

Space optics and photonics solutions

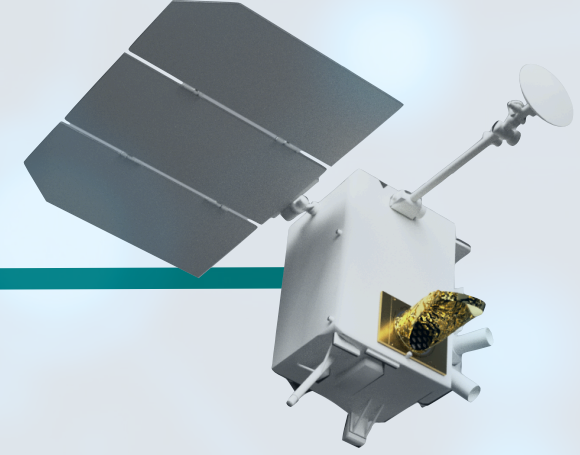
Your mission powered by light

The logo for mbryonics, consisting of the word "mbryonics" in a lowercase, sans-serif font, centered within a white circle that has a thin white border. A horizontal white line extends from the left side of the circle towards the main title.

mbryonics



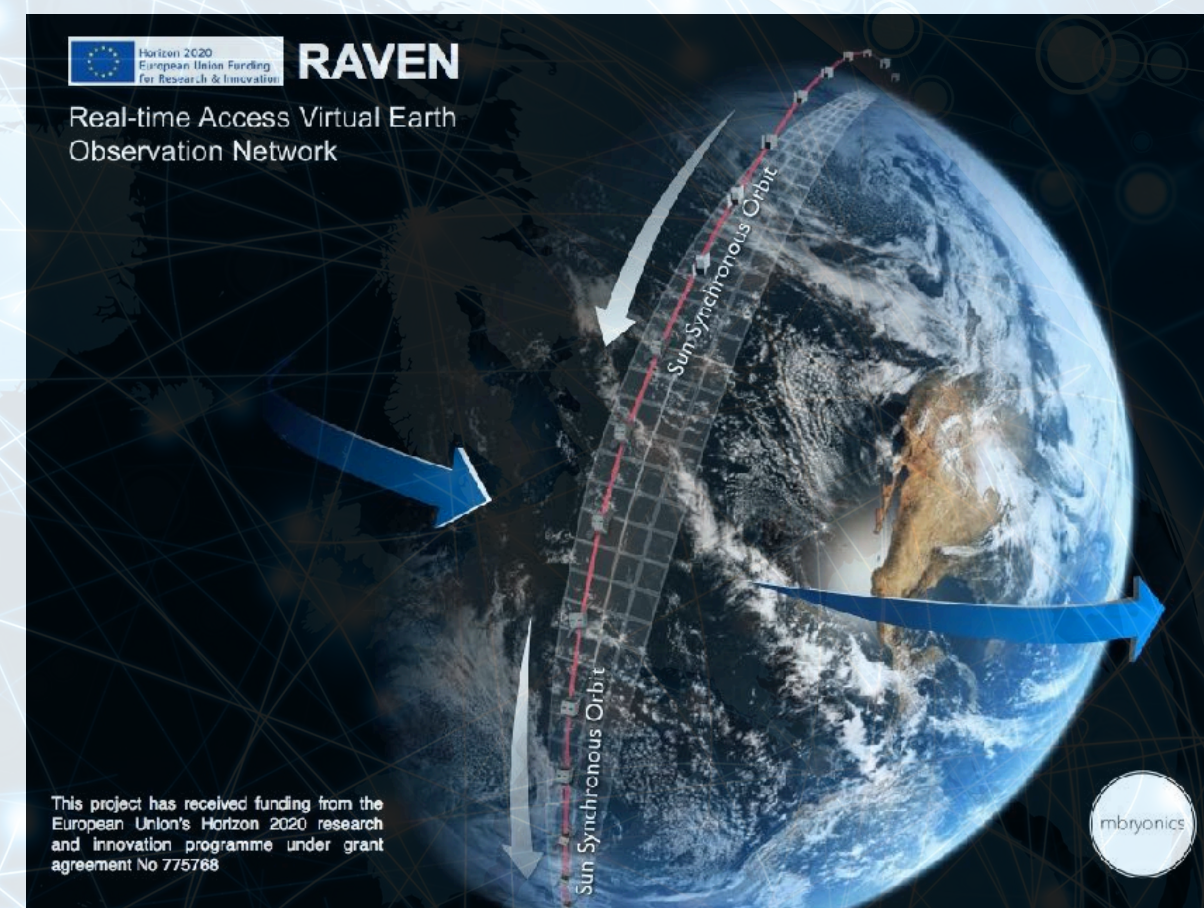
Applications, Products and Services



Space Optical Mesh Networks; Data Relay & Deep Space



Satellite/Terrestrial Network convergence



Real-Time EO Data streaming; End-to-end Big Data Chain Solutions



