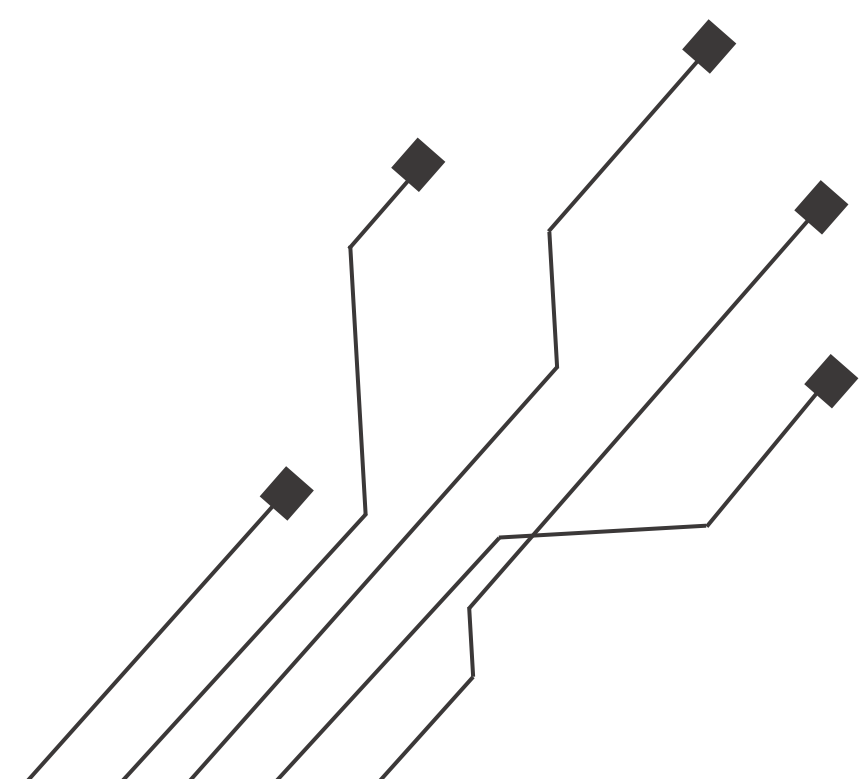




# Commercial Challenges for Photonics as 5G Booms



**Francisco Rodrigues**  
francisco@picadvanced.com

Cofinanciado por:

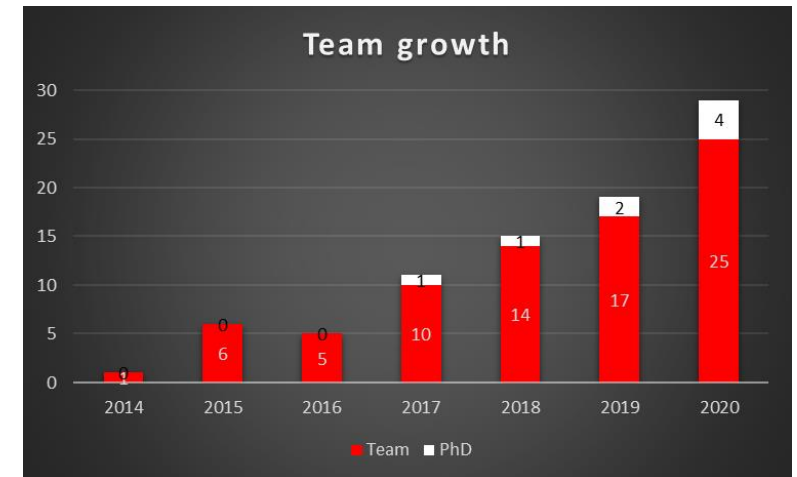
# COMPANY

## Profile

- Founded in 2014. Located in Portugal
- First in the market with fully-compliant/certified NGPON2 ONU
- Unique in the market on PIC development for access

