

PILOT LINE FOR PACKAGING OF PHOTONIC INTEGRATED CIRCUITS



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PHOTONICS PUBLIC PRIVATE PARTNERSHIP

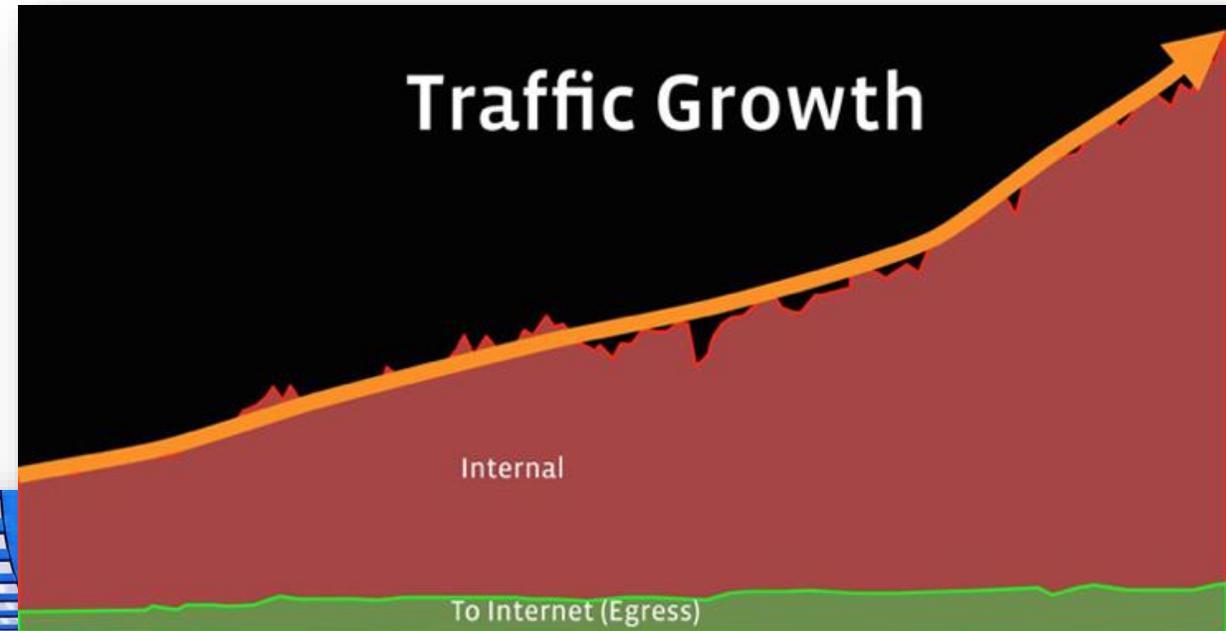
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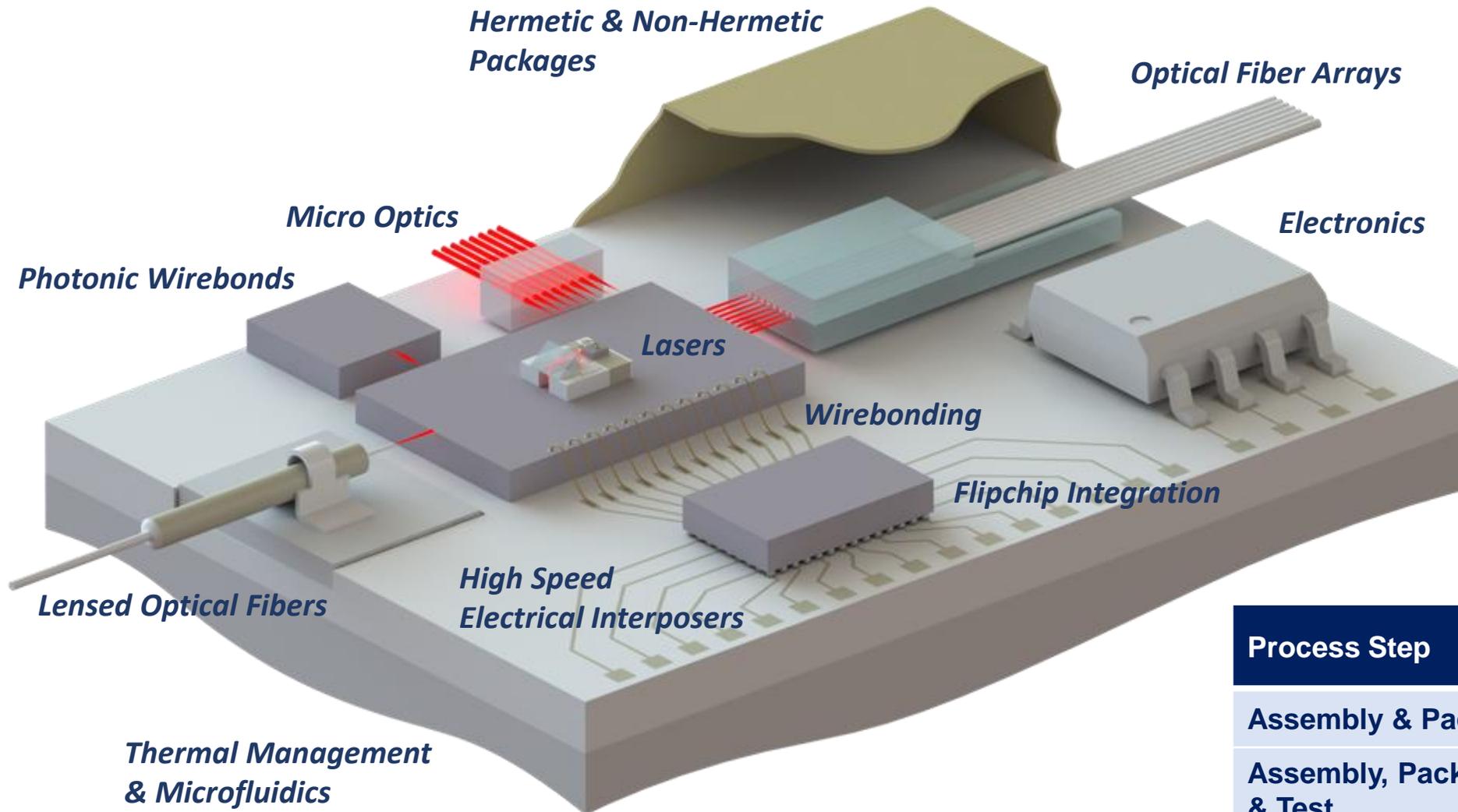
wilfried.noell@suss.com

