JAL-OV13850-L55B

OmniVision OV13850 MIPI串行接口 自动对焦 1300万像素 摄像头模组
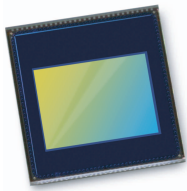

摄像头模组型号	JAL-OV13850-L55B
图像感光芯片	OV13850
焦距	3.7 mm
光圈	2.2
像素	4224 x 3136
可视角度	70°
镜头类型	1/3.06 英寸
镜头尺寸	9.78 x 9.78 x 6.04 mm
模组尺寸	23 x 9.78 mm
模组类型	自动对焦
接口	MIPI串行

配对连接器型号： GB042-30S-H10
主板上的对应连接器。分开售卖。

OV13850 13MP product brief

lead free

available in a lead-free package

Power-Efficient 13-Megapixel Image Sensor with Best-In-Class Performance for High-End Smartphones and Tablets

The OV13850 is a high performance PureCel™ 13-megapixel CameraChip™ sensor that delivers best-in-class high- and low-light performance, as well as dramatically reduced power consumption for smartphones and tablets.

The OV13850 sensor offers a number of performance enhancements, including improved full-well capacity (FWC) and sensitivity for industry-leading high- and low-light performance. It also offers a 40 percent reduction in power consumption compared to our previous generation sensor, making the OV13850 ideally suited for feature-rich mobile devices.

The 1/3.06-inch OV13850 supports an active array of 4224 x 3136 pixels (13.2-megapixels) operating at 30 frames per second (fps) for zero shutter lag and can seamlessly transition between recording video and capturing still images. Additionally, the sensor supports 4K2K ultra-high definition video at 30 fps with full-horizontal field of view (FOV) and electronic image stabilization (EIS), as well as high frame rate 1080p HD video at 60 fps with EIS to enable high quality videos.

The OV13850 fits into an industry standard 8.5 x 8.5 x 5 mm module.

Find out more at www.ovt.com.

Applications

- Cellular Phones
- Tablets
- PC Multimedia

OV13850

Product Features

- PureCel™ image sensor
- 1.12 μm x 1.12 μm pixel
- optical size of 1/3.06"
- 31.2° CRA for <6 mm z-height
- programmable controls for frame rate, mirror and flip, cropping, and windowing
- support for image sizes: 13.2MP (4224x3136), 10MP (16:9 - 4224x2376), 4K2K (3840x2160), EIS 1080p (2112x1188), EIS 720p (1408x792), and more
- 13.2MP at 30 fps
- two-wire serial bus control (SCCB)
- strobe output to control flash
- 8 kbits of embedded one-time programmable (OTP) memory
- two on-chip phase lock loops (PLLs)
- programmable controls: gain, exposure, frame rate, image size, horizontal mirror, vertical flip, cropping, and panning
- image quality controls: defect pixel correction, automatic black level calibration, lens shading correction, and alternate row HDR
- built-in temperature sensor
- suitable for module size of 8.5 x 8.5 x <6 mm
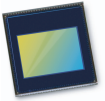
Product Specifications
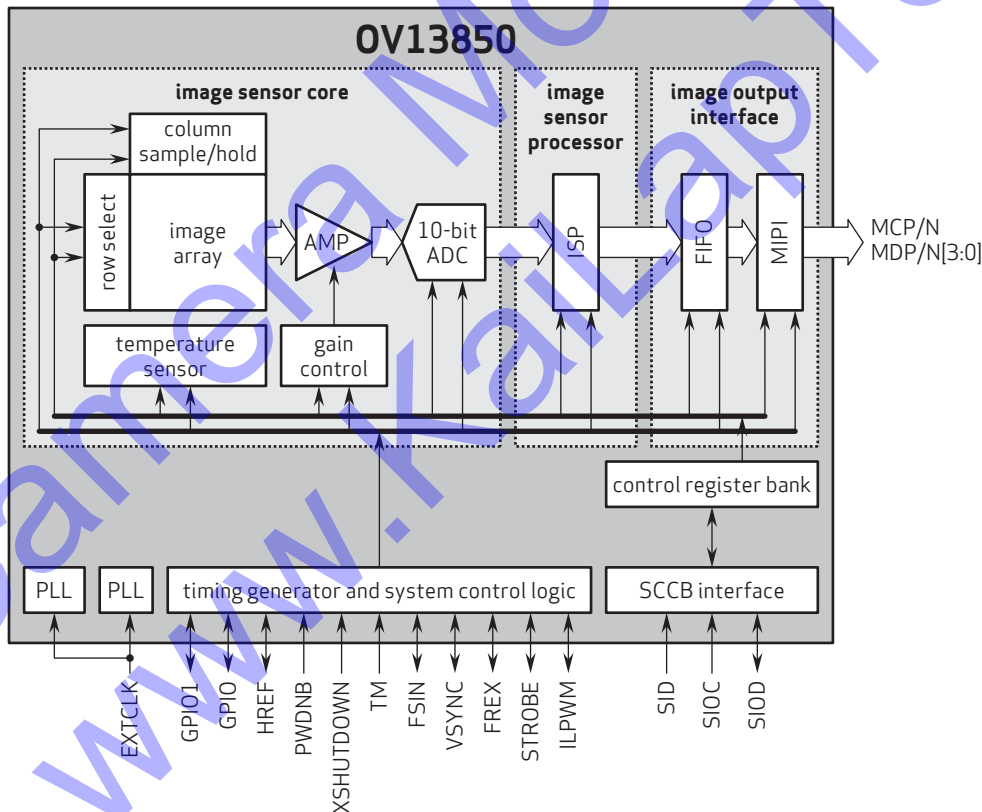
- active array size: 4224 x 3136
- power supply:
  - core: 1.14 - 1.26V (1.2V nominal)
  - analog: 2.6 - 3.0V (2.8V nominal)
  - I/O: 1.7 - 3.0V (1.8V or 2.8V nominal)
- power requirements:
  - active: 223 mW
  - standby: 300 μW
  - XSHUTDOWN: 1 μW
- temperature range:
  - operating: -30°C to +85°C junction temperature
  - stable image: 0°C to +60°C junction temperature
- output interfaces: up to 4-lane MIPI serial output
- output formats: 10-bit RGB RAW
- lens size: 1/3.06"
- lens chief ray angle: 31.2°
- input clock frequency: 6 - 64 MHz
- maximum image transfer rate: 30 fps
- scan mode: progressive
- pixel size: 1.12 μm x 1.12 μm
- image area: 4815 μm x 3678.3 μm
- die dimensions: 6210 μm x 5517 μm

Functional Block Diagram

OmniVision.