FOUNDRY SERVICES FOR PHOTONIC INTEGRATED CIRCUITS IN InP

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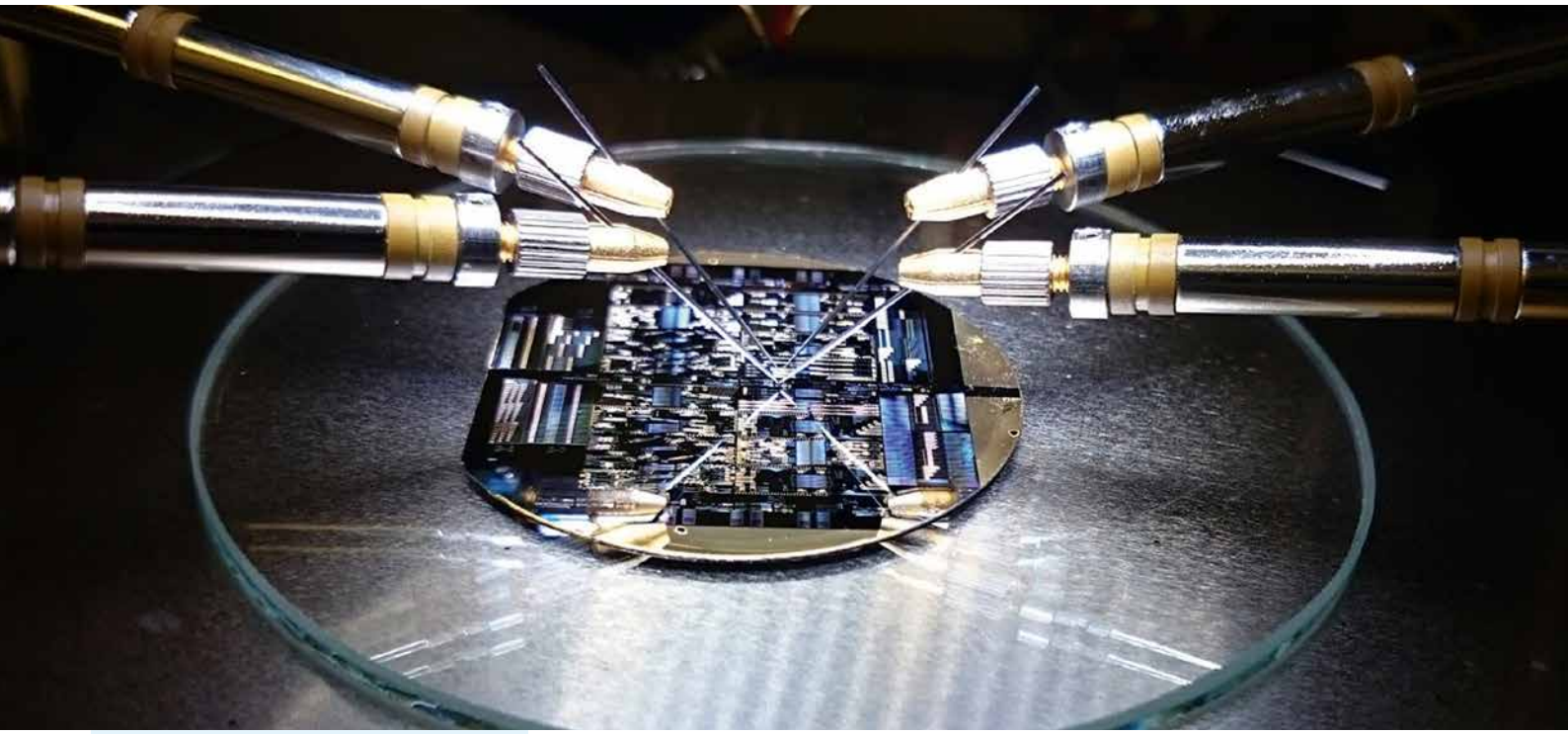

AT A GLANCE

Generic InP technology for large scale monolithic integration, DFB/DBR lasers and SOAs, detectors, full polarization handling

Features

- Our technology enables your design
- Choose from a range of proprietary building blocks or create your own
- Tape out every 3 months
- Design kits available for established software tools
- Packaging services offered by our partners
- Low-cost MPW participation or customer-specific run available

Applications

- Optical communications
- Optical filters
- Sensing
- Advanced optical sources

Photonic InP Foundry

We offer foundry services to fabricate InP-based Photonic-Integrated Circuits (PICs) for any particular application. The designer can choose from a list of fixed photonic devices offered by Fraunhofer HHI, called building blocks (BBs), to add to his PIC design. The designer can optically route the BBs together using our low-loss waveguide technology. Since the technology is generic and application agnostic, multi-project wafer (MPW) runs are offered to allow ultra-low cost prototyping.

