



POET Technologies Inc.

LD Micro (SRAX) Main Event

December 15, 2020 2:40pm EST

Safe Harbor

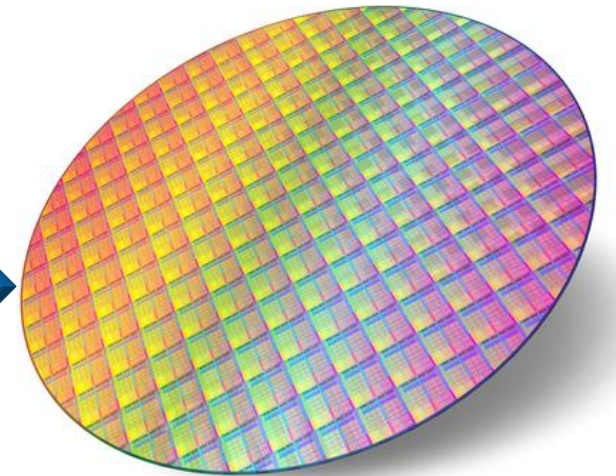
This presentation contains forward-looking statements and information which are based on management's current expectations and assumptions, which are inherently subject to uncertainties, risks and changes in circumstances that are difficult to predict.

Actual results or other expectations may differ materially from those anticipated and may prove to be incorrect. Forward-looking information and statements contained in this presentation are as of the date hereof. Other than an obligation to disclose material information under applicable securities laws, the Corporation undertakes no obligation to revise or update any forward-looking statements after the date of this presentation.

Please refer to the Corporation's filings on SEDAR.COM and SEC.GOV for a more complete description of the risks associated with investing in POET Technologies, Inc.

POET has done for Photonics what Semiconductors did for Electronics – Achieving Lower Cost and Higher Performance through Device Integration and Wafer-Level Fabrication

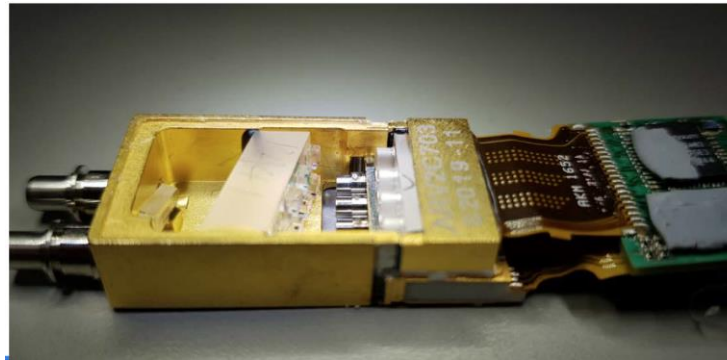
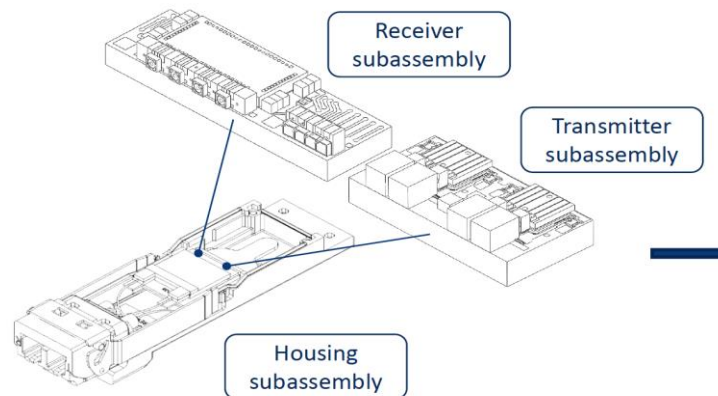
- The POET Optical Interposer™ is an integration platform that combines photonic, electronic and optical devices in the same chip-scale package – fabricated, assembled and tested all at wafer scale