## Awards & Recognitions

- TOP 25 Portuguese ScaleUP 2018 2019
- 2019 Deloitte EMEA Fast EMEA Technology Fast 500 (#49 overall)
- 2020 IAPMEI PME Líder

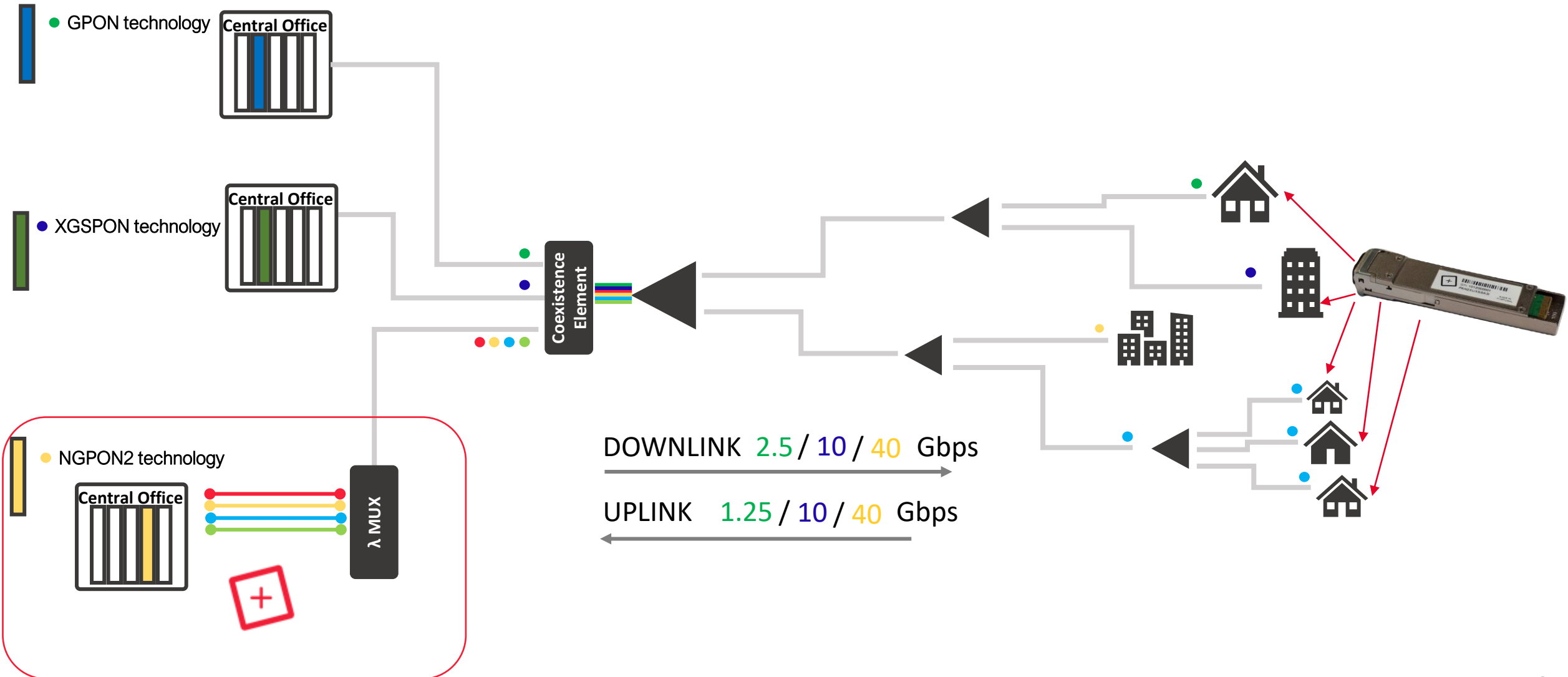


WHEN

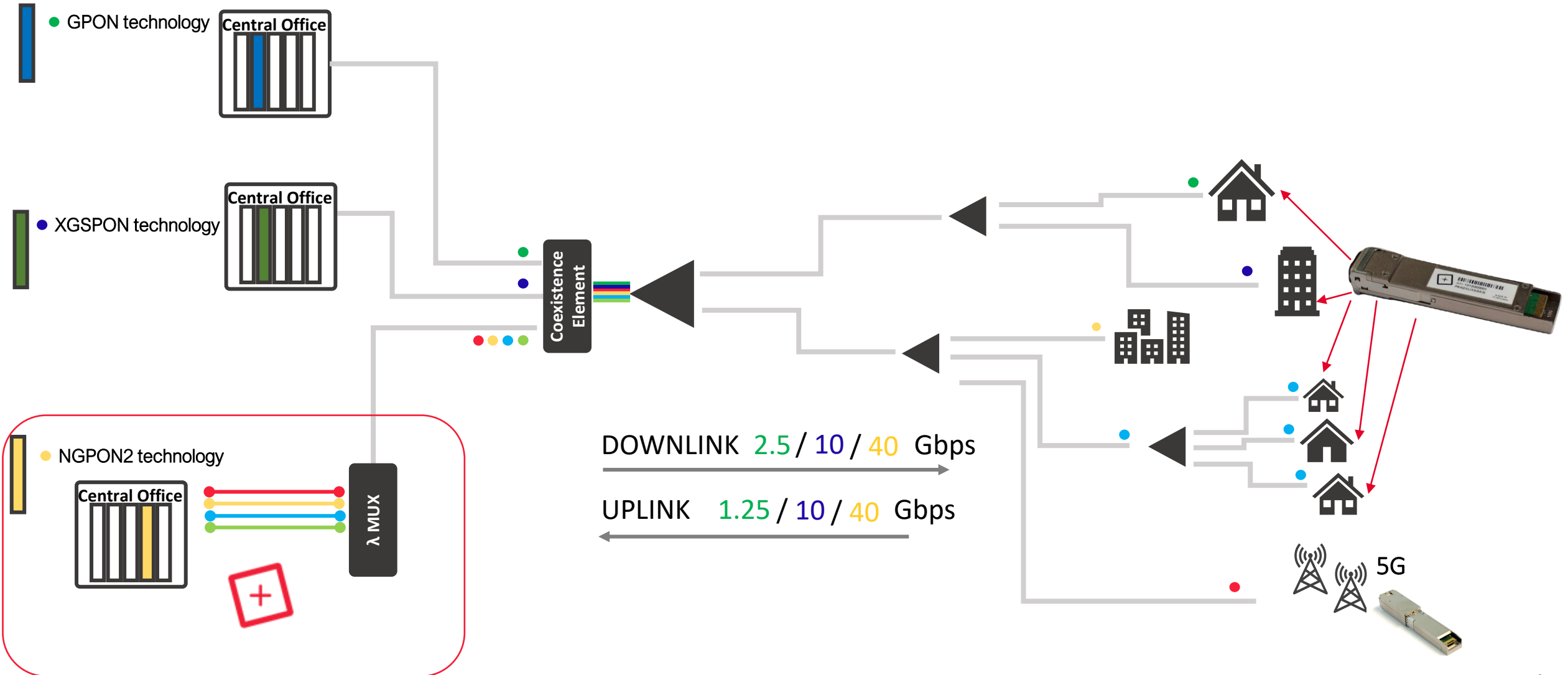
WHERE

GROWTH

