



3.5"-10.1" LCM&TFT Module manufacturer

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www.sat-sz.com

SPECIFICATION SHEET

4" MEMORY TFT LCD MODULE

- Model No.:SAT-581-BZ040D-AK-N
- System: PAL/NTSC Automatic



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1. INTRODUCTION

SAT-581-BZ043D-AK-N module is combined with HK_05_8012A PCB and SAT040HS54DHYO-A0 digital panel; supports both PAL system and NTSC, which can be automatically converted. With personality OSD, which has volume control connector and external memory SD card. It can realize photo-taking and video-recording function. The whole module use high light white LED as backlight, which has low consumption and disturbances. This TFT module can be used for visual doorbell, video telephony, automotive displays, portable DVD, instruments, meters and measuring equipment etc.

2. MAIN PARAMETERS

Resolution	320RGBX240dot matrix
Valid display area	82.08(H) x 61.56(V)
Color style	R.G.B. Beeline array
Aspect ratio	4:3
Backlight source	LED backlight

Working voltage	DC9V~DC18V (standard:DC12V)
Working voltage(DC12V)	DC130mA±20mA
Signal system	PAL/NTSC
Scope of input signal	Standard:1.0 Vp-p, Minimum:0.5 Vp-p , Maximum:2.0 Vp-p
Startup time	≤1.5S
Power consumption	≤3W
Working temperature scope	-20℃-60℃
Storage temperature scope	-40℃-70℃



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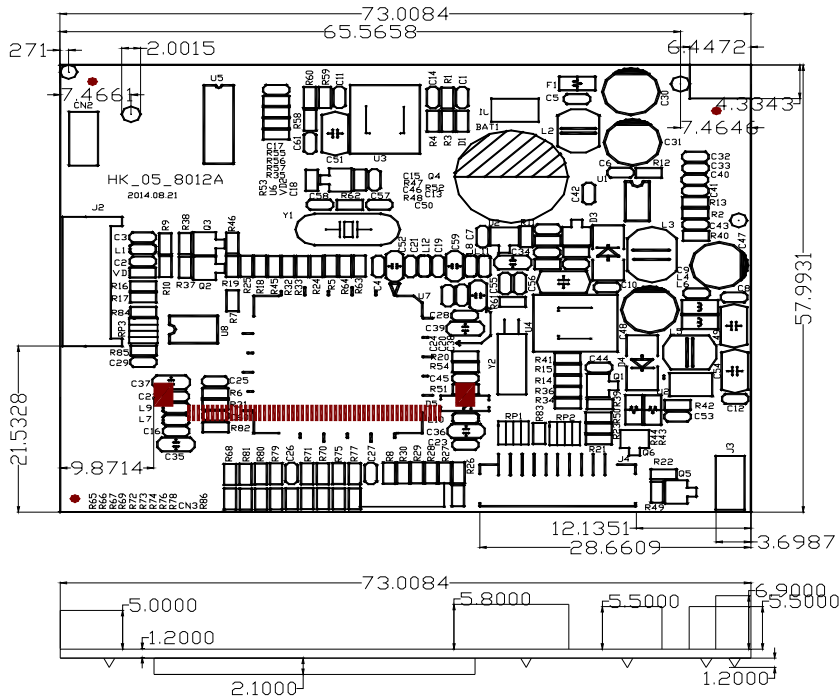
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3. PRODUCT PICTURE (JUST FOR REFERENCE)



4. DIAGRAM AND INTERFACE DEFINITION

4.1. INTERFACE DIAGRAM



4.2.INTERFACE DEFINITION

J2: 8-wire leads out (PH specifications, 2.0mm space between) for power, video, audio and data signal.

Pin	Symbol	Definition
1	+12V	9V~18V Power Input
2	GND	Power Ground
3	GND	Video Ground
4	CVBS	PAL/NTSC VIDEO Input
5	PAN_EN	Monitor open/close
6	RECORD	Photo-taking open/close
7	DB_R_A	Audio Signal Input
8	DB_R_B	Audio Signal Output

J1: 2-wire leads out (PH specifications, 2.0mm space between), used for button adjustment.



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1	DGND	Button Ground Connection
2	KEY	Button Adjustment

J4:10-wire leads out(PH specifications,1.25mm space between)used for read card and indicator light.

