



POET Technologies Inc.

PTK:TSXV POETF:OTCQX

Global Chinese Financial Forum November 4, 2021

国际金融投资博览会 | 2021年11月4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.

 Photonics and Technology Overview / 光子学与技术概述

 Markets and Potentials / 市场和潜能

 Products and Roadmap / 产品和路线图

 Customer Engagement / 客户参与

 Operations and Capital / 运营和资本

Optical Transceivers for Data Centers / 数据中心的光收发器



POET is focused on a market with high potential for disruption and growth /
POET专注于一个具有极大的颠覆和增长潜力的市场

Data and Tele-
Communications
数据和电信



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



Opportunity: / 机会:

Lack of a method to fully integrate electronic, photonic and optical devices in the same package after 20+ years of trying by leading companies in the industry /

业内领先公司经过20多年的尝试，仍缺乏将电子、光子和光学器件完全集成在同一组件中的方法

Large Market: / 巨大的市场:

>\$3B market growing to >\$6B by 2025 /
超过\$30亿的市场，到2025年将增长到超过\$60亿

The POET Optical Interposer™

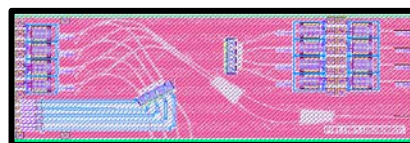
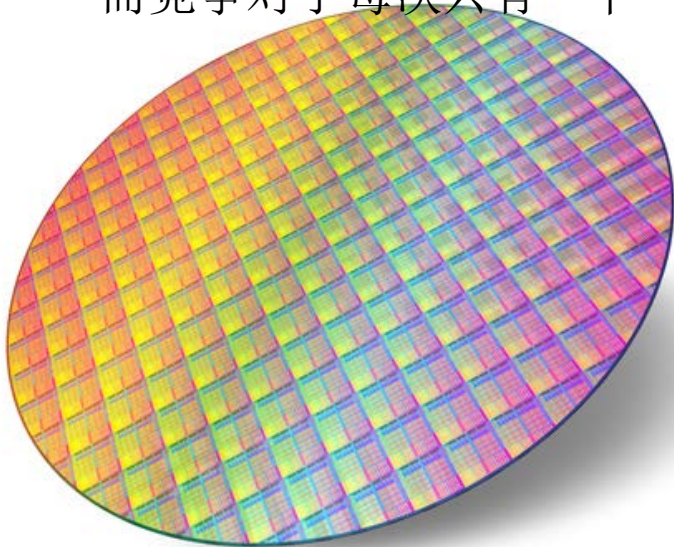


The POET Optical Interposer is a radical new invention that integrates multiple components into a complete OPTICAL ENGINE for photonic applications / POET的Optical Interposer是一项突破性的新发明，它将多个组件整合成一个完整的光学引擎，用于光子应用

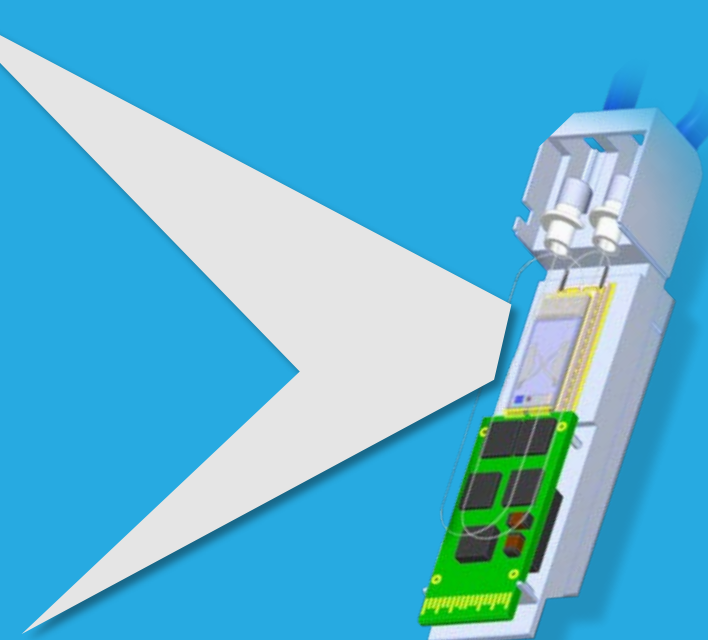
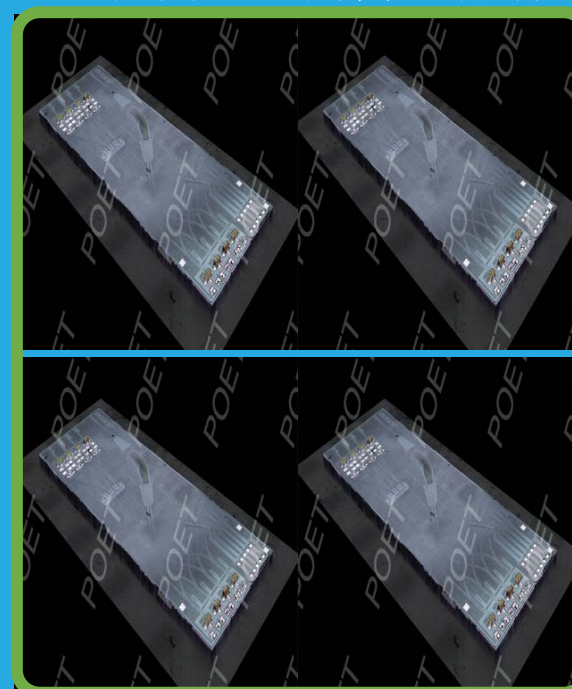
Wafer-scale assembly and test drives economies of scale / 晶圆规模的装配和测试推动了规模经济

The World's Smallest and Lowest Cost 100G/200G Optical Engine / 世界上最小和最便宜的100G/200G光引擎

400 - 500 Optical Engines per Wafer compared to 1 at a time from the Competition / 每个晶圆有400-500个光学引擎，而竞争对手每次只有一个



Can fit 4 Optical Engines in the same space compared to only 1 from the Competition / 在同一空间内可容纳4个光学引擎，而竞争对手只有1个



POET Wins with Optical Interposer Platform / POET凭借Optical Interposer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

Optical Module cost / 光学模块成本	→		20-40% Lower / 低20-40%
CAPEX investment for module assembly & test / 模块装配和测试的资本支出投资	→		10X Lower / 低10倍
Chip-scale package / 芯片级封装	→		20% Lower Power / 功率低20%
Wafer-level assembly and test / 晶圆级装配和测试	→		>100X More Scale / 超过100倍的规模
Planar architecture / 平面架构	→		Greater Flexibility / 灵活性更大
Platform technology / 平台技术	→		More Versatility for Multiple Applications / 为多种应用提供更多的多样性

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Large Market for Optical Transceivers / 光收发器的巨大市场

