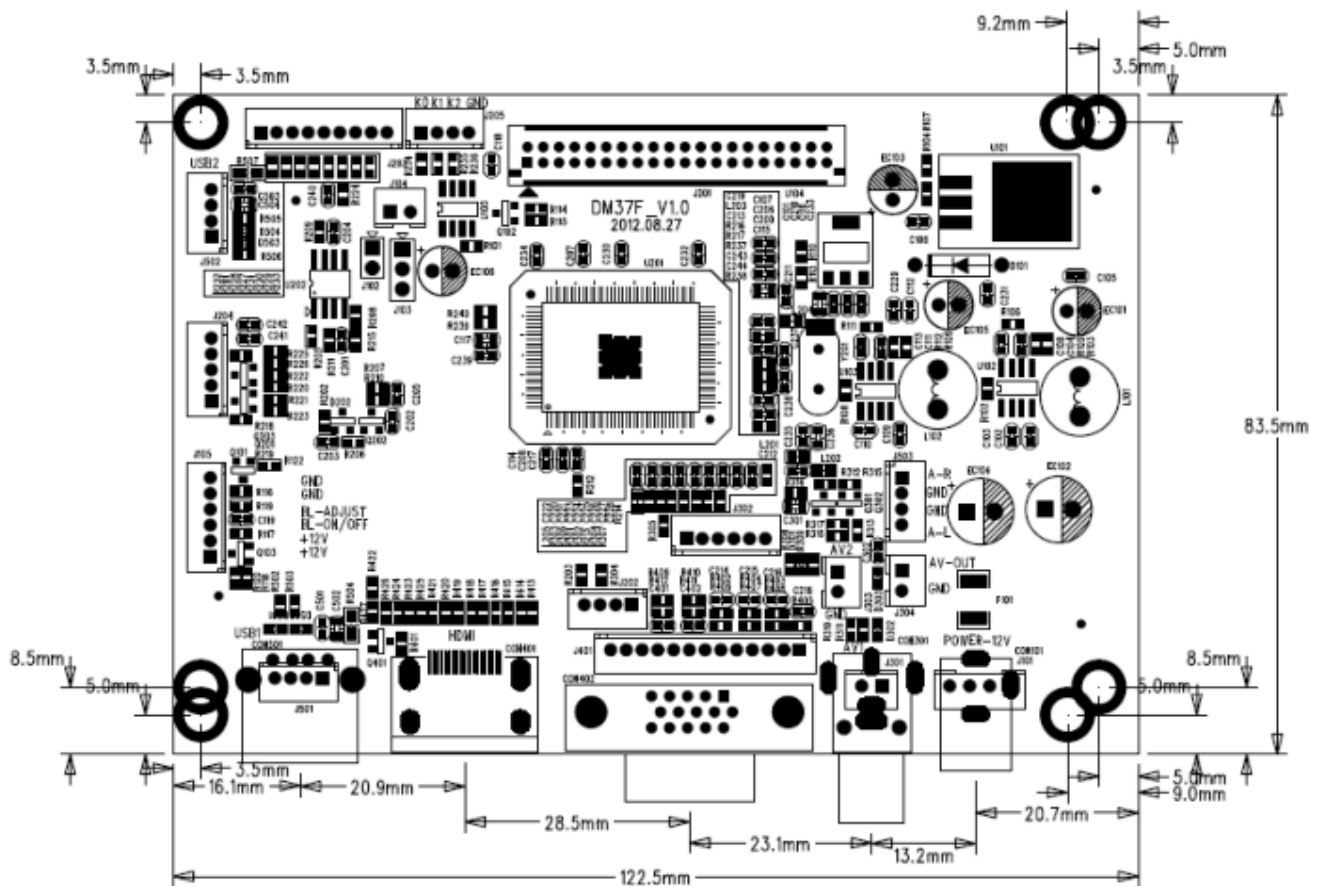


# DM37F support TFT-LCD Display panel with the resolution under 1920 x1200

## 1. Characters

- **Signal input:** 2 channels of CVBS, 1 Channel of VGA, 1 Channel of HDMI/DVI, 1 Channel of YPBPR, 2 channels of USB
- **Signal output:** 1 channel of CVBS
- Support: NTSC M, NTSC-J, NTSC 4.43, PAL(B,D,G,H,M,N,I,Nc), 3D Image filtering
- +12V single power supply, It is recommended to use more than 48w adapter
- OSD display and control
- Support the boot screen
- Support the infrared remote control
- Support the reverse function

