

## Applications

- Security and Surveillance

## Product Features

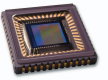
- NTSC and PAL output
- high sensitivity
- automatic exposure/gain with 16 zone control
- horizontal and vertical windowing capability
- auto white balance control
- aperture/gamma correction
- external frame sync capability (Genlock)
- slave compatible serial camera control bus (SCCB) control interface for register programming
- low power consumption
- extremely low dark current for high temperature applications
- 50/60 Hz flicker cancellation
- SPI master for single static overlay and loading setting
- dynamic overlay controls
- defective pixel correction
- on screen display (OSD) support

## Ordering Information

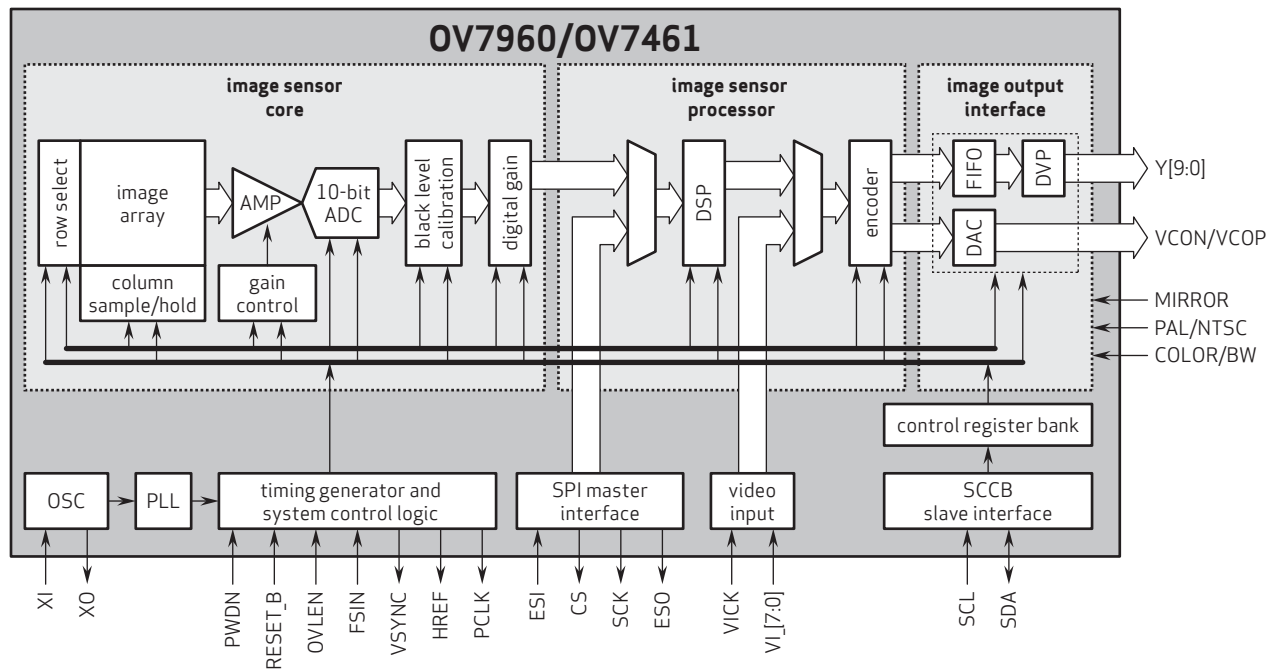
- OV07960-C48N (color, NTSC, lead-free, 48-pin CLCC)
- OV07960-C48P (color, PAL, lead-free, 48-pin CLCC)

## Product Specifications

- **active array size:**
  - NTSC: 656 x 492
  - PAL: 768 x 576
- **power supply:**
  - core: 1.5V
  - analog: 3.14 - 3.47V
  - I/O: 1.7 - 3.47V
- **power requirements:**
  - active: 225 mW
  - standby: 20  $\mu$ 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"
- **lens chief ray angle:** 0° (no microlens shift)
- **output formats:** NTSC/PAL, CCIR656
- **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:** 38 dB
- **dynamic range:** 70 dB @ 8x gain
- **scan mode:** interlaced
- **pixel size:** 6.0  $\mu$ m x 6.0  $\mu$ m
- **dark current:** 50 mV/s @ 60°C junction temperature
- **image area:** 4752  $\mu$ m x 3552  $\mu$ 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

OmniVision reserves the right to make changes to their products or to discontinue any product or service without further notice. OmniVision, the OmniVision logo and OmniPixel are registered trademarks of OmniVision Technologies, Inc. OmniPixel3-HS is a trademark of OmniVision Technologies, Inc. All other trademarks are the property of their respective owners.



Version 2.3, November, 2012