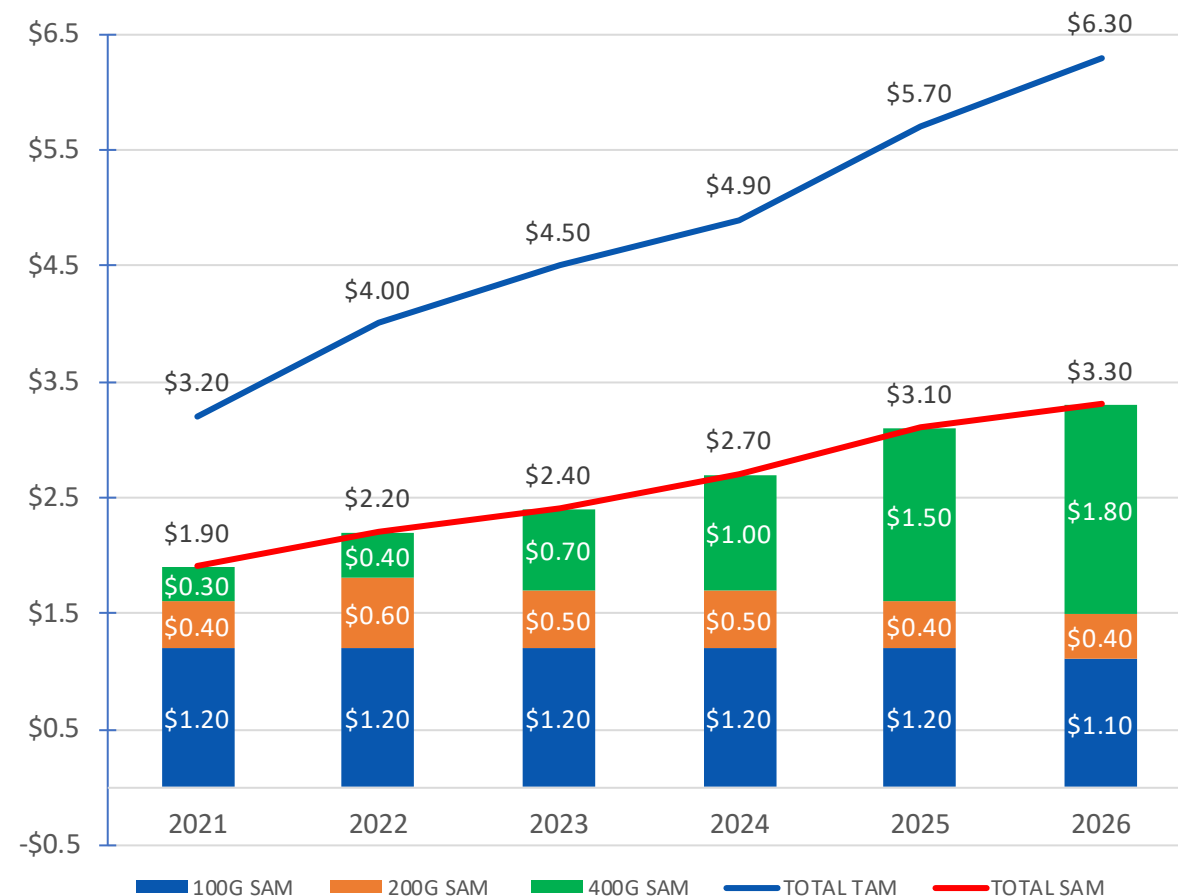


POET successfully competes in existing large segments (100/200G) of the optical transceiver market and in emerging segments like 400G /

POET在光收发器市场现有的大型细分市场（100/200G）和新兴的细分市场如400G中成功竞争

Optical Transceiver Market Forecast- SALES / 光收发器市场预测 - 销售额

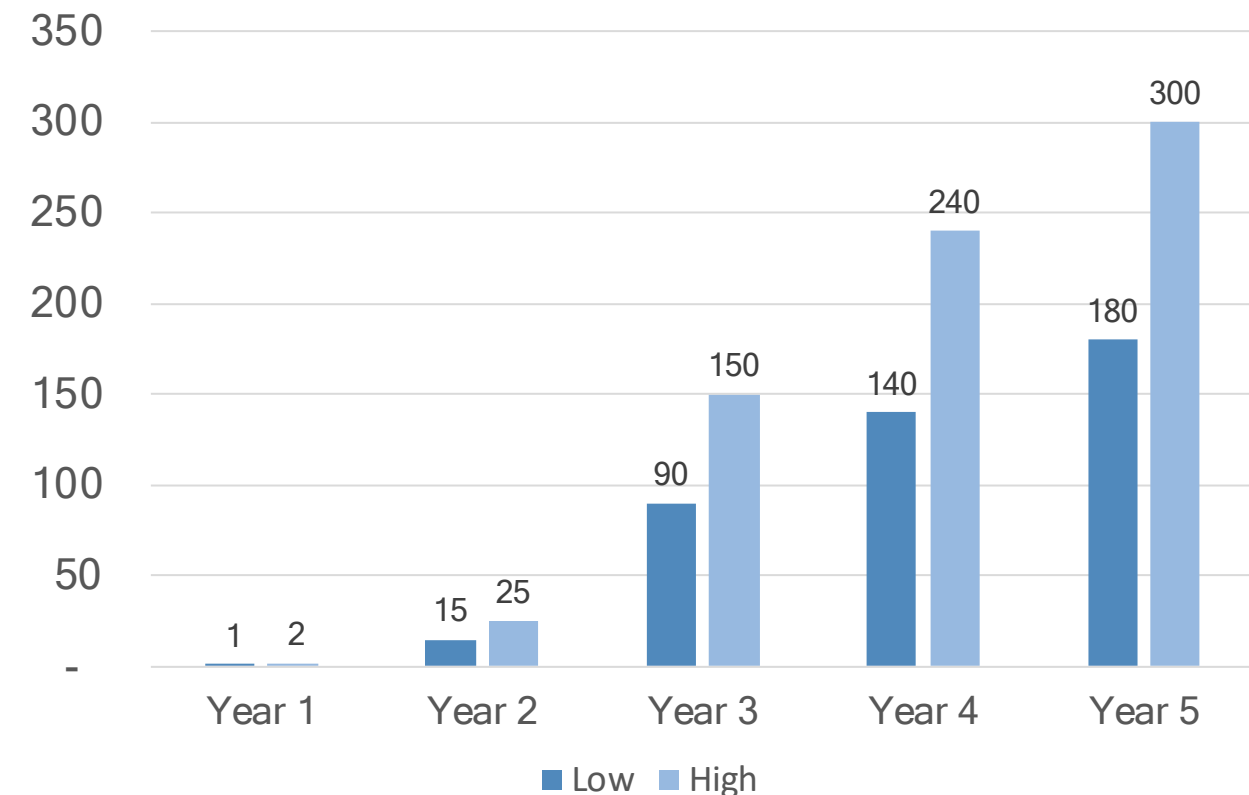
Billions of US\$ / 10亿美元



TAM = Total Available Market; SAM = Serviceable Available Market /
TAM=总体有效市场; SAM=可服务的有效市场

