



OVM9724 720p HD CameraCubeChip™ product brief



Reusable Display Handle



Disposable Blade



HD Camera with Built-In LED

Industry's Most Compact Front-Facing HD Camera for the Next Generation Disposable Laryngoscope



available in a lead-free package

OmniVision's ultra-compact OVM9724 CameraCubeChip™ captures 720p high definition (HD) video at 30 frames per second (fps) in an industry-leading miniaturized module of 3.9 x 2.9 x 2.4 mm. Because the OVM9724 CameraCubeChip is a reflowable all-in-one camera drop-in solution, the need for additional components is eliminated and manufacturing is significantly streamlined.

The low-power 1/9-inch OVM9724 utilizes OmniVision's powerful OmniBSI™+ pixel architecture to enable high quality color images and fast frame 720p HD video at 30 fps or cropped VGA at 60 fps. This combination of

high-performance and small form factor allows HD cameras to be integrated into ultra-slim, narrow-bezel devices, making it an attractive solution for the next generation disposable laryngoscope.

The OVM9724 provides full-frame, sub sampled or windowed 8- and 10-bit images. All required image processing functions, including exposure control and defective pixel cancelling are programmable through the serial camera control bus (SCCB) interface.

Find out more at www.ovt.com.



Applications

- Disposable Medical, Dental, Veterinarian, and Industrial Endoscopes

Product Features

- non-autoclavable
- supports global analog gain
- MIPI and D-PHY specification (contains one clock lane and one data lane) with a maximum of 400 Mbps data transfer rate
- supports free-running clock and gated clock
- low operating voltage and low power consumption for embedded portable applications
- supports down sample mode and VarioPixel*
- high sensitivity and low dark current for low-light conditions
- auto black level calibration
- defect correction capability

OVM9724



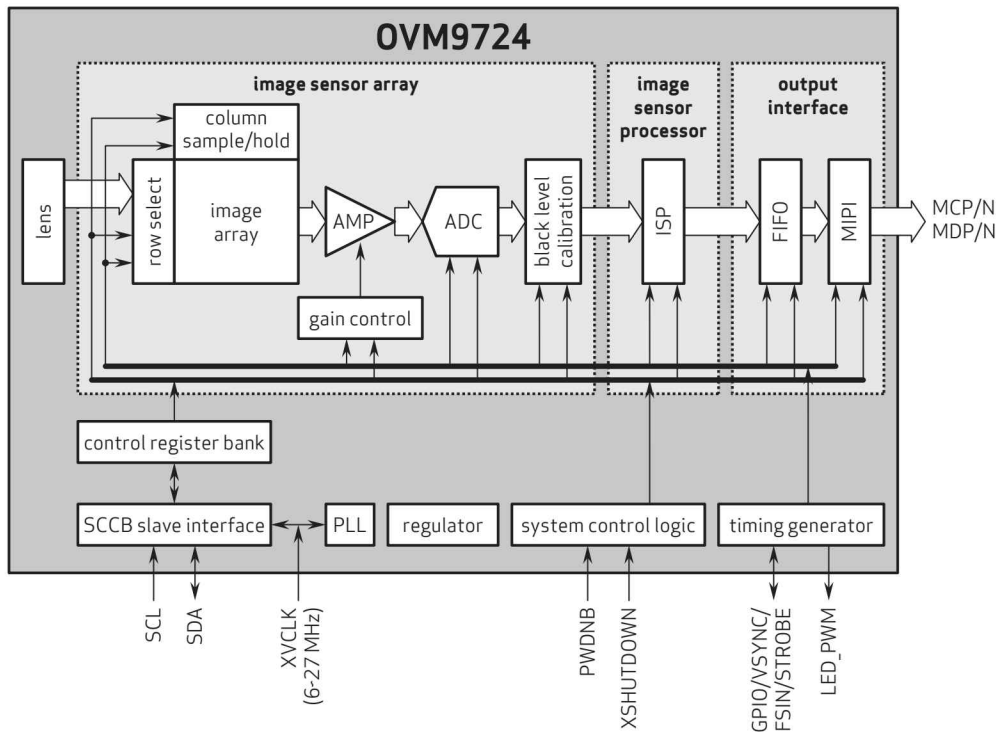
Ordering Information

- **OVM9724-RADA-1B-Z** (color, lead-free)
28-pin, 1MP CameraCubeChip™, 50 mm OD, visible version

Technical Specifications

- **active array size:** 1280 x 720
- **output formats:** 10-bit RAW RGB data
- **maximum image transfer rate:** 30 fps
- **lens size:** 1/9"
- **power supply:**
 - core: 1.5V
 - analog: 2.8V
 - I/O: 1.8V
- **diagonal field of view (FOV):** 62.8°
- **power requirements:**
 - active: 55 mA
 - hardware standby: 60 μA
 - XSHUTDOWN: 20 μA
- **f no.:** 3.0
- **focal length:** 1.645 mm
- **scan mode:** progressive
- **pixel size:** 1.4 μm x 1.4 μm
- **image area:** 1840 μm x 1040 μm
- **temperature range:**
 - operating: -30°C to +70°C junction temperature
 - stable image: 0°C to +50°C junction temperature
- **package dimensions (including ball height):**
 - RADA: 3900 x 2890 x 2394 μm

Functional Block Diagram



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