



M5603C

High-Speed USB2.0 Video Camera Controller

Preliminary Product Brief

FEATURES :

- + **USB Specification Revision 2.0 Compliant**
- + **480/12 MHz High/Full-speed Operation** with on-chip USB transceiver, SIE & UBL
- + **Supports User-Configurable Endpoints for Isochronous, Interrupt, Control Transfers** to allow Isochronous transfer-based system, such as video camera, video capture, fingerprint recognition or Multi-Function Peripheral System
- + **General Video Control Interface** to support up to SXGA(1280x1024) CMOS image sensors
- + **Glueless Single-chip integration with built-in Image Buffer and High-Quality Image Compression Codec** to support up to 30fps VGA/CIF real-time video performance
- + **Featured image processing support** to sensor pixel and image enhancement, including
 - Defect-pixel correction, Offset clamping, Color Interpolation, down-sampling, Color-matching and white balance control, Noise-reduction, Edge-enhancement and image sharpening, Gamma correction and contrast adjustment, image Panning & Zooming operation
- + **AC-97 Audio Codec Interface Supported**
- + **Support USB Remote Wakeup** and general purpose I/O control
- + **USB ID EEPROM** interface support
- + **Built-in Clock Synthesizer** for using low-cost 12MHz crystal or external 12MHz clock sources
- + **64-pin TQFP package, 2.5/3.3V operation**
- + **Operating System Platform Support** including Video for Windows compatible and Windows TWAIN driver support in WindowsXP/2000/ME, etc.

ALi's M5603C Camera Controller provides a glueless cost-effective solution for USB2.0 PC camera application. With built-in color-processing engine for CMOS image sensors, M5603C also integrates a high-quality image codec, USB2.0 controller, AC-97 codec interface and a high-performance micro-controller with user-configurable input/output control to provide upto 30 frame-per-second @ VGA or CIF size real-time video performance. With its on-chip HQ ratio-adjustable video compression codec, M5603C is capable of supporting up to SXGA(1280x1024) Snapshot capturing for still-image capturing applications.

