

FCC ID : PVCP135

The Circuit Work of Wireless (P135)

This device converts the signal from VGA to video, then sends the video signal from TX1 (RF module) to receiver. The local end can be also monitored with small display devices.

The VGA signal input from P1Jack. D4~D10 (IN4148 Diode) are applied as the limiters. By way of R9, R10, R11, C12, C10, C14, the signal enters U4 (GD2048) for process. During the process (ex. ZOOM adjustment), the image signal is stored temporarily at U8 (IMX16 SDRAM)

U1 (74HC14) is applied as the buffer for H-SYNC and V-SYNC, to move the Jack of monitor.

U4 is mainly applied to convert the VGA signal to composite video or S-video or RGB signals. Then U11 (single-chip) effects ZOOM IN/OUT, Color Adjustment, Sharpness Adjustment...etc. The processed composite signal will be sent out by Pin 66, to match the impedance with R12, to comply with EMI with L3, C17, C16, and goes into U13 (P15V330Q) electronic switch.

U13 accepts external video in or internal VGA cable from PC. The INPUT source is determined by pushing the function button (Video Source) on the control panel.

Before entering the transmitter, the signal passes through Q6 to upgrade the electric current. Then becomes 2.4GHz signal in TX1 and is transmitted here.

Most of the oscillation frequency of U11 is at 20MHz. It is generated from XTAL (20MHz). The main purpose is to decode the demands from function buttons, then pass to U4 through the I2C interface (Pin 36, 37).

U9, U5, U12 are regulators. The main purpose is to supply the work voltage to all of the chip-sets.

The work frequency of U4 is 27MHz. It generates the pulse with Y1 (27MHz) XTAL.