



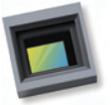
## Applications

- Automotive
  - Rear View Camera
  - Around View Monitor (AVM)

## Product Features

- advanced 110 Mp/s throughput ISP for high quality image capturing and video streaming
- local and global tone mapping support
- up-to three capture HDR combination
- supports distortion correction (DC)/perspective correction (PC), pixel mapping flexibility is up to 190° HFOV
- supports eight independent layers, line and global transparency control for each layer, 32 color/palette per image and sizes up to 1392 x 976 overlay
- embedded information including frame counter, temperature, and register data for each image to enable critical automotive safety applications
- automatic white balance (AWB)
- automatic exposure control (AEC)/automatic gain control (AGC)
- supports statistics data of up to four user programmable ROIs
- SCCB for register access
- supports four-wire or two-wire serial interface to retrieve stored firmware from external memory devices
- on-chip PLL to generate internal clocks
- on-chip voltage regulator from 1.8V to 1.1V and one DCDC from 3.3V/1.8V to 1.1V
- supports 1x4 lane MIPI TX (TX data rate 1.2 Gbps/lane)
- supports 1x12-bit DVP output, speed up to 150 MHz
- embedded 32-bit RISC processor for high performance and flexibility
- supports 1K bits of one-time programmable memory (OTP)
- JTAG boundary scan
- embedded temperature sensor

# OX01B40



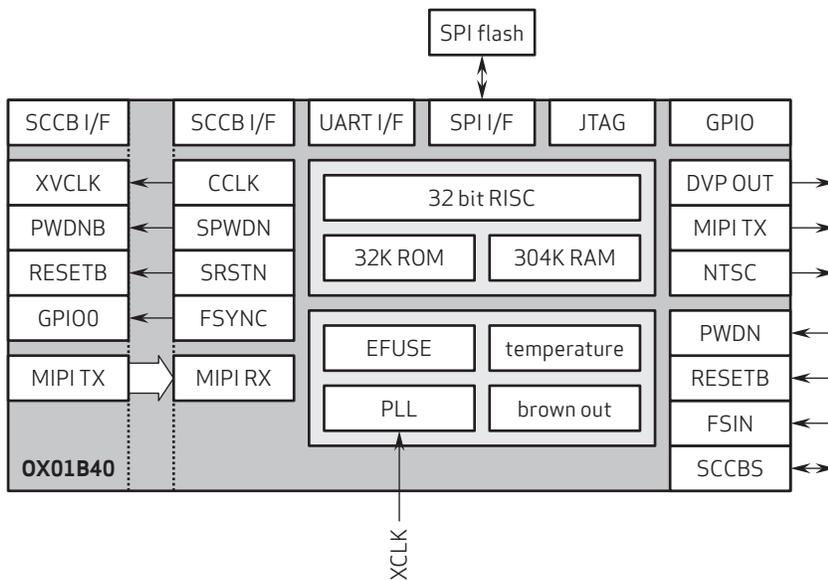
## Ordering Information

- OX01B40-U43Y-1A-Z**  
(lead-free) 143-pin SiP multi-chip package

## Product Specifications

- power supply:**
  - core: 1.1V ±5% and 1.2V ±5%
  - analog: 1.8V ±5% and 3.3V ±5%
  - IO: 1.8V ±5% or 3.3V ±5%
- temperature range:**
  - operating: -40°C to +125°C junction temperature
- package dimensions:** 8.5 mm x 8.5 mm
- power requirements:**
  - MIPI output: 400 mW, measured at room temperature with 1392 x 976 @ 30 fps
  - DVP output: 500 mW, measured at room temperature with 1280 x 720 @ 30 fps

## Functional Block Diagram



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