Forecasted Revenue for 100/200/400G* / 100/200/400G的预测收入*

Millions of US\$ / 百万美元

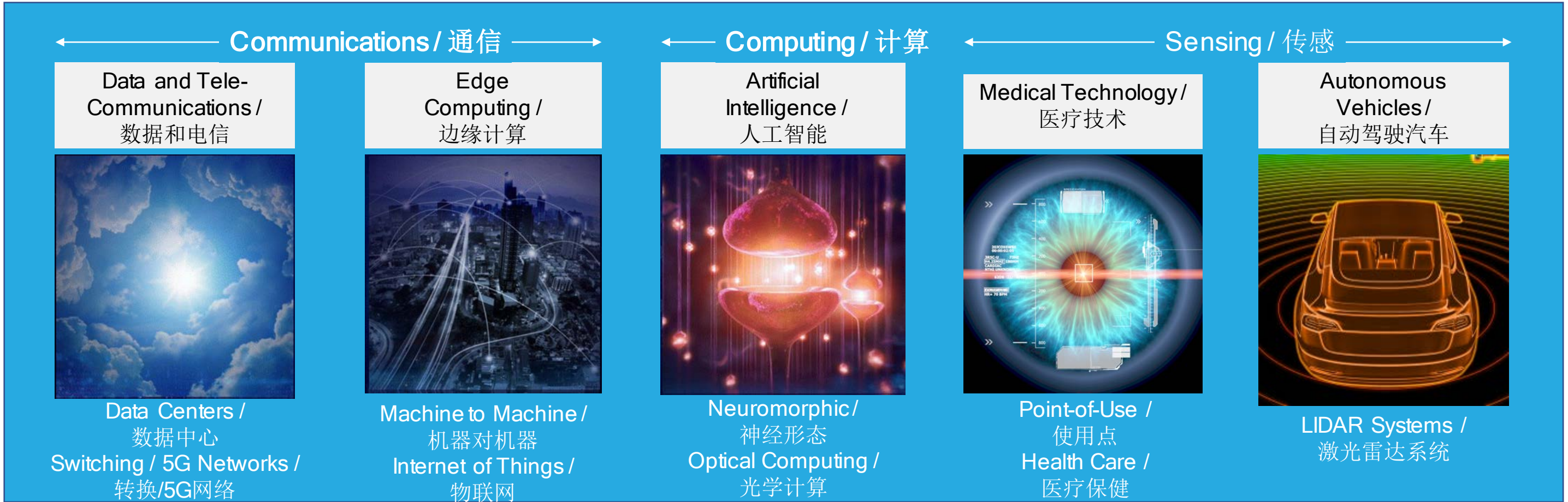


*Business Plan Forecast Range for Super Photonics Xiamen (SPX) /
*厦门超光公司（SPX）的商业计划预测范围

Many Other Large Markets Need POET's Optical Interposer / 许多其他大型市场需要POET的Optical Interposer



The Global Market for Photonics* was >\$576B in 2019 and growing to >\$1.2T in 2030, nearly a 7% annual CAGR / 全球光电市场*在2019年规模已经超过\$5760亿，在2030年预计将增长到\$1.2万亿以上，年复合增长率近7%



• Source: Prescient & Strategic Intelligence, *Photonics Market Research Report, 2019* - Includes LEDs & Lasers, Sensors & Detectors, Optical Components & Systems / 来源: Prescient & Strategic Intelligence, 《2019年光电市场研究报告》—包括LED和激光器、传感器和探测器、光学元件和系统

POET's Tech is key to unlocking new Health Tech Apps / POET的技术是解锁新健康技术应用的关键



POET's commercial focus about to turn to wearable devices, and mobile and medical devices, representing an attractive 2025 TAM of >\$48B /

POET的商业重心即将转向可穿戴设备、移动和医疗设备，这意味着2025年有吸引力的TAM超过\$480亿

POET's Optical Interposer enables a seamless integration of visible to IR spectroscopy components / POET的Optical Interposer 实现了可见到红外光谱组件的无缝集成

Chip scale integration of spectrometers for smart watches and mobile devices / 用于智能手表和移动设备光谱仪的芯片级集成

Miniature 3D Sensing and Imaging solutions for Robotic Surgery applications / 用于机器人手术的微型3D传感和成像解决方案



Several critical Bio-markers are detectable using optical spectroscopy methods /
一些关键的生物标志物可通过光学光谱方法进行检测

POET to Target Medtech / Wearables Markets / POET将瞄准医疗技术/可穿戴设备市场



\$48B+ TAM in 2025 / 2025年TAM规模超过\$480亿

Large market opportunity as growing universe of healthcare monitoring devices incorporate additional sensing capabilities / 随着越来越多的医疗保健监测设备加入更多的传感功能，市场机会巨大

Devices / 设备

Blood pressure monitor, pulse oximeter, body temperature monitor, blood glucose monitor, alcohol monitor, IR spectrometer / 血压监测仪、脉搏血氧仪、体温监测仪、血糖监测仪、酒精监测仪、红外光谱仪

\$18B TAM / TAM \$180亿

Mobile / 移动

Smartphone / 智能手机

\$23B TAM 1.5B Units / TAM \$230亿 15亿个单位

Wearables / 可穿戴设备

Smartwatch, fitness band, smart earbuds / 智能手表、健身手环、智能耳塞

\$7B TAM 700M Units / TAM 规模\$70亿，7亿个单位

Short Term Target Markets / 短期目标市场



Wearables / 可穿戴设备



Smartphones / 智能手机



Point-of-Care / 即时检测

Additional Market Opportunities / 更多的市场机会

Internet of Things / 物联网

Hearing Assist / 听力辅助

Smart Patches / 智能贴片

Smart Bands / 智能手环

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投资者资料

>\$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 / 联合包装的光学元件	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\$30亿	\$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 / 三安集成电路有限公司	Sanan IC JV Super Photonics / 三安集成电路有限公司	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