Secure Communications, SSA, PNT



Optical Ground Stations, Gateways & Wireless Networks



Optics/Photonics MAIT Process Automation



Photonics/ASICs Intra-Sat Comms



Opto-Mechanical MAIT: GSE; Onboard Instruments; Mechanisms



Space Photonics & Optical System Integrators:

Design, Engineering, Manufacturing, Assembly, Integration, Metrology & Test

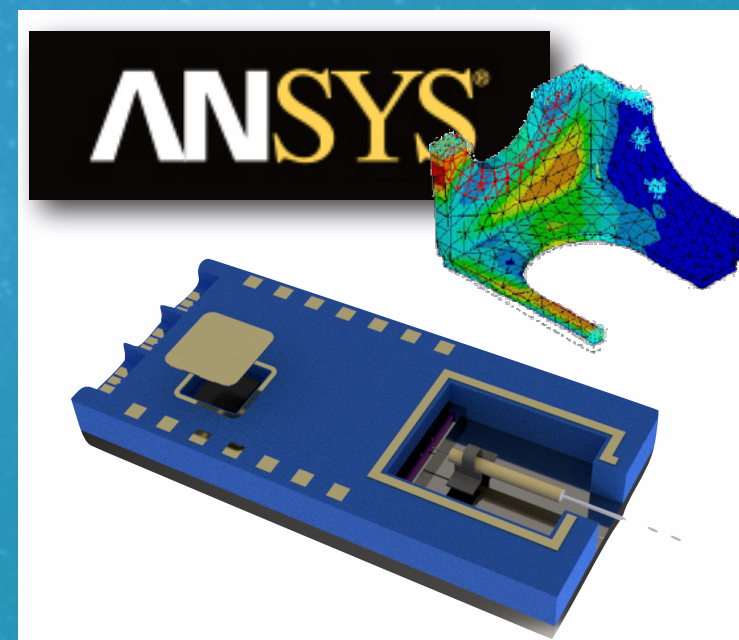
Our Capabilities:



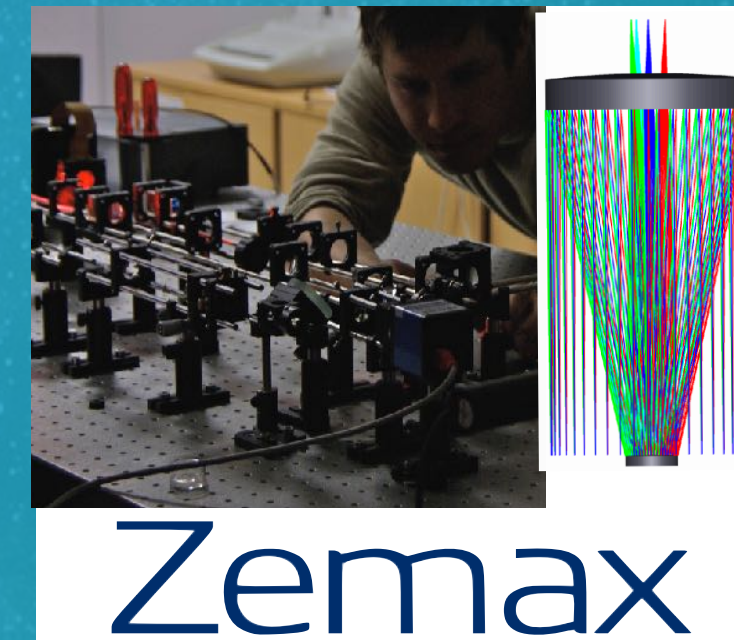
(PIC) Photonic Integrated Circuits Design House:
PIC-Foundry Platform
Agnostic integration platform for OTN hardware at the package and board level



