**Cost-effective assembly for Hybrid Integrated Photonic Switches**

The exponential rise in data consumption in the cloud is now pushing data centers beyond their limits. Optical interconnect can be an alternative technology to boost the ever-evolving cloud. Optical switching using photonic integrated circuits holds the promise of flexibility, low latency, connectivity, and energy efficiency. However, the assembly of integrated photonic switches is one of the greatest barriers to deploying optical switch technology. In this work, we investigate the assembly method for photonic integrated circuits using hybrid integration across two photonic integration platforms, Indium Phosphide (InP), and Silicon Nitride (SiN) based TriPleX. The assembly method is suited to flip-chip attachment which offers a cost-effective solution for low loss and high port count fiber-to-chip coupling.