



General Description

The JL2186A_V2 is a highly integrated, low cost SOC solution for Digital Still Camera (DSC) and entry level Digital Video Camcorder (DVC) applications. It is targeted at the application of DSC resolutions up to 16M pixels. It consists of CMOS image sensor interface, image processing engine, JPEG codec, audio codec, memory card controller, video output interface, and USB 2.0 High-speed interface.

The JL2186A_V2 also supports storage media interface including SLC/MLC NAND flash, SPI flash, SD/MMC, and SDRAM. Fully supporting major DSC/DV peripherals, customer can design DSC/DV system with minimum cost.

Features

- Image processor
 - Support CMOS sensor up to 16MP
 - CCIR601/656 video signal input
 - Advanced color processing engine with color-shading, lens-shading correction, adaptive anti-alias color interpolation, adaptive 2D edge-enhancement, adaptive 2D noise-reduction, bad pixel cancellation and AE/AWB/AF/Histogram measurement
 - 8x digital zoom for still image capture
- Video Codec
 - VGA size AVI capture and playback at 30 fps
 - 4x digital zoom for video capture
- Audio Codec
 - IMA-ADPCM coding/decoding
- Storage
 - Support SPI flash and SLC/MLC NAND flash
 - Support MMC/SD/SDHC
- CPU and Memory
 - Embedded turbo CPU
 - Booting from SPI NOR flash or NAND flash
- LCD/TV display
 - Support 8-bit memory bus and serial-RGB interface LCD
 - Support both NTSC/PAL composite video output
- USB
 - Compliant with USB 2.0 High-Speed
 - Mass-storage class, Video class, PictBridge
- SDRAM
 - Support 16-bit SDR SDRAM up to 256Mb
 - Small SDRAM buffer required
- Built-in RTC, Power MOS, Battery detection and Power-On-Reset circuit
- Package
 - 128-pin LQFP

Functional Diagram