## 2. Geometric figure & Dimension



### 3. Menu Setting

- The method of enter the menu: Remote controller, Press “ LEFT” + “LEFT” + “RIGHT” +”RIGHT” + “MENU”
- Part of the menu setting:

Through menu, we can set reversal mode and the switch of signal channels

Reversal mode: Enter Menu→SPECIAL SET→MIRROR MODE→ON/OFF

Switch of signal channels: we can set the channel switch of RGB, YPbPr, HDMI, USB

enter Menu→INPUTSOURCE SET→set each switch respectively

### 4. USB decoding supported formats

|            |                |                  |   |  |
|------------|----------------|------------------|---|--|
| MOVIE      | AVI            | MJPEG            | MP3,<br>WMA,<br>AAC,<br>MP2<br>PCM                                | TheMaxResolutionAndFrame Rate:1080p@30fps<br>Max Data Rate:10Mbps    |
|            |                | MPEG-4           |   | The MaxResolution And Frame Rate:1080p@30fps<br>Max Data Rate:20Mbps |
|            |                | MPEG-2           |   |  |
|            |                | XVID             |   |  |
|            | MP4. H. 264    | MPEG-2           |   |  |
|            |                | MPEG-4           |   |  |
|            | TS/TRP         | MPEG-2           |   |  |
|            | MPG            | MPEG-1           |   |  |
|            |                | MPEG-2           |   |  |
|            | DAT            | MPEG-1           |   | MP2  |
| VOB        | MPEG-2         |                  | The Max Resolution:720x576<br>Max Data Rate:20Mbps                |  |
| RM/RMVB    | RV8, RV9, RV10 | COOK             | TheMaxResolutionAndFrame Rate:1080p@30fps<br>Max Data Rate:10Mbps |  |
| PHOTO      | JPG            | Progressive JPEG |   | Max Resolution:1024x768  |
|            | JPEG           | Baseline JPEG    |   | Max Resolution:15360x8640  |
|            | BMP            | ---              |   | Max Resolution:9600x6400<br>Pixel Depth:1/4/8/16/4/32 bpp            |
|            | PNG            | Non-Interlaced   |   | Max Resolution:9600x6400   |
| Interlaced |                |                  | Max Resolution:1200x800   |  |
| MUSIC      | MP3            | ---              | MP3   | Sample Rate:32K~48KHz  |
|            | WMA            | ---              | WMA   | Bit Rate:32K~320Kbps<br>Channel:Mono/Stereo                          |
|            | MP4A/AAC       | ---              | AAC   | Sample Rate:8K~48KHz<br>Bit Rate:24K~320Kbps<br>Channel:Mono/Stereo  |

Others:

- 1) support hard disk, Max 400G
- 2) Folder: Max 30 levels
- 3) Each folder support Max 5000 documents
- 4) Document system support: Hi Speed FS, FAT32,FAT16,NTFS (not support NTFS compressed)

## 5. Driver board connectors definitions

- CON101 Power supply input standard connector
- J101 main power supply Wafer-4Pin-2.54 connector definitions

| PIN | Function | PIN | Function |
|-----|----------|-----|----------|
| 1,2 | GND      | 3,4 | +12V     |

- J104 LCD external power Wafer-2pin-2.54 connector definitions

| PIN | Function | PIN | Function  |
|-----|----------|-----|-----------|
| 1   | GND      | 2   | VPANEL_IN |

- J105 Inverter Wafer-6pin-2.0 connector definitions

| PIN | Function | PIN | Function | PIN | Function | PIN | Function |
|-----|----------|-----|----------|-----|----------|-----|----------|
| 1,2 | +12V     | 3   | ON/OFF   | 4   | ADJUST   | 5,6 | GND      |

- J201 LCD cables MalePin-30-2.0 connector definitions

|    |           |    |              |    |         |    |         |
|----|-----------|----|--------------|----|---------|----|---------|
| 1  | VCC       | 2  | VCC          | 3  | VCC     | 4  | GND     |
| 5  | GND       | 6  | GND          | 7  | RXO0-   | 8  | RXO0+   |
| 9  | RXO1-     | 10 | RXO1+        | 11 | RXO2-   | 12 | RXO2+   |
| 13 | GND       | 14 | GND          | 15 | RXOC-   | 16 | RXOC+   |
| 17 | RXO3-     | 18 | RXO3+        | 19 | RXE0-   | 20 | RXE0+   |
| 21 | RXE1-     | 22 | RXE1+        | 23 | RXE2-   | 24 | RXE2+   |
| 25 | GND       | 26 | GND          | 27 | RXEC-   | 28 | RXEC+   |
| 29 | RXE3-     | 30 | RXE3+        | 31 | GND     | 32 | GND     |
| 33 | BL_ON/OFF | 34 | PANEL_ON/OFF | 35 | SYS_SCL | 36 | SYS_SDA |
| 37 | RXO4-     | 38 | RXO4+        | 39 | RXE4-   | 40 | RXE4+   |

