

CollPlant

Hosts LightSolver Investor Webinar

17 September 2026



Forward Looking Statements

This presentation contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. CollPlant intends such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

Forward-looking statements may be identified by words such as "anticipate," "believe," "expect," "intend," "may," "plan," "project," "seek," "should," "will," "estimate," "potential," and similar expressions or their negative forms. These statements include, among others, statements regarding the acquisition of LightSolver, the anticipated benefits and growth opportunities resulting from the transaction, LightSolver's technology and its development and commercialization, potential market opportunities and adoption, technological and commercial milestones, strategic collaborations, and the future business, operations, plans and prospects of CollPlant, LightSolver and the combined business.

Forward-looking statements are based on management's current expectations, estimates, assumptions and assessments and are not guarantees of future performance. Actual results may differ materially from those expressed or implied by such statements as a result of various risks and uncertainties, including, among others, the ability to realize the anticipated benefits of the transaction; integration risks; LightSolver's ability to achieve technological and commercial milestones; the development, commercialization and market adoption of LightSolver's technology; competition and technological developments; intellectual property risks; the ability to establish and expand strategic and commercial relationships; the availability of capital; CollPlant's ability to maintain compliance with Nasdaq listing requirements; and general market, industry, economic and geopolitical conditions.

Additional risks and uncertainties that could cause actual results to differ materially are described in CollPlant's filings with the U.S. Securities and Exchange Commission, including its most recent Annual Report on Form 20-F and subsequent Reports on Form 6-K. Investors are cautioned not to place undue reliance on forward-looking statements.

Forward-looking statements speak only as of the date of this presentation. CollPlant undertakes no obligation to update or revise any forward-looking statements as a result of new information, future events or otherwise, except as required by applicable law.

Why LightSolver: A Large HPC Opportunity, Proven Technology and a Path to Scale



~\$89B

Projected HPC market by 2034



Real-world Customer Validation



Applications across major industries

Aerospace & Defense . Engineering . Energy .
Financial Services . National Labs



CollPlant provides the public-company platform and resources to support commercialization.



Transaction Structure Aligns Ownership with Execution

AT CLOSING

Closing shares + pre-funded warrants
\$5M funding to LightSolver to support execution

MILESTONE 1 | MILESTONE 2 | MILESTONE 3

Warrant tranches tied to specified technology
and commercial milestones

Strategic Alignment

Significant potential future ownership is tied to LightSolver's
execution and milestone achievement

Existing biotech assets

CollPlant continues to evaluate
strategic alternatives for its
existing biotech assets, with
the objective of maximizing
shareholder value.

LightSolver

Computing with Light

Dr. Ruti Ben-Shlomi, Co-Founder and CEO



SILICON QUANTUM LIGHT

We Need More Compute. **But We Can't Keep Paying the Energy Bill.**

Quantum

Nuclear

Space

What If We **Compute With Light**?

- Closed-loop all-optical compute core
- We use interacting lasers
- Analog Physical based computer

