



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



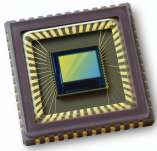
Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





OV7959 NTSC/PAL product brief



High-Performance, Cost Effective Video Capture for Surveillance Applications



available in
a lead-free
package

The OV7959 is a high-performance and cost effective CMOS image sensor developed specifically for surveillance applications. Based on OmniVision's advanced OmniPixel3-HS™ technology, the OV7959 achieves optimum low-light sensitivity and power efficiency, making it an excellent solution for video capture in varying conditions.

The 1/3.6-inch image sensor supports both NTSC and PAL output formats. The OV7959 is capable of operating in extreme low-light conditions and is capable of operating across a wide temperature range of -20°C to 70°C. It has superior IR performance and utilizes very low power. It also supports a built-in OSD function.

Advanced image processing functions, including gain control, white balance, and aperture and defective pixel correction are all programmable through the serial camera control bus (SCCB) interface. Other key features of the OV7959 are the 16-zone automatic exposure control, horizontal and vertical windowing capability and extremely low dark current.

Find out more at www.ovt.com.

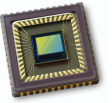
Applications

- Security and Surveillance Cameras

Product Features

- NTSC and PAL output
- excellent low light sensitivity
- automatic exposure/gain control
- auto white balance control
- aperture/gamma correction
- slave compatible serial camera control bus (SCCB) control interface for register programming
- low power consumption
- low dark current
- on-screen display
- 32 bytes of one time programmable memory (OTP)
- SPI master for single static overlay and loading setting
- dynamic overlay controls
- defective pixel correction

OV7959



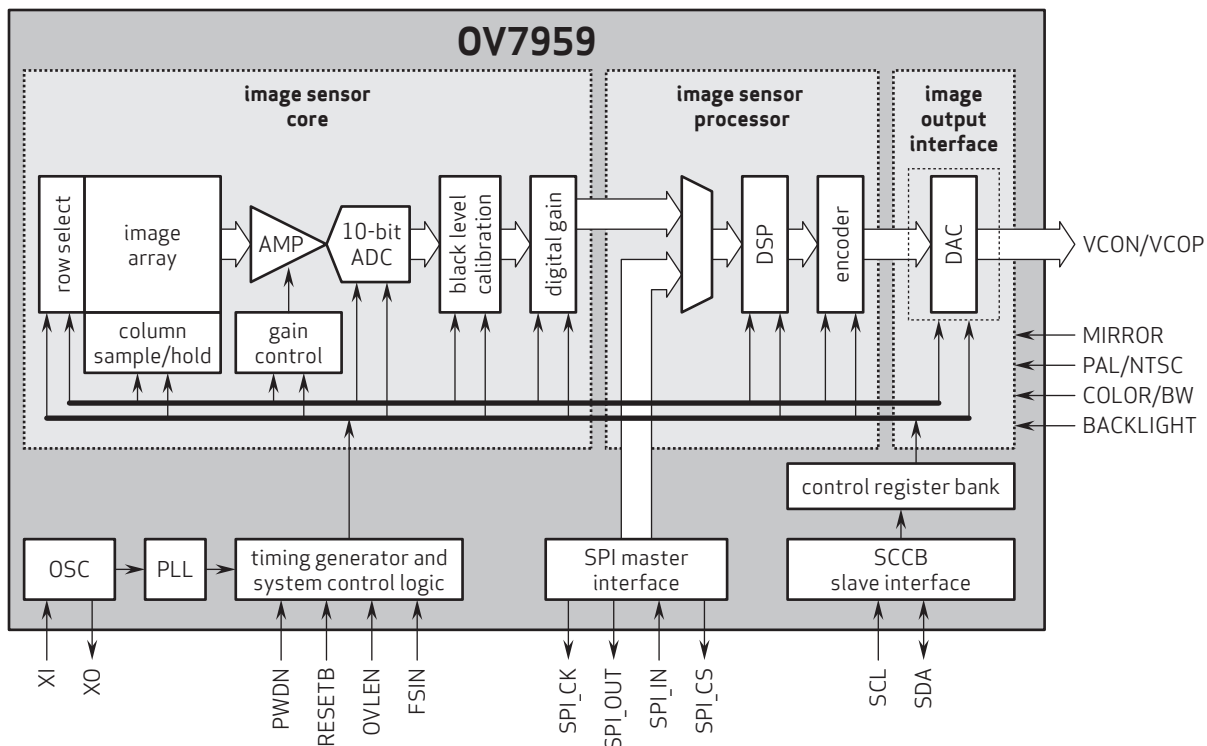
Ordering Information

- OV07959-C48A**
(color, NTSC/PAL, lead-free, 48-pin CLCC)

Product Specifications

- active array size:**
 - NTSC: 648 x 488
- power supply:**
 - core: 1.5V
 - analog: 3.3V
 - I/O: 1.8 - 3.3V
- power requirements:**
 - active: 135 mW
 - standby: 28 μ A
- temperature range:**
 - operating: -20°C to 70°C junction temperature
 - stable image: 0°C to 50°C junction temperature
- optical size:**
 - NTSC: 1/3.6"
 - PAL: 1/3.6"
- chief ray angle:** 0°
(no microlens shift)
- output formats:** NTSC/PAL
- maximum image transfer rate:**
 - NTSC: 60 fields per second
 - PAL: 50 fields per second
- sensitivity:** 12 V/lux-sec
- shutter:** rolling shutter
- max S/N ratio:** 46 dB
- dynamic range:** 72 dB @ 8x gain
- scan mode:** interlaced
- pixel size:** 6.0 μ m x 6.0 μ m
- dark current:** 15.6 mV/sec @ 50°C junction temperature
- image area:** 4008 μ m x 3024 μ m
- package dimensions:** 14.22 mm x 14.22 mm

Functional Block Diagram



4275 Burton Drive
Santa Clara, CA 95054
USA

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

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