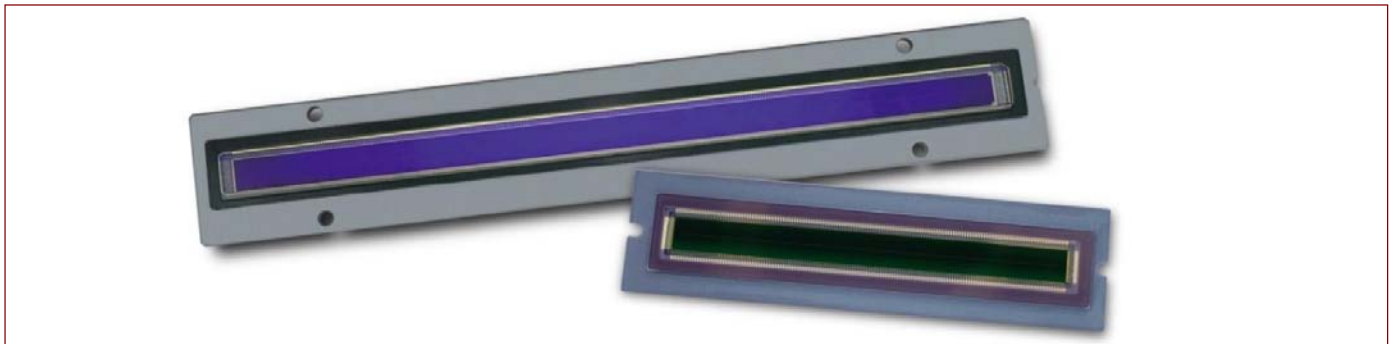


Lin-CMOS 3208/1608

32768 x 8 / 16384 x 8 Linear CMOS Image Sensor

Preliminary Short Form Datasheet



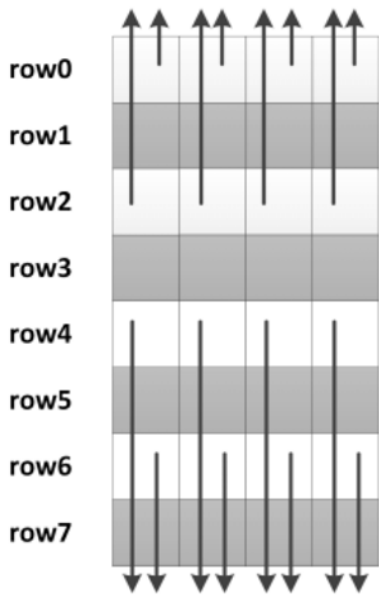
Sensor Description:

Designed for high-resolution high-speed inspection, Lin-CMOS 3208/1608 consists of 8 rows of 5 μm pixels, where the top 4 rows are readout from the top readout chain and the bottom 4 rows are readout from the bottom readout chain. Both sensors support various operation modes: including readout of 1, 2, and 4 lines in 5 μm pixel or 1, 2, and 4 lines with 10 μm pixel size when 2 x 2 on-chip pixel binning is enabled.

Sensor Specifications:

Photo-sensitive area	163.84 mm \times 40 μm @ Lin-CMOS 3208 81.92 mm \times 40 μm @ Lin-CMOS 1608
Resolution	32768 \times 8 @ Lin-CMOS 3208 16384 \times 8 @ Lin-CMOS 1608
Pixel size	5 μm \times 5 μm
Shutter type	Global shutter
Dark noise	< 4.5 e ⁻
Dark current	< 40 e ⁻ /p/s @ 25°C
Full well charge	> 20 ke ⁻
SNR Max	43 dB
Line rate	40 kHz @ dual line - 20 kHz @ four lines
Dynamic range	67 dB
Output interface	64 LVDS pairs
Supply voltage	3.3 V / 1.8 V
Operating temperature	- 55°C ~ + 85 °C
Package	222pin @ Lin-CMOS 3208 136pin @ Lin-CMOS 1608

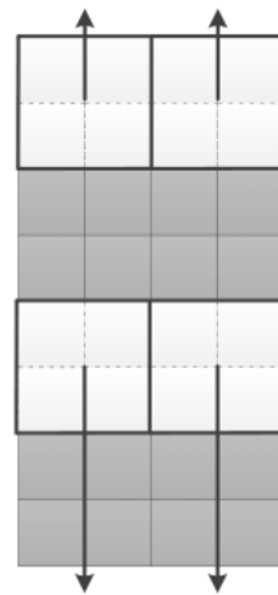
Operation Modes:



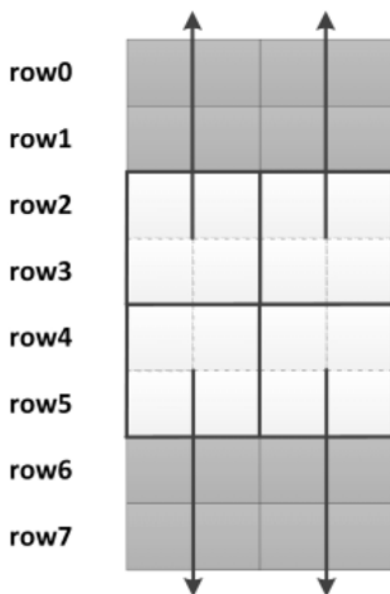
Four-line 5 µm pixel
with one-line space in
between



Four-line 5 µm pixel
without space
in between



Two-line 10 µm pixel
with one-line space
in between



Two-line 10 µm pixel
without space
in between



Four-line 10 µm pixel
without space
in between