

# FOR APPROVAL

MODEL : HC2501A1

Customer :

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RECEIPT STATUS


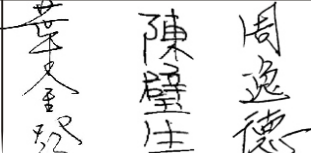
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By Date

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Time

Approved by	Checked by	Model	HC2501A1
		Version	A
		Total Pages	9
		Date	OCT.30,2006

韋拓股份有限公司



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# 1.Application

2.5 " Color TFT LCD Monitor Kits is subject to car monitor, TV monitor and other industrial equipment. The model name is HC 2501A1.

## 2. Specifications

### 2-1 LCD Display

Display	2.5" Diagonal Color TFT
Resolution	160x (R.G.B)x234 Total =112,320 dots
Active Area	49.68mmx37.44mm
Dot Pitch	0.310(H)mmx0.160(V)mm
Pixel Configuration	R.G.B. Delta
View Angle	Top=15deg Bottom= 35deg Left/Right=50deg
Brightness	250 cd/m <sup>2</sup>
Contrast Ratio	350:1
Panel Dimension	60.6(W)mmx48.4(H)mmx3.45(D)mm

### 2-2 Back Light

4 LEDs Type

### 2-3 Video Input

NTSC & PAL (Auto Switch)

Composite Video signal

(1.0 Vp-p/75ohm.)

Sync. Negative :

NTSC:  $f_H$  : 15.75KHz

$f_V$  : 60 Hz

$f_C$  : 3.58MHz

PAL :  $f_H$  : 15.62KHz

$f_V$  : 50 Hz

$f_C$  : 4.43MHz

### 2-4 Input Voltage

DC 12V $\pm$ 15%

### 2-5 Power Consumption

1.6W(Max.)

### 2-6 Temperature

Operation Temperature: 0 $^{\circ}$ C~ 60 $^{\circ}$ C

Storage Temperature: -20 $^{\circ}$ C~70 $^{\circ}$ C

### 2-7 Weight

TBD

### 2-8 Over all Dimension

TBD

### 3. Characteristics

#### 3-1 Measure Method

- |                             |                                                                                                                                            |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| (1) Input Voltage           | DC 12V±0.5V<br>(Ripple Voltage 0.5VMax.)                                                                                                   |
| (2) Video Input             | NTSC & PAL<br>Composite Signal Input 1.0 Vp-p/ 75 ohm)                                                                                     |
| (3) User Control VR         | At color signal ,each color is normally<br>present each VR adjustment (Bright,color,Tint)<br>is performed well.<br>VR01, VR02, VR03 = 50KΩ |
| (4) Environment Temperature | Normal Temperature(20~25°C)<br>Normal Humidity(60±5%RH)                                                                                    |
| (5) Others                  | Best Viewing 35cm from monitor kits<br>LCD should be set bottom up (θ=90deg)                                                               |

#### 3-2 Optical Characteristics

- |                      |                                                                                                                                   |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| (1) Resolution pixel | 480 x 234                                                                                                                         |
| (2) Gradation        | Ten gradation is clearly identified.                                                                                              |
| (3) Brightness       | Above 200 cd/m <sup>2</sup> ;<br>Under full white , Power on to warm up<br>For 2 min. temperature = 25°C,<br>Contrast= 350 (Max.) |
| (4) Lamp Life        | 10,000 hrs(Tamb=25°C)                                                                                                             |

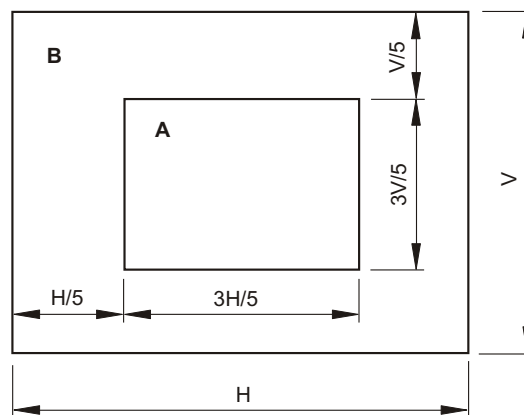
## 4. Inspection Standard

### 4-1 Inspection environment conditions

- (1) Room temperature : 20 °C ~ 25 °C
- (2) Humidity : 60 ± 5% RH
- (3) The viewing line should be perpendicular to the surface of screen.

