

SPECIFICATIONS OF TFT-LCD MODULE

This specification applies to the TFT-Module series ITM1102. This series supports the WVGA 800(H) x 480(V) screen format and 65k colors. Furthermore the module support a lot of graphic commands, resistive touch screen, external keypad, backlight driving circuit and extended power supply.

The series ITM1102 is suited very well to realize own applications with very low expenditure in all current bus systems (8/16-bit, 3/4-wire SPI, I2C).

Features

1. Display format: 800x480 dots matrix graphic (WVGA)
2. LCD controller: RA8875
3. Power supply: +3.3VDC
4. Display modes: TFT
5. Colors: 65k
6. Backlight: LED-white
7. Interfaces: 8/16-bit, SPI 3-wire/4-wire, IIC
8. General functions: internal Touch control (resistive)
Internal Backlight control (dimming by PWM)
Up to 20 key control (matrix)
Graphic functions
Internal FONT-ROM (ISO/IEC 8859-1...8859-4)
9. Options: Onboard DC/DC (max. 36VDC power supply)
Touch Screen (resistive, projective capacitive)
Up to 32MByte FLASH-memory on board
Additional Font-IC
Front bezel

Mechanical Specifications

Module size	250.0mm(L) * 155.8mm(W) * Max15.0(H)mm
Viewing area	225.30mm(L) * 135.70mm(W)
Dot size (RGB)	0.0925mm(L) * 0.276mm(W)
Weight	Tbd.

Internal Functions (Standard – always included)

- WINDOW: Set active window, Floating window
CURSOR: Graphic cursor, Blinking
PATTERN: internal customizable 16x8x8 or 4x16x16 pattern
SCROLL: Scroll window (horizontal or vertical), Layer mixed scroll, Buffer scroll
DRAW: Pixel, Line, Rectangle, Rounded Rectangle, Triangle, Circle, Ellipse, Segment of Ellipse, Text, Image (from internal Flash)
FILL: automatic filling of: Rectangle, rounded Rectangle, Triangle, Circle, Ellipse, Segment of Ellipse
FONT: ISO/IEC 8859-1~4, 90degr fonts, additional FONT-IC
BTE: Write, Move, Solid Fill, Pattern Fill, Transparent Pattern: move, write, fill, with ROP
BTE (BTE = Block Transfer Engine)
TOUCH: Resolution 10-bit for 4-Wire Touch Screens, Auto+ Manual Mode
KEY: Matrix 4x5 and 1 Main Key, Multi Key (up to 3 pressed)
DMA: Continuous and Block Mode
PWM: 1st PWM is used for Backlight Adjustment, 2nd is available on interface
SLEEP: Quitting from Sleep by Touch, Key or Register Setting