Remark: single LVDS channel default RXO channel, any modification please notify

- J202 debugging Wafer-4pin-2.0 connector definitions

| PIN | Function | PIN | Function | PIN | Function | PIN | Function |
|-----|----------|-----|----------|-----|----------|-----|----------|
| 1   | +5V      | 2   | GND      | 3   | RXD      | 4   | TXD      |

- J203 key board Wafer-9pin-2.0 connector definitions

| PIN | Function | PIN | Function | PIN | Function | PIN | Function |
|-----|----------|-----|----------|-----|----------|-----|----------|
| 1   | GND      | 2   | POWER    | 3   | MENU     | 4   | UP       |
| 5   | DOWN     | 6   | LEFT     | 7   | RIGHT    | 8   | SOURCE   |
| 9   | EXIT     |     |          |     |          |     |          |

- J204 Infrared remote control wafer-5pin-2.0 connector definitions

| PIN | Function | PIN | Function | PIN | Function | PIN | Function |
|-----|----------|-----|----------|-----|----------|-----|----------|
| 1   | LED-R    | 2   | LED-G    | 3   | IR       | 4   | GND      |
| 5   | +5V      |     |          |     |          |     |          |

- J205 Reserved interface I/O Wafer-4pin-2.0 connector definitions

| PIN | Function | PIN | Function | PIN | Function | PIN | Function |
|-----|----------|-----|----------|-----|----------|-----|----------|
| 1   | K0       | 2   | K1       | 3   | K2       | 4   | GND      |

- CON301 AVI input standard connector

- J301 AV1 input Wafer-2pin-2.54 connector definitions

| PIN | Function | PIN | Function |
|-----|----------|-----|----------|
| 1   | AV1      | 2   | GND      |

- J303 AV2 input Wafer-2pin-2.54 connector definitions

| PIN | Function | PIN | Function |
|-----|----------|-----|----------|
| 1   | AV2      | 2   | GND      |

- J304 AV output Wafer-2pin-2.54 connector definitions

| PIN | Function | PIN | Function |
|-----|----------|-----|----------|
| 1   | AV-OUT   | 2   | GND      |

- J305 Chromatic component Wafer-6pin-2.0 connector definitions

| PIN | Function | PIN | Function | PIN | Function | PIN | Function |
|-----|----------|-----|----------|-----|----------|-----|----------|
| 1   | Y        | 2   | GND      | 3   | Pb       | 4   | GND      |
| 5   | Pr       | 6   | GND      |     |          |     |          |

- CON401 HDMI standard connector

- CON402 D-SUR standard connector definitions

- J401 VGA Wafer-13pin-2.0 connector definitions

| PIN | Function | PIN | Function    | PIN | Function | PIN | Function     |
|-----|----------|-----|-------------|-----|----------|-----|--------------|
| 1   | GND      | 2   | Red signal  | 3   | GND      | 4   | Green signal |
| 5   | GND      | 6   | Blue signal | 7   | NC       | 8   | GND          |
| 9   | V sync   | 10  | H sync      | 11  | GND      | 12  | RXD          |
| 13  | TXD      |     |             |     |          | -   |              |

- CON501 USB1 standard connector

- J501 USB1 Wafer-4pin-2.0 connector definitions

| PIN | Function | PIN | Function | PIN | Function | PIN | Function |
|-----|----------|-----|----------|-----|----------|-----|----------|
| 1   | GND      | 2   | USB+     | 3   | USB-     | 4   | +5V      |

- J502 USB2 Wafer-4pin-2.0 connector definitions

| PIN | Function | PIN | Function | PIN | Function | PIN | Function |
|-----|----------|-----|----------|-----|----------|-----|----------|
| 1   | GND      | 2   | USB+     | 3   | USB-     | 4   | +5V      |

- J503 Audio output connector definitions

| PIN | Function | PIN | Function | PIN | Function | PIN | Function |
|-----|----------|-----|----------|-----|----------|-----|----------|
| 1   | Audio-R  | 2   | GND      | 3   | GND-     | 4   | Audio-L  |

## 6. Environmental parameters

Operating temperature: -25°C~+85°C

Operating humidity: 20%~80%

Storage temperature: -40°C~+150°C

Storage humidity: 5%~85%

## 7. Real figure

