

High Sensitivity and Wide Dynamic Range CMOS Image Sensor

Realize ultimate sensitivity and wide dynamic range over 100 dB in one exposure

Summary

This technology realizes a wide dynamic range CMOS image sensor by employing Lateral Overflow Integration Capacitor (LOFIC) in a pixel.

The LOFIC technology can solve the tradeoff between high sensitivity and high saturation signal.

This technology has been ready to the market.

Sample Pictures



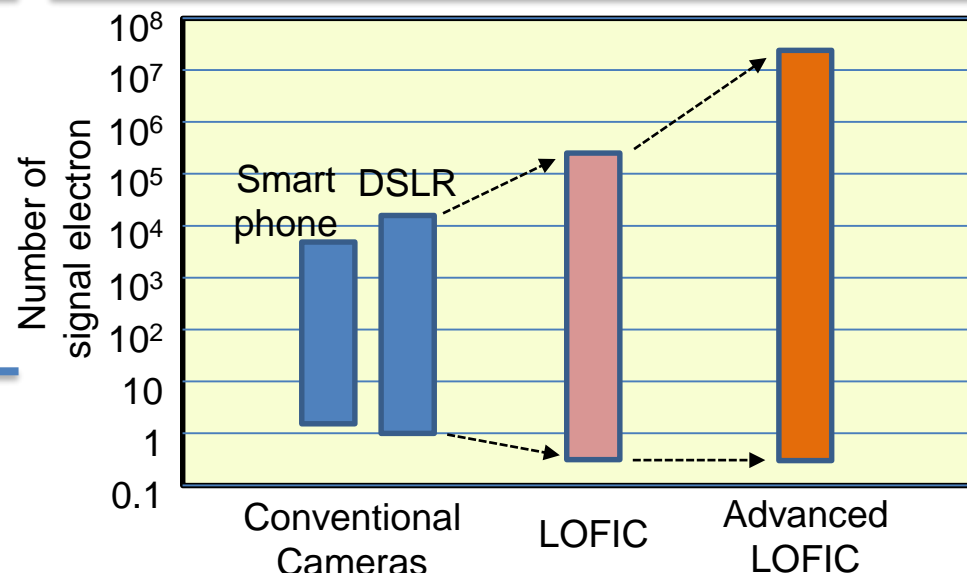
Conventional Camera

N. Akahane, S. Suawa et al., IEEE JSSC, 41, p.851-858, 2008.



Camera with this tech.

Comparison of Signal Range



Application examples

Versatile cameras (Smart phone, DSLR and so on), Wearable cameras, Surveillance cameras, Mounted cameras (Vehicle, Drone and so on), Other cameras.

Contact

Tohoku Techno Arch Co., LTD

TEL:+81-22-222-3049, FAX:+81-22-222-3419

[Click](#) to contact

Patent Data Sheet

Application No.(Serial No.): US7,518,143 (T16-074) etc.

Inventors: Shigetoshi Sugawa et al.