



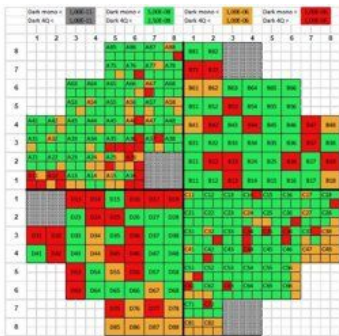
# NEW InGaAs PHOTODETECTOR

## « SELLING » STATEMENT:

A newly ITAR Free & large array devices for dual use with significant fabrication yield improvement



3mm diodes & 4Q integrated in TOx



Yield mapping at the end of VIZTA (Devices fitting specifications in green, out of specifications in red)

## KEY FEATURES

### Solved challenges

- Fabrication yield for 3mm large components
- Compatibility with nanoseconds pulse detection despite a large capacitance
- InGaAs avalanche photodiodes adapted to a new growth chamber

### Achieved results

- Specific supply chain for 3mm large diodes mono-element + 4Q
- Simplified APDs architecture tested, First I(V) results on new APDs architecture (200µm & 80µm)
- Fabrication in 4Q configuration to start

### Exploitation

- Industrialization of large P-i-n
- Fabrication of large APDs in mono & 4Q format

### Ideal for

- Laser detection in nanosecond range
- Further scientific perspectives (Free Space communication, LISA program)

Contacts : Jean-Luc Reverchon | email [jean-luc.reverchon\[at\]3-5lab.fr](mailto:jean-luc.reverchon[at]3-5lab.fr) | [www.vizta-ecsel.eu](http://www.vizta-ecsel.eu)



*This VIZTA (Vision, Identification, with Z-sensing Technologies and key Applications) project has received funding from the ECSEL Joint Undertaking (JU) under grant agreement No 826600. The JU receives support from the European Union's Horizon 2020 research and innovation programme and France, Sweden, Greece, Spain, United Kingdom, Germany, Luxembourg, Latvia, Hungary.*

*The VIZTA project results presented reflect only the author's view. The Commission is not responsible for any use that may be made of the information it contains*