

OV9734 720p HD product brief



available in
a lead-free
package

OmniVision's Smallest 720p High Definition Sensor for Next-Generation Notebooks and Mobile Devices

The OV9734 is an ultra-compact and power efficient CameraChip™ image sensor designed for slim notebooks, tablets, handsets, and other devices that require a thin bezel. Built on OmniVision's PureCel™ technology, the OV9734 CameraChip™ delivers premium quality images and video, while consuming significantly less power than previous generation image sensors.

OmniVision's 1/9-inch OV9734 is capable of capturing crisp 720p HD video at 30 frames per second (fps) or VGA video at 45 fps, while consuming approximately

25 percent less power than the previous generation 720p sensor. Additionally, the OV9734 meets the video quality specifications for popular video conferencing platforms.

To fit ultra-thin bezel devices, the OV9734 comes in a compact package that can meet 2.5 mm z-height and is 47 percent smaller in y-dimension compared to the previous generation 720p sensor.

Find out more at www.ovt.com.



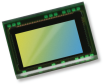
Applications

- Smart phones
- PC multimedia
- Tablets
- Digital Still Cameras
- Toys

Product Features

- support for image sizes: full size (1280x720), VGA (640x480), 2x2 RGB binning (640x360) and 2x2 BW binning (640x360)
- support for horizontal and vertical sub-sampling
- automatic black level calibration (ABLC)
- support for output formats: RAW output with MIPI
- defect pixel correction (DPC)
- support for black sun cancellation
- on-chip phase lock loop (PLL)
- standard SCCB interface
- capable of maintaining register values at software power down
- GPIO tri-state configurability and programmable polarity
- programmable controls for frame rate, mirror and flip, gain/exposure, and windowing

OV9734



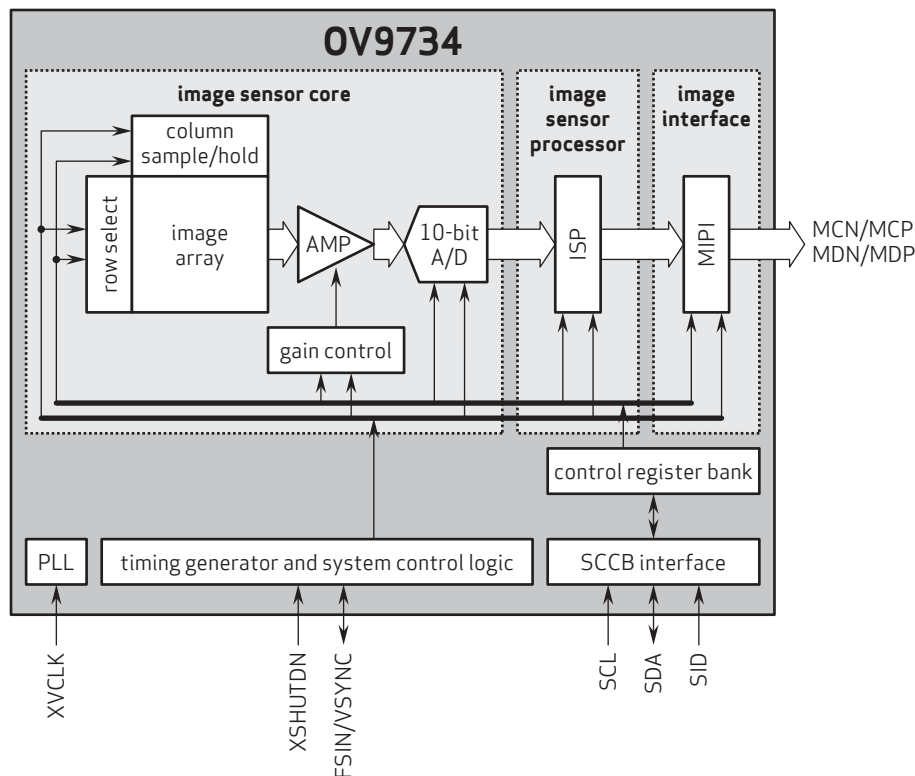
Ordering Information

- OV09734-H16A
(color, lead-free, 16-pin CSP5)

Product Specifications

- active array size: 1280 x 720
- input clock frequency: 6 - 27 MHz
- power supply:
 - core: 1.2VDC $\pm 5\%$
 - analog: 2.6 - 3.0V (2.8V normal)
 - I/O: 1.8V
- max S/N ratio: TBD
- dynamic range: TBD
- maximum image transfer rate: 30 fps
- sensitivity: TBD
- scan mode: progressive
- maximum exposure interval: 798 x t_{row}
- pixel size: 1.4 μm x 1.4 μm
- dark current: TBD
- image area: 1819.58 μm x 1033.34 μm
- package dimensions: 2532 μm x 1722 μm
- power requirements:
 - I_{DD-A} : TBD
 - I_{DD-IO} : TBD
 - I_{DD-P} : TBD
 - XSHUTDOWN: TBD
- temperature range:
 - operating: -30°C to +85°C junction temperature
 - stable image: 0°C to +50°C junction temperature
- output formats: RAW RGB
- lens size: 1/9"
- lens chief ray angle: 32.1°

Functional Block Diagram



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