LPU – Laser Processing Unit

Using the physics of light itself as a new way to compute

Up to **1M** variables / core
Massively parallel optical
interaction

Few **Nanoseconds** per iteration
Super-fast optical dynamics

< 1 KW
Low power consumption

~200 TB/sec equivalent
memory bandwidth
Persistent optical memory

Up to **10,000X** faster than a GPU
Reduced data movement

Rack size
Room temperature

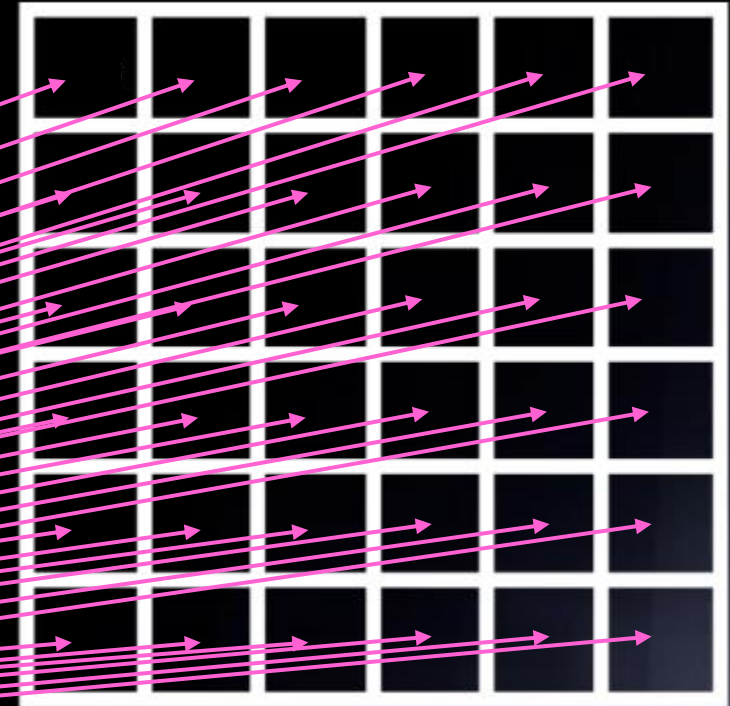


Performance figures reflect measured results and projections based on LightSolver's current systems, emulator, and scaling models. Actual performance may vary.

Inside the LPU: Computing with the Physics of Interacting Lasers

A computational problem is translated into laser parameters:

$$\frac{d\theta_i}{dt} = \omega_i + \frac{1}{N} \sum_{j=1}^N K_{ij} \sin(\theta_j - \theta_i),$$



For illustrative purposes only. All model results are preliminary and subject to ongoing development and validation.

Inside the LPU: Computing with the Physics of Interacting Lasers

SLM

Mirror

Camera



Parameters are encoded
on laser parameters

For illustrative purposes only. AI model results are preliminary and subject to ongoing development and validation.

Inside the LPU: Computing with the Physics of Interacting Lasers

SLM



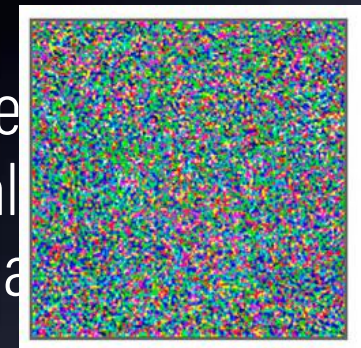
Mirror



Camera



The laser
physically
the "stea



For illustrative purposes only. All model results are preliminary and subject to ongoing development and validation.

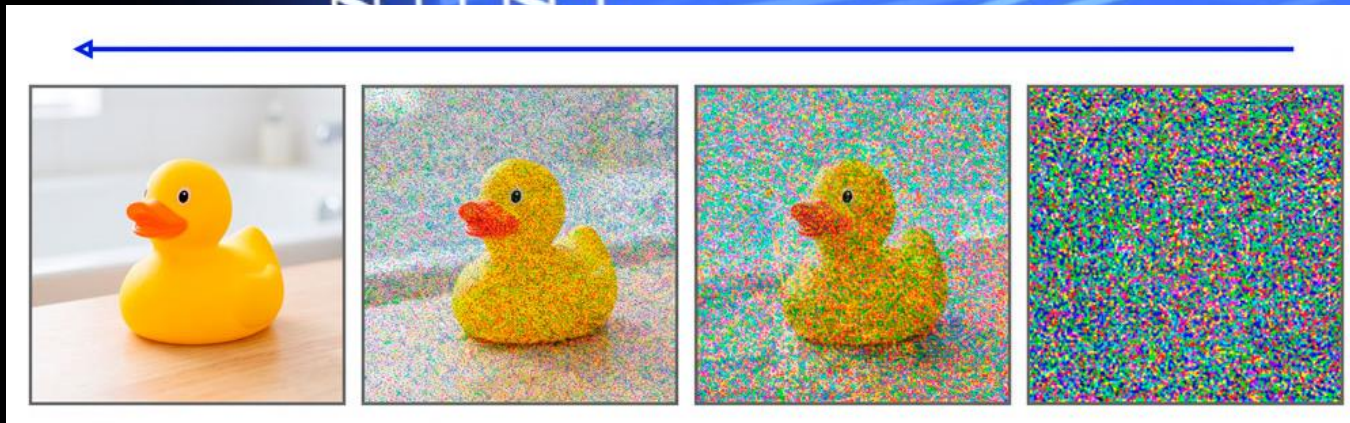
Inside the LPU: Computing with the Physics of Interacting Lasers

Laser values translated back
to digital solution

$$\frac{d\theta_i}{dt} = \omega_i + \frac{1}{N} \sum_{j=1}^N K_{ij} \sin(\theta_j - \theta_i),$$



Camera takes a
"snapshot" of the
laser values

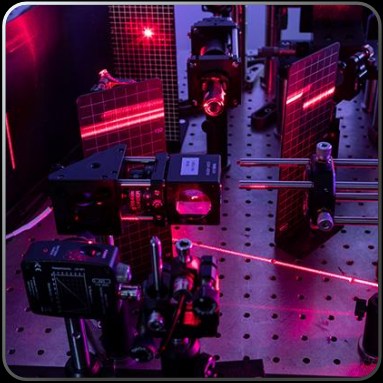


For illustrative purposes only. All model results are preliminary and subject to ongoing development and validation.

