



POET Technologies Inc.

PTK:TSXV POET:NASDAQ

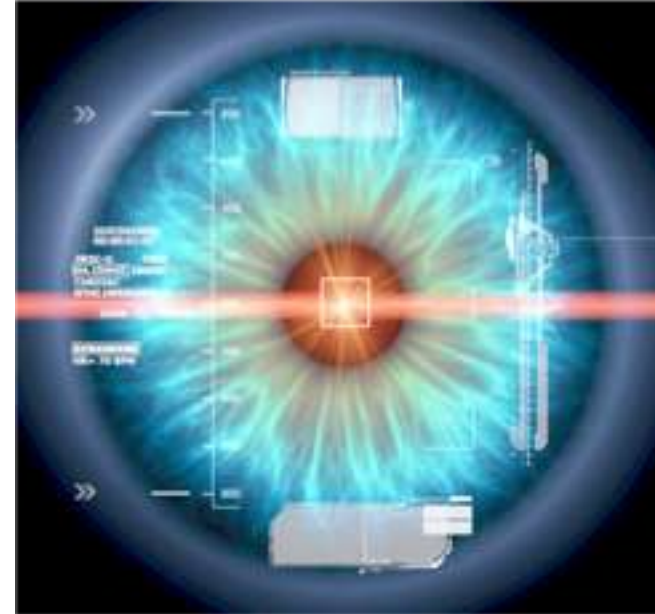
Global Chinese Financial Forum April 21, 2022

国际金融投资博览会 | 2022年4月21日

Thomas R. Mika - EVP & CFO / 执行副总裁兼首席财务官

- 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 Technologies is a leader in the silicon photonics trend that's changing the semiconductor game—moving data at light speed for today's data-hungry technologies. / POET Technologies是硅光子学趋势的领导者，该趋势正在改变半导体的游戏规则 - 以光速移动数据，以满足当今对巨大数据技术的需求。
 - Optical Transceivers for Data Centers / 数据中心光收发器
 - Artificial Intelligence Accelerators / 人工智能加速器
 - Wearables for Health Monitoring / 用于健康监测的可穿戴设备
 - Edge Computing for Internet of Things (IoT) / 物联网边缘计算
 - LIDAR Systems for Autonomous Vehicles / 自动驾驶汽车激光雷达系统



Optical Transceivers for Data Centers / 5G Networks

数据中心/5G网络的光收发器



POET's Optical Engines for Data Centers are being sampled to customers now /
POET用于数据中心的光引擎目前正在向客户提供样品

Data and Tele-
Communications
数据和电信



Opportunity: / 机会:

POET has developed a disruptive product going beyond any other existing technology in cost, size and performance. / POET已经开发出一种突破性的产品，在成本、尺寸和性能上超越了任何其他现有技术。

Large Market: / 巨大的市场:

>\$3B market growing to >\$6B by 2025.
Similar size in Co-Packaged Optics by 2028.
/ 超过\$30亿的市场，到2025年将增长到超过\$60亿。到2028年，联合封装光学也有类似的规模。

Data Centers
数据中心
Switching / 5G Networks
转换/5G网络



Artificial Intelligence Accelerator Chip 人工智能加速芯片

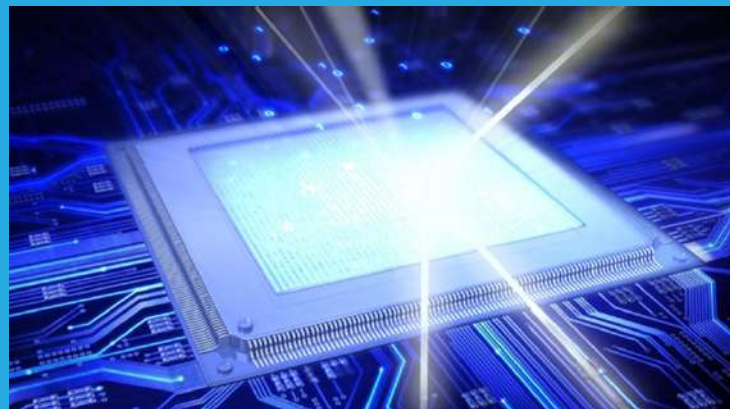


POET's lead customer is Celestial AI, a VC-backed Machine Learning Accelerator Company / POET 的主要客户是由风投机构投资的机器学习加速器公司 Celestial AI

Artificial
Intelligence /
人工智能



Neuromorphic /
神经形态
Optical Computing /
光学计算



Opportunity: / 机会:

POET can provide light sources and a platform for optical data transport for advanced computing platforms. Each AI accelerator chip needs its own light source. / POET可以为先进的计算平台提供光源和光学数据传输平台。每个AI加速器芯片都需要自己的光源。

Large Market: / 巨大的市场:

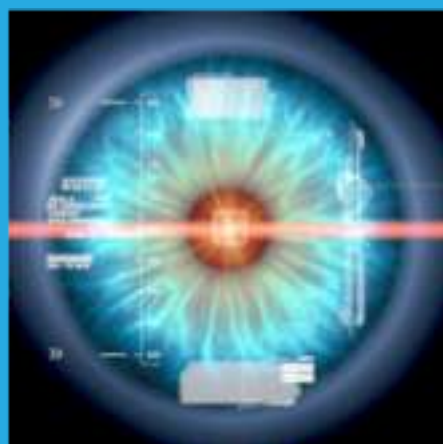
Celestial AI's accelerator products serve an addressable market that is projected by Omdia at >\$70B in 2025. / Celestial AI的加速器产品服务于一个可寻址市场，据Omdia预测，该市场到2025年的规模将超过\$700亿。

Wearables for Health Monitoring 用于健康监测的可穿戴设备



POET is doing a feasibility study on this market with a well-known company in China that pioneered heart monitoring / POET正在与中国开创心脏监测的知名公司合作，对这个市场进行可行性研究。

Medical
Technology /
医疗技术



Point-of-Use /
使用点
Health Monitoring
医疗保健



Opportunity: / 机会:

POET can provide the smallest, most energy-efficient platform for optical sensing of critical bio-markers. / POET可以为关键生物标志物的光学传感提供最小的、最节能的平台。

Large Market: / 巨大的市场:

\$48+ Billion* of Total Available Market (TAM) in 2025 with growing universe of healthcare monitoring devices incorporating additional sensing capabilities. / 随着越来越多的医疗监测设备加入更多传感功能，到2025年，总有效市场规模将达到\$480亿以上*。

Sources: Rockley Photonics, IDC, Counterpoint Research, Strategy Analytics, TrendForce Research, leading consumer electronics manufacturer investor materials. / 来源: Rockley Photonics, IDC, Counterpoint Research, Strategy Analytics, TrendForce Research, 领先的消费电子制造商的投资者资料。

POET is investigating applications for the POET Optical Interposer in these high-growth markets / POET正在调查POET光学插入器在这些高增长市场的应用情况

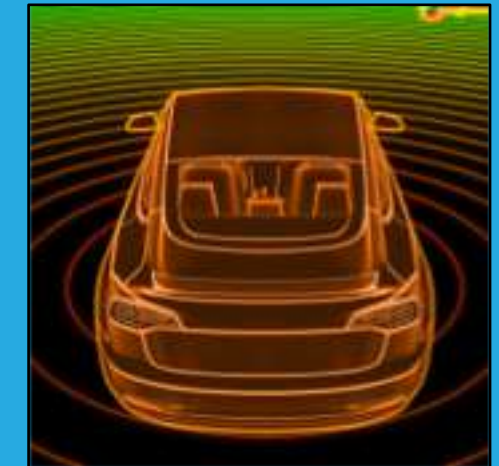
Edge
Computing /
边缘计算



Machine to Machine /
机器对机器
Internet of Things /
物联网



Autonomous
Vehicles /
自动驾驶汽车



LIDAR Systems /
激光雷达系统

>\$1B Annual Sales Opportunity in Current and Target Markets / 在当前和目标市场有年销售额超过\$10亿的机会

