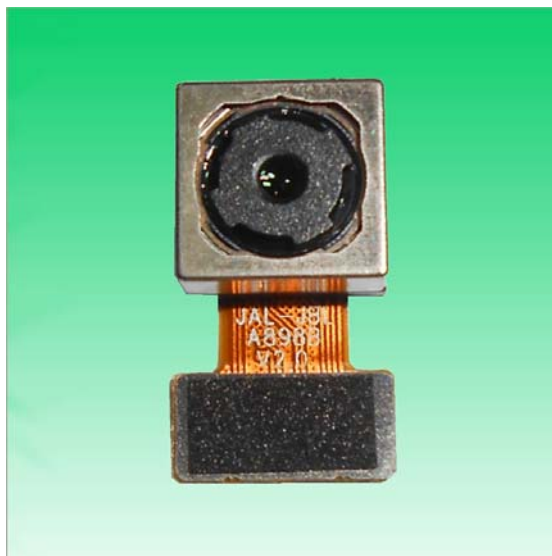


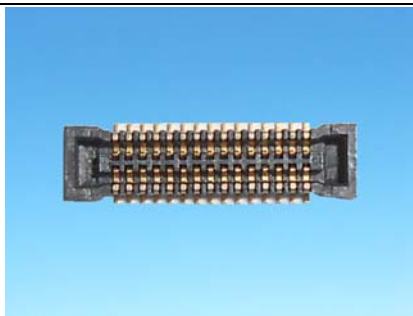
JAL-OV8865-A898B V2.0

OmniVision OV8865 MIPI Interface Auto Focus 8MP Camera Module



Camera Module No.	JAL-OV8865-A898B V2.0
Image Sensor	OV8865
EFL	3.37 mm
F.NO	2.8
Pixel	3264 x 2448
View Angle	70°
Lens Type	1/3.2 inch
Lens Dimensions	8.5 x 8.5 x 5.4 mm
Module Size	16.55 x 9 mm
Module Type	Auto Focus
Interface	MIPI

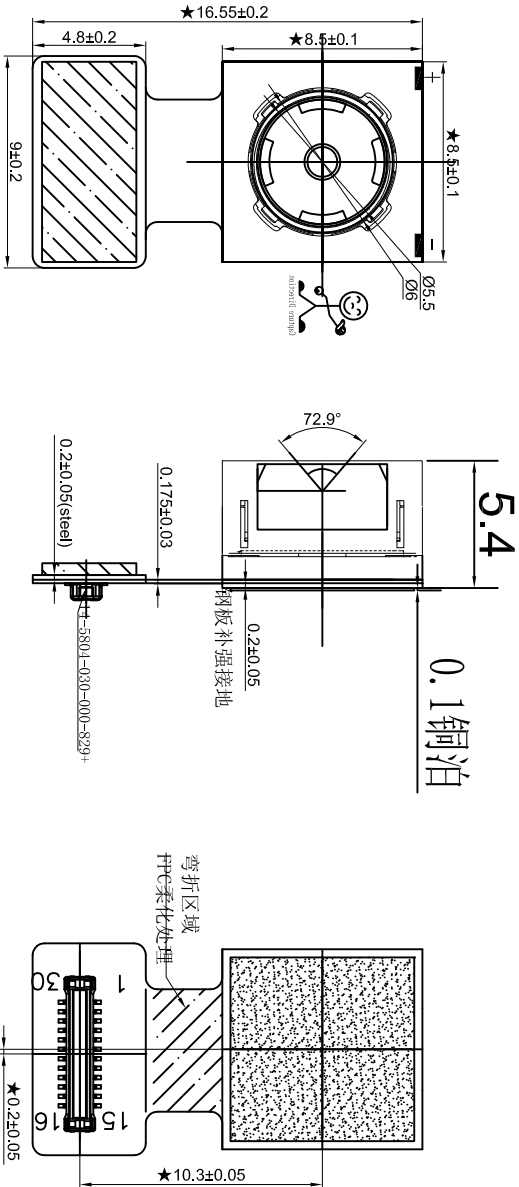
Mating Connector Part No. 24-5804-030-000-829



Mating Connector On Main Board. Sold Separately.

ROHS

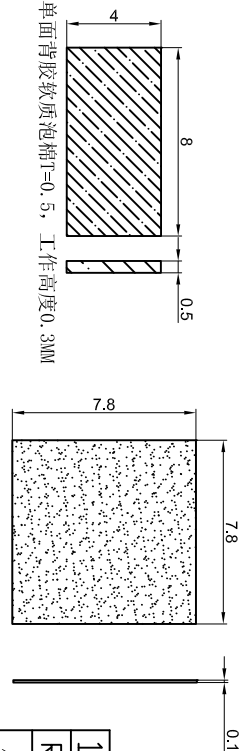
产品变更	详细变更事项
(1)	
(2)	
(3)	



