KLT-USB1A-AF-OV8865 V1.0

OmniVision OV8865 USB 接口 自动对焦 800万像素 摄像头模组

摄像头模组型号	KLT-USB1A-AF-OV8865 V1.0	
图像感光芯片	OV8865	输出格式：MJPG, YVY2
焦距	3.85 mm	10 FPS 3264 x 2488 (4K)
光圈	2.2	20 FPS 1920 x 1080 (Full HD)
像素	3264 x 2448	20 FPS 1280 x 720 (HD 720P)
可视角度	72.9°	支持的操作系统
镜头类型	1/3.2 英寸	Windows 7, 8.1, 10,Vista
镜头尺寸	8.50 x 8.50 x 5.60 mm	Windows XP SP2 under UVC
模组尺寸	30.50 x 28.50 mm	Linux Kernel V2.6.2.1 or later
模组类型	自动对焦	MAC OS 10.4 or later
接口	USB 2.0	工作电压：5V +/- 5%
IMT镜头型号	IMT-1A65H003-N	符合UVC 1.0版

配对USB线型号： KLT-USB1A-Cable
USB延长线。分开售卖。.

OV8865 8MP product brief

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

lead free

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.

OmniVision®

Applications

- Cellular Phones
- Tablets
- PC Multimedia

OV8865

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

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