### 4-2 Dot Defects

- (1) Inspection distance : 35 ± 5 cm
- (2) Inspection illumination :
- (3) Panel temperature : 30 ± 5 °C
- (4) Inspection pattern : full white, full black, red, green and blue screens.
- (5) Division



### (6) Acceptable Criteria

Ltem	Area		Total
	A	B	
Blue Black	2	3	4
Red Green White	1	3	3
Total	2	5	7

### 4-3 Scratch on the polarizer

Number = 3 max.  
Width = 0.1 mm, Length = 6 mm

### 4-4 Dent on the polarizer

Number = 3 max. , Average Diameter = 0.3 mm

### 4-5 Foreign material on the polarizer

Number = 2 max. , Average Diameter = 0.5 mm

### 4-6 Afterimage

After displaying a pattern for 5 seconds then switch to a different pattern, the previous pattern should disappear within 10 seconds.

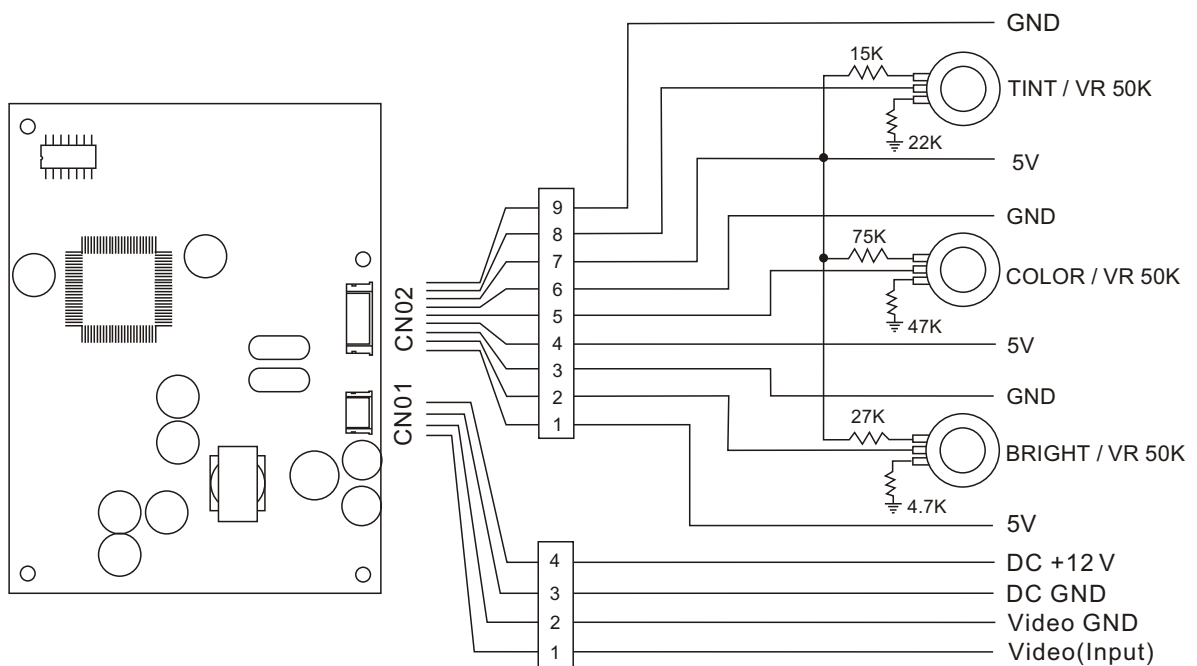
## 5. Connector

**CN01 : 4 pin/1.0mm**

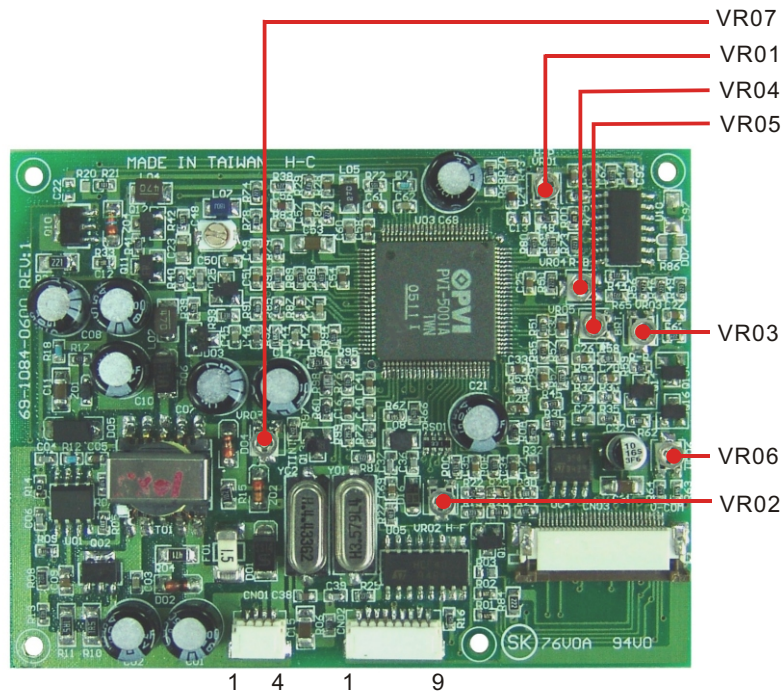
Pin No.	Configuration
1	Video(Input)
2	Video GND
3	DC GND
4	DC +12V

**CN02 : 9 pin/1.0mm**

Pin No.	Configuration
1	5V
2	BRIGHT
3	GND
4	5V
5	COLOR
6	GND
7	5V
8	TINT
9	GND



## 6.VR Discriptions



Location	Adjustment
VR01	H-Position
VR02	H-Frequency
VR03	B-Red
VR04	B-Blue
VR05	Brightness
VR06	V-Com
VR07	Tint

\* Don't turning VR01/VR02,VR03,VR04,VR06.  
Those VRs are turned by authorized engineer only.

## 7. Caution

7-1 Do not preserve or operate in the place where dewfall is easily formed

7-2 LCD should be preserved well to keep it's best performance.

The Polarizing filter of LCD should prevent from exposing under ultra-violet ray or sunshine.the exposure might cause interior of the LCD.

7-3 The storage temerature of LCD should be at normaltemperature.

Liquefaction or damage might be possible when LCD module is exceeding the temperature listed in the specification.

7-4 Please remove the foil on the LCD panel slowly and smoothly to avoid static electricy.

## 8.Packing

1



2



3



4



( 80Pcs In 1 Carton )