The Path from **Proof** to **Product**

2020

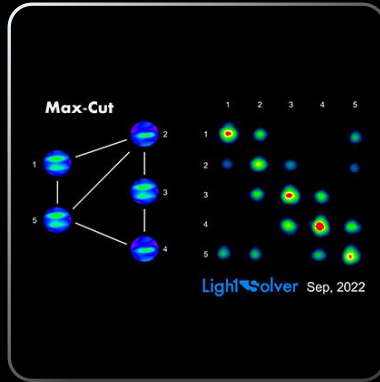
Founded



- Vision: compute with light
- Built core team and optical platform

2022

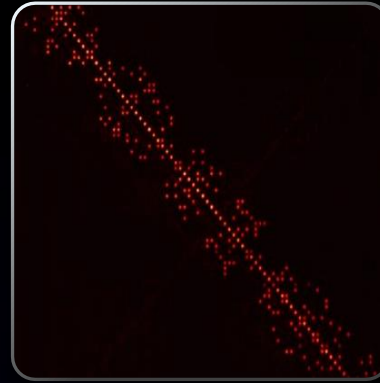
Physics is Working



- First optical computing demonstrations
- Solved optimization problems using only light
- Validated the core physics

2023-2025

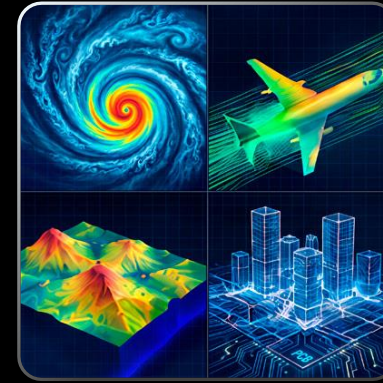
Scaling the Optical Core



- Increased number of variables
- Stronger optical core with higher connectivity
- Expanded optimization problem types (e.g., SAT, partitioning, portfolio optimization)

2026

New Class of Applications



- Solved linear systems ($Ax = b$)
- Solved partial differential equations (PDEs)
- Addressing fundamental workloads in engineering and scientific simulation

2028

LPU™ Commercial Platform



- Scaling into the LPU platform
- Increasing computational capacity
- Expanding to new workloads, including AI
- Commercial availability (target 2028)

LightSolver Addresses Some of the World's Largest Compute Markets



Large-Scale Simulation

Aerospace & Defense
Engineering Software
Automotive
Oil & Gas



Optimization

Logistics & Supply Chain
Energy & Infrastructure
Financial Services



AI / Physical A

Modeling the Physical World
Robotics & Autonomy
Drug Discovery & Materials



2034 HPC Market

\$89B ⁽¹⁾

2034 SAM*

\$53B

>60% of HPC

(1) Hyperion Research, 2024

*PDE-based Workloads

Technical Validation Is Converting into Commercial Commitment

In Process

-  European Supercomputing Center
-  U.S. National Lab
-  State-owned Defense Company
-  U.S. Supercomputing Lab

Benchmark / PoC

-  State Owned Defense Company → **200x faster decision making**
-  Energy Services → **100x faster for Oil & Gas Subsurface Imaging**
-  Top-10 Aerospace Company → **60x faster material design**
-  Engineering Simulation Leader → **up to 50% more accurate mechanical modeling**
-  Top-25 Defense Company → **10x faster image processing**
-  *European Supercomputing Center → **up to 10,000x faster linear systems**
-  Top-10 Global Bank → **10% more accurate modeling**

Paid Pilot / NRE

Performance results are based on emulation and projected LPU performance evaluated as part of POC studies and may differ from performance on future commercial systems.
*Results based on joint LightSolver-HLRS research published in the ACM Digital Library

Boeing: From POC to a Multi-Year Engineering Program



Customer problem:

Computationally intensive corrosion modeling
Running on LPU platform



Results:



Up to 100x
faster

Why it Matters:

- Better material selection
- Lower maintenance burden
- Lighter structures

Broader Impact:



