

## Applications

- Notebooks
- PC Webcams
- Camcorders
- Digital Still Cameras
- Telepresence
- Portable Media Players

## Product Features

- programmable controls: gain, exposure, frame rate, image size, horizontal mirror, vertical flip, cropping, windowing, and panning
- automatic image control functions:
  - automatic exposure (AEC)
  - automatic gain control (AGC)
  - automatic white balance (AWB)
  - automatic black level calibration (ABLC)
- serial camera control bus (SCCB)
- lens correction (LENC)
- defective pixel correction (DPC)
- support for digital video port (DVP) parallel output interface
- integrated auto focus filter
- support for one lane MIPI interface (up to 800 Mbps)
- support for 8-/10-bit RAW RGB output format
- support for image sizes:
  - 1080p at 30 fps
  - cropped 720p at 60 fps
  - VGA at 120 fps
- support for black sun cancellation
- embedded one-time programmable (OTP) memory
- on-chip phase lock loop (PLL)
- built-in 1.5V regulator for core

# OV2710



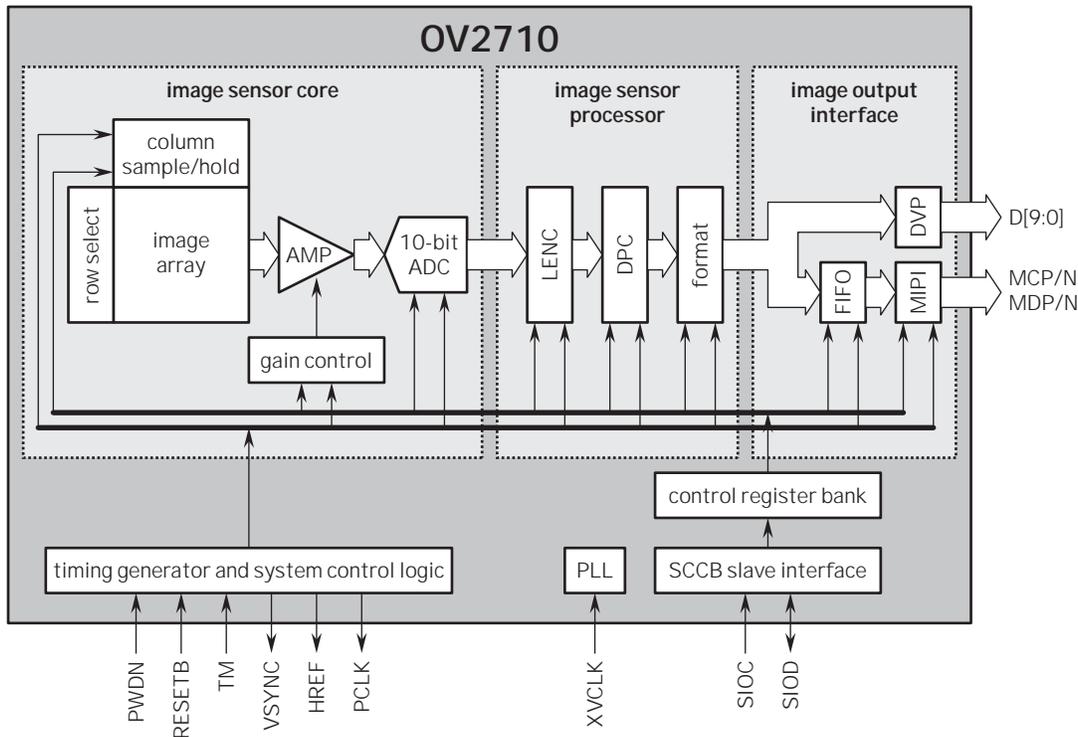
## Ordering Information

- OV02710-A68A  
(color, lead-free, 68-pin CSP3)

## Product Specifications

- active array size: 1920 x 1080
- power supply:
  - analog: 3.0 - 3.6 V (3.3 V typical)
  - core: 1.425 - 1.575 V (1.5 V typical)
  - I/O: 1.7 - 3.6 V (1.8 V typical)
- temperature range:
  - operating: -30° C to 70° C
  - stable image: 0° C to 50° C
- output interfaces: 10-bit parallel/one lane MIPI
- output formats: 10-bit RAW RGB
- lens size: 1/2.7"
- lens chief ray angle: 23.6°
- input clock frequency: 6 - 27 MHz
- dynamic range: 69 dB
- maximum image transfer rate:
  - 1080p: 30 fps
  - 720p: 60 fps
  - VGA: 120 fps
  - QVGA: 240 fps
- sensitivity: 3300 mV/(lux-sec)
- shutter: rolling
- S/N ratio: 39 dB
- pixel size: 3 μm x 3 μm
- image area: 5856 μm x 3276 μm
- package dimensions: 7465 μm x 5865 μm

## 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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