TOP VIEW

SIDE VIEW

BOTTOM VIEW

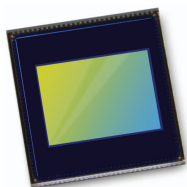


NO	SIGNAL
1	AFGND
2	VAF
3	DVDD1.8V
4	D0VDD1.8V
5	NC
6	AGND
7	AVDD2.8V
8	DGND
9	I2C-SDA
10	I2C-SCL
11	RST
12	PWMDN1
13	DGND
14	MCLK
15	DGND
16	DP3
17	DN3
18	DGND
19	DP2
20	DN2
21	DGND
22	DP1
23	DN1
24	DGND
25	CLKP
26	CLKN
27	DGND
28	DP0
29	DN0
30	DGND

后摄	
焦距 (FFL)	3.85
光圈 (F.NO)	2.2
视场角 (View Angle)	72.9°
畸变 (Distortion)	< 1.5%
镜头类型 (Lens Size)	1/3.2 inch
像素 (Array Size)	3560*2048
感光芯片 (Chip Type)	OV8865

SELECT		✓		
level	A	B	C	D
dim.				
~ 5	±0.03	±0.05	±0.08	±0.10
5~10	±0.05	±0.08	±0.10	±0.15
10~50	±0.08	±0.10	±0.15	±0.20
50~100	±0.10	±0.15	±0.20	±0.25
100~	±0.10%	±0.15%	±0.20%	±0.30%

1/0	All	First Release	Peter	16-07-13
REV.	Zone	Description	Approved	Date
佳立数码(深圳)有限公司 Kai Lap Technologies Group Ltd				
Designed By: peter		Client Name: A898B		
Checked By: Feng Liu		Model Name: JAL-OV8865-A898B V2.0		
Approved By: Aouly_Yan		Projection Type: Unit: mm Material: -----		
Third Angle		Sheet: 1 of 1 Version: 1/0		



OV8865 8MP product brief



available in
a lead-free
package

Low-Power and Compact 8-Megapixel CameraChip™ Sensor with Improved Pixel Performance for Smartphones and Tablets

OmniVision's OV8865 is a low-power high-performance 8-megapixel camera solution for next-generation 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.

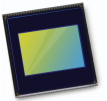
Applications

- Cellular Phones
- PC Multimedia
- Tablets

Product Features

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

OV8865



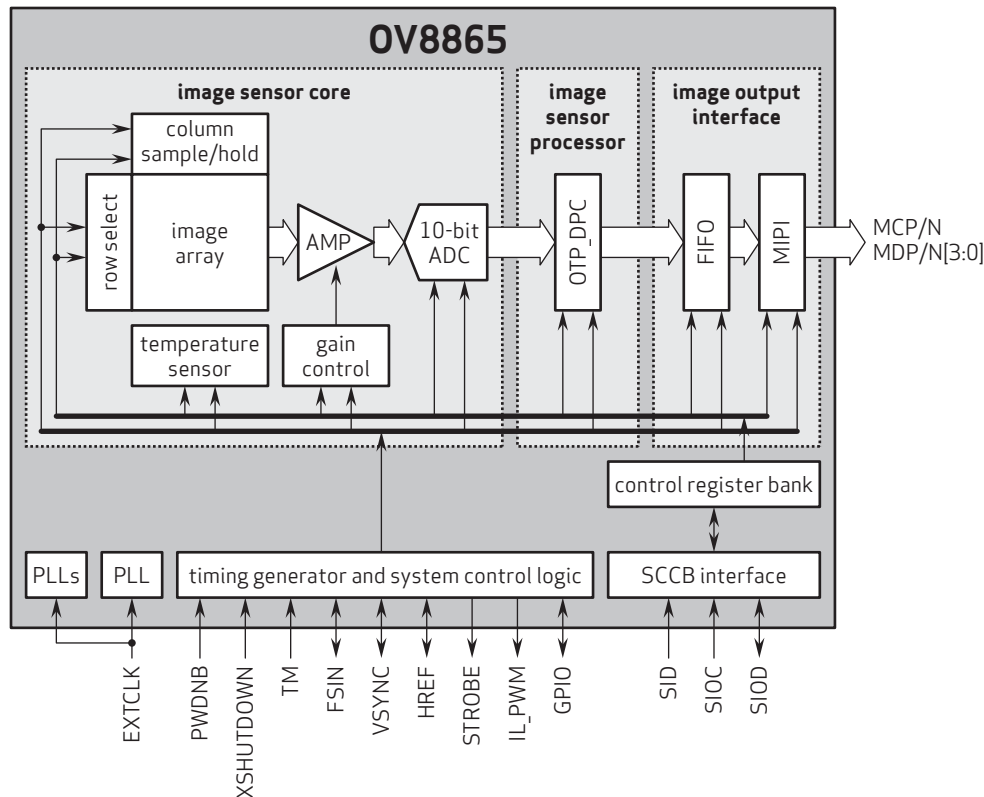
Ordering Information

- OV8865-G04A-1D (color, chip probing, 200 μ m backgrinding, reconstructed wafer with good die)

Product Specifications

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

Functional Block Diagram



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www.ovt.com

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OmniVision