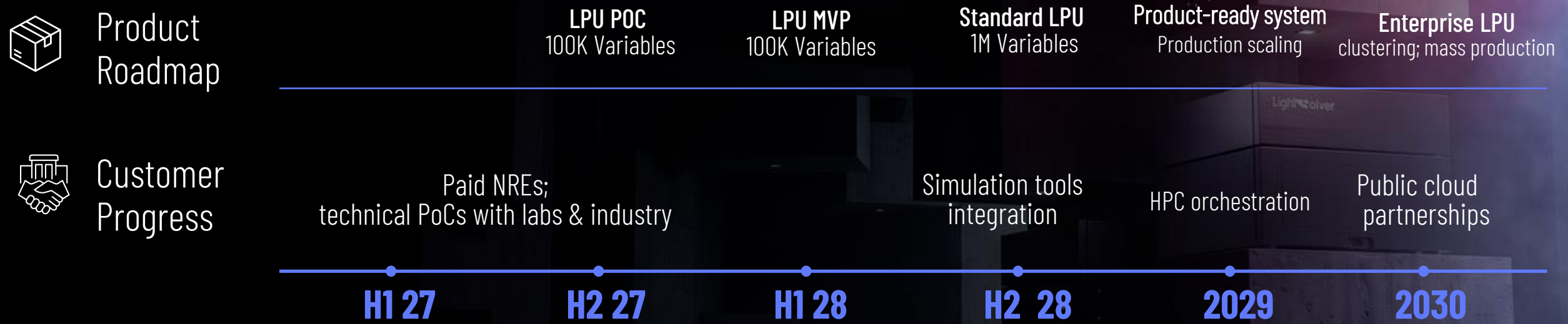
lower fuel
consumption



lower
emissions

Performance results are based on emulation and projected LPU performance evaluated as part of POC studies and may differ from performance on future commercial systems.

Customer Validation and Product Readiness Unlock Scale



Roadmap reflects current targets and expectations. Timelines, specifications and commercial milestones are subject to change.

A Different Compute Paradigm **Designed for Real-World Deployment**

Dimension	GPU	Quantum	Hybrid Photonic	LightSolver LPU
Compute architecture	Electronic massively parallel	Quantum + classical control	Optical + electronic	Closed all-optical loop
Target workloads	AI / parallel HPC	Simulation / optimization	AI / matrix operations	Simulation / optimization/ *AI
Operating environment	Room temperature	Specialized; often cryogenic	Room temperature	Room temperature
Maturity	Mature	Early- stage	Emerging	Pre-commercial; 2028 target

Comparison reflects LightSolver's assessment based on publicly available information as of September 2026. Technology characteristics, target workloads and maturity vary by implementation and may evolve over time.

*AI capabilities are under development.

A Full-Stack Technology That Is Difficult to Replicate



Proprietary All-optical architecture

Closed-loop computation with interacting lasers



Optical System & control know-how

Precision control and orchestration



Software & algorithms

Compiler, PDE and optimization libraries



Application & integration know-how

Mapping real-world problems onto the LPU



Proprietary architecture • System know-how • Application expertise

Deep Scientific Leadership. Broader Management Platform.



Dr. Ruti Ben Shlomi

Co-Founder & CEO

PhD in Physics,
Weizmann
Institute of Science,
Intel



Eran Rotem

Deputy CEO & CFO

CollPlant CFO (Nasdaq),
Tefron, CFO (NYSE, TASE)
Healthcare Tech., CFO
(Nasdaq) & Gamida, E&Y



Amir Oz

COO

GE Healthcare,
SanDisk



Dr. Chene Tradonsky

Co-Founder & Chief Scientist

PhD in Physics,
Weizmann Institute of Science



Bar Abelis

VP Legal

CollPlant (Nasdaq)
Goldfarb Gross Seligman



רשות החדשנות
Israel Innovation
Authority

European
Innovation
Council



Named a Sample Vendor in
Photonic Computing

The Investment Case: A New Computing Moving Toward Commercial Scale

HPC Megatrend Exposure

Next-generation computing that addresses silicon's power and thermal limits.

Customer-Validated Tech

Active, paid programs with Tier-1 aerospace and defense leaders, including Boeing.

Massive Target Workloads

Optimization and simulation bottlenecks across a ~\$89B+ HPC market.

Elite Execution & Leadership

Weizmann physicists paired with seasoned Nasdaq executives.

Significant Value-Creation Milestones Ahead

Productization, customer conversion and commercial scale still lie ahead.

Investors@LightSolver.com