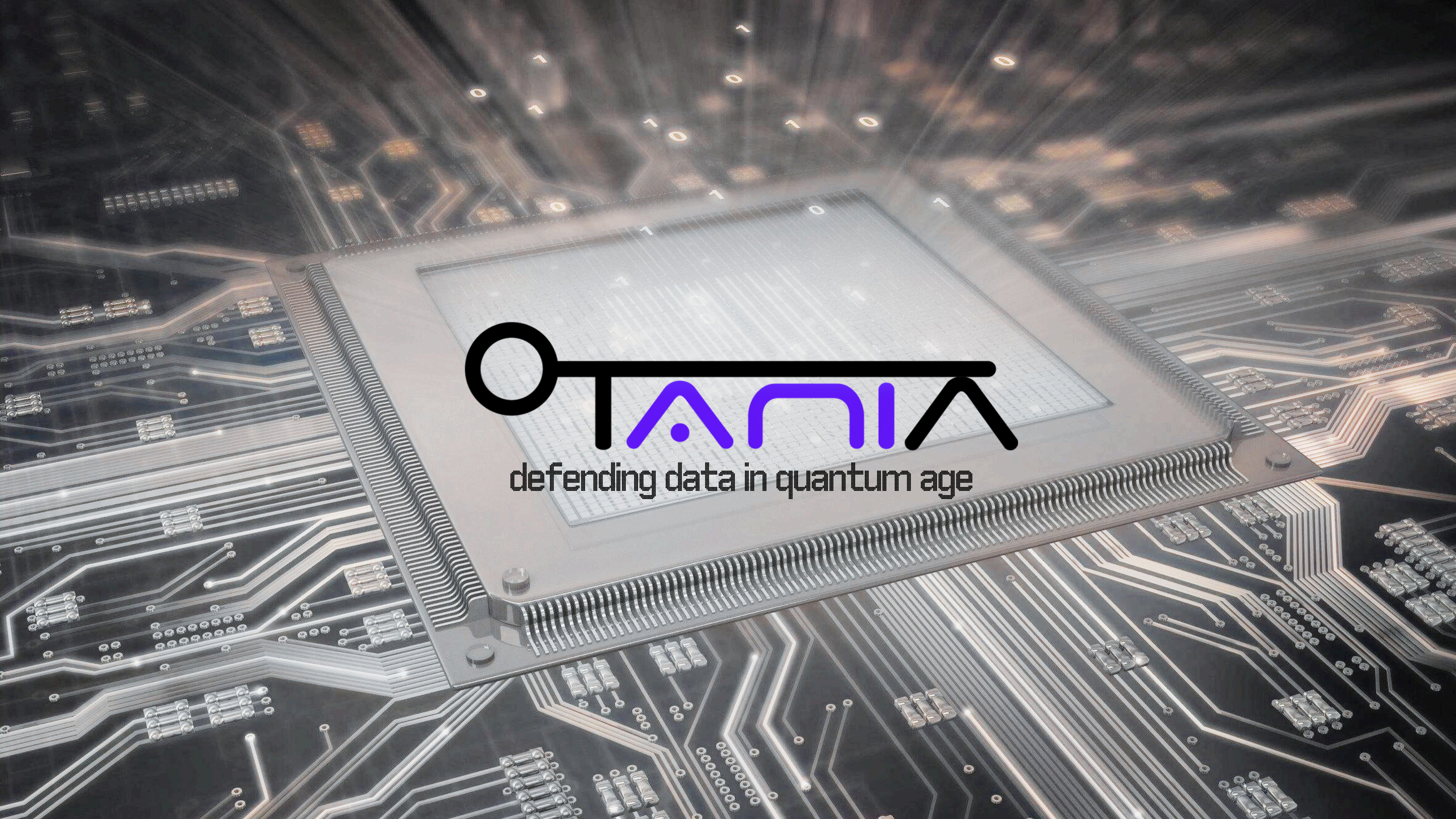

defending data in quantum age

Team

Dr. Y. Peretz
CEO, CTO, Co-founder

- Ben Gurion University, Ph.D Mathematics & Computer science
- JCT Lev Academic Center, Senior Lecturer of algorithms, cryptography, control systems, optimization methods, mathematics
- BIOMEM, Manager of systems & algorithms
- Flycomm, Algorithms & Machine Learning manager
- Tania Systems, R&D manager, General

