

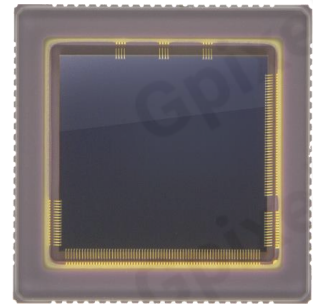
GLUX1605BSI Product Flyer



0.5MP SVGA BSI CMOS IMAGE SENSOR

GLUX1605BSI is a 0.5 Megapixel resolution BSI CMOS image sensor with $16\mu\text{m} \times 16\mu\text{m}$ pixel size.

The sensor operates in electronic rolling shutter supporting two operation modes: Low Noise mode and HDR mode. User can choose which to operate in camera based on practical application's requirement on full well capacity, noise, dynamic range, etc. It integrates two types of output channels (sub-LVDS and MIPI) and on-chip sequencer, which enables the sensor development less effort and hardware resource. **GLUX1605BSI** is pin compatible with **GLUX9701BSI** (linch SXGA of **GLUX** image sensor family), users can operate both sensors with one set of PCB design.



Key Features

- $16\mu\text{m}$ square pixels
- HDR mode & Low noise mode
- On-chip 12-bit column-parallel ADC
- On-chip sequencer
- On-chip PLL

Applications

- Scientific Imaging
- UV industrial inspection

Sensor Specifications

Resolution	800 (H) x 600 (V)	Optical format	1"
Pixel size	16 μ m x 16 μ m	Photo-sensitive area	12.8mm x 9.6mm
Shutter type	Rolling shutter	Quantum efficiency	90% @ 560nm
Maximum FWC	73ke-	Dark noise	0.9e- @Low noise mode 1.6e- @HDR mode
Dynamic range	93dB @HDR mode	Frame rate	60fps @HDR mode 25fps @Low noise mode
Output interface	4 pairs of Sub-LVDS data output 1 pairs of Sub-LVDS clock output 4 pairs of MIPI data output 1 pairs of MIPI clock output	Power consumption	200mW @HDR mode with Sub-LVDS 80mW @Low noise mode with Sub-LVDS 250mW @HDR mode with MIPI 120mW @Low noise mode with MIPI
Data rate	445.5Mbps per lane @HDR mode 222.75Mbps per lane @Low noise mode	Input clock rate	37.125MHz (Recommend) 20 – 50MHz (Support)
Chroma	Mono	Image Lag(e-)	< 2
I/O voltage	3.3V for Analog 1.75V for Digital	Package	84-pin CLCC

Ordering Information

Sensor Part No.

GLUX1605BSI-CBM-NCN-AR1

BSI image sensor, 84-pin CLCC package. Removable D263T glass lid without AR coating on both sides.

GLUX1605BSI-CBM-NCN-AU1

BSI image sensor, 84-pin CLCC package. UV epoxy sealed D263T glass lid without AR coating on both sides.

GLUX1605BSI-CBM-NCN-ARE

BSI image sensor, 84-pin CLCC package. Removable D263T glass lid without AR coating on both sides.

GLUX1605BSI-CBM-NCN-AUE

BSI image sensor, 84-pin CLCC package. UV epoxy sealed D263T glass lid without AR coating on both sides.

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