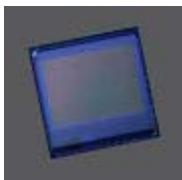


## Products



### OV14825

Color CMOS 14 Megapixel (4416 x 3312) Image Sensor with OmniBSI Technology

The OV14825 is the ultimate mobile imaging solution, combining 14.6-megapixel photography with 1080p/definition (HD) video. The 1/2.33 inch OV14825 utilizes OmniVision's most advanced 1.4 micron OmniBSI™ architecture to achieve optimal performance and low-light sensitivity in the industry's smallest format. The 1/2.33 inch OV14825 has an active array of 4416 x 3312 backside illumination pixels operating at 15 fps in full res while delivering full 1080p HD video at 60 fps, using a binning feature to achieve higher sensitivity. In full H mode, the sensor also provides additional pixels used for electronic image stabilization (EIS).

The OV14825's 28° chief ray angle (CRA) optimizes it for use in mobile camera applications. The sensor's s form factor is largely attributable to its CSP3 packaging, allowing for the development of ultra compact mo products. The OV14825 is also available in RW (bare die) for module integrators. The OV14825 enables cam designs with a low bill of materials and reduced power consumption. It is offered with industry-standard connectivity including LVDS, MIPI and DVP and does not require external IC components.

All required image processing functions, including exposure control, white balance, defective pixel canceling canceling are programmable through the SCCB interface. In addition, OmniVision image sensors use propri sensor technology to improve image quality by reducing or eliminating common lighting/electrical sources o contamination, such as fixed pattern noise and smearing to produce a clean, fully stable color image.

## Features

### Ultra high performance

Automatic image control functions: automatic exposure control (AEC), automatic gain control (AGC), automatic white balance (AWB), automatic band filter (ABF), automatic 50/60 Hz luminance detection, and automatic black level calibration (ABLC)

Programmable controls for frame rate, mirror and flip, cropping, and windowing

Image quality controls: lens correction and defective pixel canceling

Support for binning

Standard serial SCCB interface

Digital video port (DVP) parallel output interface

### MIPI serial output interface

Support for output formats: 9/10/11/12-bit RAW RGB (DVP), 10/12-bit RAW RGB (MIPI/LVDS), CCIR656

Support for horizontal and vertical subsa

Support for images sizes: 14.6 MP, 12.7 MP

electronic image stabilization (EIS) 1080

1080p, EIS720p, 720p, VGA, QVGA etc.

Embedded one-time programmable (OTP) memory for part identification


On-chip phase lock loop (PLL)

Programmable I/O drive capability

Built-in 1.5V regulator for core

LVDS serial output interface

## Product Specifications

	<b>OV14825-G02A</b>	<b>OV14825-A16A</b>
<b>Part Number</b>	<b>OV14825-G02A</b>	<b>OV14825-A16A</b>
<b>Package Size</b>	8950 x 6990 $\mu\text{m}$	8935 x 6975 $\mu\text{m}$
<b>Analog/ Digital</b>	Digital	Digital
<b>Chroma</b>	Color	Color
<b>Array Size</b>	4416 x 3312 $\mu\text{m}$	4416 x 3312 $\mu\text{m}$
<b>Resolution</b>	14 MP	14 MP
<b>Package</b>	RW	116-pin CSP3
<b>Optical Format</b>	1/2.33"	1/2.33"
<b>Pixel Size</b>	1.4 $\mu\text{m}$	1.4 $\mu\text{m}$
<b>Frame Rate</b>	60 @ EIS1080p 15 @ Full	60 @ EIS1080p 15 @ Full
<b>Power Consumption</b>	TBD	TBD
<b>Temperature</b>	Operating: -30° - 70°C Stable: 0° - 50°C	Operating: -30° - 70 Stable: 0° - 50°C
<b>Output Format</b>	RAW RGB 	RAW RGB  -