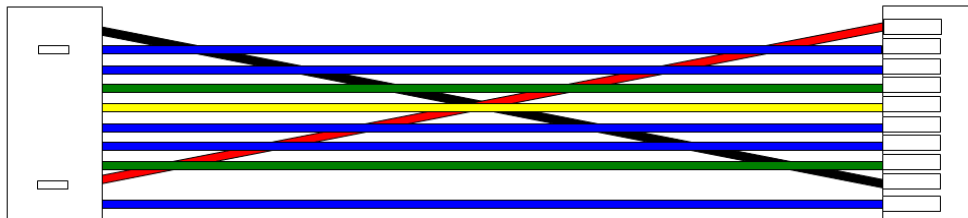
Pin	Symbol	Definition
1	LED2+	Indicator Light
2	VCC3.3V	Power
3	SD_DET_O	External Memory Card Data Input
4	SD_D1_O	External Memory Card Data Output
5	SD_DO_O	External Memory Card Data Output
6	SD_CLK_O	External Memory Card Clock Signal
7	SD_CMD_O	External Memory Card Data Signal
8	SD_D3_O	External Memory Card Data Output
9	SD_D2_O	External Memory Card Data Output
10	DGND	Ground

4.3.STANDARD WIRING

SAT-86-SF-10P-125

SAT-85-SF-2P-200

SAT-86-SF-9P/10P-125



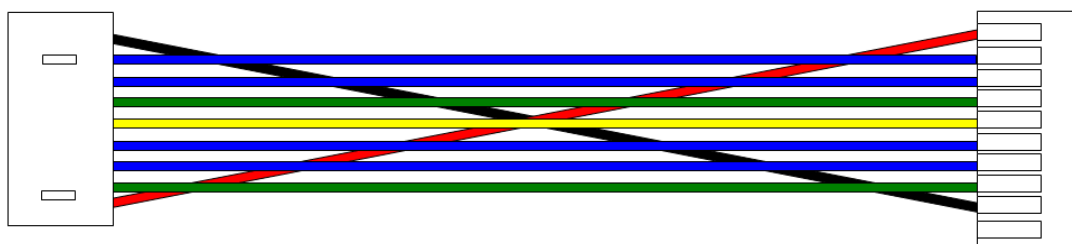


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5. PACKING, TRANSPORT AND STORAGE

5.1. PACKING

Sample packing dimension: 180×120×30mm

Module writing: SAT-86-SF-10P-125 SAT-85-SF-2P-200

(SAT-86-SF-9P/10P-125)each 1pcs

Large box of packing specification: 447(L)*382(W)*292(H)mm

Carton quantity:60pcs, each separated by paper card board.

5.2. TRANSPORT AND STORAGE

☆To avoid transport during rain or snow days. Prohibited to store with chemical materials and wet things.

6. ATTENTION

☆The input voltage should not be higher than upper limit of designed voltage.

☆Distinguish power line and signal line; if connect reversely, the board can be burn out easily.

☆The board is electronic product, so static electricity should be precaution during process,assembling,operate.

☆Panel is glass product, should handle carefully in case of breakage.

☆The FPC line connects panel and PCB, it can be easily broken off or pull apart, so should be careful during process,assembling,operate.

☆When using, the signal resistance should be match with the module internal resistance. 75ohm is the right resistance of input signal resistance on the board: R16



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position, if have this resistance, the signal resistance is 75ohm input, if not, the signal resistance is 50Kohm high resistance input.

7. PANEL DECISION CRITERIA

7.1. TESTING CONDITION

Test distance: 35CM±5CM

View angle: Check when light on: ±5 degree;

Outlook checking: ±45 degree.(from screen surface 0 degrees away in vertical)

7.2. CIRCUMTANCES

Temp.: 23±5 degree

Humidity: 45%~65%

Brightness: Outlook check:600LUX;Lighting on: 300-500LUX

7.3. INSPECTION METHOD

Scratch: Inspect at 600 LUX, from 30CM away, check in vertical (or left/right 45 degree), if no any scratches, then qualified.

Black dot: Compare LCD black dot with Dot investigation standard by eyes.

White/color dot: Cover black dot investigation standard paper on the white dot or color dot, to check if the white/color dot is available.

7.4. INSPECTION STANDARD

Remark: 1. Diameter= (maximum +minimum)/2

2. Total quantity of Black dot, White dot, Color dot: A+B≤4

DIAMETER (mm)		ALLOWED AREA	
		A area	B area
Black	d≤0.2	Neglect	Neglect



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dot	$0.2 < d \leq 0.3$	4	4
	$0.3 < d \leq 0.5$	2	3
	$0.5d > 0.8$	0	2
White dot	$d \leq 0.2$	Neglect	Neglect
	$0.2 < d \leq 0.3$	3	3
	$0.3 < d \leq 0.5$	1	2
	$0.5d > 0.8$	0	1

8. DIVISION OF A/B AREA

