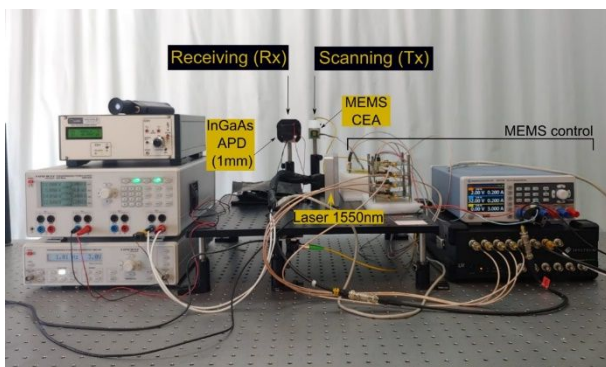




LRL DEMONSTRATOR INTEGRATING VIZTA DEVELOPED COMPONENTS

« SELLING » STATEMENT:

A demonstration of successfully developed components integrated in a specific VIZTA architecture for LRL LIDAR



LRL Demonstrator integrating CEA-LETI MEMS mirror and Lumibird fibre laser ($\lambda=1.55\mu\text{m}$)



Drivable demonstrator

KEY FEATURES

Competitive advantages

- Solid-state lidar with strong IP protection
- High resolution lidar imaging suitable for easy image fusion.
- Full Class 1 eye safe ($\lambda=1.55\mu\text{m}$)
- Multimodality enables improved AI perception

Demonstrated within VIZTA

- Specification, testing and validation of each of the LRL lidar subcomponents (PIN detector, fibre laser, MEMS mirror) in dedicated setups.
- Operative optomechanical designs at $\lambda=1.55\mu\text{m}$ for receiving and transmitting
- Dedicated front-end optimized for APD amplification in InGaAs
- Dedicated tools and strategies for validation of specs of components

Further research

- Improved detector for stunning performance with immediate opening of market.
- TRL rise in MEMS mirror for commercial use

Statement

- Significant gain in experience (qualification of components)
- New projects started

Contacts : [santiago.royo\[at\]upc.edu](mailto:santiago.royo[at]upc.edu) | [jordi.riu\[at\]beamagine.com](mailto:jordi.riu[at]beamagine.com) | 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