# PON



# PON: infrastructure for 5G midhaul



# Enable PON connection to 5G: NG-PON2 “stick”



ONT: Optical Network Terminal



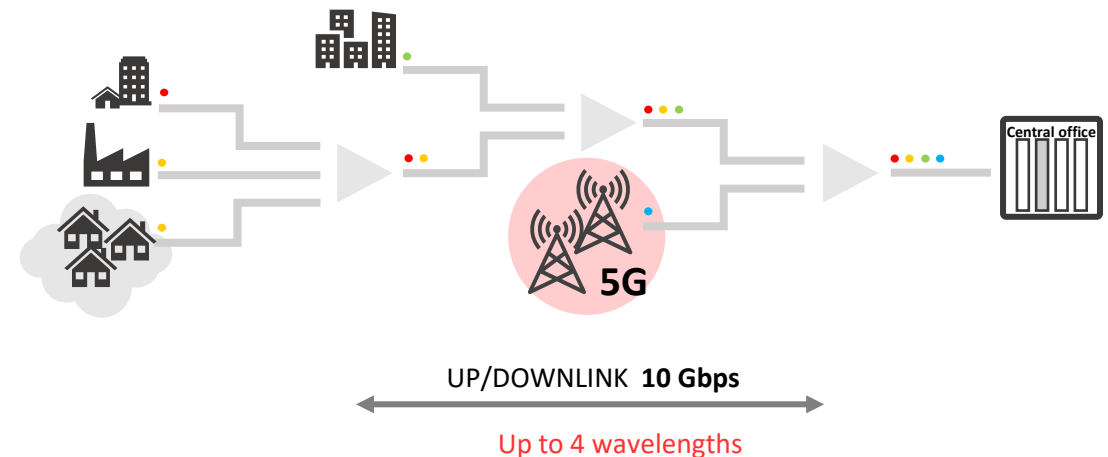
Pluggable transceiver



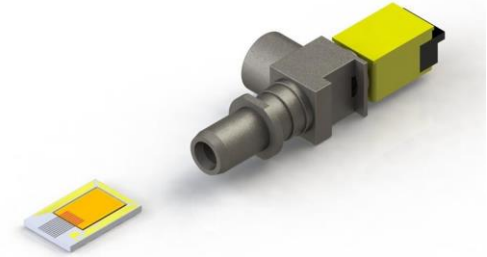
NG-PON2 stick

