

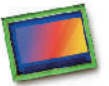
## Applications

- Security and Surveillance Cameras

## Product Features

- support for image sizes:
  - 1080p @ 30 fps
  - cropped 720p @ 60 fps
  - VGA @ 120 fps
- 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)
- defect pixel correction (DPC)
- support for digital video port (DVP) parallel output interface
- integrated auto focus filter
- support for 10-bit RAW RGB output format
- support for black sun cancellation
- embedded one-time programmable (OTP) memory
- on-chip phase lock loop (PLL)
- built-in 1.5 V regulator for core

# OV2715



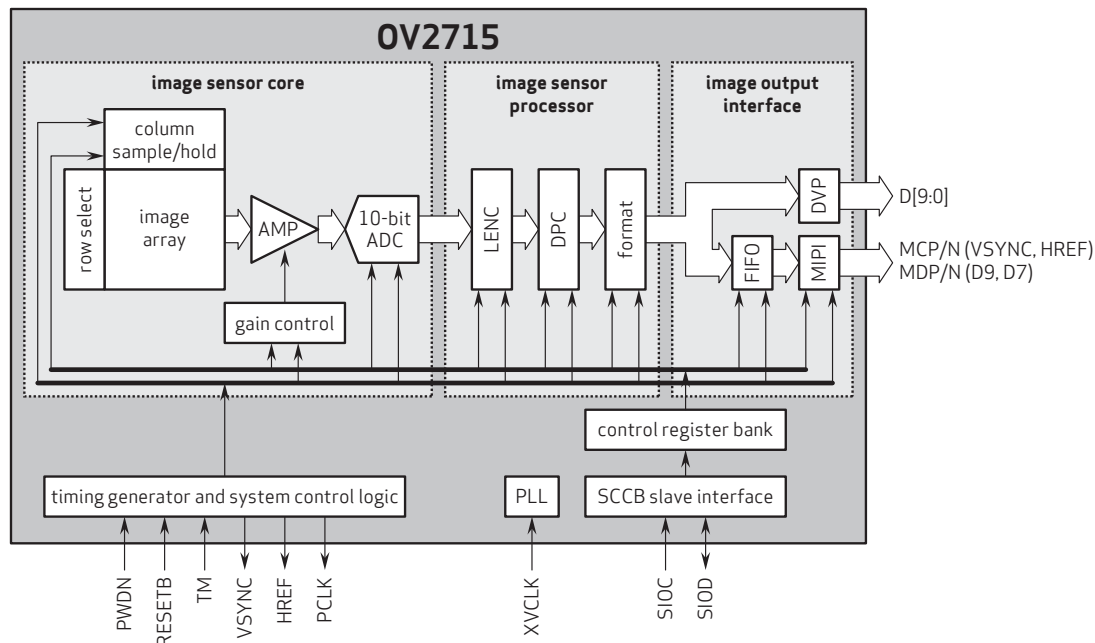
## Ordering Information

- **OV02715-A68A**  
(color, lead-free, 68-pin CSP3)
- **OV02715-A68A-PC**  
(color, lead-free, 68-pin CSP3 with protective film)
- **OV02715-A68A-RC**  
(color, lead-free, 68-pin CSP3 with protective film, packed in tape and reel)

## 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)
- **power requirements:**
  - active: 350 mW
  - power down: 70  $\mu$ A
- **temperature range:**
  - operating: -30°C to 85°C junction temperature
  - stable image: 0°C to 65°C junction temperature
- **output interfaces:** 10-bit parallel/one lane MIPI
- **output formats:** 10-bit RAW RGB data
- **lens size:** 1/2.7"
- **lens chief ray angle:** 0°
- **input clock frequency:** 6 - 27 MHz
- **scan mode:** progressive
- **maximum image transfer rate:**
  - 1080p: 30 fps
  - cropped 720p: 60 fps
  - VGA: 120 fps
  - QVGA: 240 fps
- **sensitivity:** 3300 mV/lux-sec
- **shutter:** rolling shutter
- **max S/N ratio:** 39 dB
- **dynamic range:** 69 dB @ 8x gain
- **maximum exposure interval:** 1096 tline
- **pixel size:** 3  $\mu$ m x 3  $\mu$ m
- **image area:** 5856  $\mu$ m x 3276  $\mu$ m
- **package dimensions:** 7465  $\mu$ m x 5865  $\mu$ m

## Functional Block Diagram



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