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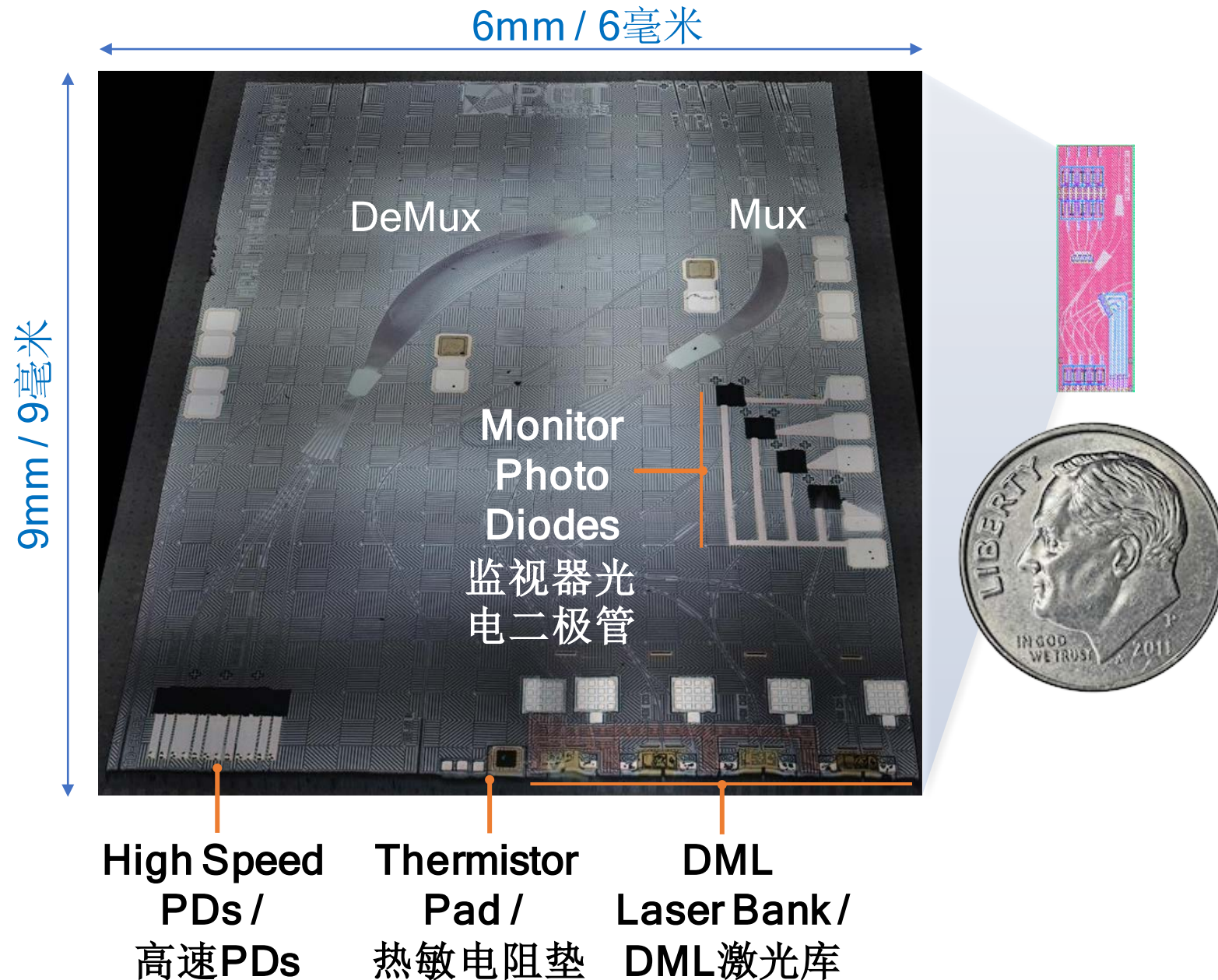
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100G/ 200G CWDM Optical Engine / 100G/200G CWDM光学引擎



POET's Optical Interposer Platform produces complete single chip optical engines that can be assembled **PASSIVELY** and at **WAFER SCALE** / POET的Optical Interposer平台可以生产出完整的单芯片光学引擎，可以在**WAFER**规模下进行被动组装

Miniature size opens up opportunities for novel applications in datacom and other vertical markets / 微型尺寸为数据通信和其他垂直市场的新型应用提供了机会

Current POET customer will place 4 CWDM / LR4 Optical Engines in one standard module to produce a 400G module / POET当前客户将在一个标准模块中放置4个CWDM/LR4光引擎去生产400G模块

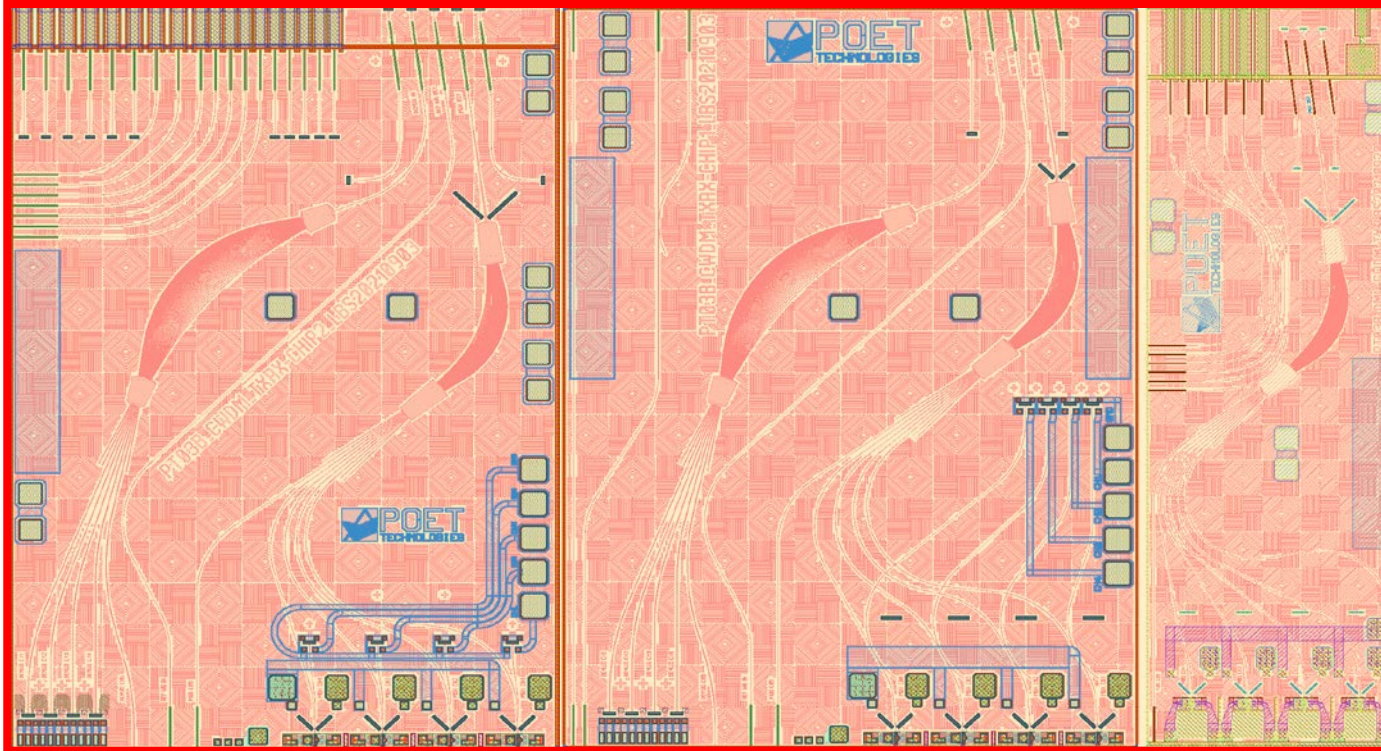
POET's Platform Enables Rapid Deployment / POET的平台可实现快速部署



