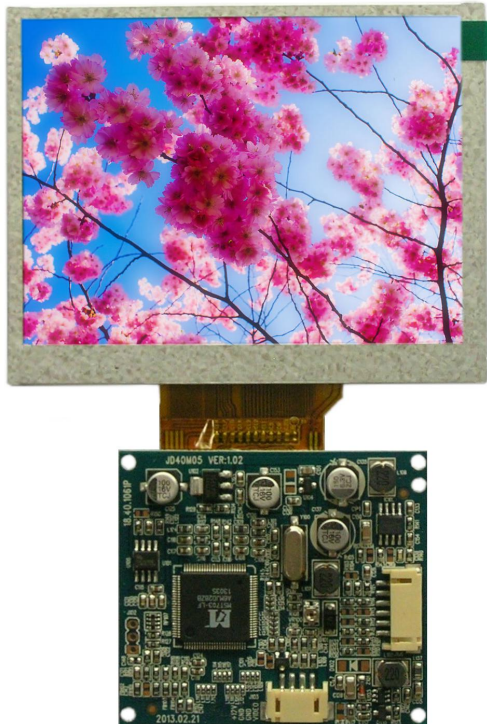
1. Profile

JD40M05 VER:1.02-JD040H54D08A0-32SAT(56)TFT LCD Color Dight Module. This procuts is composed of JD40M05 VER:1.02 drive board and JD040H54D08A0-32SAT(56) Panel. CVBS signal input, PAL and NTSC formats which two formats can be automatic identified. pushbutton adjustment , OSD menu display. This LCD Module is mainly used for video door phone and other display equipments.

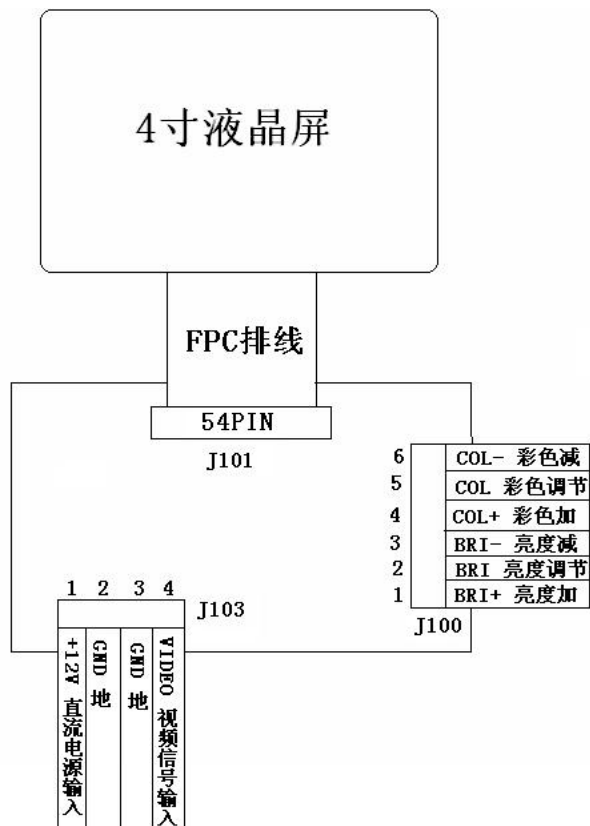
2. Main Parameter

No.	Item	Description	Note
1	Screen Size	4.0 inch	
2	Contrast Ratio	4:3	
3	Backlight	LED	
4	Brightness	320 ±20 cd/m ²	
5	Resolution	320(RGB)×240	
6	Viewing Angle (U/D/R/L)	(60/70/75/75) Degree	
7	Outline Dimension	96.0 W) ×76.0 (H) ×3.2 (D) mm	
8	Active Area	82.08 (H) ×61.56 (V) mm	
9	Drive Board Size	62.0 (W)×55.2 (H) ×9.0(D) mm	
10	Working Voltage (Power supply ripple is less than	Min: DC=9V Standard: DC=12V Max: DC=15V	
11	Working Current (DC= 12V)	DC120mA±10mA	
12	Power Consumption	1.44W (TYP)	
13	Start time	≤1.5Sec	
14	Operating Temperature	0℃~60℃	
15	Storage Temperature	-20℃~70℃	
16	Relative Humidity	5~95%RH	

