



Reusable Display Handle



Disposable Blade



HD Camera with Built-In LED

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-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

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 μ A
 - XSHUTDOWN: 20 μ A
- 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 μ m x 1.4 μ m
- image area: 1840 μ m x 1040 μ m
- package dimensions (including ball height):
 - RADA: 3900 x 2890 x 2394 μ m

Functional Block Diagram

