



*3.5"-10.1" LCM&TFT Module manufacturer*

Email: [szmex.tft@mail.com](mailto:szmex.tft@mail.com) | [melody.hsia@sat-sz.com](mailto:melody.hsia@sat-sz.com)

Tel.:0086 769 22980021 Fax:0086 769 22985588

[www.sat-sz.com](http://www.sat-sz.com)

# SPECIFICATION SHEET

## 3.5" STANDARD TFT LCD MODULE

- Model No.:SAT-630-TM035D-SO-N
- System: PAL/NTSC Automatic

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## 1. INTRODUCTION

SAT-630-TM035D-SO-N TFT module is combined with SAT-630-035-54DS-C PCB board and SAT035TM54DMR1-A0-01 LCD digital panel, support both PAL system and NTSC ,which can be automatically converted. 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 and etc.

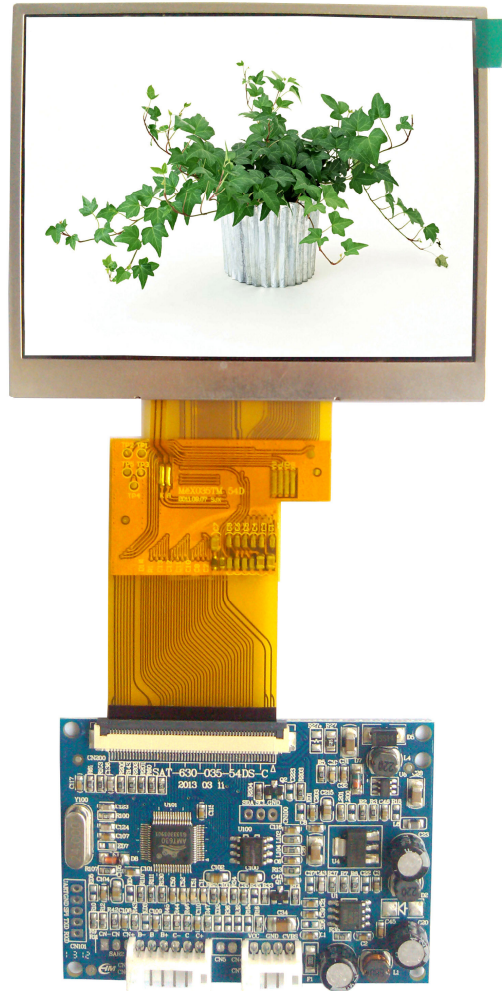
## 2. MAIN PARAMETERS

|                    |                       |
|--------------------|-----------------------|
| TFT Brand          | TM digital panel      |
| Resolution         | 320RGBX240 dot        |
| Valid display area | 70.08(W)*52.56(H)(mm) |
| Color style        | R.G.B. Beeline array  |
| Aspect ratio       | 4:3                   |

|                             |  |
|-----------------------------|--|
| Working voltage             | DC9-18V (standard : DC12V)   |
| Working voltage(DC12V)      | DC120mA±10mA   |
| Signal system               | PAL/NTSC   |
| Scope of video signal input | standard value : 1.0 Vp-p<br>min value:0.5Vp-p<br>max value:2.0 Vp-p |
| Startup time                | ≤1.8S  |
| Power consumption           | <1W  |
| Working temperature scope   | -20℃-60℃   |
| Storage temperature scope   | -40℃-70℃   |

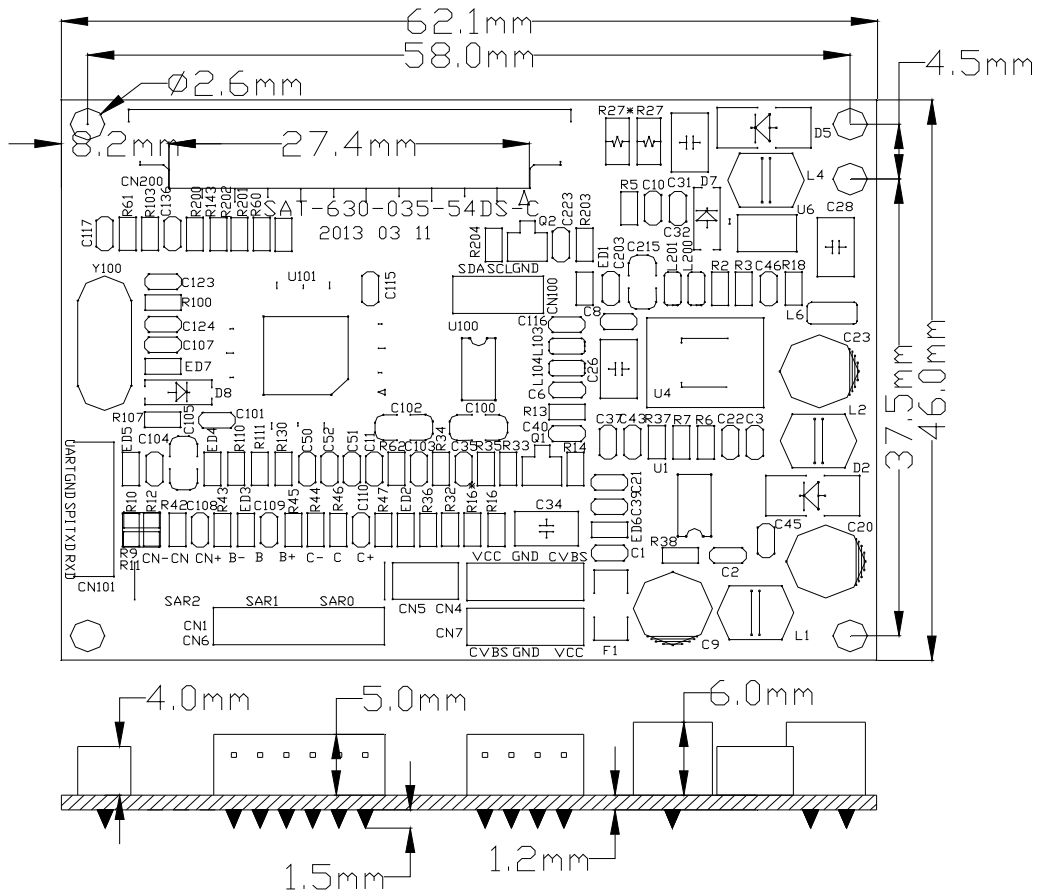
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### 3. PRODUCT PICTURE( JUST FOR REFERENCE)