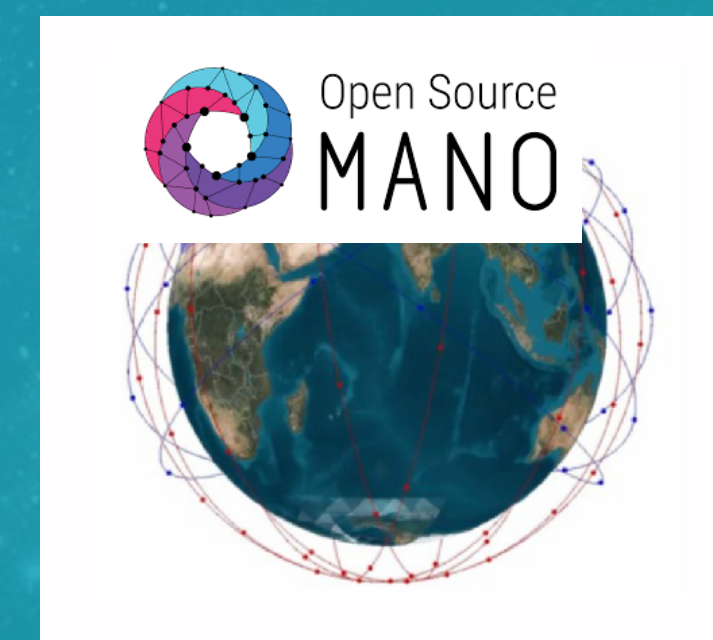
Electro-optical systems & ASIC
Specialists in opto-electronic systems & Adaptive Optics systems. Deformable Mirrors, Liquid Crystal Spatial Light Modulators. Custom photonics ASICs



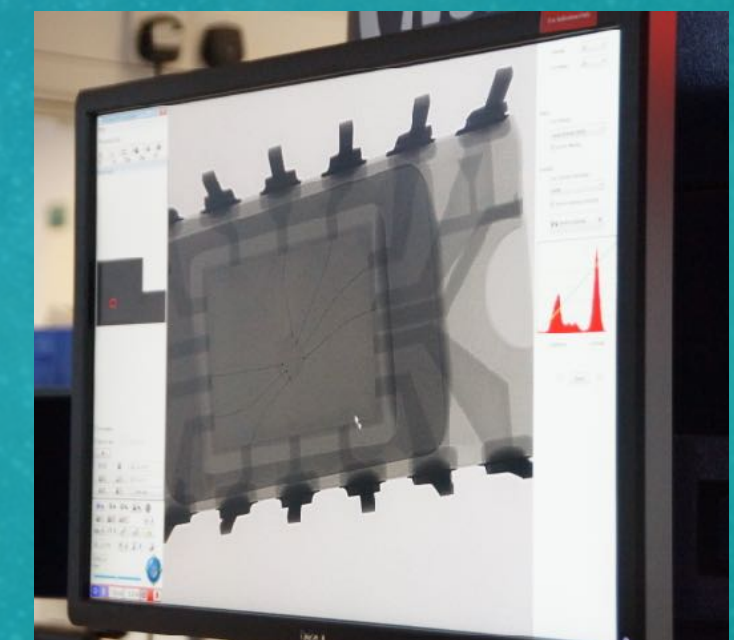
Photonics System Design, Engineering & MAIT
Development of custom packages for high frequency Applications; Finite Element Analysis for thermo-mechanical design, optical design; Pilot Lines & Ramp



Optical & Mechanical Design, Engineering & MAIT:
Design for manufacture for 'one-off' or series manufacture. Metrology for Assembly integration and test, MGSE/OGSE; Freeform; Active Optics



SDN Development for Satellite Architecture
Development of Software definable networks for custom satellite topologies, ground networks, traffic management, and channel considerations.



Component Qualification ISO 17025 & custom Metrology development for assembly integration and test.



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