OV4686

Applications

- Surveillance
- Home Automation
- Sports Cameras

Product Features

- automatic black level calibration (ABLC)
- programmable controls for:
  - frame rate
  - mirror and flip
  - cropping
  - windowing
- static defective pixel canceling
- supports output formats:
  - 10-bit RAW RGB-Ir (MIPI)
- supports images sizes:
  - 4MP
  - 3MP
  - EIS1080p
  - 1080p
- fast mode switching
- standard serial SCCB interface
- up to 4-lane MIPI serial output interface
- two on-chip phase lock loops (PLLs)
- programmable I/O drive capability
- built-in temperature sensor
- supports staggered 3-exposure HDR mode

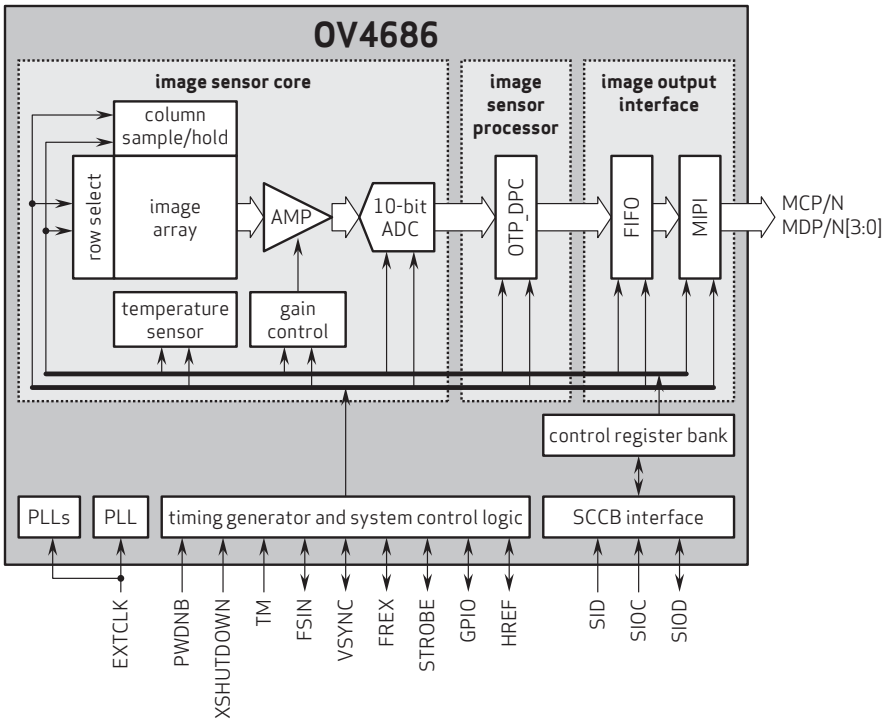
Ordering Information

- **OV04686-H67A**
  (RGB-Ir, lead-free, 67-pin CSP5)

Product Specifications

- **active array size:** 2688 x 1520
- **power supply:**
  - **core:** 1.1 - 1.3V
  - **analog:** 2.6 - 3.0V
  - **I/O:** 1.7 - 3.0V
- **power requirements:**
  - **active:** 163 mA (261 mW)
  - **standby:** 1 mA
  - **XSHUTDOWN:** <10 µA
- **temperature range:**
  - **operating:** -30°C to +85°C junction temperature
  - **stable image:** 0°C to +60°C junction temperature
- **output interface:** 4-lane MIPI
- **output formats:** 10-bit RAW RGB-Ir
- **lens size:** 1/3"
- **input clock frequency:** 6 - 64 MHz
- **lens chief ray angle:** 9°
- **maximum image transfer rate:**
  - **2688x1520:** 90 fps
  - **1920x1080:** 120 fps
- **maximum exposure:** 4 T_{ROW}
- **minimum exposure:** VTS-8 T_{ROW}
- **sensitivity:** 1900 mV/lux-sec
- **max S/N ratio:** 37.8 dB
- **dynamic range:** 64.6 dB @ 1x gain
- **scan mode:** progressive
- **maximum exposure interval:** 1548 x T_{ROW}
- **pixel size:** 2 µm x 2 µm
- **dark current:** 4 mV/sec @ 60°C junction temperature
- **image area:** 5440 µm x 3072 µm
- **package dimensions:** 6630 µm x 5830 µm

Functional Block Diagram



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