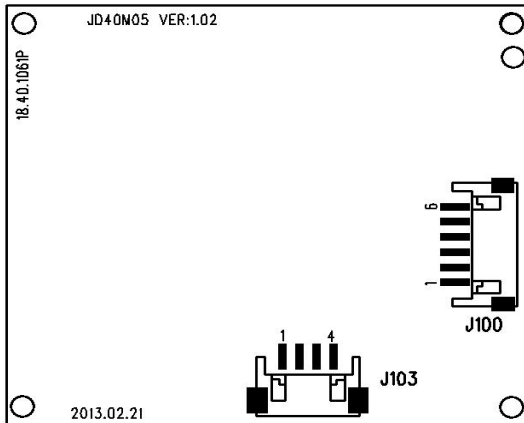
3. Prouct Picture



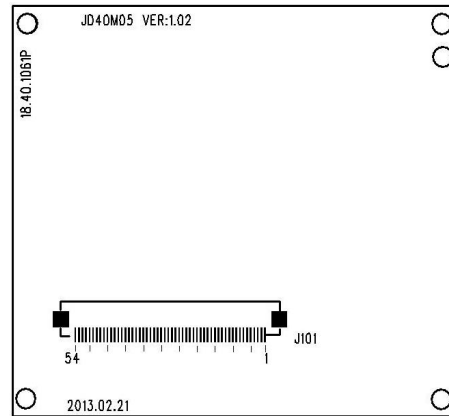
4.



Front



Back



5. Connector definition of driver board:

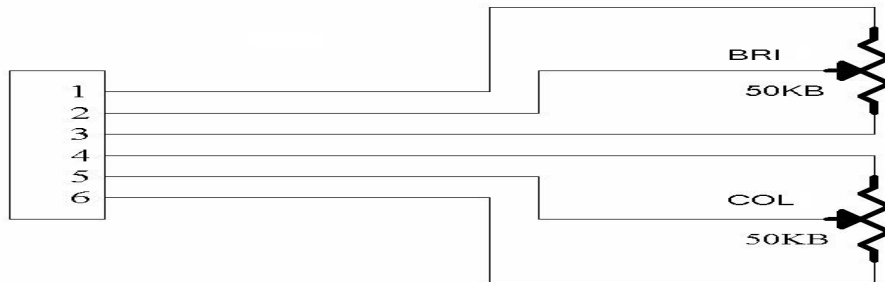
5.1 J103

Pin	Symbol	I/O	Function	Remark
1	+12VIN	I	DC Power Input	
2	GND	-	Ground	
3	GND	-	Ground	
4	VIDEO	I	Video Signal Input	

5.2 J100:

Pin	Symbol	I/O	Function	Remark
1	BRI+	I	Brightness +	
2	BRI	I	Brightness Adjustment	
3	BRI-	I	Brightness -	
4	COL+	I	Color +	
5	COL	I	Color Adjustment	
6	COL-	I	Color -	

