

GLUX9701BSI Product Flyer



1.3MP SXGA BSI CMOS IMAGE SENSOR

GLUX9701BSI is a 1.3 Megapixel resolution BSI CMOS image sensor with $9.76\mu\text{m} \times 9.76\mu\text{m}$ pixel size.

The sensor operates in electronic rolling shutter supporting two operation modes: HDR mode and Low Noise mode. Users can choose which to operate in camera based on practical application's requirement on frame rate, noise, dynamic range, power consumption, etc.

With two types of data output channels: a 4 channel pairs sub-LVDS and MIPI (CSI-2, D-PHY) running at 445.5 MHz, achieving frame rate of 30 fps to flexibly match either ISP or FPGA components being used in camera electronics. Various operating functions are available including master mode, slave mode, standby mode, etc, making GLUX9701BSI useable for different imaging conditions.



Key Features

- $9.76\mu\text{m}$ square pixels
- Two operation modes: HDR & Low noise
- Optional output channel: Sub-LVDS & MIPI(CSI-2, D-PHY)
- Switchable operation: slave and master
- Vertical/Horizontal image flipping

Applications

- Surveillance
- Scientific Imaging
- UV industrial inspection

Sensor Specifications

Resolution	1280 x 1024	Optical format	1.0 "
Pixel size	9.76 μ m x 9.76 μ m	Photo-sensitive area	12.493mm x 9.994mm
Shutter type	Rolling shutter	Quantum efficiency	89% @ 610nm
Full well capacity	48 ke ⁻	Pixel clock rate	37.125MHz
Dark noise	1.6 e ⁻ @ HDR 0.85 e ⁻ @ Low Noise	Dark current	0.08e ⁻ /s/p @ -28 °C
Dynamic range	89.5 dB @HDR mode	Frame rate	30fps @ HDR 25fps @ Low noise
Output interface	4 pairs @ sub-LVDS 4 pairs @ CSI-2	Max. Data rate	445.5Mbps @Sub-LVDS 445.5Mbps @MIPI
Chroma	Mono	Power consumption	250 mW @ HDR 160 mW @ Low noise
Supply voltage	3.3V for analog 1.8V for digital	Package	184 pins CLCC 22mmx15.93mm

Ordering Information

Sensor Part No.

GLUX9701BSI-BBM-NCN-AR1
Mono, removable glass lid without AR coating, Grade 1

GLUX9701BSI-BBM-NCN-ARE
Mono, removable glass lid without AR coating, Grade ES

GLUX9701BSI-BBM-NCN-AU1
Mono, UV epoxy sealed glass lid without AR coating,
Grade 1

GLUX9701BSI-BBM-NCN-AUE
Mono, UV epoxy sealed glass lid without AR coating,
Grade ES

EVK Part No.

EVA-9701B-RC12, USB interface, single stacked PCB boards

Contact

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