DIAMOND QUANTA

The Physics of Forever™

Our mission is to make diamond as accessible as silicon.

We are building the platform that standardizes engineered diamond integration for high-volume semiconductor manufacturing.

August 27, 2026

Adam Khan | Founder & CEO

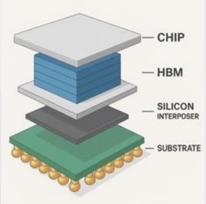
Michael Pierantozzi | Co-Founder & COO/BD

SOSV HAX

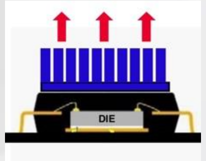
nextcorps LUMINATE PORTFOLIO COMPANY

AI infrastructure is making energy the next constraint on semiconductor scaling

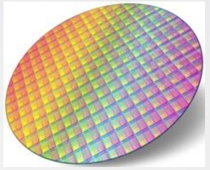
AI compute



Advanced packaging



Energy density



Process integration

High-volume manufacturing

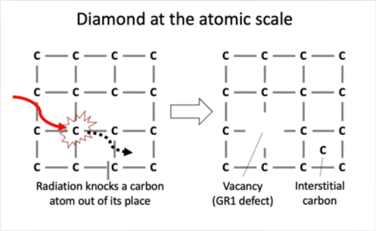
Why semiconductor integration is difficult

- ❖ Thermal budget
- ❖ Packaging complexity
- ❖ Qualification cycles
- ❖ Existing fab compatibility

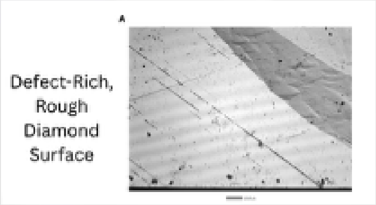
The bottleneck is no longer material discovery.

It is manufacturable integration.

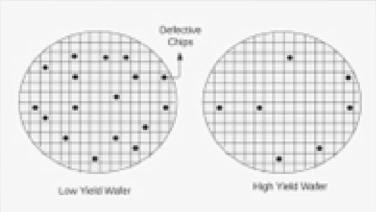
Why diamond has not scaled in semiconductor manufacturing



Exceptional properties



Defects + interfaces



Process variability

Commercial consequences

- ❖ Difficult fab integration
- ❖ Slow qualification
- ❖ Low manufacturing yield
- ❖ Limited commercial deployment

Diamond's performance was never the barrier.
Interface engineering enables **manufacturable integration**.

The Adamantine Platform™ solves manufacturing integration.

One manufacturing platform. Multiple licensing opportunities.

Initial commercialization:
Optics

- *Smartphone cover glass*
- *Optical durability & AR integration*

Platform expansion:
Thermal

- *AI compute & advanced packaging*
- *Power Electronics*

Long-term opportunities:
Photonics

- *Silicon photonics*
- *Quantum & diamond electronics*

We standardize engineered diamond integration for high-volume semiconductor manufacturing.

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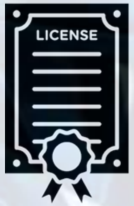
We monetize semiconductor integration, not diamond.

Qualification

✓Evaluation + Process Integration

NRE

→



Licensing

✓Manufacturing License

License Fee

→

Production

✓Partner Manufacturing

Royalty

One manufacturing platform. Multiple licensing opportunities.

Execution team built to commercialize, not just invent

Founders

Adam Khan
Founder & CEO
Former Argonne National Lab (ANL) researcher and Serial diamond materials entrepreneur across optics, coatings, and advanced materials.

Michael Pierantozzi
Co-Founder & COO/BD
Former HP, HPE and Intellectual Ventures executive with experience in semiconductor commercialization, licensing and strategic partnerships

Technical leadership
(Expanding with Seed financing)

Madhuri Duggineni
Applications Engineer /
Technology Program Manager

Kiran Kumar Kovi, Ph.D.
Consulting Chief Scientific Officer
(Fmr ANL; Princeton Plasma Physics Lab)

Tae Sung Kim, Ph.D.
Sr. Photonics & Fab Engineer
(SNF; fmr NASA)

Roger Hamamjy
Manufacturing Head
(fmr Intel)

Srujana Valluri
Process Engineer
(fmr ANL)

Board Observers

Paul Pickering
Silicon Catalyst

Jui Lim
Corelabs Capital

Built to qualify, standardize, and scale engineered diamond manufacturing.

Customer qualification is already underway

Customer Qualification → Technology Licensing → Commercial Production → Recurring Revenue

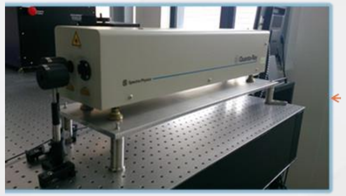
Lawrence Livermore National Laboratory

SNF Stanford Nanofabrication Facility

UPPSALA UNIVERSITET

2025

Laser Annealing

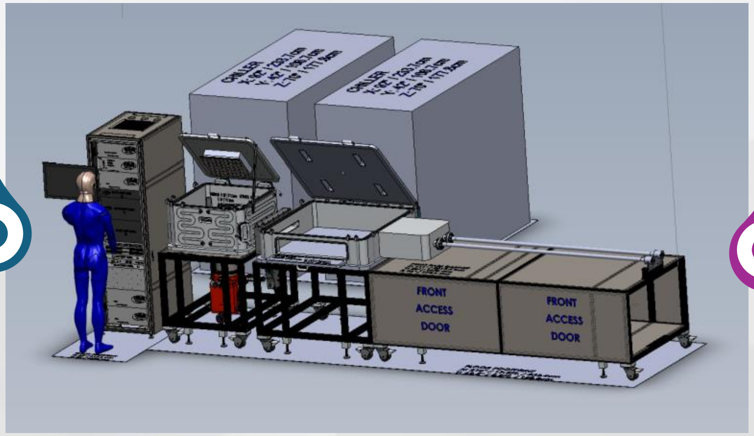


Sample Validation
OEM JT&E → LoS

TRL6 /MRL5

2026

Diamond Forge 1 Pilot Mfg + NRE
TRL7 / MRL6



HELLER INDUSTRIES

ExtenD

SONO·TEK

2027

Licensing

TRL8 / MRL7

PPPL

Diamond Forge 2
(Plasma)

2028

Factory
deployment

TRL9 / MRL8

2029

Adamantine Optics™
Commercial Launch

2030

Adamantine Thermal™
Commercial Launch

Execution today

- ***✓ HAX (SOSV) investment and residency, with Day 30 review completed***
- ***✓ Paid customer qualification programs and foundry pathways advancing***
- ***✓ Diamond Forge 1 pilot manufacturing deployment underway in Petaluma, CA***

This is the commercial inflection point. Technical feasibility has been validated.
Customer qualification now drives licensing and commercial scale.

SOSV HAX

nextcorps LUMINATE PORTFOLIO COMPANY

Si SILICON CATALYST PORTFOLIO COMPANY

Building the manufacturing infrastructure for semiconductor-compatible engineered diamond

Our mission is to make diamond as accessible as silicon.

Why now

- AI infrastructure scaling
- Advanced packaging bottlenecks
- Optical durability demand

Why we scale

- Manufacturing integration platform
- Customer qualification underway
- Licensing-driven business model

The technology works. Paid customer qualification is underway. Completing approximately $460K of our current pre-seed allocation to advance customer qualification and Diamond Forge 1 deployment ahead of the Seed round.

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