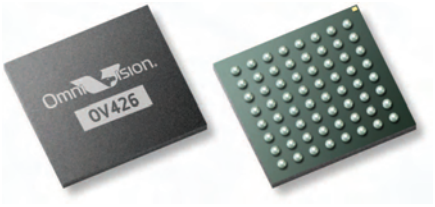


OV426 companion ASIC product brief

Compact Image Signal Processor for Medical Imaging Applications

lead free

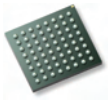
available in a lead-free package

The OV426 is a single chip solution for small medical image sensors like the OV6946 and OV6948. The OV426 provides an integrated analog-to-digital data conversion using a built-in A/D converter (ADC), black level calibration (BLC), AEC/AGC and a final digital video parallel output (DVP). As shown in figure 2-1, the OV426 supports a standard SCCB interface to communicate with the system and manipulate the above mentioned functions.

During operation, the OV426 decodes the proprietary analog output from the OV6946 and digitizes it by an ADC. The generated digital signals will then be processed by a digital signal processor (DSP) and finally, standard DVP outputs are sent out.

Find out more at www.ovt.com.

OV426



Applications

- Endoscopes
- Catheters
- Wearables

Product Features

- complete imaging front-end solution
- 400 x 400 at 30 fps
- support for the following ISP functions:
  - ADC
  - BLC
  - AEC/AGC
  - MWB
- analog input
- support for:
  - SCCB control
  - 10-bit DVP data output
  - SPI master
- flexible input clock
- external system clock or independent crystal; internal PLL
- low voltage operation
- 6 mm x 6 mm to fit into handle or at back-end, near ISP in medical endoscope and other video devices

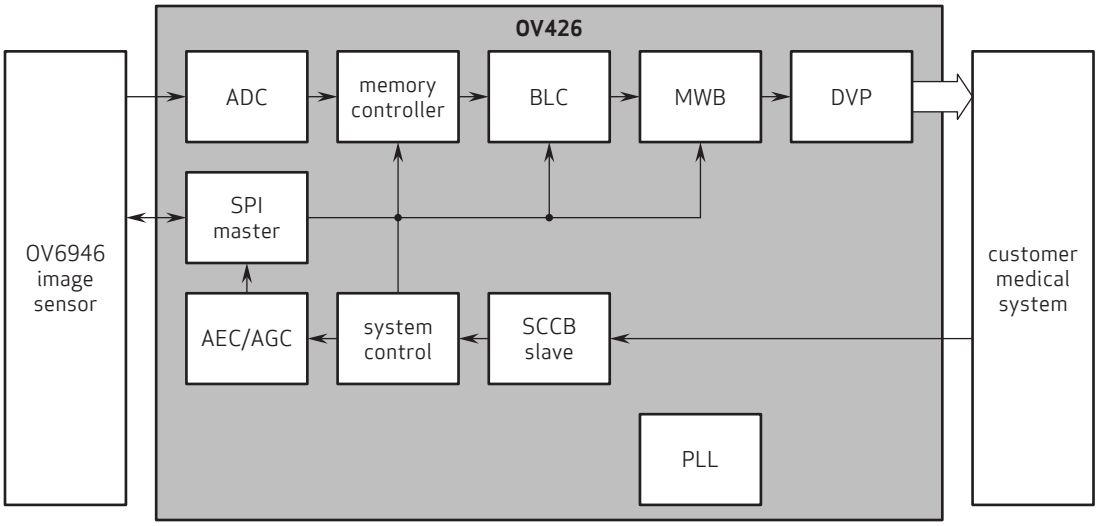
Ordering Information

- **OV00426-B64G**
  (lead-free, 64-pin BGA)

Product Specifications

- **power supply:**
  - **core:** 1.5V
  - **I/O:** 3.3V
  - **analog:** 3.3V
- **temperature range:** -30°C to +70°C
- **package dimensions:**
  6 mm x 6 mm

Functional Block Diagram



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Version 1.0, July, 2017