

Product Introduction

VS4388 is a BSI, CMOS image sensor with an optical size of 1/1.8" and a 4Lane MIPI-CSI2 output interface. Each Lane supports a maximum rate of 1Gbps and a maximum image output of 2560x1440@60fps 10-bit. It also supports Staggered wide dynamic mode with two exposures.

VS4388 The chip supports automatic black level correction, automatic/manual exposure control, manual white balance, bad point correction, horizontal/vertical mirror image, register write synchronization, frame synchronization, etc.

VS4388 Supports standard I²C interface.

product features

- ◆ 3.0um*3.0um Large pixels
- ◆ 2560x1440 frame output
- ◆ Staggered HDR
- ◆ Raw/YUV output
- ◆ Black light night vision imaging
- ◆ Built-in temperature sensor
- ◆ AEC, BLC, and DPC are on the chip

application scenarios

- ◆ security and protection monitoring
- ◆ automotive electronics
- ◆ machine vision
- ◆ unmanned aerial vehicle

key parameter

Project	Parameter
Resolution ratio	4MP
Pixel arrays	2576(H) x 1456(V)
Pixel size	3.0um x 3.0um
Optical size	1/1.8'
CRA	12°
Maximum frame rate	Linear@60fps 2 Staggered HDR@30fps
Output format	8 / 10-bit RAW RGB 8-bit YUV422 black and white
Output interface	1/2/4-Lane MIPI
The way it's exposed	Rolling
Sensitivity	TBD
Dynamic range	Linear: 80dB 2 Staggered HDR:96dB
Noise-signal ratio	40dB
Working voltage	AVDD = $2.8 \pm 0.1V$ DOVDD = $1.8 \pm 0.1V$ DVDD = $1.2 \pm 0.06V$
Working temperature	-30°C ~ +85°C
Power dissipation	120mW full size@30fps
Package	CSP