Keypad circuit



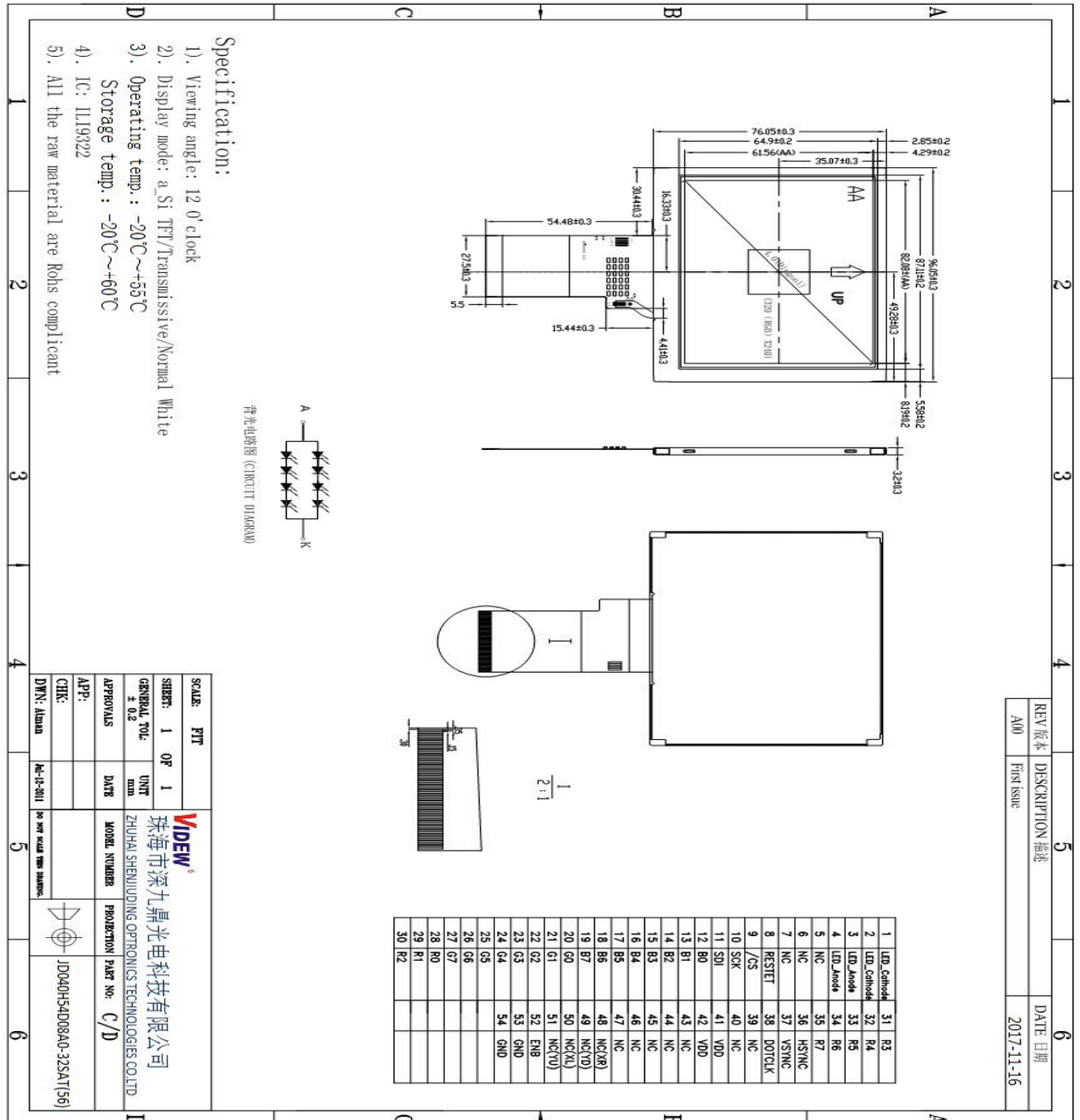
5.3、 J101 interface:

Item	Pin	I/O	Specification	note
1	LED_Cathode	P	LED_Cathode	
2	LED_Cathode	P	LED_Cathode	
3	LED_Anode	P	LED_Anode	
4	LED_Anode	P	LED_Anode	
5	NC	-	No Connect	
6	NC	-	No Connect	
7	NC	-	No Connect	
8	RESET	O	RESET	
9	SPENA	O	Serial port data enable signal	
10	SPCK	O	SPI Serial Clock	
11	SPDA	I/O	SPI Serial Data Input/output	
12	B0	O	Blue data	
13	B1	O	Blue data	
14	B2	O	Blue data	
15	B3	O	Blue data	
16	B4	O	Blue data	
17	B5	O	Blue data	
18	B6	O	Blue data	
19	B7	O	Blue data	
20	G0	O	Green data	
21	G1	O	Green data	
22	G2	O	Green data	

