



Diagonal 5.71 mm (Type 1/2.8) CMOS Solid-state Image Sensor with Square Pixel for Color Cameras

INX4202-A

Brief Datasheet

V1.0

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Description

The INX4202-A is a diagonal 5.71 mm (Type 1/2.8) CMOS solid-state image sensor with a square pixel array and 4 M effective pixels. This chip operates with analog 2.8 V, digital 1.5 V, and interface 1.8 V triple power supply, and has low power consumption. High sensitivity, high signal to noise ratio and excellent high temperature performance. This chip features low power consumption

(Application: Security cameras/ Mobile device cameras/ Smart home cameras)

Features

- Staggered HDR
- High sensitivity
- Excellent high temperature performance
- High sensitivity
- High color rendition
- Low power consumption
- External control frame rate, multiple sensors synchronization
- 75 x analog gain, 4 x digital gain
- Programmable I2C port register

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Device Structure

- ◆ CMOS image sensor
- ◆ Image size
Diagonal 5.71 mm (Type 1/2.8) approx. 4 M pixels, All pixels
- ◆ Total number of pixels
2693 (H) × 1525 (V) approx. 4.1 M pixels
- ◆ Number of active pixels
2688 (H) × 1520 (V) approx. 4.08 M pixels
- ◆ Unit cell size
2.0 μm (H) × 2.0 μm (V)
- ◆ Substrate material Silicon

Absolute Maximum Ratings

| Item | Symbol | Min. | Max. | Unit | Remarks |
|-----------------------------------|------------------|------|------------------------|------|---------|
| Supply voltage (analog: 2.8 V) | AV _{DD} | -0.3 | 3.4 | V | — |
| Supply voltage (interface: 1.8 V) | OV _{DD} | -0.3 | 2.2 | V | — |
| Supply voltage (digital: 1.5 V) | DV _{DD} | -0.3 | 1.8 | V | — |
| Input voltage | VI | -0.3 | OV _{DD} + 0.3 | V | — |
| Output voltage | VO | -0.3 | OV _{DD} + 0.3 | V | — |
| Operating temperature | Topr | -30 | 85 | °C | — |
| Storage temperature | Tstg | -40 | 85 | °C | — |

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