Kevin Chami
CPO, Co-founder

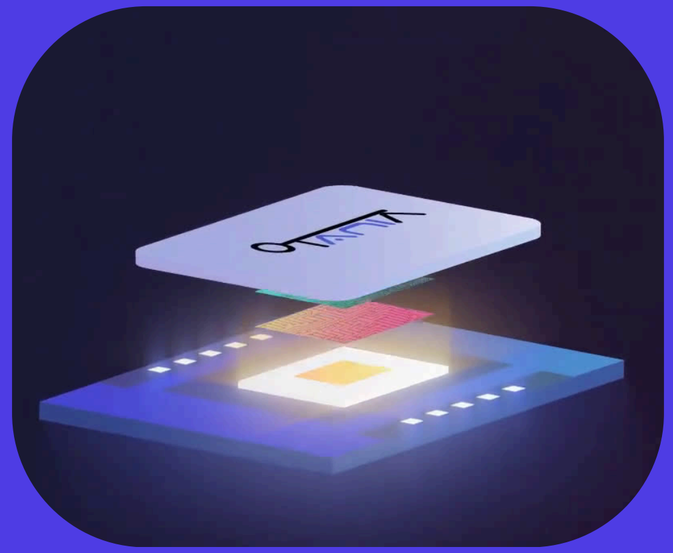
- Jerusalem College of Engineering, BA Computer Science
- Surecomp, Software engineer
- Tania Systems, Software & GPU developer

Hillel Primack
COO, Co-founder

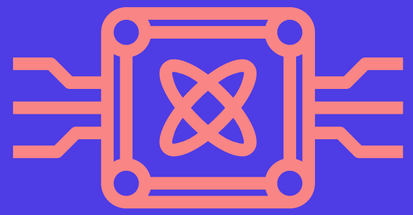
- Reichman University, Dual BA Business Administration & Entrepreneurship, Dean's List nominee
- Fotimex, Account & Product manager
- Tania Systems, Operations & Product manager

What is Tania?

TANIA is a quantum-safe cryptographic chip design, combining public key, secret key, and digital signature technologies, to be implemented in parallel hardware ensuring super fast transmission rates and robust security.



The big issue



Quantum Threat

Quantum computers can quickly solve complex mathematical problems that current cryptographic systems rely on, potentially breaking widely used encryption like RSA and ECC.

Security Risk

This ability threatens the security of sensitive data across critical sectors such as healthcare, finance, defense, cryptocurrencies & more.

Urgency in Quantum-Safe Crypto

As quantum computing advances, there's an urgent need for new cryptographic systems that can withstand quantum attacks.

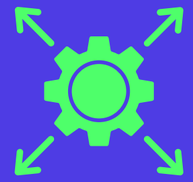
Tania’s solutions

Quantum Safe Algorithm

TANIA uses a new cryptographic method that is not vulnerable to quantum attacks, unlike RSA and ECC which rely on factorization.

