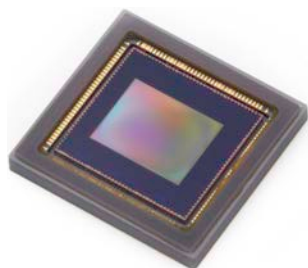


# 5MP Global Shutter CMOS Sensor

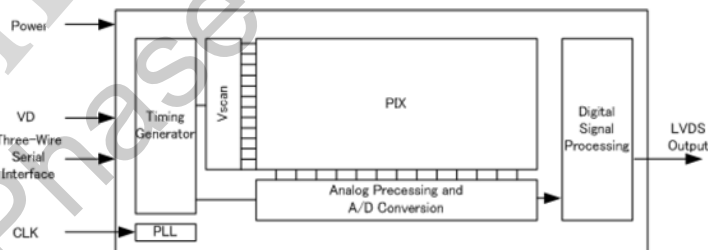


The 3U5MGXS global shutter image sensor employs a new pixel design introducing new drive readout and light guiding technologies significantly reducing noise, and contributing to remarkably wide dynamic range with a power consumption of 500mW. Equipped with a global shutter and all pixel progressive reading at 120fps, the 2/3" sensor size, and pixel size of 3.4 $\mu$ m with 5.33 million effective pixels (2592 x 2056) easily allow for applications in machine vision and other industrial environments where smaller size and high performance are

required. It is available in RGB and Monochrome. As this is an engineering sample, final specifications will be published once the production version is available.

## Specifications:

- Sensor size: Approx. 2/3 inch (8.8mm x 7.0mm)
- Number of effective pixels: 2592h x 2056v, approx. 5.3M
- Filter types:
  - 3U5MGXSCES: RGB on-chip color filter
  - 3U5MGXSMES: Monochrome
- Pixel size: 3.4 $\mu$ m x 3.4 $\mu$ m
- Maximum Frame Rate: 120fps
- Global electronic shutter function
- Progressive scan
- Main clock frequency: 36MHz (Recommended)
- Sensitivity:
  - 3U5MGXSCES (Green): 30,000 e/lx/sec @Analog gain x1(TBD)
  - 3U5MGXSMES: TBD
- Saturation: 7,000e gain x1 (TBD)
- Output Channels Data: 12 lanes, Clock 2 Lanes
- Output from LVDS: Maximum output of 864Mbps
- Analog gain: 0 to 36dB
- Digital Gain: 0 to 24dB
- Dark Random Noise: 2.6e rms @ Analog gain x4(TBD)
- Dark Current: 1.3 e/sec @Analog gain x4, Room Temp
- Maximum Dynamic Range: 68.6dB (TBD)
- Function: ROI function (8 region) Inverted output function (horizontal and vertical)
- 180pin ceramic LGA
- Power consumption (Typ): 500mW (full pixel scan at 60 fps)
- Power supply voltage: 3.3V, 1.2V
- Package size: 19.0mm x 18.1mm x 2.5mm
- Exposure control by external trigger



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