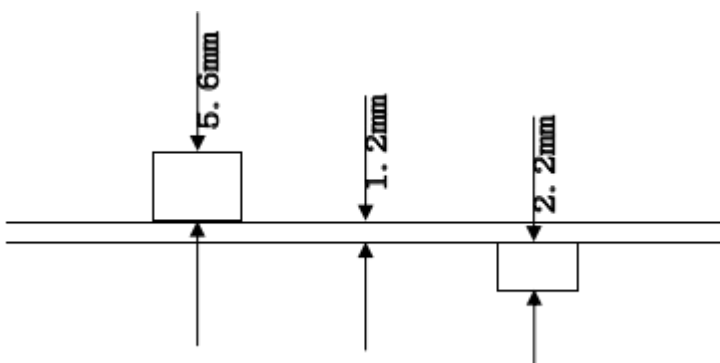
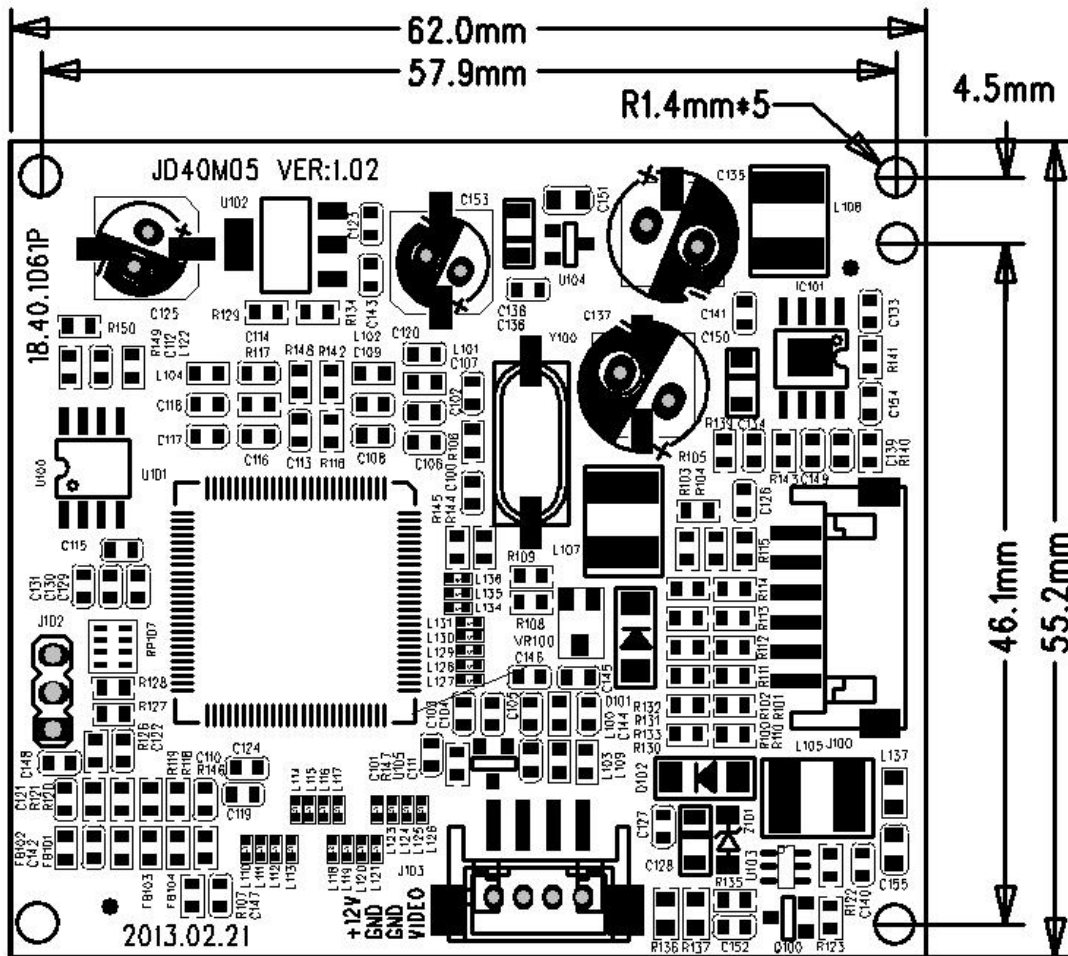
23	G3	O	Green data	
24	G4	O	Green data	
25	G5	O	Green data	
26	G6	O	Green data	
27	G7	O	Green data	
28	R0	O	Red data	
29	R1	O	Red data	
30	R2	O	Red data	
31	R3	O	Red data	
32	R4	O	Red data	
33	R5	O	Red data	
34	R6	O	Red data	
35	R7	O	Red data	
36	HSYNC	O	Horizontal Synchronous Signal	
37	VSYNC	O	Vertical Synchronous Signal	
38	CLK	O	Data Clock	
39	NC	-	No Connect	
40	NC	-	No Connect	
41	VDD	P	power supply (3.3V)	
42	VDD	P	power supply (3.3V)	
43	NC	-	No Connect	
44	NC	-	No Connect	
45	NC	-	No Connect	
46	NC	-	No Connect	
47	NC	-	No Connect	
48	NC/XR	-	No Connect	
49	NC/YD	-	No Connect	
50	NC/XL	-	No Connect	
51	NC/YU	-	No Connect	
52	DEN	O	Data enabling signal	
53	GND	P	Ground	
54	GND	P	Ground	