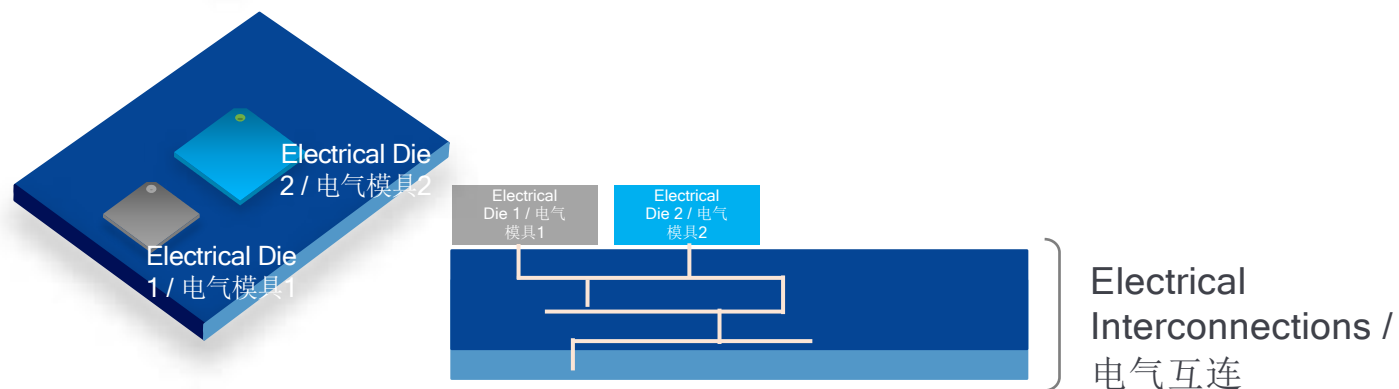
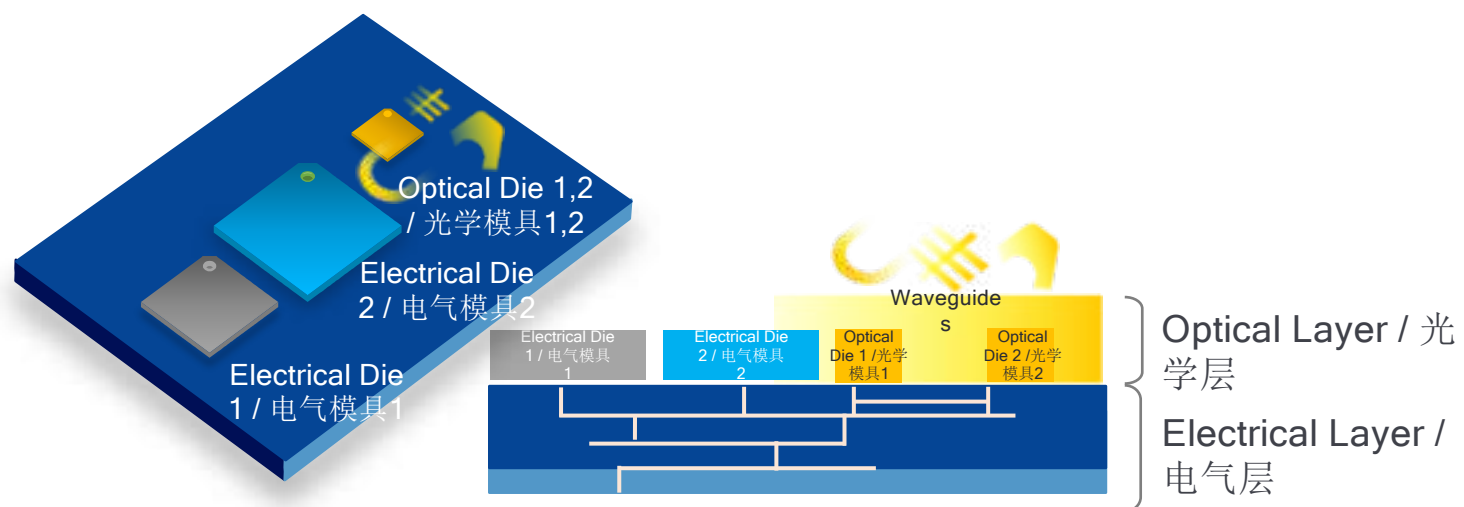


>\$1 Billion Annual Revenue Potential / 年收入超过\$10亿的潜力	Transceivers for Datacom / 用于数据通信的收发器	5G Networks / 5G网络	Co-Packaged Optics / 联合封装的光学元件	Optical Computing and Edge Applications / 光学计算和边缘应用	BioSensing / 生物传感 Watches and Mobile Devices / 手表和移动设备	LIDAR / 激光雷达
Market Size SAM (peak 2021-28) : / 市场规模 SAM: (2021-28年峰值)	\$2-3.5B annually / 每年\$20-35亿	\$3-5B Annually / 每年\$30-50亿	\$2-3B Annually / 每年\$20-30亿	\$3-5B Annually / 每年\$30-50亿	\$30B Annually / 每年\$300亿	\$1-3B Annually / 每年\$10-30亿
Development Partners: / 发展合作伙伴:	Tier 1 NA / 第1级 NA European / 欧洲	Several in play / 多个正在合作	Several in play / 多个正在合作	US-based Start-up / 美国的初创企业	Major Chinese or Korean Company / 中国或韩国的大公司	TBD / 待定
Strategic Partner(s): / 战略合作伙伴:	Sanan IC JV Super Photonics / 与三安集成电路有限公司的合资企业 厦门超光	Sanan IC JV Super Photonics / 与三安集成电路有限公司的合资企业 厦门超光	TBD / 待定	TBD / 待定	Major Chinese or Korean Company / 中国或韩国的大公司	TBD / 待定
Potential Customers: / 潜在客户:	Multiple module makers / 多个模块制造商	Multiple module makers / 多个模块制造商	Data Center Operators and Equipment Suppliers / 数据中心运营商和设备供应商	Computing Platform and Chip Suppliers / 计算平台和芯片供应商	Consumer Markets / 消费者市场	Auto Sub-Assembly Companies / 自动分装公司
Revenue Potential: / 营收潜力:	\$250M+ annually / 每年\$2.5亿以上	\$250M+ annually / 每年\$2.5亿以上	\$250M+ annually / 每年\$2.5亿以上	\$250M+ annually / 每年\$2.5亿以上	\$250M+ annually / 每年\$2.5亿以上	\$250M+ annually / 每年\$2.5亿以上

