

CMOS CAMERA MODULES



your BEST camera module partner

JAL-OV8865-HQ16B V4.0

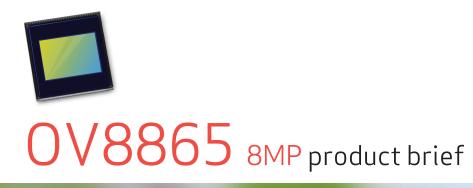
OmniVision OV8865 MIPI Interface Auto-foco 8MP Módulo de Câmera



Módulo de câmara No.	JAL-OV8865-HQ16B V4.0
Sensor de imagem	OV8865
EFL	3.7 mm
F.NO	2.2
Pixel	3264 x 2448
Ângulo de visão	78.9°
Tipo de lente	1/3.2 polegada
Dimensões da lente	8.5 x 8.5 x 5.6 mm
Tamanho do Módulo	19.51 x 18.33 mm
Tipo de Módulo	Auto-foco
Interface	MIPI



www.KaiLapTech.com sales@KaiLapTech.com Tel: (852) 6908 1256 Fax: (852) 3017 6778





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



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 3264×2448 (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 $8.5 \times 8.5 \times 5$ mm package.

Find out more at www.ovt.com.





Applications

- Cellular Phones
- PC Multimedia

■ Tablets

Product Features

- 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

- automatic black level calibration (ABLC) 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



■ 0V08865-G04A-1D

(color, chip probing, 200 µm backgrinding, 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:

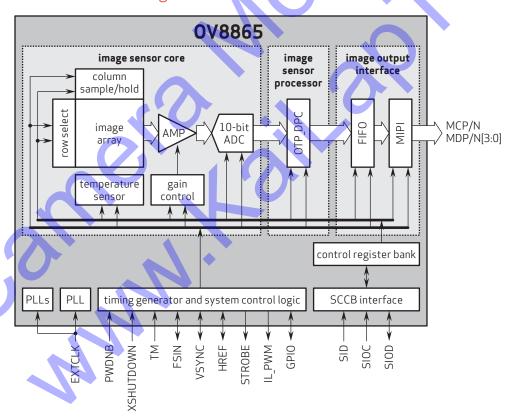
 operating: -30°C to +85°C junction temperature
- stable image: 0°C to +60°C junction temperature
- output formats: 10-bit RAW RGB data

lens chief ray angle: 32.2° non-linear

- lens size: 1/3.2"

- 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

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 logs and OmniB3 are trademarks of OmniVision Technologies, Inc. All other trademarks are the property of their respective owners.

