

# OVMed® ISP product brief

### Advanced Class Medical Imaging Processing Unit – Compact IPU With High Image Quality for Endoscope CCUs

OMNIVISION's OVMed® OH1093 Image Processing Unit (IPU) is an ASIC-based, imaging solution featuring advanced automatic exposure and gain control, RGB noise reduction, edge enhancement and RAW 8/10/12 image output. The OVMed® OH1093 IPU interfaces with our high-performance medical image sensors and can fit into an endoscope's camera control unit (CCU).

This IPU allows medical designers to leverage the benefits of our extremely small image sensors with easy integration into their systems, enabling a short time to market with high image quality.

Find out more at www.ovt.com.



## OVMed® OH1093

### **Evaluation Kit Ordering Information**



- Contact Sales Rep OH1093 evaluation kit
- Package Includes:
- OMNIVISION camera AA module or OVMed® cable module
- PCB board camera interface, OV426 A/D converter and ISP
- USB cable with USB mini connector
- Download available for OvtMedical demo software

#### **Applications**

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

#### **Mechanical Specifications**

- Size L: 86 mm W: 35 mm
- Output USB connector: Mini USB
- Input connector: 4-pin OMNIVISION AA Module; 10-pin Hirose connector

#### **Product Features**

- Integrated design: sensor, processor bridge, ISP, and PC interface
- Small form factor to fit spaceconstrained equipment
- Easily adjustable system parameters with pre-defined buttons
- Advanced ISP delivers high quality images
- Seamless evaluation and build with customer equipment
- Market-ready, end-to-end solution
- Software compatibility with Windows
- Patient Isolation design
- Low EMC/EMI to help passing customer medical device certification

#### **Product Specifications**

- Supports image size: 400 x 400
- Image output formats: RGB, RAW, and YUV
- Output interface USB2.0 interface
- Current 300 mA (min >30 mA; max <500 ma)</li>
- AntLinx™ Analog sensor interface
- USB 5V power supply

- 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

### Functional Block Diagram