POET Optical Interposer™



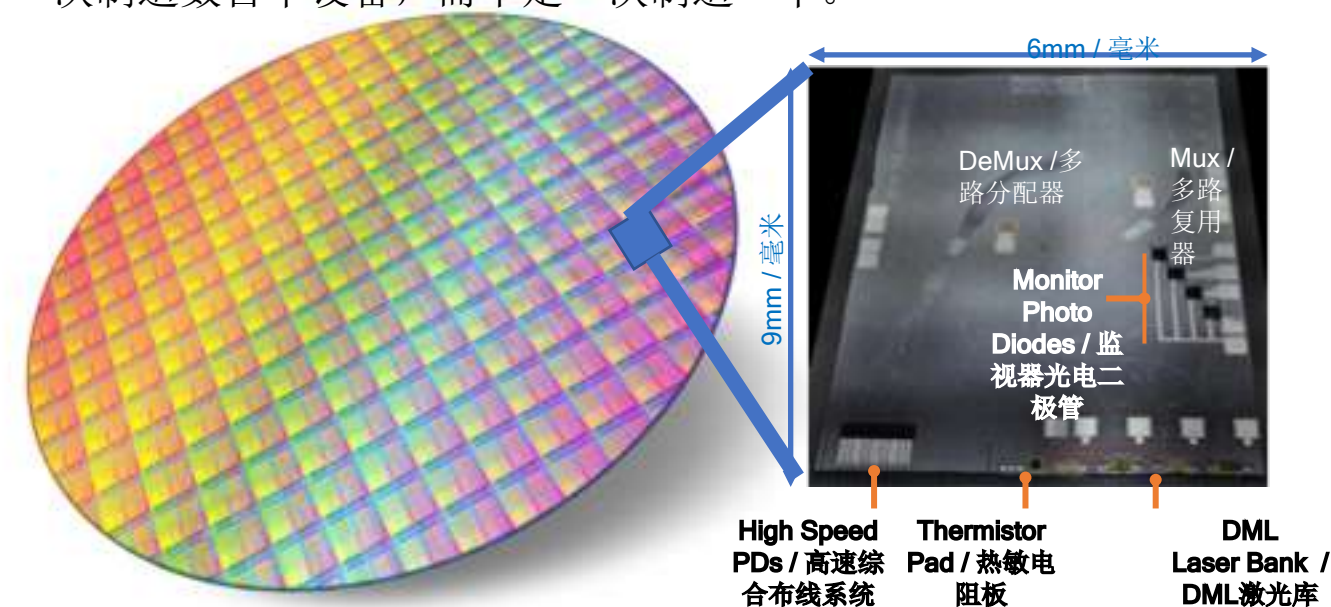
- By adding an optical transport layer to the top of an Electrical Interposer, POET created an Optical Interposer with unique properties and a simple-to-use architecture. / 通过在电气插入器的顶部增加光学传输层，POET创造了具有独特性能和简单易用架构的光学插入器。



Electrical Interposers are common in many electronic devices, including cell phones. / 电气插入器在包括手机在内的许多电子设备中很常见。

POET: NASDAQ | PTX: TSXV

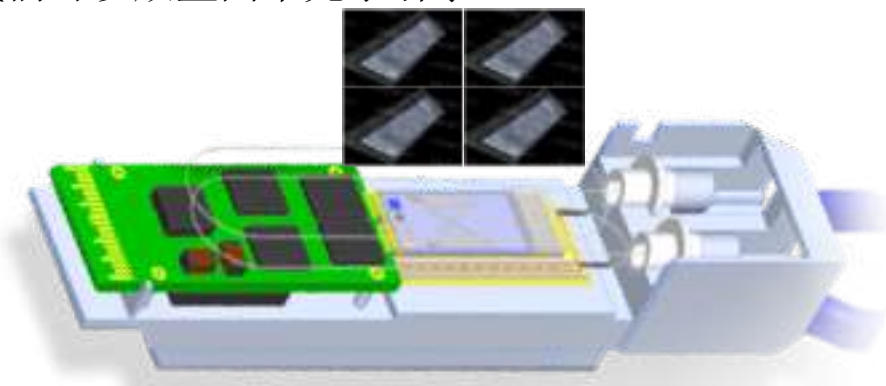
- Applying semiconductor fabrication techniques allows devices to be built hundreds at a time rather than one at a time. / 应用半导体制造技术可以一次制造数百个设备，而不是一次制造一个。



- The small size allows four Optical Engines to be placed in the same space that competitors can fit only one! / 尺寸小巧，在竞争对手只能放置一个光学引擎的空间里我们可以放置四个光学引擎!