6 .Structural diagram:

6.1 TFT LCD Panel:



6.2 PCB Dimension: 62.0 (W) ×55.2(H) ×9.0(D) mm



7. Product Label:

JD040H54D08A0-32SAT(56)

8. Packing, Shipping, Storage

1. Package

TBD

2. Shipping &Storage

Avoid to crash and drench.

Do not store the module in surroundings containing organic solvent, chemical corrosive gas, high humidity.

9. Caution:

1. The TFT products were had precision testing and ageing test with the instrumentation before transport, so as it no need to adjust again.
2. Please correctly connect power and video signal before you adjust, should be on/off power and video signal to check the image's effect.
3. This Module is electronic product, please notice prevent static.
4. MeX040HS-54D -YH0-A0 is made of glass. Place carefully, broken for fear.
5. Don't touch potentiometer's pin feet when you use the keyboard control the module. Because the person have resistance, you will affect potentiometer's function when touch it.

10.4 "TFT- LCD PANEL Inspection standard:

Aim: Establish the standard of PANLE for inspecting material & progress and for clients' inspection.

Scope: Apply to 4"TFT LCD Panel

Content:

10.1. Inspection standard and method

10.1.1. The method and determinant of inspecting the Scratch of panel of LCD:

10.1.1.1. 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 scratch, it is "OK". Otherwise "NG".

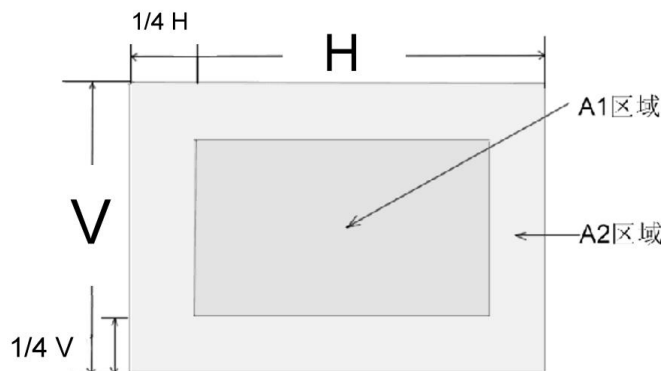
10.1.2. The method and determinative for black & white & color spots for the Panel of LCD:

10.1.2.1 Inspection method

10.1.2.1.1. Black Dot: under status of denote light, set the MASK of black spot inspection near the black spot then compare the big and small by eyes.

10.1.2.1.2. White Dot: White & Color spots: under status of denote light, set the Mask of black spot inspection on the white spot (or color spot) then inspect them by eyes if it can hide.

10.1.2.2 Division of LCD Panel



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

A2 Area: The edge of the available area for the picture (around the central area)

10.1.3. The inspection standard for the spots:

Spot Diameter (mm)		Allowed Area	
		A1 Area	A2 Area
Black Spot	$d \leq 0.15$	Irrespective	Irrespective
	$0.15 < d \leq 0.3$	4	4
	$0.3 < d \leq 0.5$	2	3
	$0.5 < d < 0.8$	0	2
Bright Spot or Color Spot	$d \leq 0.15$	Irrespective	Irrespective
	$0.15 < d \leq 0.3$	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 spot is 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: $A1 + A2 \leq 4$.