



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



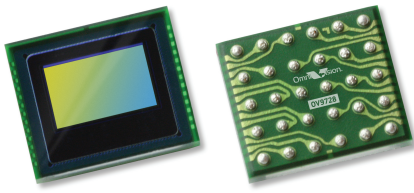
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OV9728 720p HD product brief



Low-Power and Cost-Efficient 720p HD CameraChip™ Sensor for Portable Devices and Smart TVs



available in
a lead-free
package

The OV9728 is a low-power, cost-efficient CameraChip sensor designed for secondary camera applications in notebooks, tablets, smartphones and smart TVs. The high-performance OV9278 delivers exceptional 720p high-definition (HD) video, which exceeds the criteria of premium video specifications for Microsoft® Lync™ and Skype®.

The OV9728 utilizes a 1.75-micron OmniBSI+™ pixel architecture to deliver best-in-class low-light sensitivity, a 60 percent improvement in full-well capacity (FWC), a 4 dB improvement in dynamic range, and a significantly enhanced signal-to-noise ratio (SNR). A 1/6.5-inch sensor, the OV9728 can record 720p HD video at 30 frames per second (fps) or high-quality cropped VGA video at 60 fps.

The OV9728 provides full-frame, sub-sampled, windowed or scaled 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. It features a one-lane high-speed MIPI interface and fits into a compact 6 x 6 x 3 mm module.

Find out more at www.ovt.com.



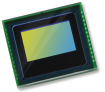
Applications

- Ultrabooks/Notebooks
- Smartphones
- Gaming
- Tablets
- Televisions
- Toys
- PC Multimedia

Product Features

- MIPI and D-PHY specification (contains one clock lane and one data lane) with a maximum of 600 Mbps data transfer rate
- supports free-running clock and gated clock
- supports global analog gain
- high sensitivity and low dark current for low-light conditions
- low operating voltage and low power consumption for embedded portable applications
- supports down sample mode and VarioPixel*
- auto black level calibration
- defect correction capability

OV9728



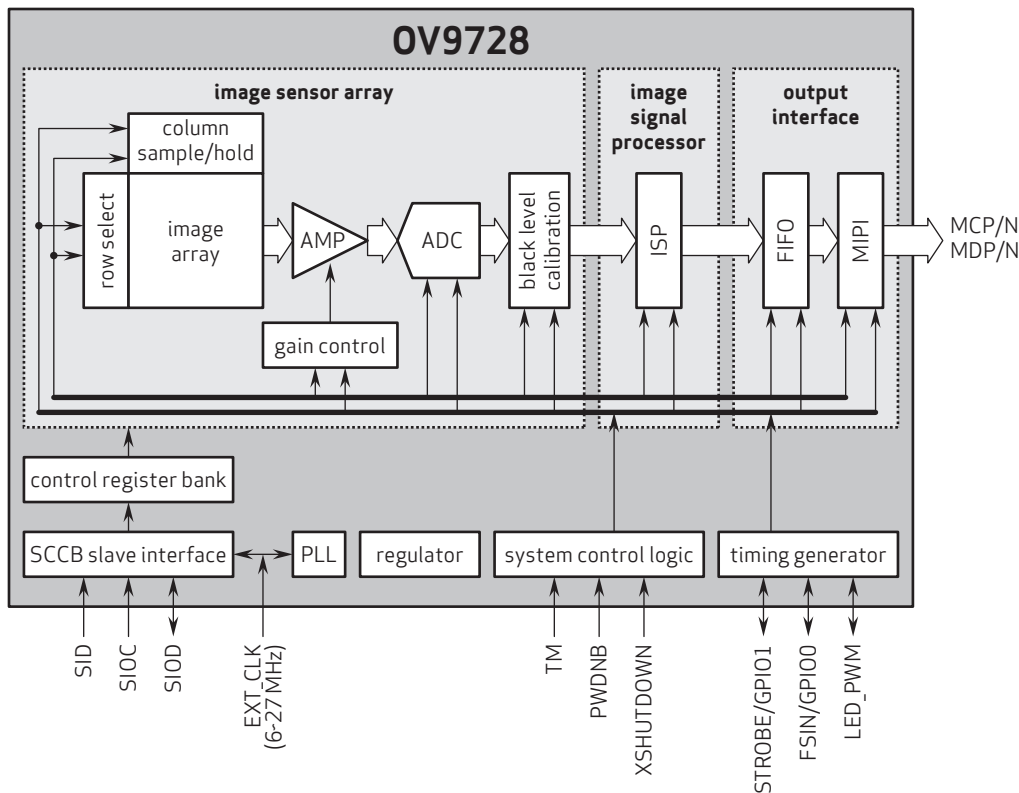
Ordering Information

- OV9728-A30A (color, lead-free, 30-pin CSP3)

Product Specifications

- active array size: 1296 x 808
- power supply:
 - core: 1.5V
 - analog: 2.8V (typical)
 - I/O: 1.8V (typical)
- power requirements:
 - I_{DD-A}: 18 mA
 - I_{DD-IO}: 28 mA
 - XSHUTDOWN: 5 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: 1/6.5"
- lens chief ray angle: 31.6° non-linear
- input clock frequency: 6 - 27 MHz
- max S/N ratio: 38 dB
- dynamic range: 74 dB @ 8x gain
- maximum image transfer rate: 30 fps
- sensitivity: 1000 mV/lux-sec
- scan mode: progressive
- maximum exposure interval: 824 x t_{row}
- pixel size: 1.75 μm x 1.75 μm
- dark current: 12 e⁻/s @ 50°C junction temperature
- image area: 2296 μm x 1428 μm
- package dimensions: 3810 μm x 3260 μm

Functional Block Diagram



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