Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

OVMed™-A1 Image Processing Unit product brief

Streamlining High Performance Medical Imaging

lead free

available in
a lead-free
package

The OVMed-A1 Image Processing Unit (IPU) is a single board solution featuring the OV6946, OmniVision's latest advanced image sensor for medical applications. The OVMed-A1 IPU integrates the company's advanced image CMOS sensor, signal capture, and advanced ISP system. The IPU allows customers to leverage the benefits of an extremely small image sensor with easy integration of the OV6946 into their existing system. The IPU also shortens time-to-market of customer's system while maintaining industry-leading image quality.

Find out more at www.ovt.com.

OmniVision®

OVMed™-A1

Applications

- Medical and Veterinary Endoscopes
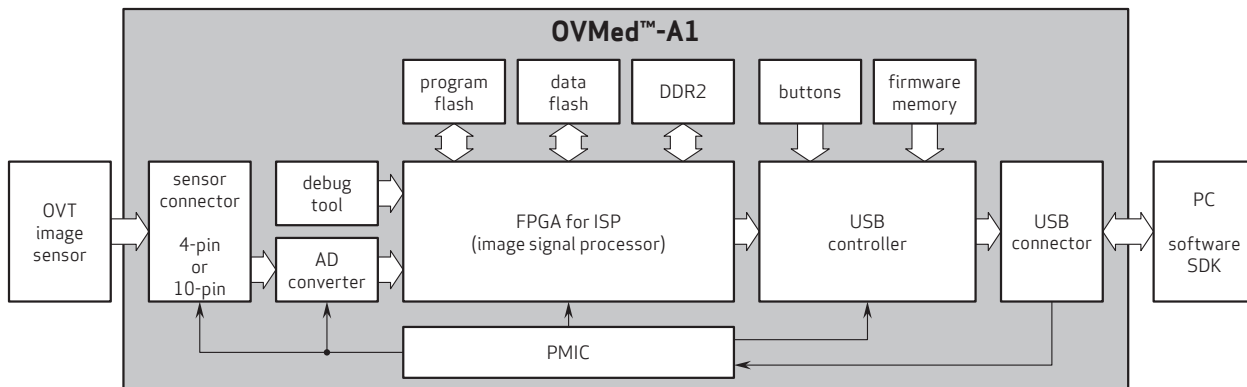- Security and Surveillance System
- Industrial Processing Cameras

Product Features

- Integrated design: sensor, processor bridge, ISP, and PC interface
- Small form factor to fit space-constrained equipment
- Easily adjustable system parameters with pre-defined buttons
- Advanced ISP delivers high quality images
- Ready-to-use Software Development Kit (SDK) to facilitate IP integration
- Seamless evaluation and build with customer equipment
- Market-ready, end-to-end solution
- Software compatibility with Windows, Linux, and Android platforms

Ordering Information

- **OV00000-EG00-0093**
  OVMed ISP (advanced) with USB output (E3)

  Package Includes:
  - OmniVision camera AA module with OV6946 image sensor
  - PCB board for OV6946 interface, OV426 A/D converter and ISP
  - USB cable with USB mini connector
  - CD-ROM containing:
    - Installation program
    - OVMed™_SDK_Install_Guide
    - OVMed™_SDK_User_Guide
    - Demo programs with source code

Product Specifications

- Supports image size: 400 x 400
- Image output formats: RGB, RAW, and YUV
- Sensor interface to 4 pin OV6946 mixed signal interface
- Output interface USB2.0 interface
- USB 5V power supply
- Current 300 mA (min >30 mA; max <500 ma)
- Supports AEC/AGC/AWB control
- Supports manual white balance
- Supports brightness/contrast adjustment
- Supports saturation adjustment
- Supports sharpness adjustment.
- Supports deFPN and de-noise function

Software Development Kit (SDK)

- The OVMed-A1 IPU comes with a Software Development Kit (SDK), a ready-to-use integration tool that enables customers to develop applications as needed. The SDK also provides a C++ callable function library. The SDK's main features include:
  - Provides system initialization and load setting
  - Provides interface for image output formats (RAW, YUV, RGB)
  - Provides interface for system controls for settings such as brightness, contrast, saturation, sharpness, and de-noise
  - Auto white balance (AWB) and Manual white WB control.
  - Customizable development of new Graphical User Interfaces (GUIs) and applications
  - No hardware modification or registration required
  - Supports customer-defined function buttons
  - Provides tutorial for API use with executable source code
  - Library provided in binary (DLL) format
  - Supports Windows OS, MacOS and Linux OS* platforms

Mechanical Specifications

- Size L: 86 mm W: 35 mm
- Power switch: 1
- Pre-defined adjustment buttons: 7
- Input connector: 4-pin OmniVision AA Module; 10-pin Hirose connector
- Output USB connector: Mini USB

Functional Block Diagram