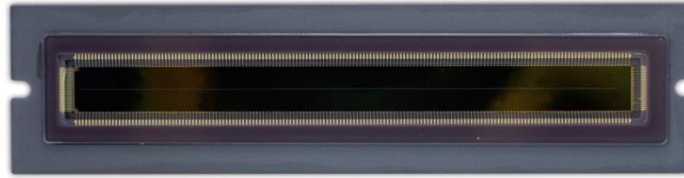


16384 X 8 Linear CMOS Image Sensor- GL1608



SENSOR DESCRIPTIONS

The GL1608 sensor is a line-scan CMOS image sensor which contains 8 lines of 16384 pixels, the pixel pitch is 5 μ m. Users can choose either dual-line mode or four-line mode based on application. 39 KHz and 17.8 KHz line frequency can be achieved respectively. The sensor achieves a read noise of less than 3e⁻. The full well is around 25ke⁻. On-chip 2x2 binning is also supported to increase the sensitivity and SNR. All these features make GL1608 sensor an ideal line-scan image sensor for various applications.

SENSOR SPECIFICATIONS

Photo-sensitive area	81.92mm × 0.04mm	Resolution	16384 × 8
Pixel size	5 μ m × 5 μ m	Shutter type	Global shutter
Dark noise	<3e ⁻	Dark current	<200e ⁻ /p/s@42°C
Full well charge	>25ke ⁻	SNR Max	48dB
Line rate	39kHz @ dual-line 39kHz @ four-line binning 17.8kHz @ four-line	Quantum efficiency	46.5% @ 630nm R line 43.9% @ 540nm G line 42.7% @460nm B line TBD @550nm MONO
Dynamic range	>65dB	Maximum Data rate	15.36Gbps
Output interface	32LVDS pairs	Supply voltage	3.3V /1.8V
Power consumption	<4W	Package	136-pin PGA

OPERATION MODES

