Production-Ready Camera Reference Design

VD Digital

THE REAL PROPERTY.

IP Cores

Mobile

ZR836442 Product Brief Zoran Corporation 1390 Kifer Road Sunnyvale, CA 94086-5305 Tel 408.523.6500 Fax 408.523.6501 www.zoran.com



Description

Zoran's CamMini 8 is a copy ready reference camera that is based on Zoran's COACH™ 8 (Camera On a CHip) processor. It is offered in two version; CamMini 8 CCD and CamMini 8 CMOS. The main features include TFT LCD, Internal Flash and SD card, IGBT flash, MPEG 4 and WMV Capture and playback, Direct printing mode, fast click-2-click and additional features from the COACH 8 features palette.

CamMini 8 CMOS comes with Micron's amd OmniVision(R) 3MP CMOS sensors. CamMini 8 CMOS is a low cost effective solution for entry grade cameras.

CamMini 8 CCD comes with Panasonic's 4Mpixel CCD sensor and Copal's zoom lens. CamMini 8 CCD is a cost effective high quality mid-range camera solution. It features full zoom camera functionality

with zoom and auto focus control and AGC adjustment, providing high image quality under a variety of conditions.

CamMini 8 is equipped with a highly efficient power module. This module allows long operating life in all modes as is powered by 2 AA batteries. Built-in voice audio codec of COACH 8 is utilized for audio recording and playback modes including movies.

CamMini 8 software includes: COACH firmware, COACH Host Control Embedded (HCE-8) reference code and production ready, WHQL certified PC drivers. The HCE features an attractive, production ready GUI and includes a multi-language support core, with a fully implemented English language. The USB connection modes include PictBridge direct printing, bulk-only mass storage and video streaming. PC drivers include Twain and WIA.

CamMini 8 CCD Reference Design





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Product Brief

Feature List

- MPEG 4 and WMV video capture at 30fps VGA resolution
- · Enhanced sensor signal processing with;
 - 12 bit processing for high dynamic range *1
 - Color Interpolation and Conversion
 - Image scalers
 - Automatic White Balance (AWB)
 - Automatic Exposure (AE)
 - Auto Focus *1
 - Edge Enhancement
 - Advanced Color Matching
 - Programmable Lens Shading compensation (Patent Pending)
 - Performance enhancement when using Zoran's CMOS sensor
- Smooth Digital Zoom completes optical zoom in view, capture and clip capture modes
- IGBT flash circuit with support for red-eye reduction
- Resident NAND flash and SD card

- USB interface, including on-chip USB line drivers
- Camera power circuit that supports USB/battery switching
- Real-time JPEG compression with advanced bit rate control ensures superior visual quality for the required number of stored images
- Capture sequence of still images at high rate
- Advanced movie playback mode with pause/continue/fast forward/slow motion/ backward and zoom capabilities
- VGA Movie capture to the flash card at a rate of up to 30fps (depending on card speed)
- NTSC/PAL analog output to a TV monitor
- Interchangeable LCD; available with Casio
- Host Controller Embedded reference code
- Production-level user interface supporting English language and multi-language support core, provided as reference code
- Support in most of COACH 8 features

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^{*1 -} CamMini 8 CCD