ACTUAL SCALE
COMPARED TO
A US DIME / 与
美国一角钱相比
的实际大小



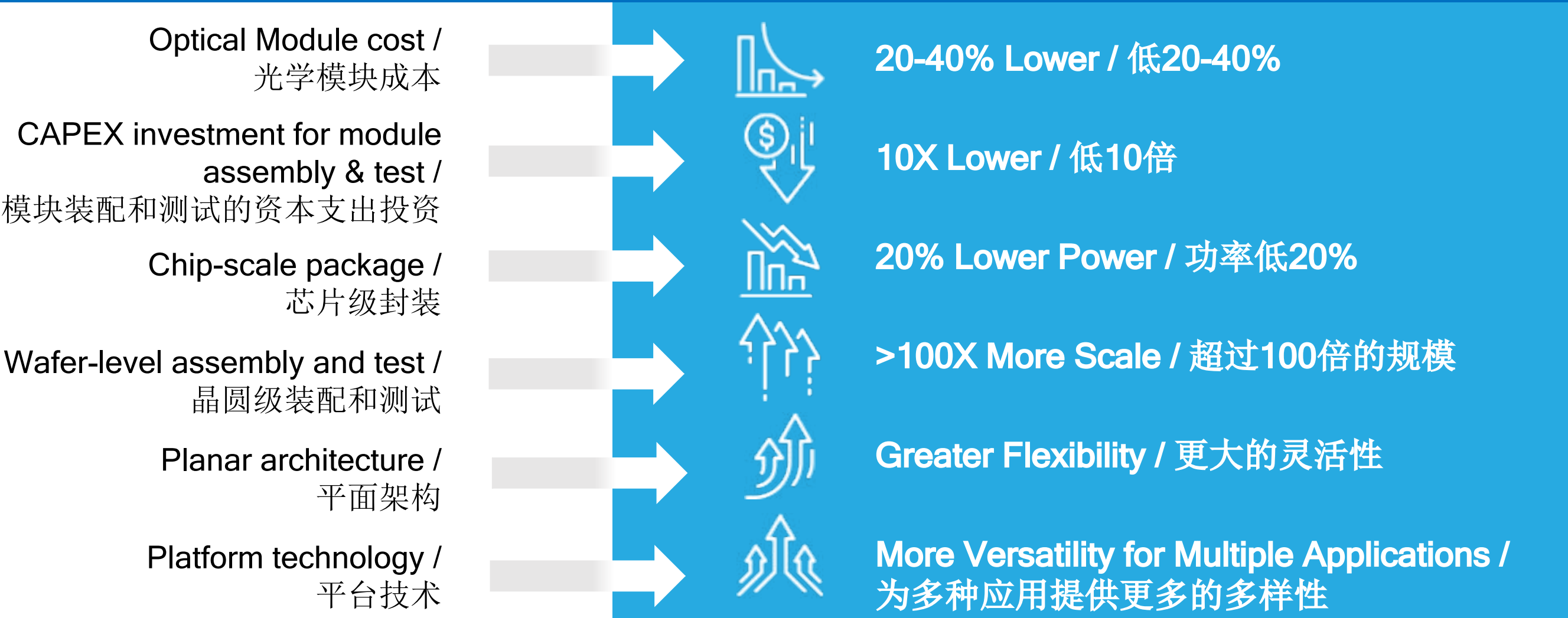
POET Wins with Optical Interposer Platform

POET凭借光学插入器平台一举得胜



A **DISRUPTIVE** platform that beats the competition in large-scale photonics

一个**颠覆性**的平台，在大规模光子学领域击败竞争对手



Roadmap to Commercial Products

商业产品的路线图



	Alpha	Beta	Production 生产
100G CWDM Solutions 解决方案 TX, RX, TXRX	2H 21	1H 22	2H 22
100G LR4 Solutions 解决方案 TX, TXRX		1H 22	2H 22
200G CWDM and LR4 Solutions 解决方案	2H 21	1H 22	2H 22
400G Solutions 解决方案 DR1, DR4, FR4 Si Photonics Modulator / 硅光子学调制器	1H 22	2H 22	1H 23
Custom Light Bar Solutions* 定制灯条解决方案*	1H 22	2H 22	1H 23

* Custom implementations ; schedule driven by customer adoption / * 定制实施；时间表由客户采用所驱动

POET Products Match Datacenter Market Needs

POET产品符合数据中心市场需求



200G FR4:

- Meta (Facebook) is deploying 200G FR4 / Meta (Facebook) 正在部署200G FR4
- Tencent in China is deploying 200G FR4 / 中国腾讯公司正在部署200G FR4
- Google is deploying 2x200G FR4 / 谷歌正在部署2x200G FR4
- 200G FR4 is an attractive market for the next 2-3 years with several million units of planned deployment. / 200G FR4在未来2-3年内是一个有吸引力的市场，计划部署几百万台。

