ZC0301PL USB PC Camera Processor

Key Features

- USB1.1 Compatible
- Built-in USB device Controller
- 15 fps @VGA
- Advanced ISP
- CMOS Interface
- JPEG Encoder
- RGB Raw

ZC0301PL is a welcome addition to the Vimicro PC Camera Processor family. Designed to run economically without compromising quality on Web Camera for PC, PDA, and set-top boxes,

ZC0301PL gives a consistent excellent performance with both still image and video streaming. All major image processing functions, such as advanced Image Signal Processing (ISP), high quality image data compression as well as data transfer units such as USB device controller are built into the chip. This state-of-the-art design is a single chip solution that makes the creation of high-speed, high-resolution, low-power, low-cost web cams easier than ever before.

Image Manipulation

ZC0301PL supports 10/9/8-bit RGB raw format for greater control over tweaking and manipulating images. This enables processing tasks such as, white balance, color correction and gamma correction to be carried out with more freedom to meet the user's desired effect.

High Quality Video Streaming

With the ZC0301PL integrated CMOS sensor interface, performances of up to 30 fps CIF/SIF and 15 fps VGA video streaming can be expected. Combined with the integrated Imaging Signal Processor (ISP), built-in JPEG encode engine (requiring no external buffer) and sophisticated error correction technologies, the ZC0301PL is more than capable of delivering high quality video streaming and heightening multimedia experiences .

USB Controller

ZC0301PL utilizes a USB device controller with a built-in transceiver, with no external DRAM requirements, and is USB 1.1 compatible. The USB device controller features programmable OEM USB parameters by EEPROM. The USB controller features can offer more flexibility and minimize potential compatibility issues.

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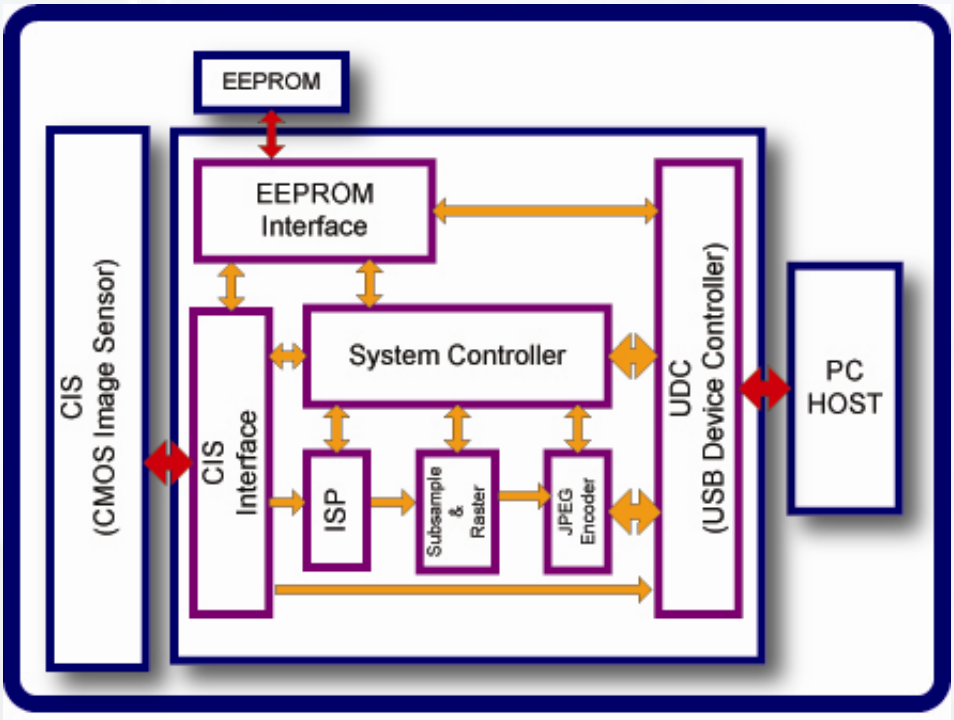
Chip Block Diagram

The ISP block receives RGB raw data from CMOS image sensor interface and performs various image processing tasks The Sub-sample & Raster block handles the image scaling and then converts image data to 8x8 block format for JPEG compression. The JPEG Encoder block further compresses the image data into JPEG format, which is then transferred to PC host via USB Device Controller (UDC) block.



For more details, please visit our website http://www.vimicro.com/ or contact our world wide sales offices.

Vimicro Corporation is a China-based semiconductor company providing chips and solutions that enable multimedia communication and applications. Vimicro is a market leader in imaging processors for PC and mobile devices. Vimicro is now focused on offering next generation multimedia technologies for PC and mobile phones markets. Our latest multimedia processors will combine all the functionalities of both the imaging/video/graphics and sound/audio/music processors, allowing for future applications such as Multimedia Messaging Services ("MMS"), mobile imaging, mobile ring-tone, mobile music, mobile flash, mobile video and mobile games.

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