DATA TRAFFIC – WHY DO WE NEED PHOTONICS

- + 80 to 90% of the data traffic is within the datacenter
- + 1st Change from copper cables to multi-mode fibers (MMF)
- + 2nd Change from multi-mode fibers (MMF) to single mode fibers (SMF)



The Photonic Packaging Technologies



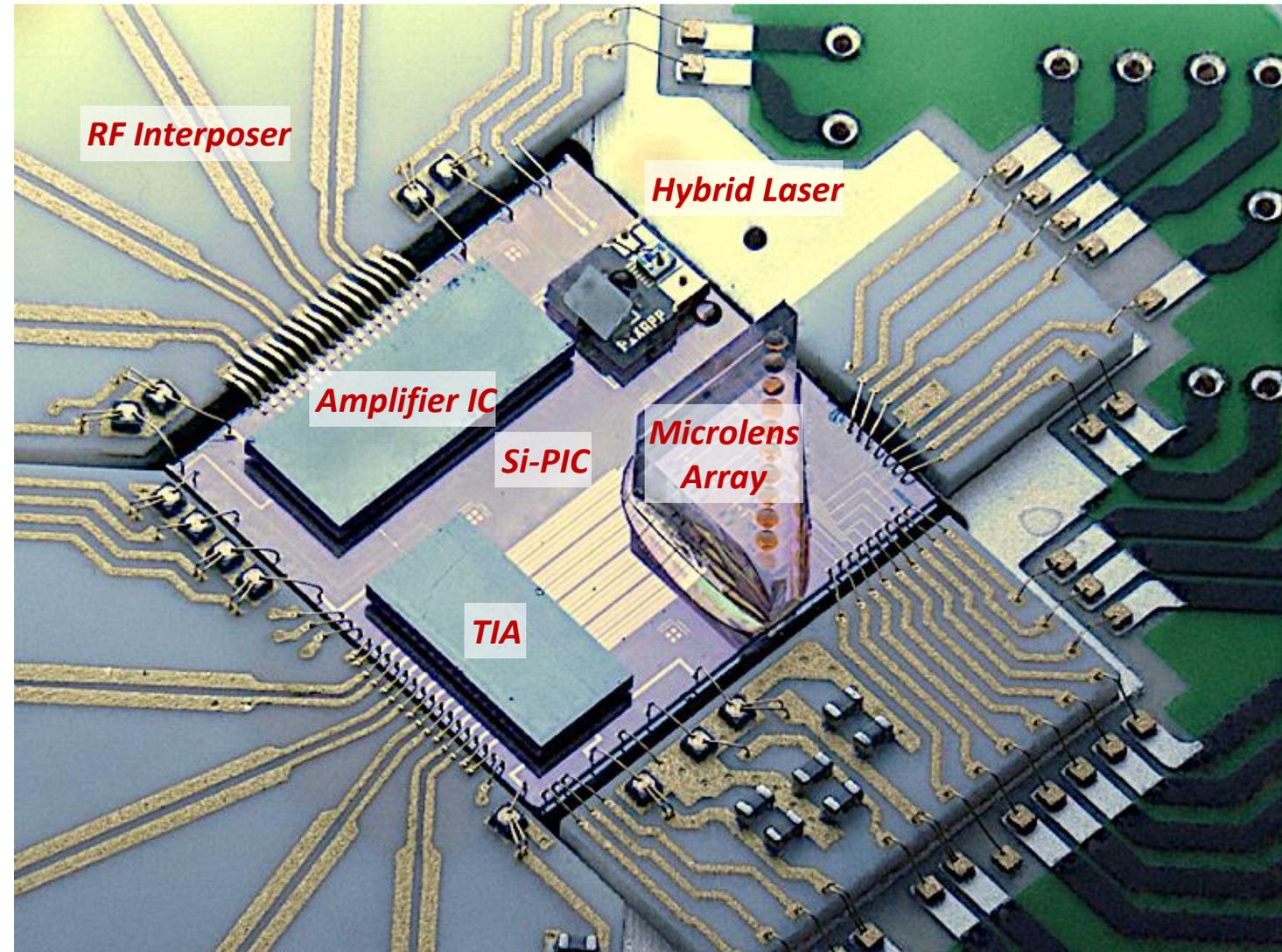
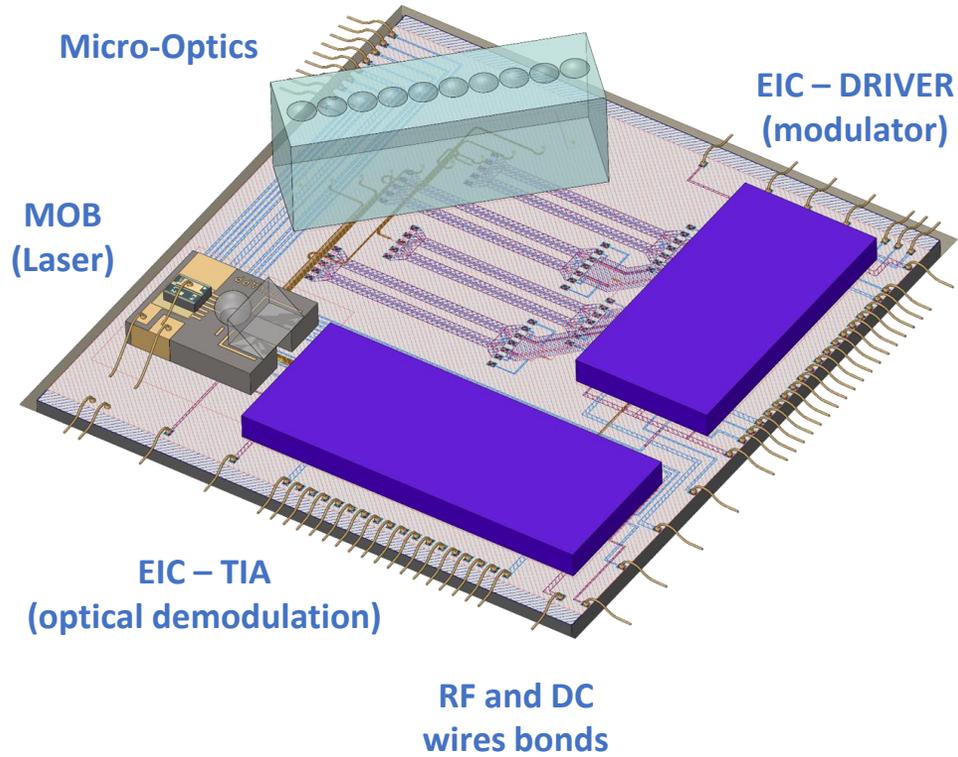
Process Step	Percentage Cost
Assembly & Packaging	> 50%
Assembly, Packaging & Test	> 80%

