### **Applications**

- PC multimedia
- Games
- Security and Surveillance

# OV7740/OV7241



#### ordering information

- 0V07740-A32T
  - (color, lead-free, 32-pin CSP3)
- 0V07740-A32A
  - (color, lead-free, 32-pin CSP3)
- 0V07241-A32A

(b&w, lead-free, 32-pin CSP3)

#### **Product Features**

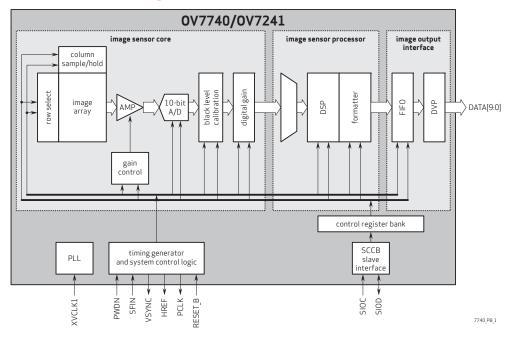
- support for output formats: RAW RGB and YUV
- support for image sizes: VGA, QVGA, CIF and any size smaller
- support for black sun cancellation
- support for internal and external frame synchronization
- standard SCCB serial interface
- digital video port (DVP) parallel output interface
- embedded one-time programmable (OTP) memory
- on-chip phase lock loop (PLL)
- embedded 1.5 V regulator for core

# **Product Specifications**

- array size: 656 x 488
- power supply:
  - **core:** 1.5VDC ± 5%
  - **analog:** 3.0 3.6V
- **I/0:** 1.7 3.47V
- power requirements:
  - active: 48 mA
  - **standby:** 20 μA
- temperature range:
  - operating: -30°C to 70°C junction temperature
  - **stable image:** 0° C to 50° C junction temperature
- output format:
  - 8-/10-bit raw RGB data
  - 8-bit YUV
- lens size: 1/5"
- lens chief ray angle: 25°

- input clock frequency: 6 27 MHz
- max S/N ratio: 38 dB
- dynamic range: 71 dB @ 8x gain
- max image transfer rate:
- VGA (640x480): 30 fps
- QVGA (320 x 240): 60 fps
- sensitivity: 6.0 V/lux-sec
- shutter: rolling shutter
- maximum exposure interval: 502 x t<sub>ROW</sub>
- gamma correction: programmable
- pixel size: 4.2 μm x 4.2 μm
- dark current: 30 mV/s @ 60°C junction temperature
- image area: 2755.2 µm x 2049.6 µm
- package dimensions:
  - 4185 μm x 4345 μm

# Functional Block Diagram



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