# NG-PON2 “stick”: 5G enabler

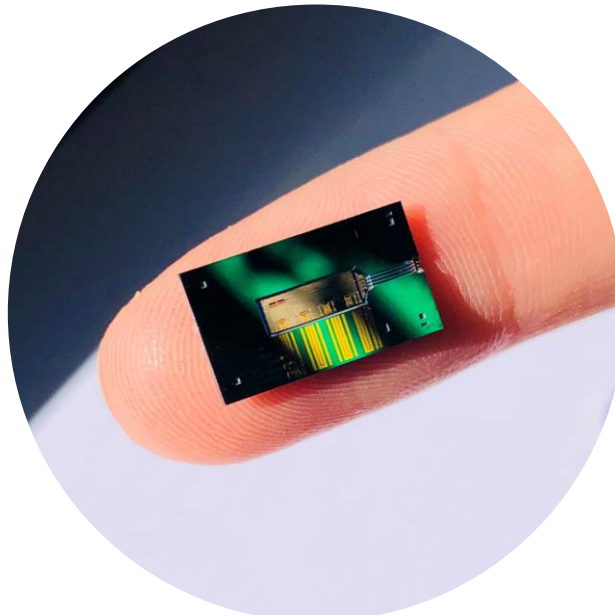
- ❑ SFP+ is a standard interface for:
  - ❑ Small-cell
  - ❑ Base station
- ❑ Feed common routers with PON ports directly
- ❑ Simple network structure with fiber reuse
- ❑ Eases densification of devices/users