Distributed Photonic Packaging Pilot Line

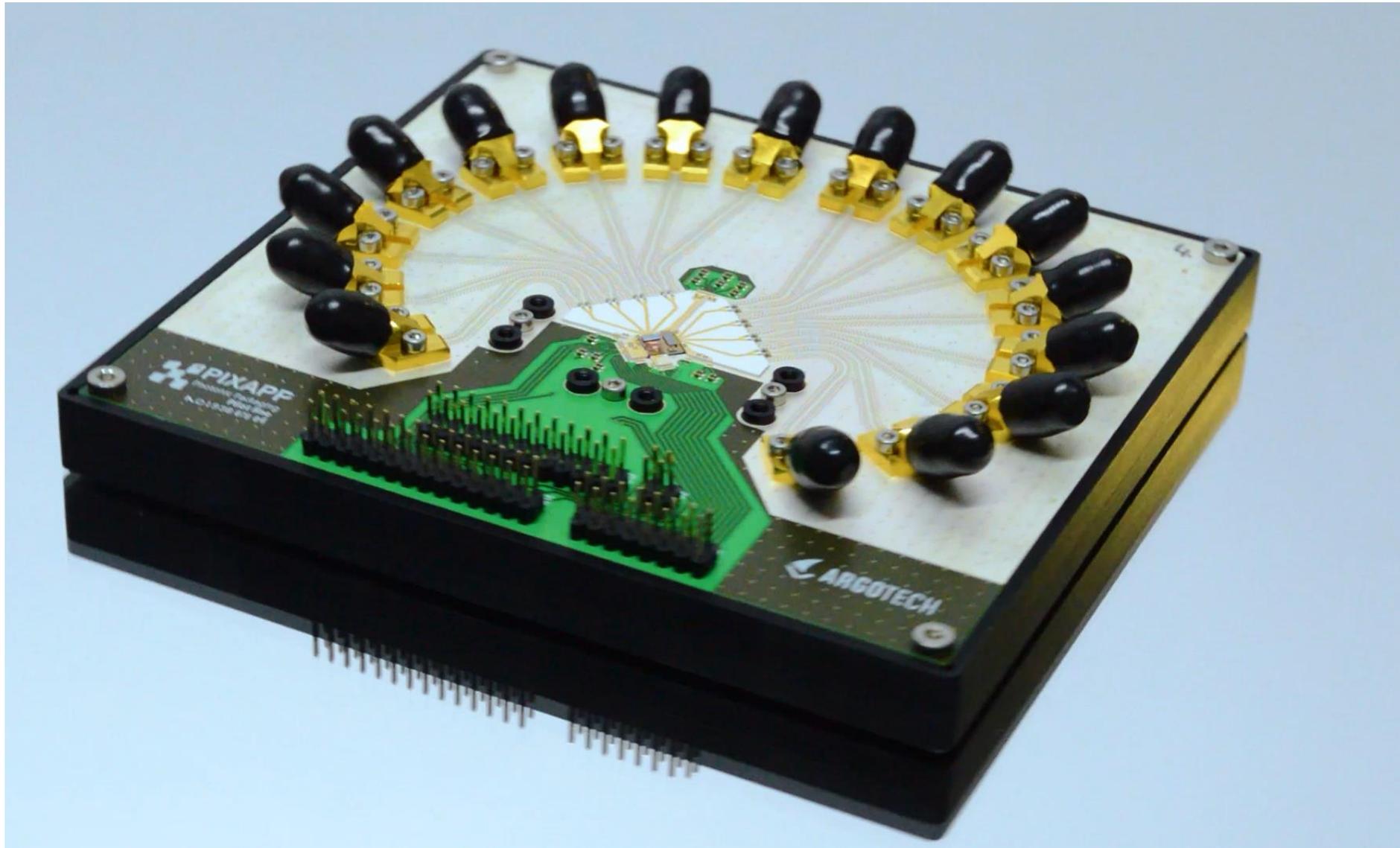


Standardised Packaging (building blocks)

PIC = Substrate



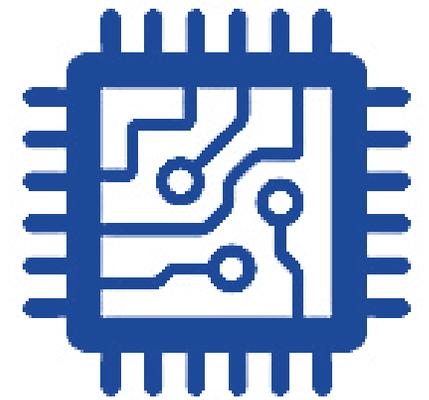
Standardised Packaging (building blocks)



PIXAPP Gateway (easy access to open access)