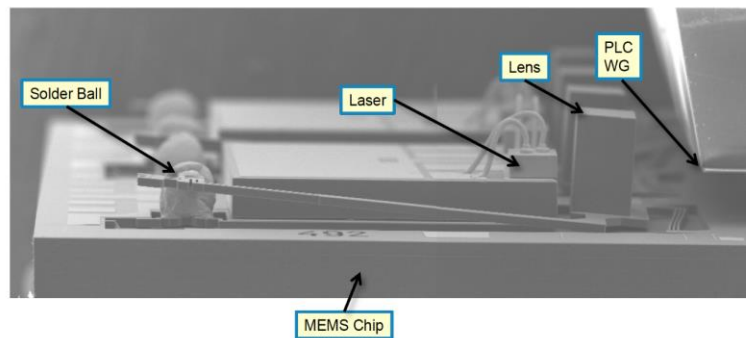
Combining All Photonics / Optics Components into One Chip

- And building them hundreds at a time instead of one at a time, at wafer scale

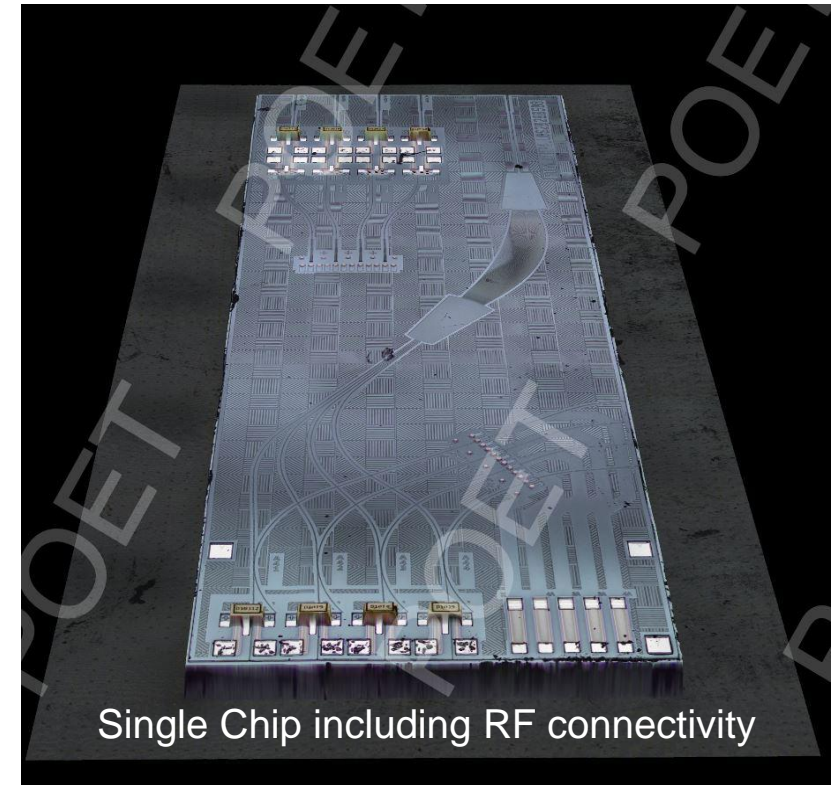
Competing Technologies



- Multiple sub-assemblies
- Multiple Active Alignments
- Multiple Chips
- Multiple “Gold Boxes”
- Multiple Fiber attach units

