



OVMed®

MEDICAL
DESIGN BRIEFS

2019 Product of the Year

OH0118 Advanced Class Image Processing Unit product brief



Compact IPU With HDMI Output and High Image Quality for Endoscope CCUs

OmniVision's OVMed® OH0118 Image Processing Unit (IPU) is an FPGA-based, imaging solution featuring HDMI output, advanced automatic exposure and gain control, RGB noise reduction, edge enhancement and RAW 8/10/12 image output. The OVMed® 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.



Applications

- Medical Endoscopes and Catheters
- Industrial Video Scopes
- Veterinarian Endoscopes
- Security and Surveillance Monitoring Systems

Product Features

- Integrated design:
 - Sensor
 - Processor bridge
 - ISP
 - Display interface
- Small form factor fits standard medical equipment
- Easily adjustable system parameters with pre-defined buttons
- Advanced ISP delivers high-quality images
- Works stand-alone; no computer needed
- Software tool for customer setting adjustments
- Market-ready, end-to-end solution with pre-defined buttons
- Compatible with HDMI

Product Specifications

- Supports image sizes: 400 x 400 and 200 x 200
- Image output formats: RGB, RAW and YUV
- Display resolution: 720p and 1080p at 60 fps
- 4-pin mixed-signal interface for OmniVision medical image sensors
- Output interfaces: HDMI
- Supports AEC/AGC/AWB control
- 8 hardware buttons support adjustments, including brightness, contrast, saturation and others
- Reconfigurable buttons and settings via USB port connection to a PC

Mechanical Specifications

- Size: Length: 85 mm, Width: 35 mm, Height: 10 mm
- Power switch: 1
- Redefinable adjustment buttons: 8
- Input connector: 4-pin OmniVision AA module; 10-pin connector
- Output USB connector: mini USB
- Output to display: HDMI

OVMed[®] OH0118



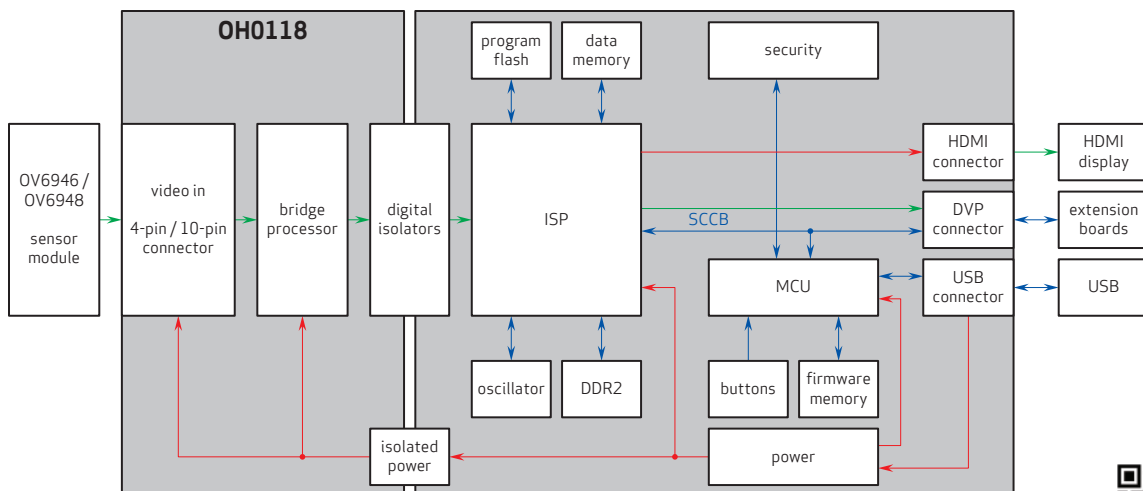
Evaluation Kit Ordering Information

- **Contact Sales Rep**
Complete SDK evaluation kit (advanced) for OV6946-based medical camera

Package includes:

- OmniVision camera AA module/daughter board or OVMed[®] cable module with OV6946 image sensor
- PCB motherboard with OV6946 interface
- USB power adapter
- USB cable with USB mini connector
- HDMI cable for HD monitor
- CD-ROM or USB stick containing:
 - Setup program
 - Installation guide
 - User guide

Functional Block Diagram



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