



OVMed[®]-0117 Mini Class Medical Image Signal Processor Module product brief



Cost-Effective, Compact Module for Endoscopes and Catheters



available in
a lead-free
package

OmniVision's OVMed[®]-0117 is an ASIC-based, stand-alone image signal processor (ISP) module. Designed to pair with our high-performance medical image sensors, the OVMed[®]-0117 provides a small and cost-effective option for catheters and single-use and reusable endoscope handles.

The OVMed[®]-0117 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.



Applications

- Medical Endoscopes and Catheters
- Industrial Video Scopes
- Dental Visualization Equipment
- Security and Surveillance Monitor 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
- Advanced 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 and OV6948 mixed signal interface
- Supports image size:
 - 400 x 400
 - 200 x 200
- YUV, RAW video output
- Video output frame rate: 30 fps
- Lens shading correction, defect pixel compensation, de-noise, black level control
- Exposure / gain control: Auto / manual
- White balance control: Auto / manual
- Mirror / flip
- Control port: SCCB device
- Video output interface: DVP
- Extension GPIOs: 7
- Illumination control
- Power-up time: 100 ms
- System latency: 100 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), IEC 62304 certified

OVMed[®]-0117



Ordering Information

- OH00000-EG02-1A-0117 OVMed[®]-0117 SoM

Package includes:
 - OVMed[®]-0117 PCB board
 - CD-ROM containing:
 • OVMed[®]-0117 datasheet

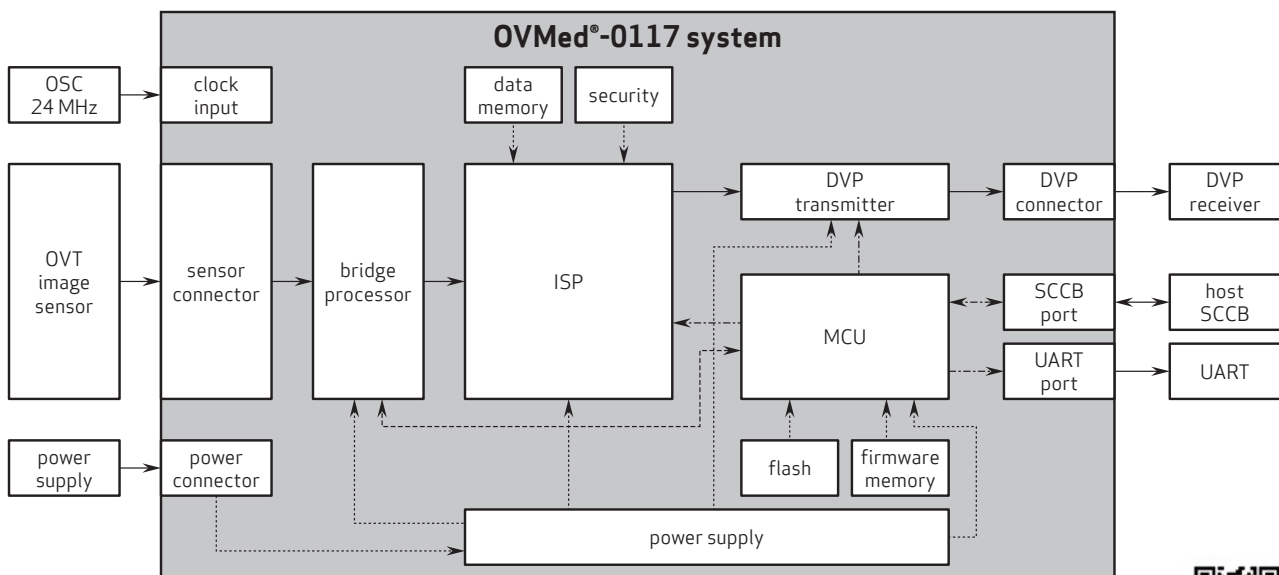


Command Set for System Control

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

Functional Block Diagram



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