

VisionMOS Flexible Multimedia Platform (FMP)

Overview

The VisionMOS Flexible Multimedia Platform (FMP) is a compact consumer electronics reference platform that can serve a variety of development roles. It is equipped with a modular image sensor port and high performance multimedia processor at its core. The platform also supports most common peripherals for this product class including USB 2.0, LCD display, high performance media codecs, and a flexible graphical user interface. The system can be configured as a point and shoot digital still camera, portable media player, video camera, and internet peripheral.



The VisionMOS FMP is ideal as the basis for fast path to market which can incorporate their unique image sensors, displays and audio devices and industrial design configurations. It can be provided as a stand alone hardware platform for evaluation, electronically as designs, layouts and firmware, or customized to meet specific market needs. A variety of customer support options are available.

The FMP is modular, which also allows for a variety of quickly customized configurations. Changes to the sensor, display, power supply and interfaces are possible. The system is highly programmable, and sports high performance hardware acceleration for image / video / audio intensive applications.

The physical size when completely assembled is 2.5" x 4.25" x 3/4" in its prototype configuration. The system may be optionally packaged in a housing or customized to create a single board form factor for production. It is fully portable, operating on AA

batteries. It also has all firmware loaded for immediate operation right out of the package.

Features

- Sensor Interface
 - CMOS & CCD support
 - 12 bit color depth
 - AF motor control
 - Mechanical Shutter Support
 - Strobe/Flash Support
 - Variable high speed clock support
 - ITU-R BT.601 (Digital) Video input
- Video Codecs
 - WMV / WMA
 - Quicktime compatible MP4
 - Xvid
- Color / Image Processing
 - Hardware driven color processing chain
 - Integrated automatic image finishing
 - JPEG still image capture to 16 M pixel
- Display Interface
 - Highly programmable
 - 8 Bit data bus
 - 10 independent control signals
 - RGB / delta / YUV4:2:2 output support
- Power Interface
 - Battery, DC input or USB power options
 - Integrated Li Ion Battery Charger
 - High efficiency power management
- Flash Interface
 - Auto, on/off, RED Eye
 - LED or Xenon support
- Audio Interface
 - Built-in Linear CODEC
 - Stereo DAC
 - Digital Channel Filters
 - Differential-input microphone amplifier
- Main Board
 - Zoran COACH™ Processor
 - NAND Flash
 - DDR
 - SD Card
 - Audio CODEC
 - NTSC/PAL analog TV output
 - USB 2.0 HS
 - UART programming interface
- Mechanical
 - Modular printed circuits
 - Available Plexiglas housing
 - Customizable to meet form factor needs

Architecture

The VisionMOS FMP is a multi-board modular consumer electronics platform. Its architecture is based on a high performance Zoran COACH 9 processor. The system is made up of 5 primary subsystems, although custom configurations including single board solutions are possible.

The main processor board contains all interconnects to the other subsystems. It houses the COACH™ processor, system memory, and primary interfaces including USB and SD removable media.

The LCD assembly contains the LCD panel (which may also be custom selected), as well as user configuration buttons and feedback indicators.

The power subsystem has a number of options, although the primary configuration is 3xAA standard alkaline batteries for easy replacement. Other options including lithium batteries and charging are possible.

The image sensor board enables a modular configuration of CMOS or CCD sensors, with a variety

of optics options. Included in the baseline system is a high performance CMOS sensor and fixed focus options. Many customization options are available.

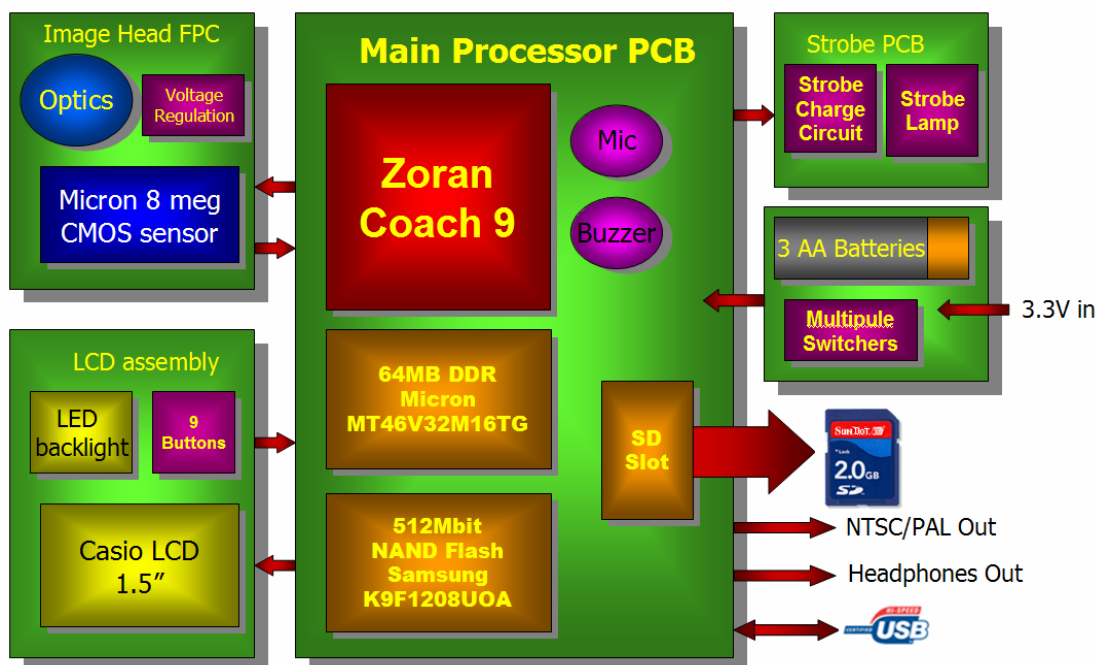
System Use

The FMP typically requires customization to meet a specific product need. As it is, it can perform digital point-and-shoot camera and multimedia player functions.

The FMP hardware and industrial design can be fully customized to meet customer needs. New designs can also be concurrently developed with customer teams using the schematic baselines.

Software development and customization is possible with VisionMOS engineering support. Upon customization, unique object programming code is made available to the customer team to support production as necessary.

Licensing options for production are also available.



Ordering Information

The VisionMOS Flexible Multimedia Platform is available at: <http://www.VisionMOS.com>

For custom and/or upgraded features contact our sales team at 480-730-7800 or email Sales@visionmos.com