MoticamU Schematic description

MoticamU is USB PC camera, it is UVC USB PC Camera.
It has two main ICs, the first one is 2M Pixels CMOS sensor (U5) and the other is Camera Image Signal Processor (ISP) USB IC (U1).

Whole system's DC power is from the PC USB ports (DC +5V) and there are several LDO power ICs (U3, U4, and U6) and it makes different system's DC powers that are used by Sensor, ISP IC and other parts.

ISP IC (U1) works with 12MHz Master clock and it is from X-Tal (RX1) and CMOS sensor takes live image stream and passes it to ISP IC continuously and ISP IC gets such live image stream and does some image processing include color conversion, brightness and other image properties processing, MJPG compression and others.

And ISP IC changes such live image stream to the proper USB interface protocol and transfers it to the PC and sometime ISP IC receives PC's commands and does a proper working.