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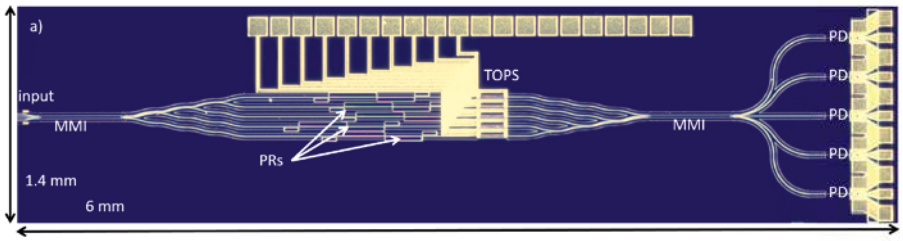
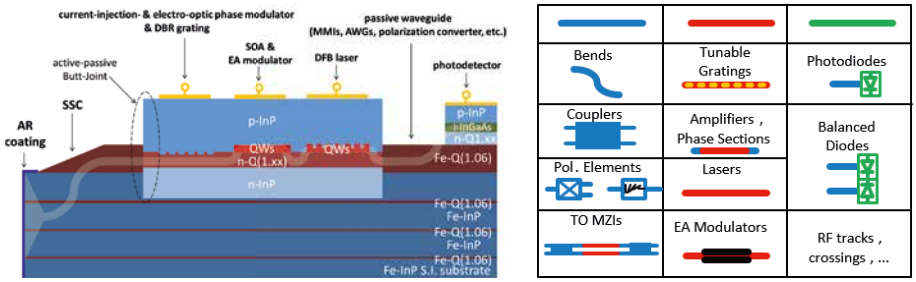
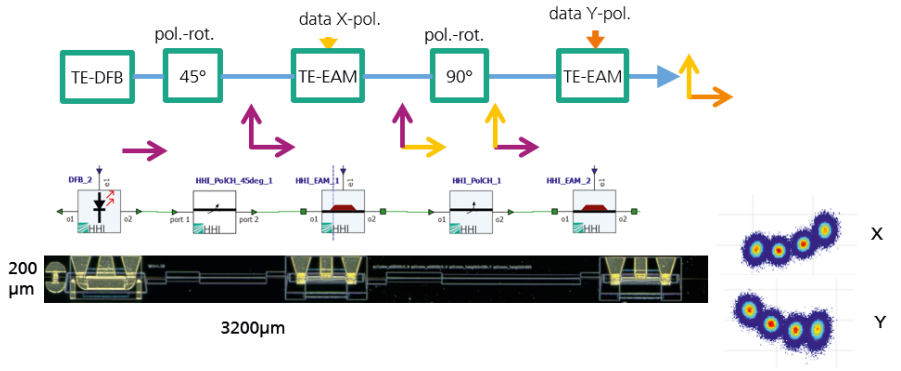
Specifications

- 1 dB / cm waveguides
- 40 GHz (balanced) detectors
- 20 GHz (DML and EML) transmitters
- phase shifters, MMIs, AWGs
- <2 dB fiber-to-chip coupling
- polarization converter and splitter (PER>15 dB)
- semi-insulating substrate

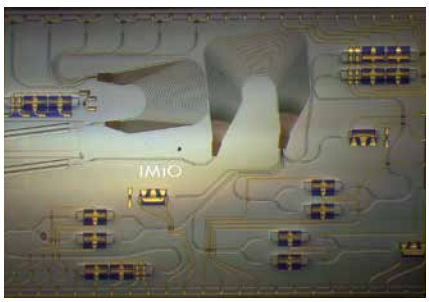


Stokes vector receiver and polarimeter





Dual-Pol. transmitter including laser source, designed using compact-model library



Integrated multichannel transceiver for free space optical communication

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