

JAL-OV8865-E08B

OmniVision OV8865 MIPI Interfaz Enfoque automático 8MP Módulo de cámara



Módulo de cámara No.	JAL-OV8865-E08B
Sensor de imagen	OV8865
EFL	3.85 mm
F.NO	2.2
Pixel	3264 x 2448
Ángulo de visión	72.9°
Tipo de lente	1/3.2 pulgada
Dimensiones de la lente	8.50 x 8.50 x 5.40 mm
Tamaño del módulo	17.50 x 9.60 mm
Tipo de módulo	Enfoque automático
Interfaz	MIPI

N. ° de pieza del conector de acoplamiento. 24-5804-030-000-829



Conector de acoplamiento en la placa principal. Se vende por separado.



OV8865 8MP product brief



High-Performance, Low-Power 8-Megapixel Image Sensor for Mainstream Smartphones and Tablets



available in
a lead-free
package

OmniVision's OV8865 is a low-power high-performance 8-megapixel camera solution for mainstream smartphones and tablets. Utilizing an improved 1.4-micron OmniBSI-2™ pixel, the OV8865 delivers best-in-class pixel performance in a smaller, more power efficient package compared to the previous generation OV8835 sensor.

The OV8865 offers a number of performance improvements including a five percent improvement in dynamic range and a 50 percent reduction in dark current, resulting in superior high- and low-light images. Furthermore, the OV8865 consumes considerably less power than the OV8835, achieving the sub 200 mW benchmark preferred by high-end mobile device manufacturers.

The 1/3.2-inch OV8865 supports an active array of 3264 x 2448 (8-megapixels) operating at 30 frames per second (fps) for high-speed photography. The sensor is also capable of capturing 1080p high-definition (HD) video at 30 fps or 720p at 60 fps.

The OV8865 fits into an industry standard 8.5 x 8.5 x 5 mm package.

Find out more at www.ovt.com.



Applications

- Cellular Phones
- Tablets
- PC Multimedia

Product Features

- automatic black level calibration (ABLC)
- programmable controls for frame rate, mirror and flip, cropping, and windowing
- static defective pixel canceling
- supports output formats: 10-bit RAW RGB (MIPI)
- supports horizontal and vertical subsampling
- supports images sizes: 3264x2448, 3264x1836, 2816x1584, 1632x1224, 1408x792
- supports 2x2 binning, re-sampling filter
- standard serial SCCB interface
- up to 4-lane MIPI serial output interface
- embedded 1536 bytes one-time programmable (OTP) memory for part identification, etc.
- two on-chip phase lock loops (PLLs)
- programmable I/O drive capability
- built-in temperature sensor

OV8865



Ordering Information

- OV8865-G04A-1D (color, chip probing, 200 μm backgrounding, reconstructed wafer with good die)

Product Specifications

- active array size: 3264 x 2448
- power supply:
 - core: 1.2V
 - analog: 2.8V
 - I/O: 1.8V, 2.8V
- power requirements:
 - active: 196 mW (full resolution @ 30 fps)
 - XSHUTDOWN: 5 μW
- temperature range:
 - operating: -30°C to +85°C junction temperature
 - stable image: 0°C to +60°C junction temperature
- output formats: 10-bit RAW RGB data
- lens size: 1/3.2"
- lens chief ray angle: 32.2° non-linear
- input clock frequency: 6 - 27 MHz
- max S/N ratio: 36.7 dB
- dynamic range: 68.8 dB
- maximum image transfer rate: 30 fps
- sensitivity: 940 mV/lux-sec
- scan mode: progressive
- pixel size: 1.4 μm x 1.4 μm
- dark current: 20 e⁻/sec @ 60°C junction temperature
- image area: 4614.4 μm x 3472 μm
- die dimensions: 5850 μm x 5700 μm

Functional Block Diagram



4275 Burton Drive
Santa Clara, CA 95054
USA

Tel: +1 408 567 3000
Fax: +1 408 567 3001
www.ovt.com

OmniVision reserves the right to make changes to their products or to discontinue any product or service without further notice. OmniVision and VarioPixel are registered trademarks of OmniVision Technologies, Inc. The OmniVision logo and OmniBSI are trademarks of OmniVision Technologies, Inc. All other trademarks are the property of their respective owners.



OmniVision