

Bachelor / Master Thesis:

Electro-optical packaged Silicon-Organic hybrid modulator

The Datacom traffic has grown tremendously due to the cloud computing and applications in video-streaming, Artificial Intelligence (AI), and Internet of Things (IoT). The large amount of data demands mega-data centers with high bandwidth and energy efficient optical interconnects. Utilizing a low footprint, high transfer rates and highly energy-efficient operation, silicon-organic hybrid (SOH) photonic devices have become a suitable candidate, to play a key role in the future of datacom.

In real world applications, e.g. transceivers for ethernet, those modulators need to be integrated in an electro-optical package, including optical and electrical connections, as well as a proper encapsulation. In this work, you will develop a fully packaged electro-optic modulator and test it under “real world” conditions.

Your tasks:

- Evaluating different encapsulation materials
- Developing and electro-optic package
- Device fabrication & Characterization

For detailed information contact:

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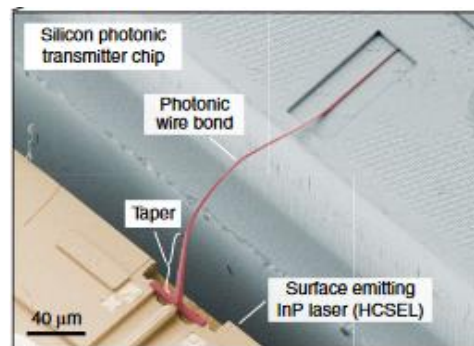
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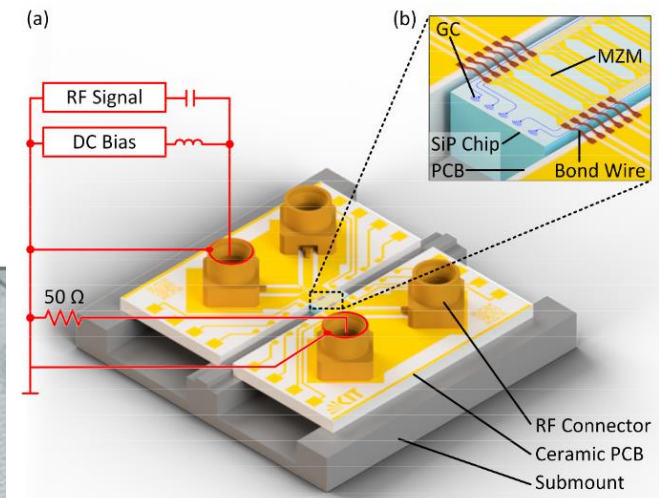
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Optical packaging via photonic wire bond



Schematic of electrical packaged EO-modulator