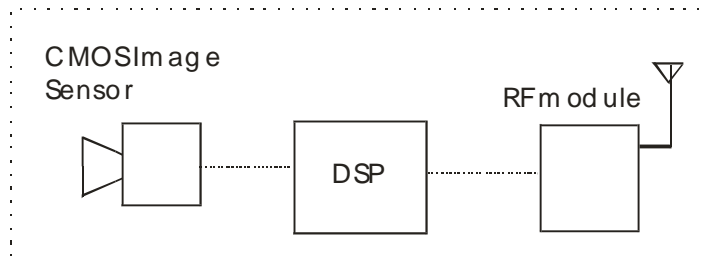


Circuit description

1. Camera



CMOS sensor –

The optical lens and the CMOS sensor (OV7725) capture the video image from the object, converted to digital signal, then feed to the DSP for processing.

DSP (SN93331) –

is a single chip processor, which video Codec, RF baseband controller built-in.

Video signal compressed by using MJPEG algorithm, digital data packet are feed to the RF module for transmission. FHSS technology is used.

The DSP use 12MHz Crystal.

RF module –

Is a 2.4GHz transceiver (A7121) with power amplifier and LNA is employed. On Tx cycle, data packet transmit by 2.4GHz carrier and GFSK modulation. On Rx cycle, acknowledge data will be received back for the receiver side.

Use L shape on PCB board, no need extra antenna.

built-in PCB antenna, F-type, < 0dB, Omni-directional

The A7121 use 18MHz Crystal.

Power supply & charging circuit -

The camera is powered by a 3.7V Li-on battery. With the ac adaptor plugged in, the battery will start charging. When the battery voltage reach 4.2V, the charging current will be terminated.