400G DR4/FR4:

- Several transceiver companies are focusing on cost reducing 400G DR4 and FR4 modules. / 一些收发器公司正专注于降低400G DR4和FR4模块的成本。
- 400G DR4 and FR4 have the highest growth potential in the next 3-4 years. / 400G DR4和FR4在未来3-4年内具有最高增长潜力。
- DR4 is shipping in volume today (Mainly deployed by Amazon). FR4 is expected to ramp in volume in 2022/2023 / DR4现在正在批量出货（主要是由亚马逊部署）。FR4预计将在2022/2023年增加。

800G:

- Google planning to deploy 2x400G FR4 as a migration path from 2x200G FR4 / 谷歌计划部署2x400G FR4，作为2x200G FR4的迁移路径。
- Several companies working on 800G DR8 transceivers / 一些公司正在研究800G DR8收发器

CPO: Optical Engines and Chiplets for Co-packaged optics: demos/announcements by Broadcom, Ranovus, HPE, Ayar Labs

CPO: 光学引擎和联合封装光学芯片: Broadcom、Ranovus、HPE、Ayar Labs的演示/公告

200G/Lambda: using Lithium Niobate modulators: Hyperlight, Liobate (Modulator), E-Optolink (800G DR8 Module)

200G/Lambda: 使用铌酸锂调制器: Hyperlight、Liobate（调制器）、E-Optolink（800G DR8模块）

JV Adds World-Class Manufacturing and Scale / 合资公司增加了世界级的制造和规模



Super Photonics Xiamen - POET and Sanan IC Joint Venture (JV) / 厦门超光—POET与三安集成的合资公司

- Virtual vertical integration of manufacturing for Optical Engines / 光学引擎制造的虚拟垂直整合
- Ability to rapidly scale production to thousands of devices per month / 有能力迅速将生产规模扩大到每月数千台设备



Sanan IC | Xiamen Sanan Integrated Circuit Co., Ltd. / 三安集成 | 厦门三安集成电路有限公司

- Xiamen Torch High-Tech Industrial Development Zone / 厦门火炬高技术产业开发区
- US\$500 million investment on 180,000 square meters / 投资5亿美元，占地18万平方米
- Compound semiconductor manufacturing platform / 化合物半导体制造平台
- Process technologies for microwave radio frequency, high power electronics & lasers / 微波射频、高功率电子和激光的工艺技术



Sanan Optoelectronics Co. Ltd. (Parent) / 三安光电股份有限公司 (母公司)

- LED, filters, power electronics, microwave integrated circuits and optical comms. / LED、滤波器、电力电子、微波集成电路和光通信
- Produces 25 million 6" wafers per year with 4 locations and over 8,500 acres / 每年生产2500万片6英寸晶圆，有4个厂址，面积超过8500英亩
- US\$1 billion Revenue; US\$14 billion market cap / 营收10亿美元；市值140亿美元
- Shanghai Stock Exchange (600703) / 上海证券交易所上市公司(股票代码600703)

POET Enters China Market in October 2021!

POET于2021年10月进入中国市场! /



CIOE AND ICCSZ CONFERENCES / CIOE和ICCSZ会议

6

Product Demonstrations /
产品演示

60

C-Suite and Exec Staff /
最高管理层和高管人员

20

Leading Optics Companies /
领先的光学产品公司

2

Committed Customers /
忠诚的客户

>10

Sample Backlog /
未完成样品订单

>2

Strategic Discussions /
战略讨论

OFC in San Diego - March 8 -10, 2022 - A great success!

2022年3月8日至10日举行的美国圣地亚哥光纤通讯展览会OFC——非常成功!



- Live demos of two products / 两个产品的现场演示
 - 200G FR4 TX Optical Engine / 200G FR4 TX光学引擎
 - 400G FR4 RX Optical Engine / 400G FR4 RX光学引擎
- Reactions from Industry Leaders: / 来自行业领袖的反响:
 - “It’s a work of art!” / “这是一件艺术作品！”
 - “You will never find anything smaller” / “你永远也找不到比这更小的东西”
- Potential strategic engagements with six new companies / 与六家新公司达成潜在战略合作
- Eight additional customer opportunities for optical engines identified, on top of six current customers / 在六家现有客户的基础上，又确定了八家光学引擎客户机会