### 4 . DIGRAM AND INTERFACE DEFINITION

#### 4.1. PCB DIGRAM



## 4.2. INTERFACE DEFINITION

CN2: 4-wire leads out (PH specifications, 2.0mm space between) for power and video.

| Pin | Symbol | Definitions          |
|-----|--------|----------------------|
| 1   | VCC    | 9V~18V Power Input   |
| 2   | GND    | Power ground         |
| 3   | GND    | Video ground         |
| 4   | CVBS   | PAL/NTSC VIDEO Input |

CN1: 6-wire leads out (PH specifications, 2.0mm space between),

used for potentiometer

| Pin | Symbol | Definitions        | Resistance |
|-----|--------|--------------------|------------|
| 1   | COL-   | Chrominance VR (-) | 10---50K   |

|   |      |                   |        |
|---|------|-------------------|--------|
| 2 | COL  | Chrominance VR    |        |
| 3 | COL+ | Chrominance VR(+) |        |
| 4 | BRT- | Brightness VR(-)  | 10—50K |
| 5 | BRT  | Brightness VR     |        |
| 6 | BRT+ | Brightness VR(+)  |        |

### 4.3. STANDARD WIRING

SAT4253 SAT6253 cable (UL1007-24#)。



## 5. PACKING, TRANSPORT AND STORAGE

### 5.1 PACKING

Sample packing dimension: 120×120×40mm

Module cable :(SAT4253--250mm、SAT6253--250mm each 1pc)

Large box of packing specifications: 430(L) ×340(W) ×270(H) mm

Carton quantity: Thick brackets :48pcs

Thin brackets:60pcs

each separated by paper card

### 5.2 TRANSPORT AND STORAGE

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

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## 6. ATTENTION

- ☆The input voltage should not higher than the limitation voltage.
- ☆Distinguish the position of power line and video line, if connect contract, 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, it should be careful when taken and put down, avoid breakage.
- ☆The PFC line connect between panel and PCB connect line, it is easily being break off or pull apart, so should be careful during process、 assembling、 operate.
- ☆when using, pay attention to the input impedance match of signal, on PCB board, the position of R18\* 75 ohm is signal input impedance matching resistance,when exist this resistance ,it is 75 ohm signal input, when not, it is 50K high resistance input.

## 7. ANEL 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:** 55±10 degree

**Brightness:** Outlook check:600LUX;

Lighting on: 300-500LUX

### 7.3 INSPECTION METHOD

**Scratch:** Inspect at 600LUX, 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.

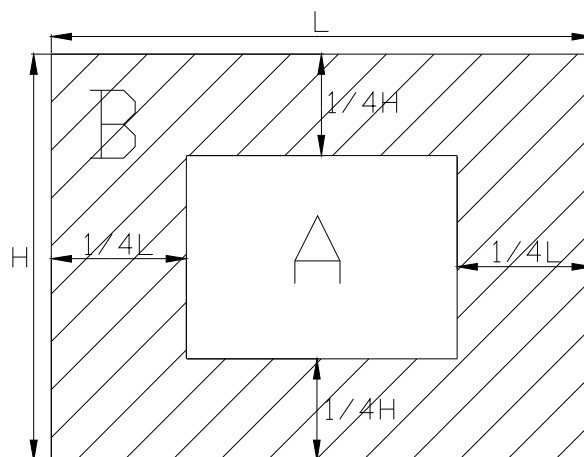
## 7.4 INSPECTION STANDARD

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

2. Total quantity of Black dot, White dot, Color dot:  $A+B \leq 4$

| DIAMETER (mm)    |                    | ALLOWED AREA |         |
|------------------|--------------------|--------------|---------|
|                  |                    | A area       | B area  |
| <b>Black dot</b> | $d \leq 0.2$       | Neglect      | Neglect |
|                  | $0.2 < d \leq 0.3$ | 4            | 4       |
|                  | $0.3 < d \leq 0.5$ | 2            | 3       |
|                  | $0.5 < d > 0.8$    | 0            | 2       |
| <b>White dot</b> | $d \leq 0.2$       | Neglect      | Neglect |
|                  | $0.2 < d \leq 0.3$ | 3            | 3       |
|                  | $0.3 < d \leq 0.5$ | 1            | 2       |
|                  | $0.5 < d > 0.8$    | 0            | 1       |

## 7.5 DIVISION OF A/B AREA



# 8. PANEL STRUCTURE CHART