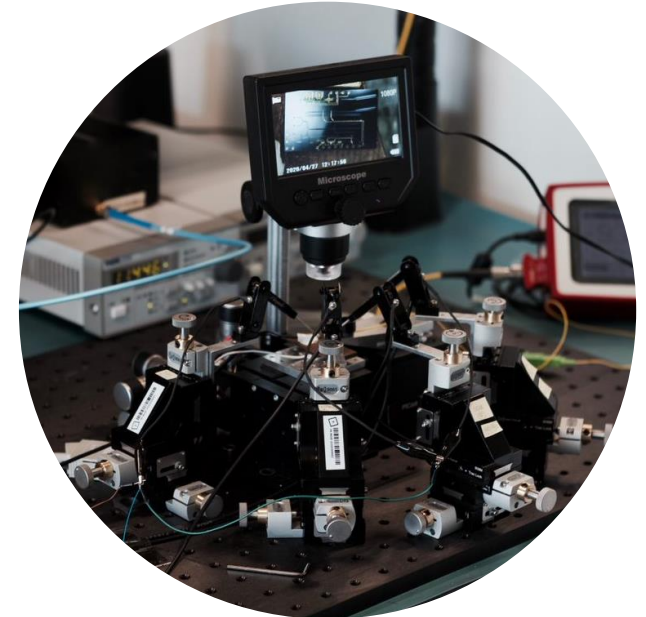
# Photonic integration: path for 5G improvement



Layout & Simulation



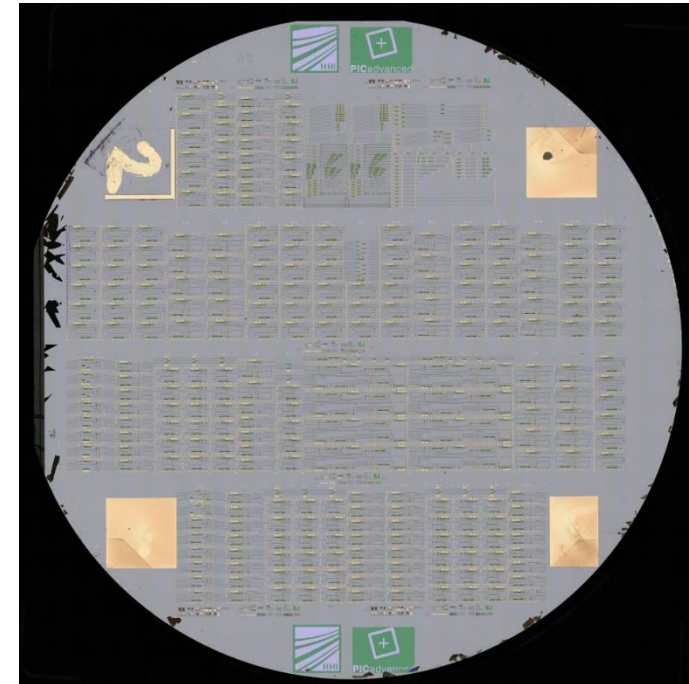
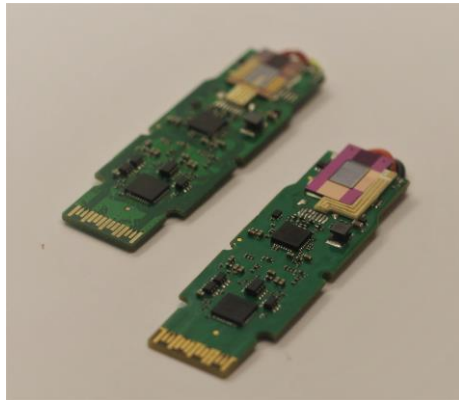
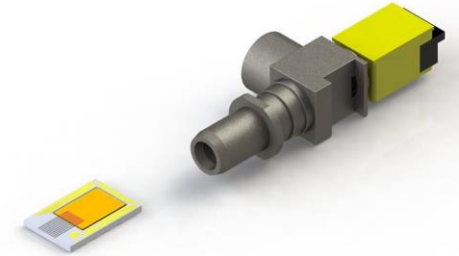
Packaging