Engaged with Leading Companies / 与龙头公司合作



Customer Traction at Leading Module and System Companies / 对领先的模块和系统公司的客户吸引力



世界级的管理团队和工程技术人才



Executive Team 管理团队



Dr. Suresh Venkatesan
首席执行官兼董事会主席

- GlobalFoundries高级技术副总裁
- 在摩托罗拉和飞思卡尔半导体公司担任各种高级职务



Vivek Rajgarhia
总裁兼总经理

- MACOM高级副总裁和总经理
- Optomai首席执行官兼联合创始人
- Lucent, OpNext, GigOptix



Thomas Mika
执行副总裁兼首席财务官

- Rennova Health董事会主席
- Tegal Corporation董事会主席兼首席执行官
- IMTEC(并购机构)联合创始人

Engineering and Operations Team 工程和运营团队



James Lee
新加坡副总裁兼总经理

- IMEC逻辑技术副总裁
- 在GlobalFoundries和Chartered Semiconductor担任各种高级职务



Dr. Jinyu Mo
亚洲区高级副总裁兼总经理

- MACOM Technology Solutions高级董事和首席科学家
- Nexwave Photonics创始人/首席技术官
- 华为、Oclaro、I2R



Kevin Barnes
财务和行政副总裁

- EC English财务主管
- Duguay and Ringler Corporate Services



Dan Meerovich
产品工程副总裁

- MACOM产品工程主管
- 曾在Broadcom和Multiplex任职



Dr. Robert Ditizio 博士
VP, Intellectual Property
知识产权副总裁

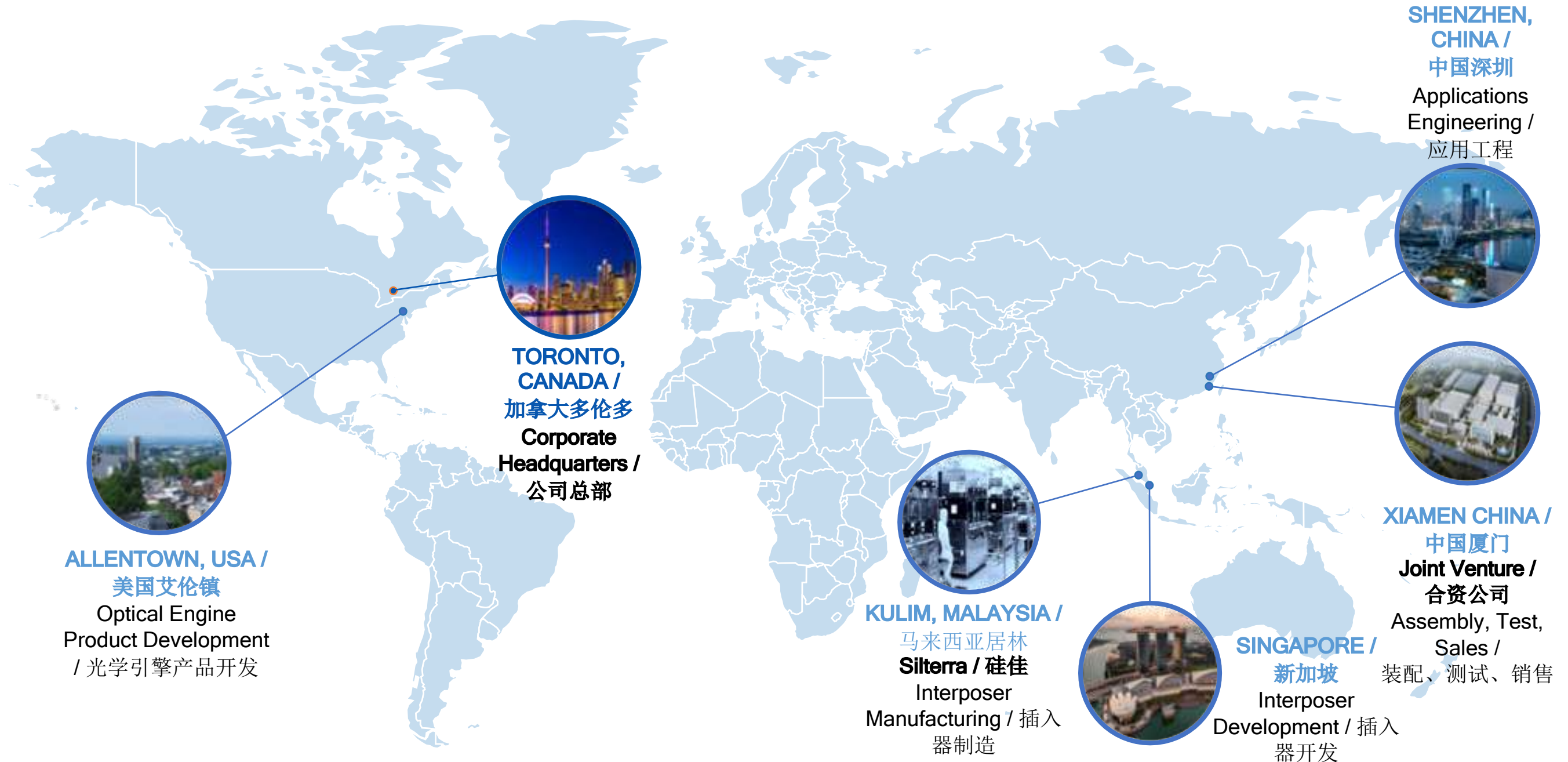
- CTO, Tegal Corporation / Tegal Corporation首席技术官
- Patent and process consultant for POET since 2017 / 自2017年起担任POET的专利和工艺顾问

