



# High Performance 2.5um Global Shutter Pixel with New Designed Light-Pipe Structure

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**Abstract:**

We developed a 2.5um global shutter (GS) CMOS image sensor pixel using an advanced Light-Pipe (LP) structure designed with novel guidelines. To the best of our knowledge, it is the smallest reported GS pixel in the world. The developed pixel shows an excellent Quantum Efficiency (QE), Angular Responses (AR) and very low Parasitic Light Sensitivity (PLS). Also, even in oblique light condition of 10 degrees, the 1/PLS is maintained to about half value. These key characteristics allow development of ultra-high resolution sensors, industrial cameras with wide aperture lenses and low form factors optical modules for GS mobile applications.

For the complete article, please visit [here](#).