Users

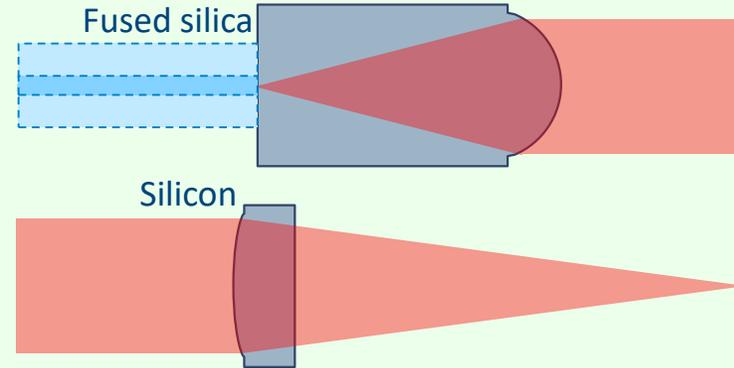
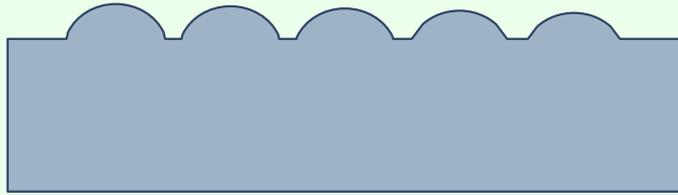


Packaging

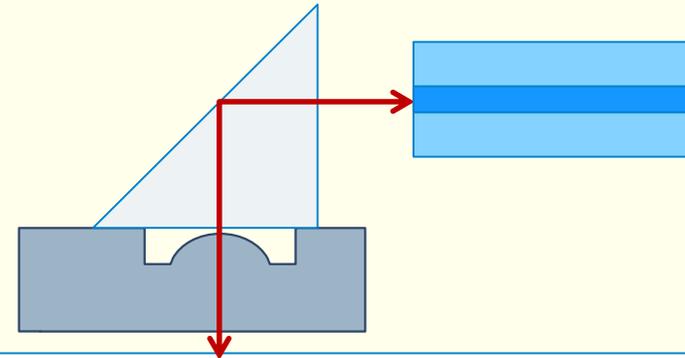
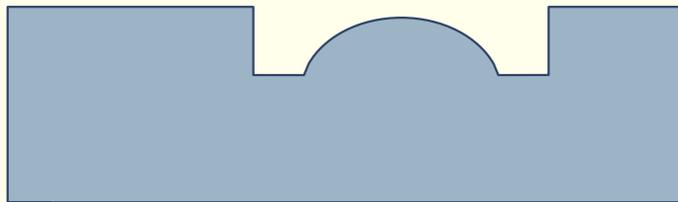
MICROLENSSES – FOR PIC APPLICATIONS

Packaging easier

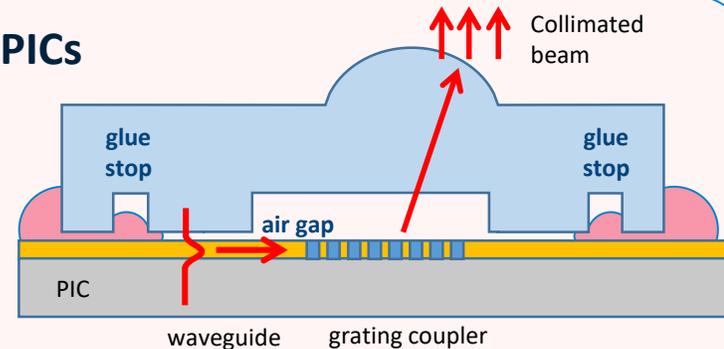
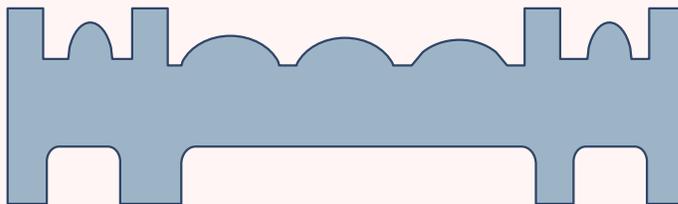
Collimation microlenses



Microlens arrays for microprisms



Microlenses with "adhesive management" for PICs



Microoptics costs lower

Thank You & Questions



Building a Sustainable European PIC Packaging Pilot Line & Manufacturing Ecosystem



PHOTONICS PUBLIC PRIVATE PARTNERSHIP

PIXAPP Training (hands-on courses)

10 Attendees / One Week



Lectures



Hands-on



PIXAPP Gateway (customer pipeline)

