OH0117

OVMed® ISP product brief

Mini Class Medical ISP Module – Cost-Effective, Compact Module for Endoscopes and Catheters

OMNIVISION's OVMed® OH0117 is an ASIC-based, stand-alone image signal processor (ISP) module. Designed to pair with our high-performance medical image sensors, the OVMed® OH0117 provides a small and cost-effective option for catheters and single-use and reusable endoscope handles.

The OVMed® OH0117 module can be quickly and easily integrated into medical imaging systems, allowing customers to fully utilize the many performance and imaging capabilities this compact module has to offer without extending time-to-market.

Find out more at www.ovt.com.

MEDICAL DESIGN BRIEFS
2019 Product of the Year

OMNIVISION™

OVMed® OH0117

Evaluation Kit Ordering Information

Example Evaluation Kit Pictured Here

- Contact Sales Rep OVMed® OH0117 SoM
- Package includes:
  - OVMed® OH0117 PCB board

Command Set for System Control

The module can be controlled via SCCB. Customers can develop their own applications by using the following commands to access the module:

- System initialization
- System reset and status check
- Start / stop video stream
- Image format selection: YUV, RAW
- Image adjustments:
  - Brightness
  - Saturation
  - Sharpness
  - Contrast, etc.
- White balance switch: Auto / manual
- Lens shading correction
- System ID check
- Firmware version check

Applications

- Medical Endoscopes and Catheters
- Dental Visualization Equipment
- Industrial Video Scopes
- Security and Surveillance Monitoring Systems

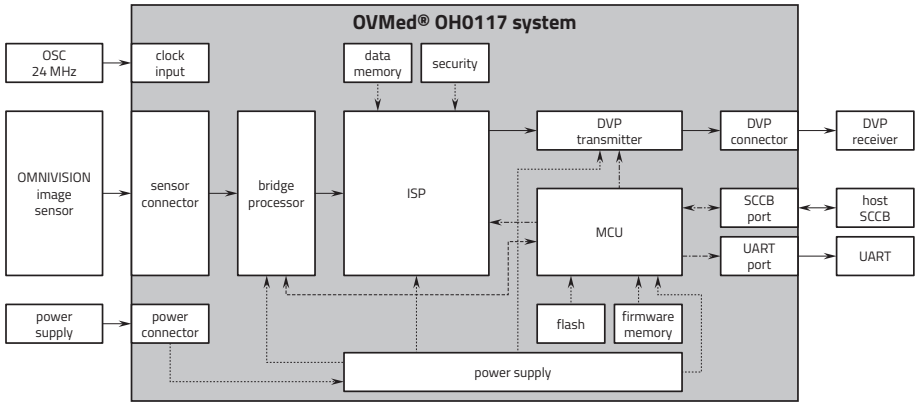
Product Features

- Integrated design:
  - Sensor interface
  - Processor bridge
  - ISP
  - Host interface
- Compact form-factor fits inside endoscope handle
- GPIO pins for easy connection to buttons to control the system
- Access via SCCB bus
- ISP with excellent image quality
- Full command set software development kit (SDK) and API for customer software development
- Low power consumption

Product Specifications

- Camera input interface: OV6946
- Supports image size: 400 x 400
- YUV, RAW video output
- Video output frame rate: 30 fps
- Lens shading correction, defect pixel compensation, de-noise, and black level control
- Exposure / gain control: Auto / manual
- White balance control: Auto / manual
- Mirror / flip
- Control port: SCCB device
- AntLinx™ Analog sensor interface for OVM6946
- Video output interface: DVP
- Extension GPIOs: 7
- Illumination control
- Power-up time: 100 ms
- System latency: 33 ms
- Power supply 3.3V / 1.8V
- Current: <330 mA
- Size: L: 36 mm, W: 13 mm, H: 2.8 mm
- RoHS, REACH, CE, IEC 60601 (limited)

Functional Block Diagram



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