

MAT130

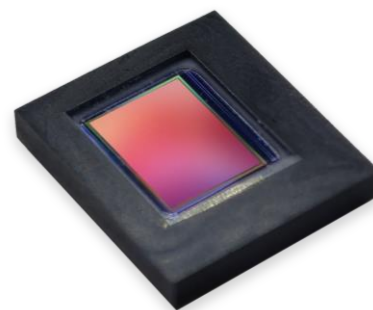
MetaSilicon MAT Series CMOS Image Sensor For Automotive Applications

MAT130 is an automotive grade CIS with high dynamic range and high frame rate for automotive vision applications. The product also has on-chip ISP and LED flicker suppression functions, which can provide high-quality image support for applications including 360° surround view, reversing imaging, blind spot detection and other applications.

MAT130 uses BSI process and is designed follow AEC-Q100 Grade 2 and ISO 26262 ASIL-B functional safety standards. With the support of MetaSilicon's self-developed optimized LOFIC technology and MTHDR® technology, it can achieve a high dynamic range of 120dB. In addition, MAT130 can output high frame rate video images at 60fps @1280×960. The product supports RAW / YUV422 format output and provides two packaging forms: iBGA and CSP.

Item	Parameters
Resolution	1.3MP
Process	BSI
Pixel Size	3.0μm × 3.0μm
Pixel Array	1280H × 960V
Optical Format	1/3.7 inch
Max Frame Rate	30fps @1280 × 960
SNR	50dB
Output Format	RAW / YUV422
Output Interface	DVP: Max 96MHz 30fps CSI-2 MIPI: 792Mbps / lane @2lane
CRA	15°
Dynamic Range	120dB
Operation Temperature	-40°C ~ +105°C
Power Supply	Analog: 2.8V @AVDD Digital: 1.2V @DVDD IO: 1.8V @DOVDD
Package	iBGA / CSP

CMOS IMAGE SENSOR



MAT Series: MAT130

Features

- AEC-Q100 Grade 2
- ISO 26262 ASIL-B
- Automotive grade RISC-V MCU (ASIL-B)
- 120dB high dynamic range
- 30fps @1280×960 high frame rate video output
- On-chip ISP two-in-one, built-in image processing algorithm
- LED flicker suppression
- High sensitivity

Applications

- 360° surround view
- Reversing imaging
- Blind spot detection