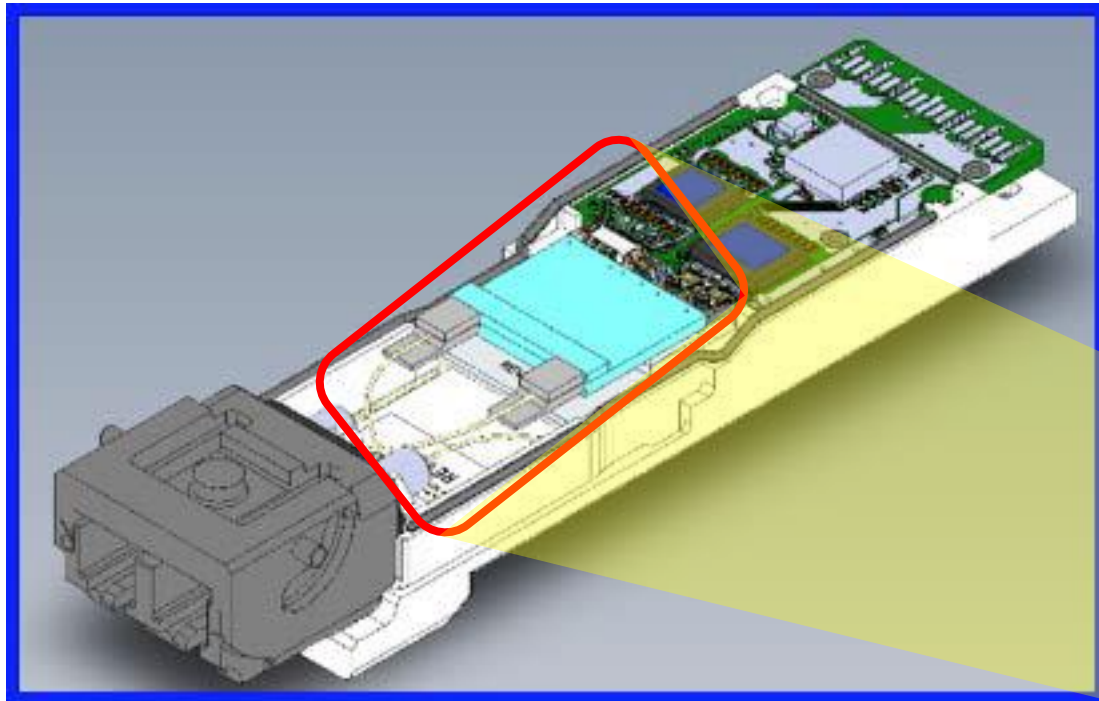


POET



World's Smallest & Lowest Cost CWDM4 100G Transmit Optical Engine

- 4 x 25G DML Lasers, 4 High Speed Photodiodes, 4 Monitor Photodiodes, Multiplexers, DeMultiplexers, Power Taps and Fiber Attach
- All on a 9mm x 6.3mm POET Optical Interposer platform



Four POET Optical Engines can fit in a space occupied by one!!



How POET Wins:

- ❑ Simplified Packaging
- ❑ Lower Bill of Materials (BOM) Cost
- ❑ Highly Automated Wafer Scale Manufacturing
- ❑ Dense, Smallest Form Factor
- ❑ Excellent Electrical and Optical Performance

Benefits of POET's Optical Interposer

- The benefits POET's Optical Interposer add up to a truly disruptive entry into large-scale photonics markets

✓ Dramatically lower BOM cost	<i>25% - 40% less, depending on device</i>
✓ Lower capital investment to produce	<i>10% of conventional and silicon-based</i>
✓ Chip-scale package	<i>50% to 90% reduction in real-estate needed</i>
✓ Wafer-level assembly and test	<i>Built 100's at a time, not 1 at a time</i>
✓ Planar architecture	<i>Ease of production and flexibility in design</i>
✓ Platform technology	<i>No requirement to design from bottom-up for new applications or next generations; can reuse designs for passive components</i>

Market Application for POET's Optical Interposer

- POET's Optical Interposer can lower the cost and improve the performance of any photonics device targeted at the highest growth areas of computing today and in the future

Proliferation of
Cloud Computing



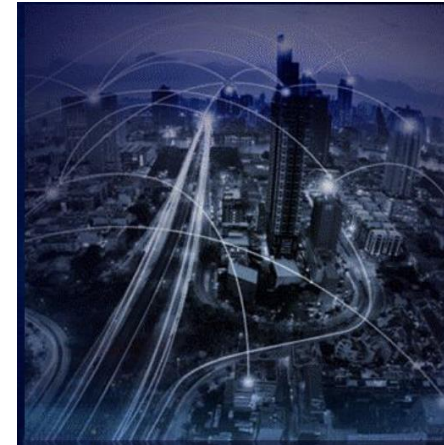
Data Centers
Network Switching

Growth of
Artificial Intelligence



Neuromorphic
Optical Computing

Adoption of
5G and Edge



Communications
Internet of Things



POET

T e c h n o l o g i e s