

Circuit Description

The unit is based on a single-chip COMS camera sensor (OV7725) providing a high quality video, built-in an audio microphone, auto turn on/off IR LED for night vision and audio alert when audio volume over preset level. Microprocessor (SN93131) runs at 12MHz, code and decode the video and audio signal and send the digital signal to MV-400 for transmitting RF radio. MV-400 runs at 12.288MHz, and it is a single chip radio transceiver for the world wide 2.4 -2.48 GHz ISM band. The transceiver consists of a fully integrated frequency synthesizer, a power amplifier, a crystal oscillator, a demodulator. Output power, frequency channels, and protocol setup are easily programmable through a SPI interface. Current consumption is very low. Built-in Power Down and Standby modes makes power saving easily realizable.