

OVM9724 720p HD CameraCubeChip™ product brief









HD Camera with Built-In LED

lead free

available in a lead-free package

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

OmniVision's ultra-compact OVM9724
CameraCubeChip™ captures 720p high definition (HD)
video at 30 frames per second (fps) in an industryleading 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

OVM9724 🧐



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

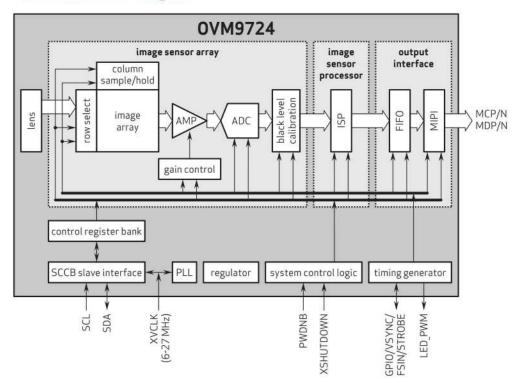
■ OVM9724-RADA-1B-Z (color, lead-free) 28-pin, 1MP CameraCubeChip™, 50 mm OD, visible version

Technical Specifications

- active array size: 1280 x 720
- maximum image transfer rate: 30 fps
- power supply: core: 1.5V
- analog: 2.8V I/O: 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
- lens size: 1/9"
- diagonal field of view (FOV): 62.8°
- fno:30
- focal length: 1.645 mm
- scan mode: progressive
- pixel size: 1.4 μm x 1.4 μm
- image area: 1840 μm × 1040 μm
- package dimensions (including ball height): - RADA: 3900 x 2890 x 2394 µm

Functional Block Diagram



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