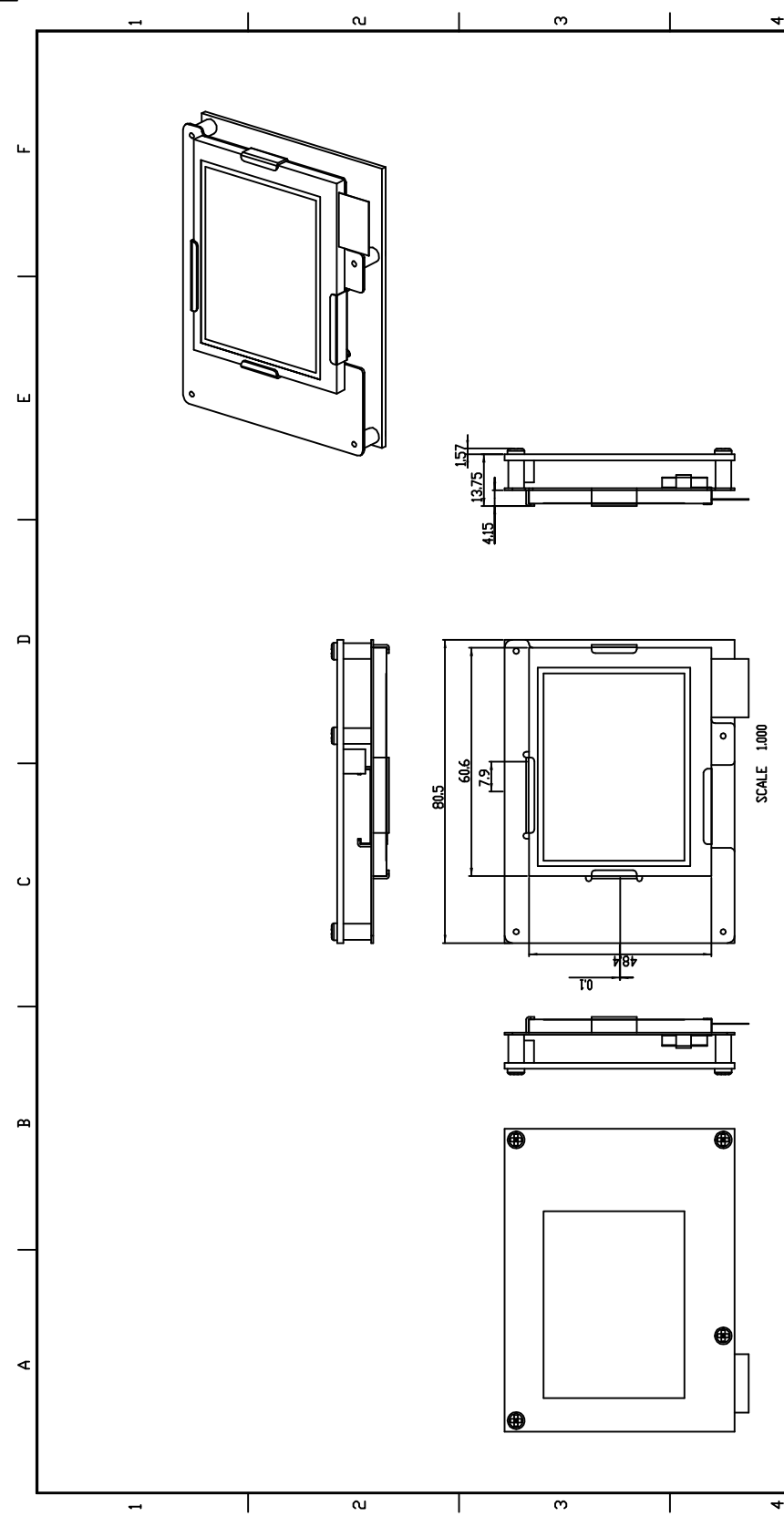
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1.	58-1043-2520 SPONGE
2.	02-1084-2000 MODULE
3.	73-1018-0010 BUBBLE/ESDBAG
4.	70-1016-0010 BOX
5.	70-1011-0010 CARTON



# 9. Mechanical Drawing



DATE		18-Oct-06		MATERIAL		SEE NOTES		PROJECT		TREATMENT	
DATE		UNIT		MM		SCALE		1/1		HC2501A1	
REMARK		DESIGNED		CHECKED		APPROVED		PART NO.		R00	
PENG										Hexa-Chain Co., Ltd.	
ITEM		CONTENTS OF CHANGE		RVS		CHK		APV		M/D/Y	

Part name : ASM35  
 File name : HC2501A1  
 SHEET NO. OF