

ADVANCED SOLUTIONS FOR IMAGERS

IMAGERS NEED MORE AND MORE PIXELS,
DIGITAL RESOLUTION, FRAMES PER SECOND.
BUT HOW TO DEAL WITH THE GROWING DATA DEMAND?



Many solutions have been developed to solve the datathroughput bottleneck:

- Advanced CMOS technologies for high density
- 3D stacking to get space for electronics integration
- Advanced analog-to-digital convertors
- Data sorting to only output relevant data
- Local processing to get high-level information

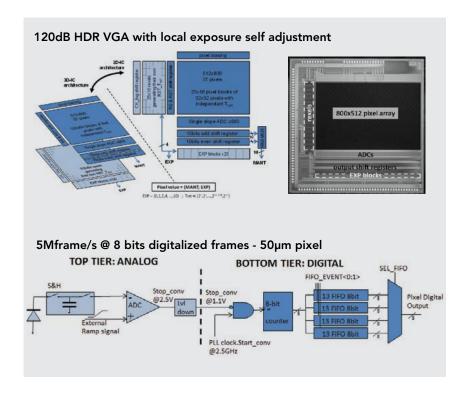
APPLICATIONS

- Imager market has become pervasive, quickly evolving and growing in response to new uses:
- High-speed camera for Industrial production chain control
- High-precision imaging for scientific and research equipment
- Sensing for the Internet of Things with wearable, health and wellness applications
- Advanced camera for drones or automotive applications
- And whenever high-speed, compact, ultra-low-power solutions are required

WHAT'S NEW?

Examples of designed solutions:

- High-dynamic-range imaging with local exposure control
- Burst-mode imaging with digital storage
- Local compression with data throughput control
- Compressive sensing for efficient acquisition
- Event-based imaging with smart image analysis
- Advanced delta sigma digital conversion
- Massively parallel data acquisition & processing



KEY FACTS: 15 patents filed in the last two years on electronics and architecture for imagers Access to advanced design platform (EDA, design flow, foundry design kit, thermal effect, aging, robustness) 40 design experts (PhD & Engineers)

LETI'S OFFER

Thanks to 25-years of background in imaging and a large set of skills, we can offer cutting-edge solutions tailored to your needs:

- Feasibility analysis based on customer use-case
- Access to our background and intellectual property
- Patents filing to add value to our partner solution
- Development of proof of concept
- Analysis of the product cost and added value
- Transfer the solution to industrial production chain

Leti, technology research institute

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INTERESTED IN THIS TECHNOLOGY?

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