



# EPIC Online Technology Meeting on Mid-IR Photonics

13 May 2020

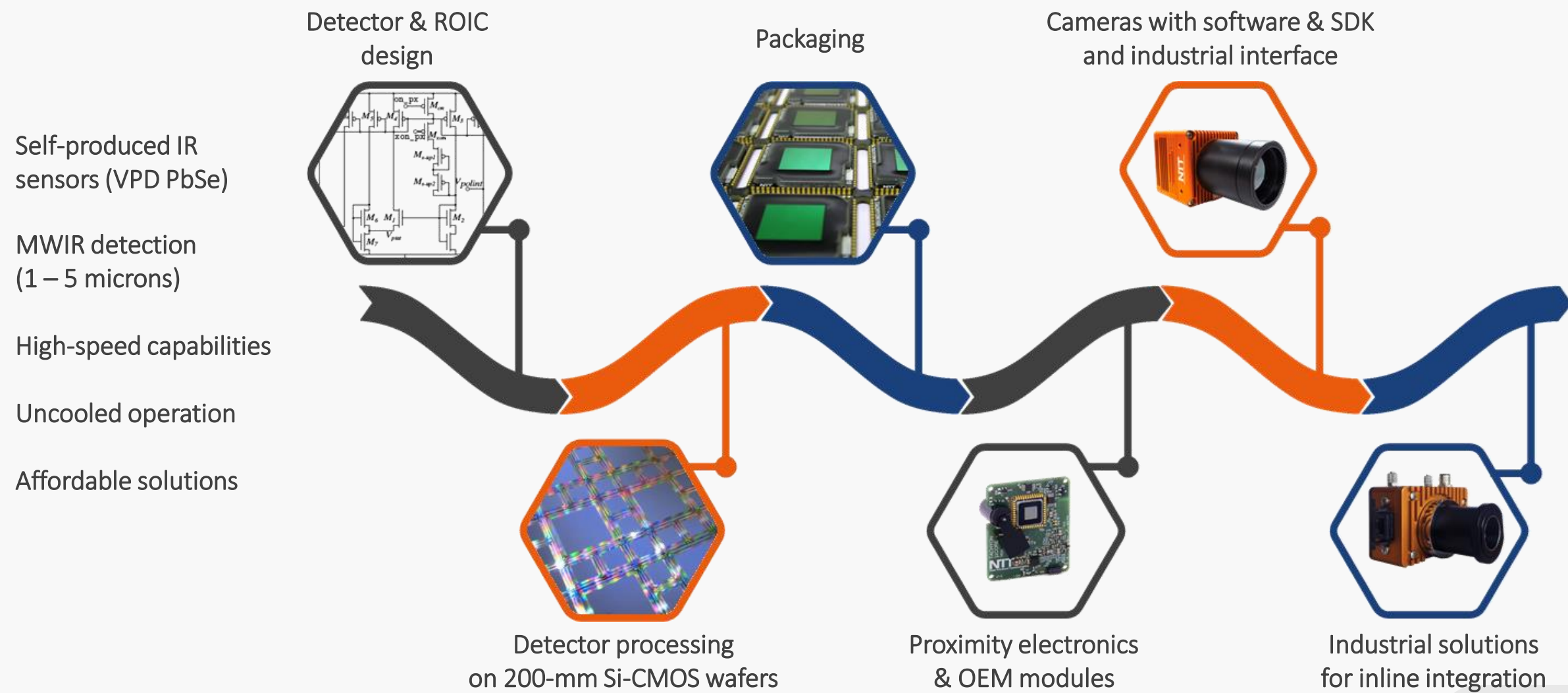
Rodrigo Linares  
Business Development Mgr.  
[rlinaresh@niteurope.com](mailto:rlinaresh@niteurope.com)



**NIT**  
New Infrared  
Technologies

[www.niteurope.com](http://www.niteurope.com)  
[sales@niteurope.com](mailto:sales@niteurope.com)

# New Infrared Technologies: A vertically integrated company supplying innovative mid-IR detectors, cameras and industrial solutions





# New Infrared Technologies: Product and Solutions portfolio targeted to Integrators, Solution developers and End-users

Single pixel



Linear array (256 px)

OEM modules  
(1x256, 32x32)



TACHYON 1024  
microCAMERA

CLAMIR

Quality assurance of  
L-DED 3D metal printing

Closed-loop control of  
laser power

Real time monitoring  
of melt pool width

Direct integration in laser optics



Winner of the Innovation Radar Prize 2018, category 'Industrial & Enabling Tech', awarded by the European Commission

TACHYON 16k  
CAMERA PLUS

128x128 px, pixel size: 50 um,  
uncooled operation

Max. frame rate: 4,000 fps

Snapshot acquisition

GigE VISION & GenICam compliant

Power-over-Ethernet



**GigE**  
VISION

**GEN*i*CAM**

**PoE**  
POWER OVER ETHERNET

I3MS

monitoring system

Continuous monitoring of  
melt pool width

Analog output proportional  
to melt pool width

Warning and Failure  
alarm levels



# New Infrared Technologies: Industrial applications

- Quality assurance of laser-based processes
  - Laser DED 3D metal printing & laser cladding process monitoring and control
  - Laser welding with real-time Machine Learning processing
  - SLM processes (melt pool geometry, position and cooling rate monitoring)
- Arc welding & WAAM process monitoring
- Glass manufacturing quality control
- Spectroscopy & dual-comb hyperspectral imaging
- Strong collaboration with the industry in H2020 projects:





# NIT

## New Infrared Technologies

[www.niteurope.com](http://www.niteurope.com)  
[www.clamir.com](http://www.clamir.com)  
[www.izms.eu](http://www.izms.eu)

Calle Vidrieros 30, nave 2  
28660 Boadilla del Monte  
SPAIN

 +34 91 632 4363  
 [sales@niteurope.com](mailto:sales@niteurope.com)