Test & Characterization



# Photonic integration: path for 5G improvement

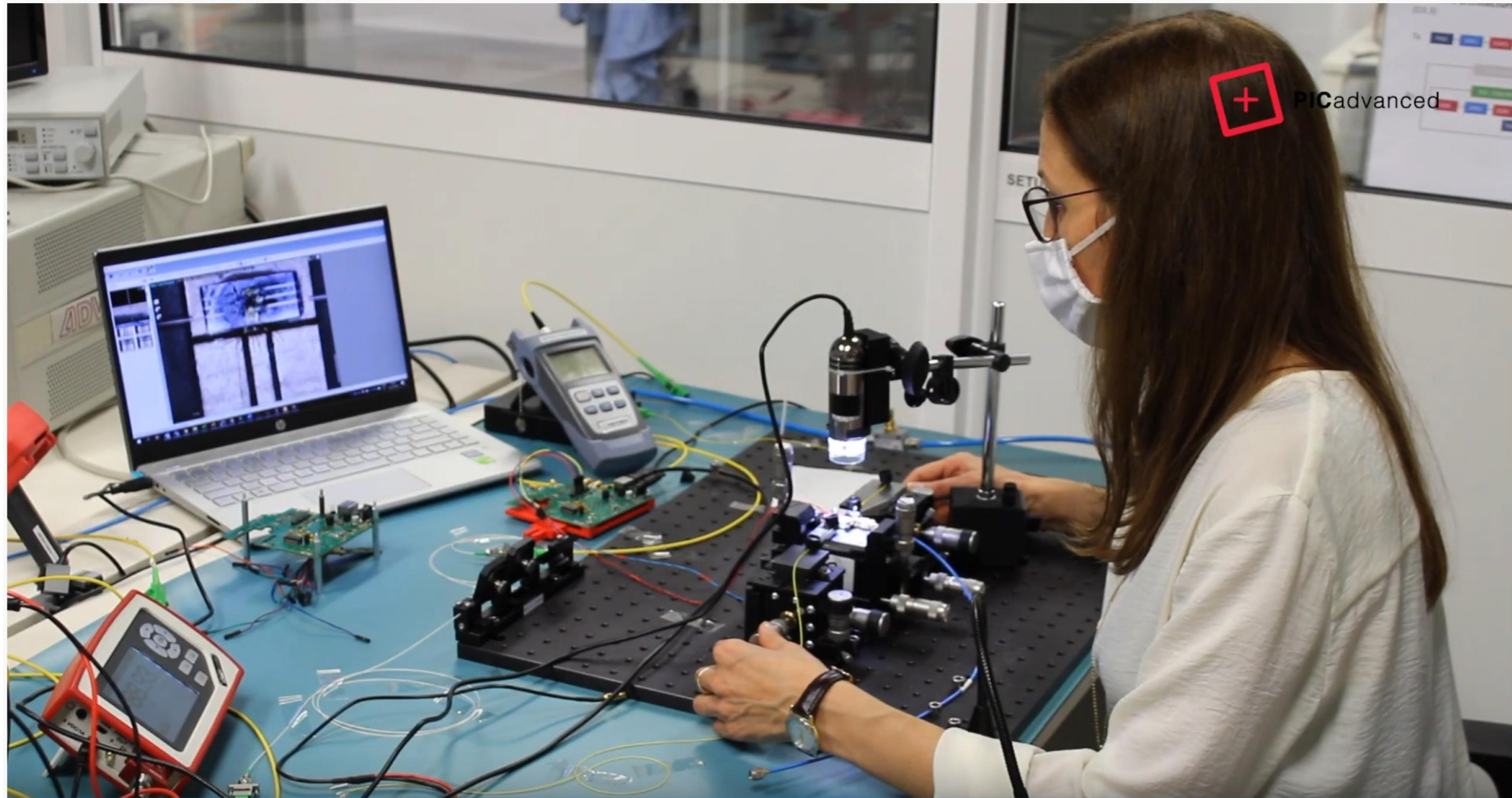




# COME AND E-VISIT US



<https://youtu.be/T-V7Zi4ZW3c>





**THANK YOU!**

**think outside the box  
with us**

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