Driving the Digital Lifestyle

Digital Camera Processor

DVD Digital TV

Imaging

IP Cores

Mobile

Product Brief

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Description

The COACH 10 highly integrated digital camera processor supports high ISO-6400 while maintaining image details, jitter stabilization for both video and still photos, high definition video capture, Advanced Video Coding (H.264), MPEG-4, DivX, and still picture capture of over five frames per second at eight megapixels, using Zoran's

patent-pending still and video processing technologies.

The COACH 10 family enables platforms from entry and mid-level to DSLR-grade performance and picture quality while also enabling true video recording at high definition resolution.

COACH 10 Family

- COACH 10D (part # ZR36487BGCF) For entry to mid range DSLR
- COACH 10P (part # ZR36482BGCF) For high performance still and video cameras supporting HD (high definition) video capture and HDMI interface
- COACH 10M (part # ZR36480BGCF) For mainstream still and video cameras supporting standard definition video capture
- COACH 10S (part # ZR36483BGCF) For entry level still cameras

Feature List

- Up to 16MP image capture resolution
- · 16-bit image processing for highest quality
- Click-to-click performance of over 5 frames per second at 8MP resolution with single buffer
- · Dual CPU architecture for advanced image processing algorithms
- Enhanced noise suppression and color reproduction
- Real-time dynamic range enhancement (Z-Light+)
- H.264 video capture and playback of HD (720P) resolution at 30 frames per second
- MPEG-4 encoding uses I, P and B frames for true video quality
- Digital Image Stabilization Technology (DIST) to correct handshaking and object movement
- Digital Video Motion Stabilization Technology to compensate unwanted camera movement
- Stereo microphone and audio playback to headphone; mono to speaker and line out
- On-chip CD quality audio codec

- On-chip HDMI transmitter for native HD (1080i) display support
- Rich color On-Screen Display (OSD) with transparency levels
- Hardware Picture-in-Picture (PIP) with blending support
- Direct output to LCD and TV monitor, on-chip NTSC/PAL encoder and video DAC
- Direct interface to resident flash memory (NAND, OneNAND, NOR) and/or removable memory card support of CompactFlash (CF), SmartMedia (SM), Secure Digital (SD), Secure Digital High Capacity (SDHC), MultiMediaCard (MMC), xD, Memory Stick (MS), Memory Stick Pro (MS-Pro) and ATA-6 hard disks
- · Second storage interface to SD, SDIO, MS and MS-Pro
- 16-bit data SDRAM/DDR/DDR2 interface supporting sizes of 128Mbit, 256Mbit, 512Mbit and 1Gbit
- On-chip High Speed USB 2.0 OTG interface
- CCIR-601 input port for capturing from an external TV decoder
- · Micro stepping motor control for fast and quiet lens movement
- Generic serial port for interfacing with peripheral hardware units

Firmware Highlights

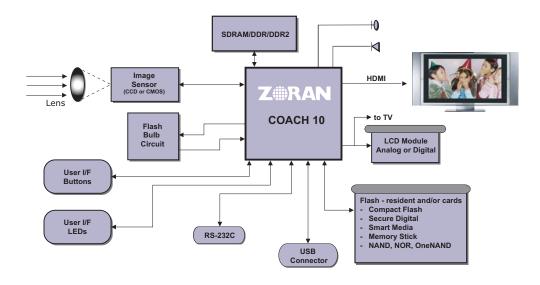
- Embedded host control (HCE) software architecture enables customer creation of DSC applications with minimal effort
- · Backward compatibility with previous COACH software API set
- · Open firmware architecture for easy customer modification
- All standard camera operation modes
- Advanced bit rate control (BRC) guarantees size of compressed video clips at maximum visual quality
- Advanced GUI support including rich OSD, bitmaps, picture in picture and more
- · Variety of protocols for USB interface supported including:
 - PC Video Capture mode, for capturing real time video to PC
 - WIA, Twain, and Twain 2 protocol for direct retrieving of images and live video
 - Bulk-Only mass storage, for representing camera as a PC drive.
 No drivers required for most operating systems
 - PTP & MTP
 - Pictbridge

Digital Camera Processor

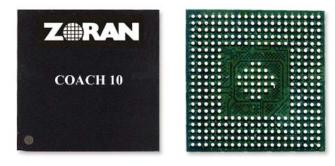
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Block Diagram



COACH 10 Package



C10d/C10p: 15mm x 15mm C10m/C10s: 13mm x 13mm

For more information, contact Zoran's Sunnyvale office or the office nearest you:

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