

Photon-Effect Transistor (PET): New Basic Element of Digital Circuit for Ultra-High Resolution Image Sense with Super Simple Structure and Higher Performance

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Status:

Seeking R&D and/or
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Patent Pending

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Photon-Effect Transistor (PET): New Basic Element of Digital Circuit for Ultra-High Resolution Image Sense with Super Simple Structure and Higher Performance

- Photon-Effect Transistor
 - Implements light signal sensing and electrical signal amplifying dual functions in one simple unit
 - Photosensitive semiconducting material
- Sensor that powers cameras and other image reading technologies
- Transforms light from an image into electrons
- Image sensor pixels create high quality, low-noise images

Advantages of Photon-Effect Transistor (PET): New Basic Element of Digital Circuit for Ultra-High Resolution Image Sense with Super Simple Structure and Higher Performance

- Without multi-component, photo sensitive gate occupies most of the pixel area
 - Stronger sensitivity and efficiency
- Two-terminal architecture
- Significantly reduces the complexity and space cost of interconnect layout
 - Direct amplification of photo signal effectively reduces signal distortion
 - Substantially reduces pixel size and achieves better performance

[For More Information, Click to View YouTube Pitch](#)

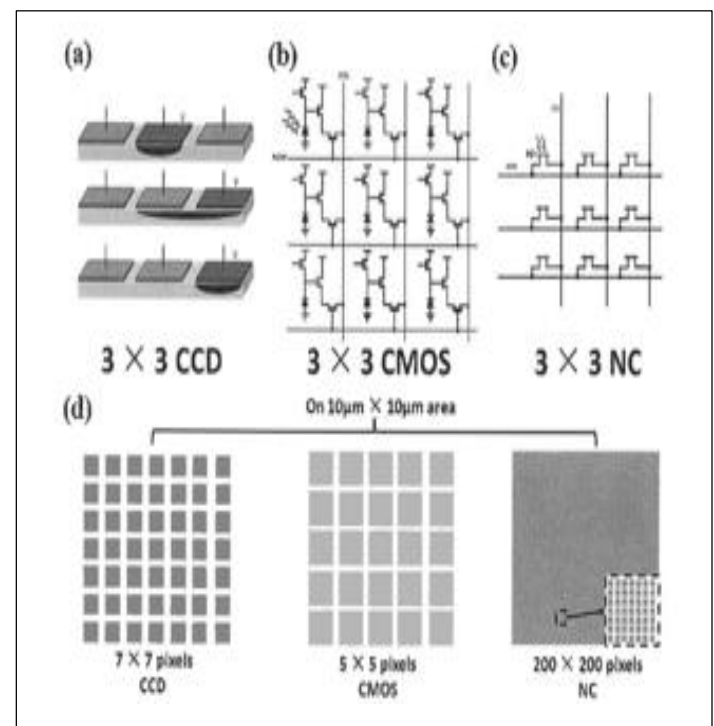


Figure 1. Schematic Structure and Illustration of Image Sensors