

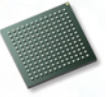
Applications

- Surround view system
- e-Mirror
- Camera Monitoring System (CMS)

Product Features

- AEC-Q100 grade 2 qualified
- advanced 100 Mp/s throughput ISP for high quality image capturing and video streaming
- local and global tone mapping support
- up to 3-capture HDR combination
- simultaneous output of fully processed YUV for display-based applications and RAW for machine vision applications
- embedded information including frame counter, temperature, and register data for each image to enable critical automotive safety applications
- auto white balance (AWB)
- automatic exposure control (AEC) / automatic gain control (AGC)
- supports statistics data of up to four user programmable ROIs
- SCCB master/slave interface for sensor and ASIC configuration
- supports four-wire or two-wire serial interface to retrieve stored firmware from external memory devices, such as EEPROM
- on-chip PLL to generate internal clocks
- on-chip voltage regulator 1.8V to 1.1V
- brown-out detection circuit and output flag
- supports 2x2 lane MIPI RX/TX and 1x4 lane MIPI RX/TX
- supports 12-bit DVP input, shared with MIPI RX
- supports 12-bit DVP output, shared with MIPI TX
- supports 24-bit DVP output, shared with BT1120 output
- embedded 32-bit RISC processor for high performance and flexibility
- supports 1K bits of one-time programmable memory (OTP)
- JTAG boundary scan

OV493



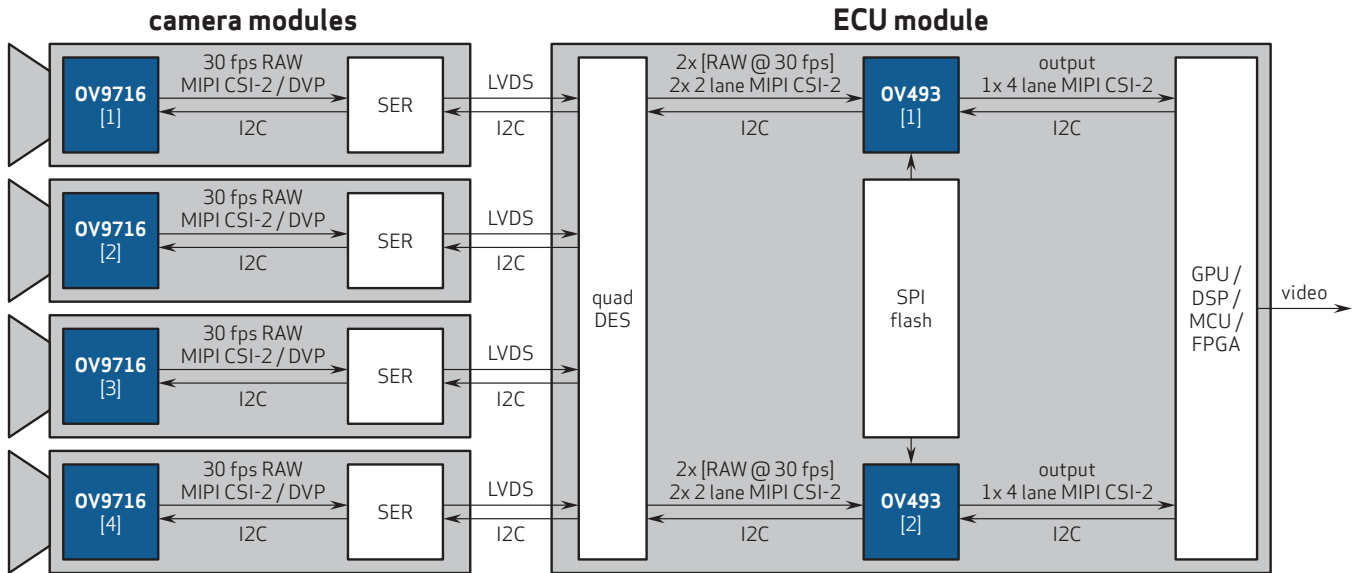
Ordering Information

- | | |
|---|--|
| <p>■ OV00493-B69G-1A
(lead-free) 169-pin BGA,
packed in tray</p> | <p>■ OV00493-B69G-TA
(lead-free) 169-pin BGA,
packed in tape and reel</p> |
|---|--|

Product Specifications

- **power supply:**
 - core: 1.1V ±5%
 - I/O: 1.8V ±5% or 3.3V ±5%
- **power requirements:** 265 mW, measured at 1392 x 976 @ 30 fps, 12-bit plus 12-bit input from OV9716 via MIPI interface and 1392 x 976 YUV422 output via MIPI interface
- **temperature range:**
 - operating: -40°C to +105°C ambient temperature and -40°C to +125°C junction temperature
- **package dimensions:** 7 mm x 7 mm

Advanced Architecture Example



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