

OVM9724 720p product brief



Compact Front-Facing HD CameraCubeChip® for Next Generation Disposable Laryngoscope

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.





OVM9724

Ordering Information

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

Applications

• disposable medical, dental, veterinarian, and industrial endoscopes

Product Features

- non-autoclavable
- MIPI and D-PHY specification (contains one clock lane and one data lane) with a maximum of 400 Mbps data transfer rate
- low operating voltage and low power consumption for embedded portable applications
- high sensitivity and low dark current for low-light conditions

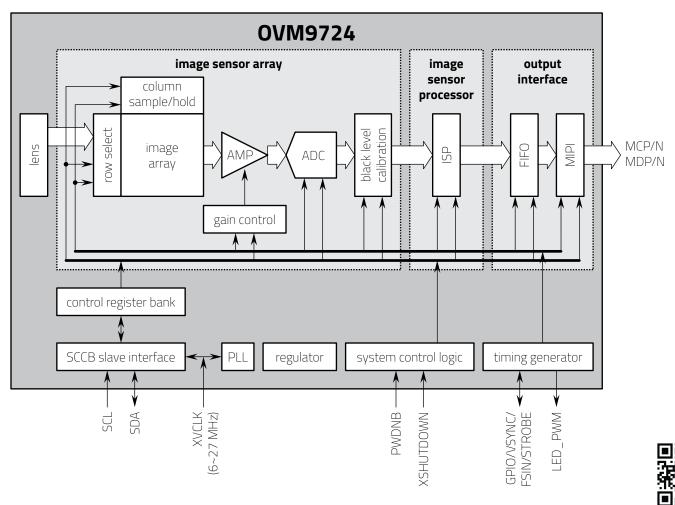
- supports global analog gain
- supports free-running clock and gated clock
- supports down sample mode and VarioPixel[®]
- auto black level calibration
- defect correction capability

Functional Block Diagram

Technical Specifications

- active array size: 1280 x 720
- maximum image transfer rate: 30 fps
- power supply:
 core: 1.5V
- analog: 2.8V
- I/0: 1.8V
- power requirements:
 active: 55 mA
- hardware standby: 60 μA
 XSHUTDOWN: 20 μA
- temperature range:
 operating: -30°C to +70°C junction temperature
- stable image: 0°C to +50°C junction temperature

- output formats: 10-bit RAW RGB data
- optical size: 1/9"
- diagonal field of view (FOV): 62.8°
- 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
- package dimensions (including ball height):
- RADA: 3900 x 2890 x 2394 μm



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