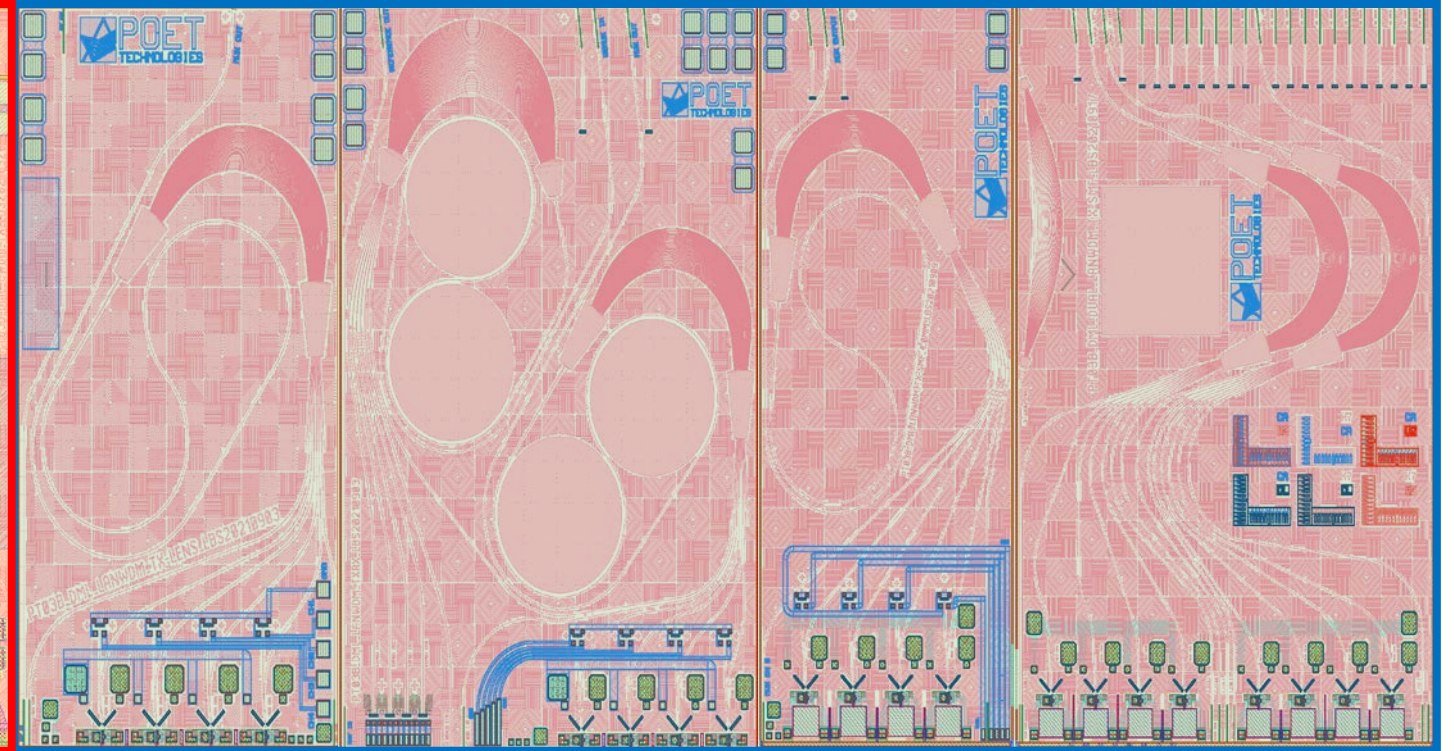
POET's Platform technology enables the reuse of key features and tools, shortening the development process and allowing the launch of multiple products simultaneously /

POET的平台技术实现了关键功能和工具的重复使用，缩短了开发过程，并允许同时推出多种产品

100G/200G FR4 PRODUCTS / 100G/200G FR4产品



100G LR4 PRODUCTS / 100G FR4产品



With the only integration platform in the world for DML/EML type lasers, POET can extend to 400G by changing out the lasers on the 100G / 200G products /

