



# OH0131



## OVMed® ISP product brief

### OVMed® Image Signal Processor for Up to 2MP Medical Endoscope Cameras

OVMed® OH0131 image signal processor (ISP), an easy-to-implement solution for reusable and disposable endoscopes connected to handheld tablet consoles or camera control units (CCUs). It supports all OMNIVISION medical image sensors up to 2-megapixel (MP) resolution, including the popular OCHTA, OVM6946, OCHFA, OCHSA and OCH2B imagers.

The OH0131 supports OMNIVISION's proprietary AntLinX™ CMOS chip-on-tip endoscopy imaging interface and MIPI interfaces. It serves as a kernel board to integrate with any MIPI-input post-processing board by an SoC, FPGA or x86 platform to build custom CCUs or handheld tablet consoles. The OH0131 kernel features the latest state-of-the-art image pre-processing algorithms supporting brightness,

contrast, saturation, sharpness, hue, white balance and gamma adjustment with advanced noise reduction. Post processing board performed by a third-party partner utilizing an SoC or FPGA will target (but is not limited to) LED drivers, patient isolation, high dynamic range, image rotation, image mask/onscreen display, H.264 compression, high-definition multimedia interface, and Wi-Fi output.

The OVMed® OH0131 is available now; OMNIVISION plans to put the ISP through IEC 60601 EMC and EMI pre-scan testing. The miniature board is available in a small form factor of 63 mm x 51 mm.

Find out more at [www.ovt.com](http://www.ovt.com).



# OVMed® OH0131

## Evaluation Kit Ordering Information



Example Evaluation Kit Pictured Here

- Contact Sales Rep OH0131 evaluation kit for OCHFA-based medical camera
- Package Includes:
  - OMNIVISION camera AA module or OVMed® cable module for OCHFA
  - PCB board for AntLinX™ and MIPI input interface
  - USB cable with USB mini connector

## Product Features

- Integrated design: processor bridge, ISP, and host interface
- Advanced ISP delivers high quality images
- Small form factor to fit space-constrained equipment
- Seamless evaluation and build with customer equipment
- Market-ready, end-to-end solution

## Applications

- Medical and Veterinary Endoscopes
- Industrial Processing Cameras

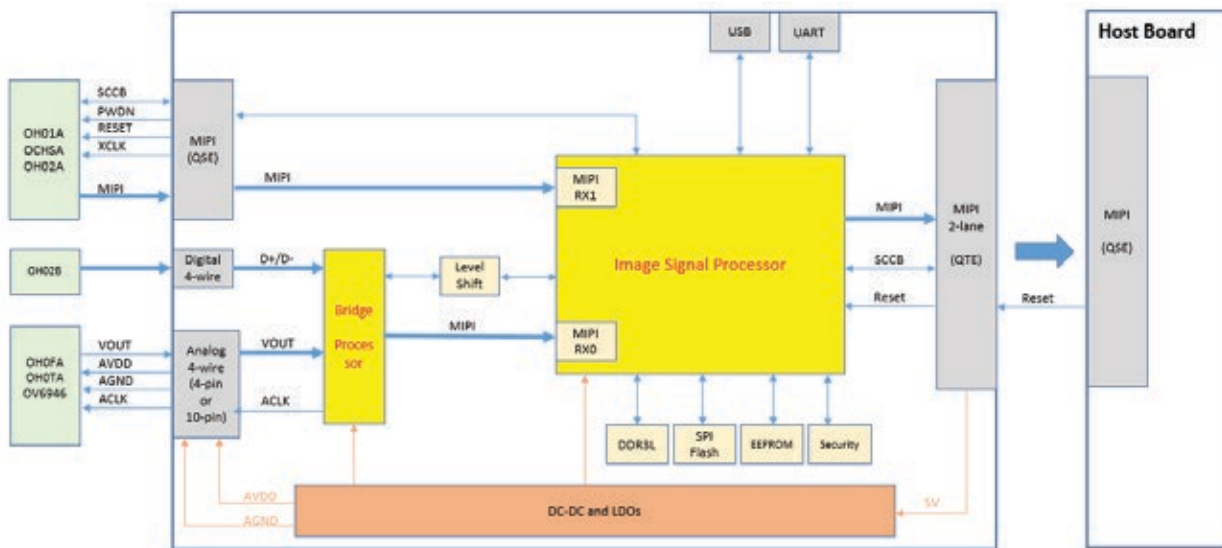
## Product Specifications

- Supports image size:
  - 1920 x 1080
  - 1500 x 1500
  - 800 x 800
  - 720 x 720
  - 400 x 400
- Supports AEC / AGC / AWB control
- Supports auto and manual white balance
- Supports brightness / contrast adjustment
- Supports saturation adjustment
- Supports sharpness adjustment
- Supports 2D / 3D de-noise function
- AntLinX™ Analog sensor interface for OVM6946, OCHTA, OCHFA, and OCH2B
- Supports OCHSA, OCH2B, OH02A, OCHFA, OCHTA, OVM6946
- Image output formats: RAW and YUV
- Output interface USB3.0 interface and MIPI (kernel board)
- Current <500 mA

## Mechanical Specifications

- Size: 65 mm x 51 mm
- OH0131 kernel board output connector: 40-pin QSE-020-01 or AXE540127
- OH0131 dev kit output USB connector: USB3.0 Type C

## Functional Block Diagram



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