50 Employees / 50名员工

45 Engineers/Techs / 45名工程师/技术员

14 PhDs / 14名博士

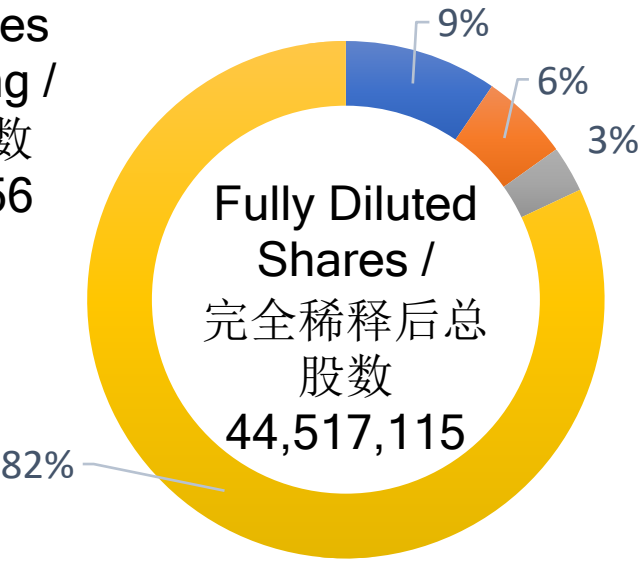
Global Development and Manufacturing / 全球开发与制造



- Cash at 9/30/21:~US\$20M; Cash Burn of ~\$1.3M/month / 截至2021年9月30日的现金：约2000万美元；每月消耗现金约130万美元
- Two -year Warrants expiring April - September 2023 / 2023年4月至9月到期的两年期认股权证
- Market Capitalization approximately US\$250 million / 市值约2.5亿美元

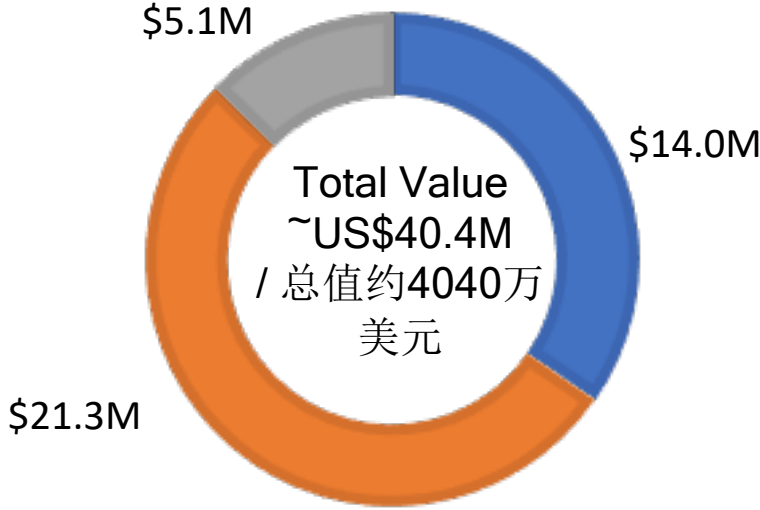
Capital Structure / 资本结构

Total Shares
Outstanding /
流通股总数
36,496,456



■ ITM Options ■ OTM Warrants & Options
■ ITM Warrants ■ Common Shares Outstanding

Value of Warrants & Options / 认股权证和期权的价值



■ ITM Options ■ OTM Warrants & Options ■ ITM Warrants

ITM = IN THE MONEY / 价内 OTM = OUT OF THE MONEY / 价外

Why Invest in POET Now? /

为什么现在投资 POET?

- Technology proven out by leading companies / 经过龙头公司证明的技术
- First rate management team with public company track records / 有上市公司成功履历的一流管理团队
- Disruptive technology applying to large and known markets with huge potential / 应用于大规模已知市场的颠覆性技术，潜力巨大
- Just entering New Product Introduction / Commercialization stage (revenue ramp in 2H 2022) / 刚刚进入新产品介绍/商业化阶段（2022年下半年收入上升）
- Not widely known outside of Canada – just listed on Nasdaq (3-14-22) / 在加拿大以外并不广为人知--刚刚在纳斯达克上市（2022年3月14日）
- Co-invested in China with Sanan IC for manufacturing operations and local development and sales / 在中国与三安集成电路公司共同投资，进行生产运营和本地开发与销售