凭借世界上唯一的DML/EML型激光器的集成平台，POET可以通过更换100G/200G产品上的激光器扩展到400G

Roadmap to Commercial Products / 商业产品路线图



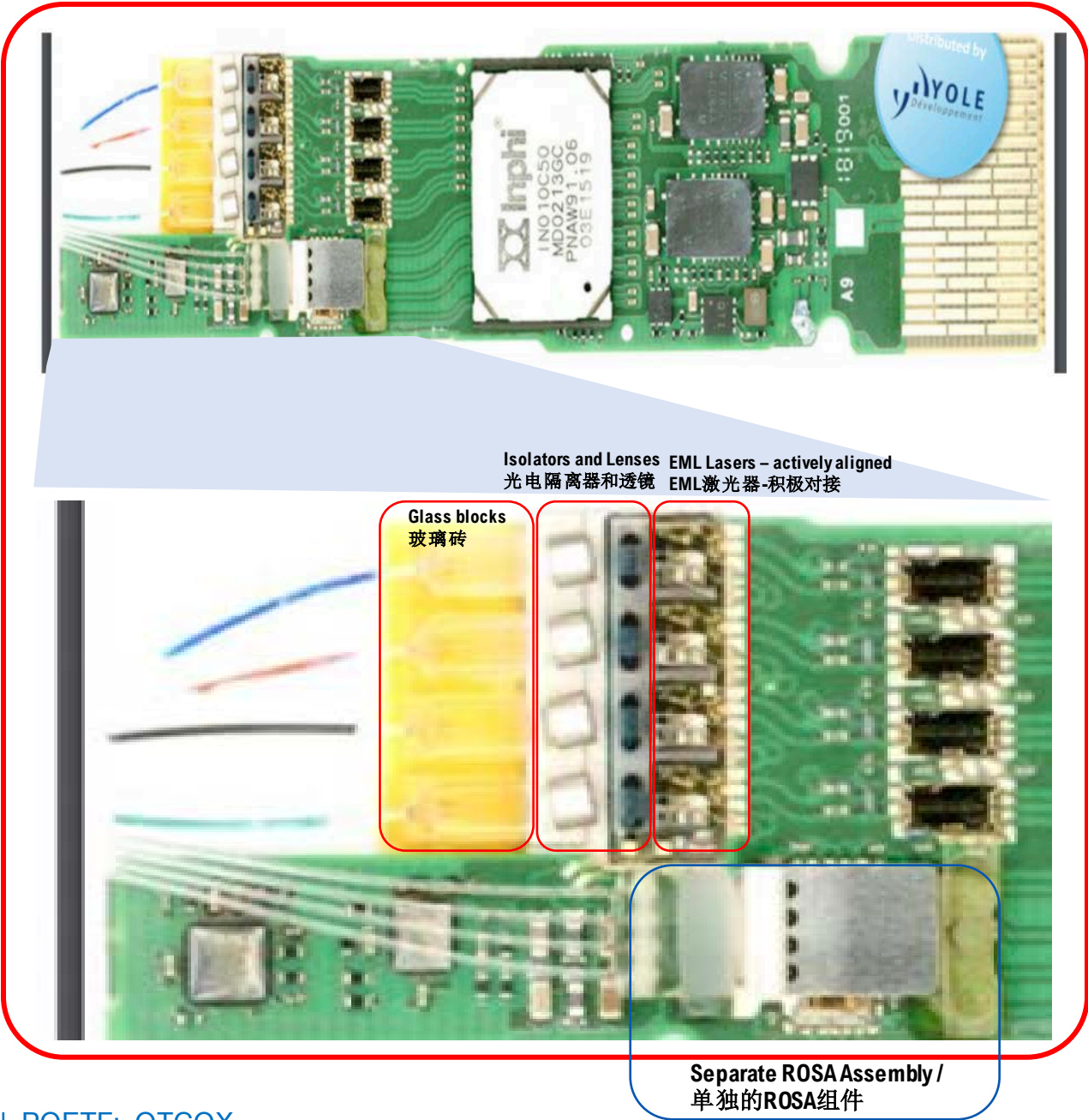
	Alpha / 第一版	Beta / 测试版	Production / 生产
100G CWDM Solutions / 100G CWDM解决方案 TX, RX, TXRX		1H 22	2H 22
100G LR4 Solutions / 100G LR4解决方案 TX, TXRX		1H 22	2H 22
200G CWDM and LR4 Solutions / 200G CWDM和LR4解决方案		1H 22	2H 22
400G Solutions / 400G解决方案 DR1, DR4, FR4 Si Photonics Modulator / 硅光子学调制器	1H 22	2H 22	1H 23
Custom Light Bar Solutions / 定制光条解决方案	1H 22		

- Custom implementations ; schedule driven by customer adoption
- 定制实施；进度由客户采用的时间决定

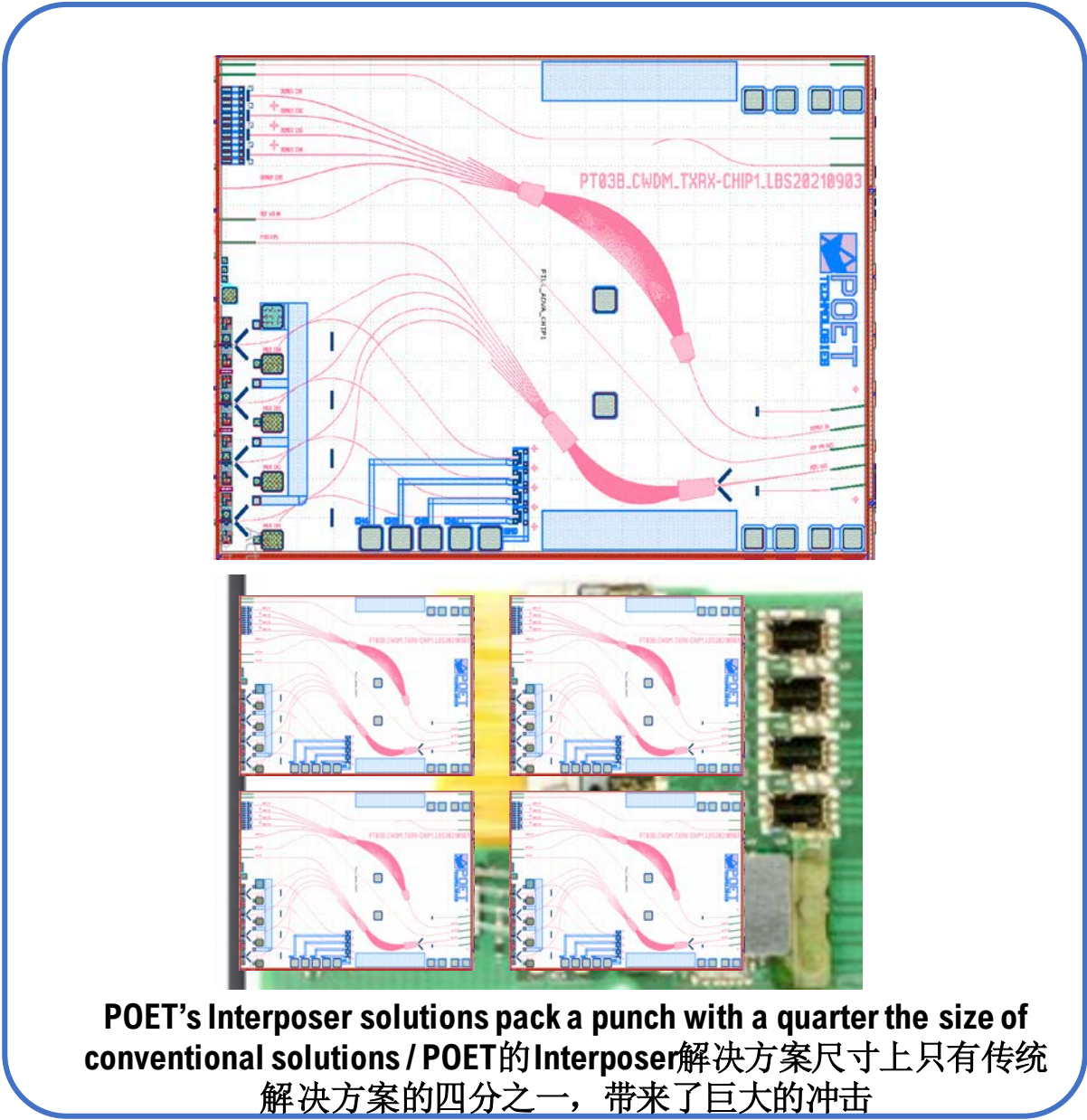
POET vs. Innolight @ 400G



Innolight – DR4



POET – FR4



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 / 复合半导体制造平台
- 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)

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Customer Wins Starting NOW / 从现在开始获得客户



TORONTO, Ontario,
October 5, 2021 /

安大略省多伦多市, 2021
年10月5日

POET Technologies Announces Design Win and Purchase Order
from Leading Systems Company /

POET Technologies宣布赢得设计和领先系统公司的采购订单

TORONTO, Ontario and
SHENZHEN, China,
September 29, 2021 /

安大略省多伦多和中国深圳,
2021年9月29日

POET Technologies Launches Its Products and Optical Interposer
Platform in China to Critical Acclaim /

POET Technologies在中国推出产品和Optical Interposer平台, 好评如潮

Live Product Demonstrations Yield Numerous Customer Engagements / 现场的产品演示获得了大量的客户参与

TORONTO, Ontario and
SHENZHEN, China,
September 9, 2021 /

安大略省多伦多和中国深圳,
2021年9月9日

POET Technologies Teams-up with SiLUX Technologies to
Demonstrate its 400G Optical Engine during China International
Optoelectronics Exhibition /

POET Technologies与SiLUX Technologies合作, 在中国国际光电博览会期间展示其400G光引擎

POET Enters China Market to High Acclaim! / POET进入中国市场获得高度赞誉!



