

Operation Description

The Monitor is composed of LCD Panel Unit, TMDS Transmitter(DS90c387A), LCD Controller(GM5020), Video Clock, Microcontroller clock(89C51), Inverter and external Power supply.

- Power

The AC adapter supplies DC12V to main board. The main board generates DC3.3V , DC5V and 2.5V after the power on signal is detectd. It supplies DC5V, 3.3V and 2.5V.

- Inverter

The part inverts DC to AC to light back light lamp of LCD Panel

Main board supplies signals inverter's on/off and brightness control signal.

- Video Processing(image process)

LCD panel only supports a resolution (1280 x 1024). The scaling function is used when the input resolution is less than the panel resolution.

- Micro Controller

The microcontroller automatically detects the video board installed in your system. When you turn on the monitor, the micro controller first checks the display mode memory stored in the user setting area and factory presetting area. And the controller has IC interface to communicate with EEPROM and a direct bus to communicate with scaling IC. And an operating clock of the controller is a 20MHz.