- 6 Product Demonstrations / 产品演示
- 60 C-Suite and Exec Staff / 最高管理层和执行人员
- 20 Leading Optics Companies / 领先的光学产品公司
- 2 Committed Customers / 忠诚的客户
- >10 Sample Backlog / 积压样品订单
- >2 Strategic Discussions / 战略讨论

Engaged with Leading Companies / 与龙头公司合作



Customer Traction at Leading Module and System Companies / 在领先的模块和系统公司的客户牵引力



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World Class Mgmt Team and Engineering Talent



Executive Team



Dr. Suresh Venkatesan
CEO and Chairman

- SVP Technology at GlobalFoundries
- Various Senior roles at Motorola & Freescale Semiconductors



Vivek Rajgarhia
President & General Manager

- SVP and GM, MACOM
- CEO and Co-Founder, Optomai
- Lucent, OpNext, GigOptix



Thomas Mika
Exec. Vice President & CFO

- Chairman, Rennova Health
- Chairman & CEO, Tegal Corporation
- Co-Founder IMTEC (M&A Boutique)

Engineering and Operations Team



Edward Comejo
VP, Product Marketing

- Sr. Director, MACOM Technologies
- Google Fiber, Opnext, Lucent and Lytel



Dr. Jinyu Mo
SVP & GM, Asia

- Sr. Director and Chief Scientist, MACOM Technology Solutions
- Founder/CTO, Nexwave Photonics
- Huawei, Oclaro, I2R



Kevin Barnes
VP, Finance and Administration

- Controller, EC English
- Duguay and Ringler Corporate Services



Dan Meerovich
VP, Product Engineering

- Director, Product Engineering at MACOM
- Broadcom, Multiplex



James Lee
VP and GM, Singapore

- VP Logic Technology, IMEC
- Various Senior roles at GlobalFoundries and Chartered Semiconductor

48 Employees
43 Engineers/Techs

世界级的管理团队和工程技术人才



执行团队



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

工程和运营团队



Edward Comejo
产品营销副总裁

- Sr. Director, MACOM Technologies / MACOM Technologies高级董事
- Google Fiber, Opnext, Lucent and Lytel / 曾在Google光纤、Opnext、朗讯和Lytel任职



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

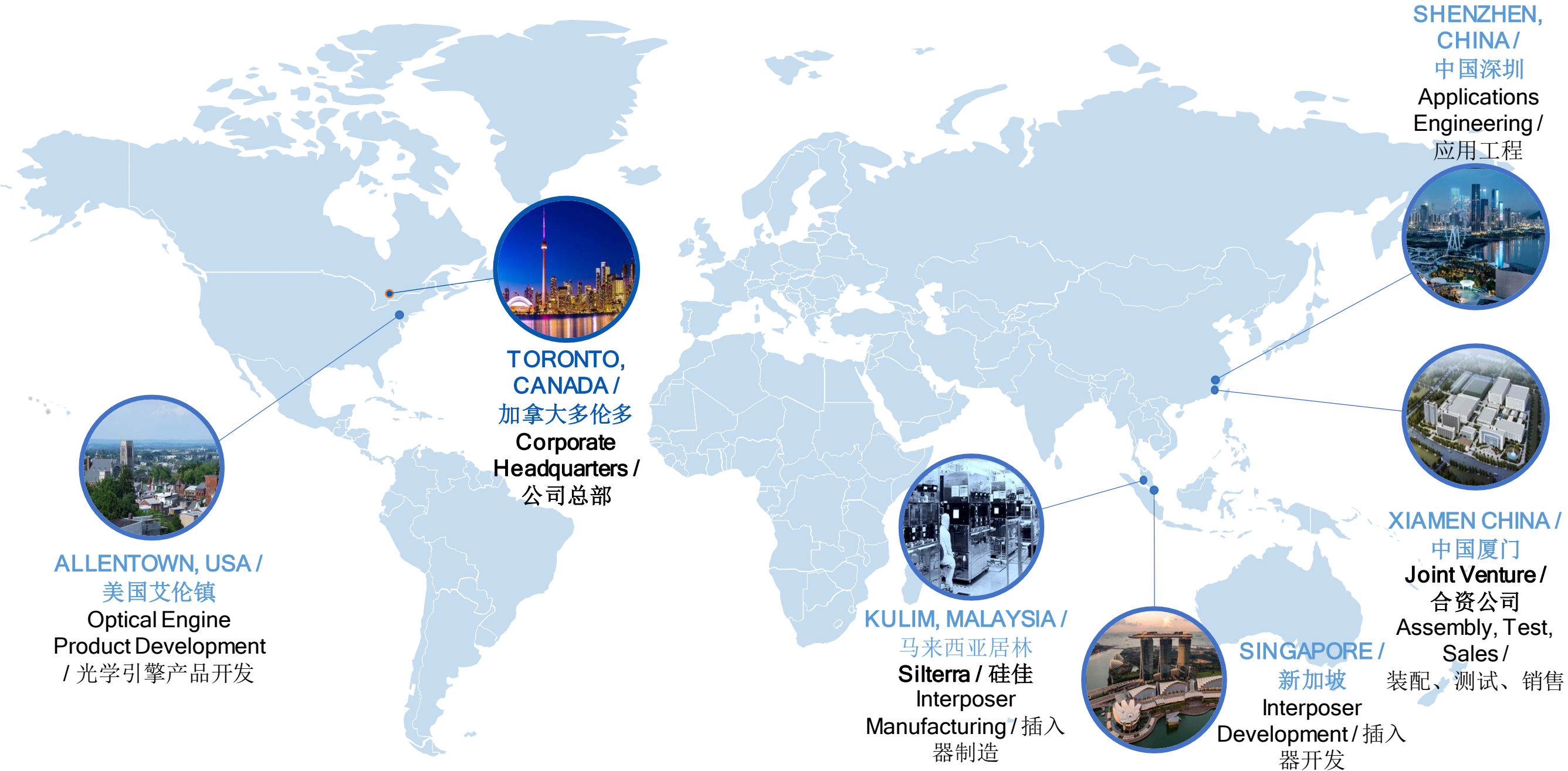


James Lee
新加坡副总裁兼总经理

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

48名员工
43名工程师/技术人员

Global Development and Manufacturing / 全球开发与制造

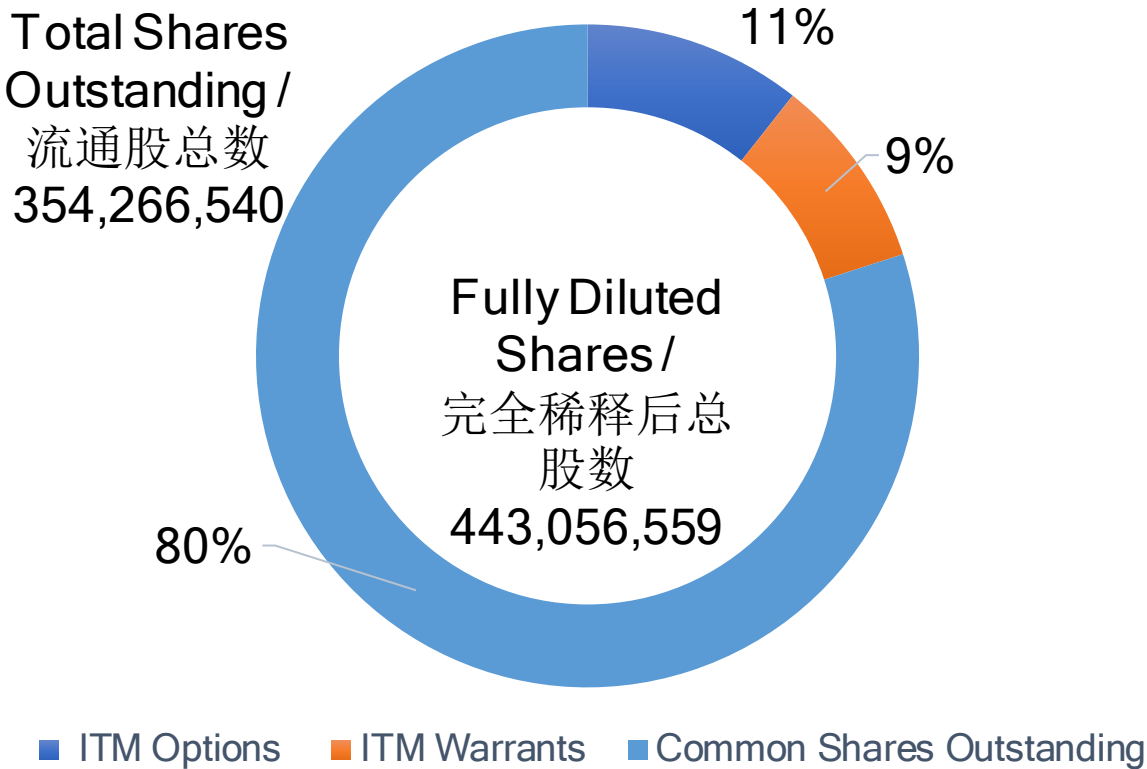


POET Capital Structure / POET资本结构

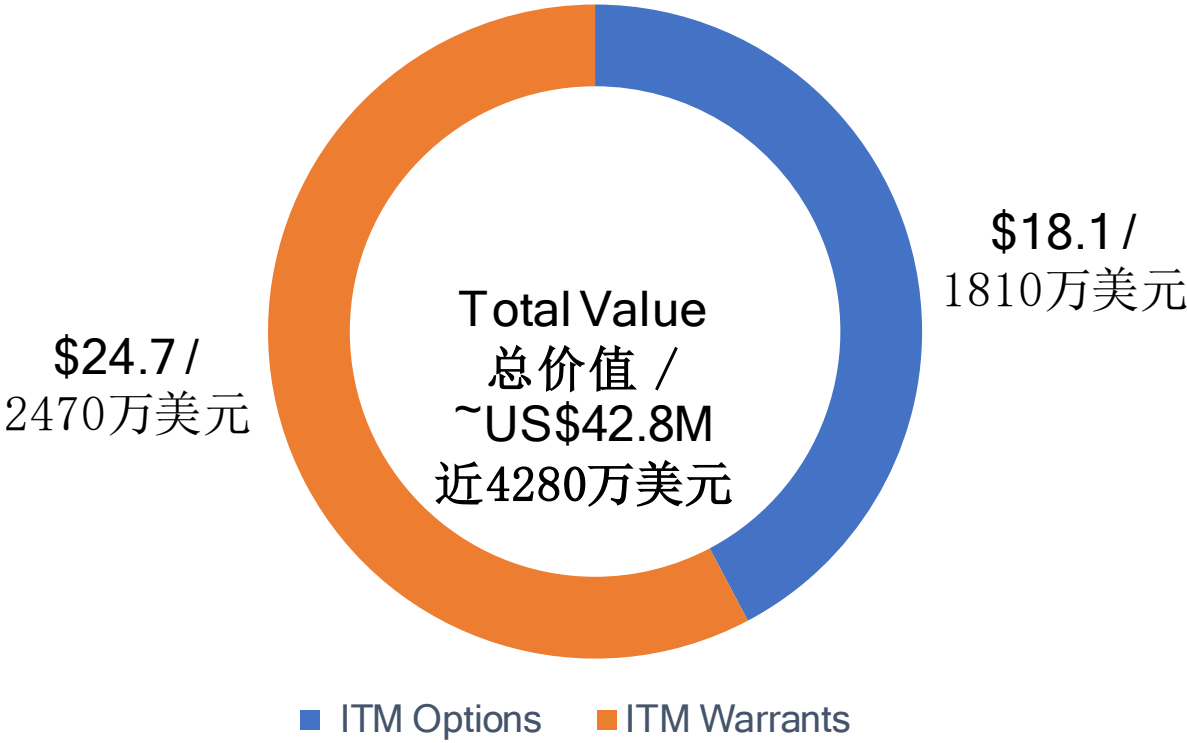


- Cash at 9/30/21:~US\$20M; Cash Burn of ~\$1M/month / 截至2021年9月30日的现金：约2000万美元；每月消耗现金约100万美元
- Five-year Warrants Expiring on Nov. 2, 2021 will add ~US\$4 million to cash balance / 2021年11月2日到期的五年期认股权证将增加约400万美元的现金余额
- Market Capitalization approximately US\$290 million (C\$372 million) / 市值约为2.9亿美元（3.72亿加元）

Capital Structure / 股本结构



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



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 2022) / 刚刚进入新产品介绍/商业化阶段（2022年收入上升）
- **Not widely known** outside of Canada (TSXV and OTCQX in the US) / 在加拿大以外地区不广为人知（多交所创业板TSXV和美国OTCQX挂牌交易）
- **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
- **Nasdaq listing** in Q1'22 / 22年第一季度将在美国纳斯达克交易所上市