Performance Efficiency

TANIA is designed to be efficient enough for real-time applications, matching or exceeding current encryption speeds. Tania’s PK will be as fast as Secret Keys, differing from other existng technologies. **Meeting 6G communication protocols for 1Terabits/sec for PK encryption.**

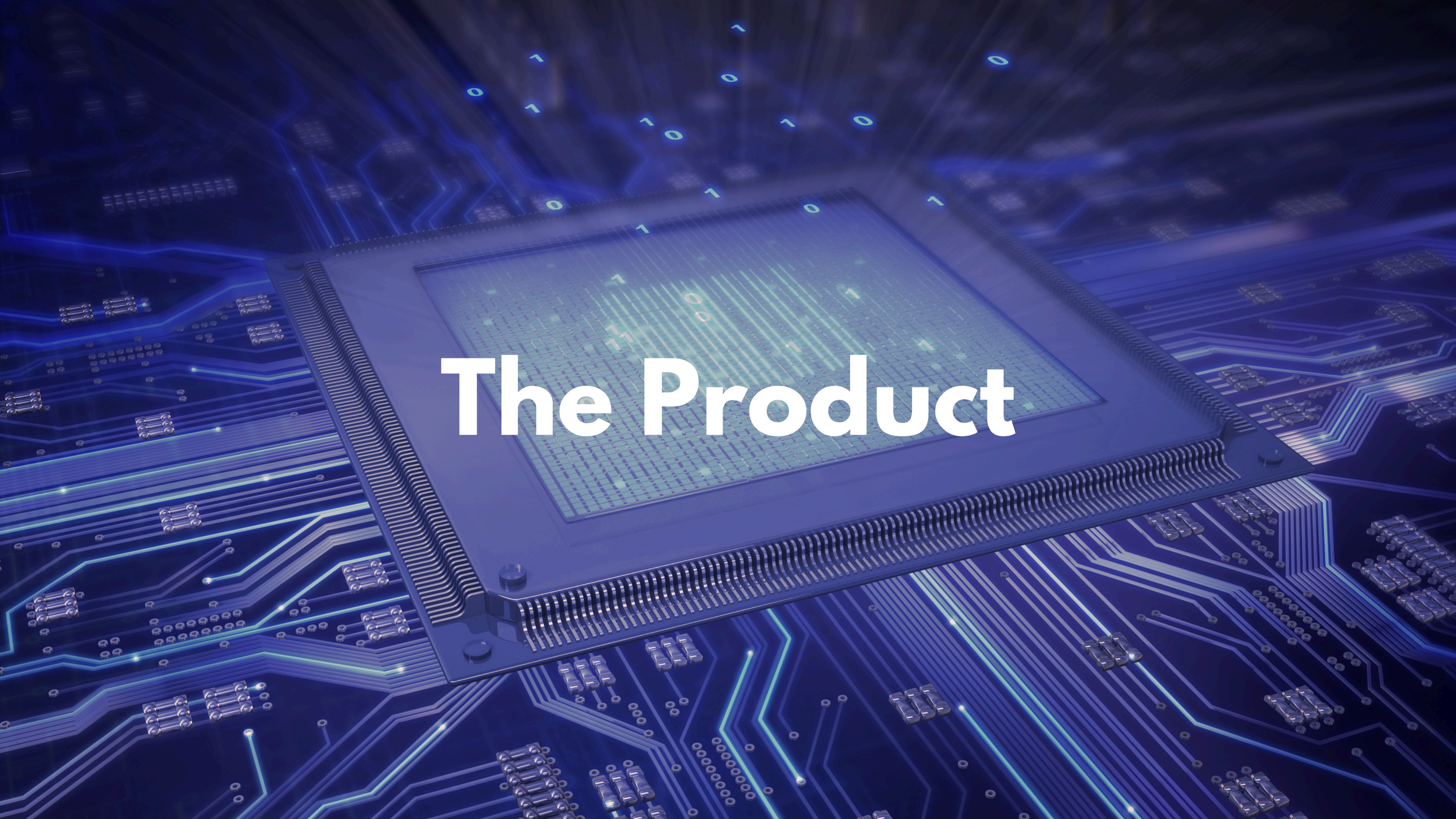


Scalability & Adaptability

The solution is scalable to different security needs and adaptable to future advancements in quantum computing and cryptography.

Cost-effective

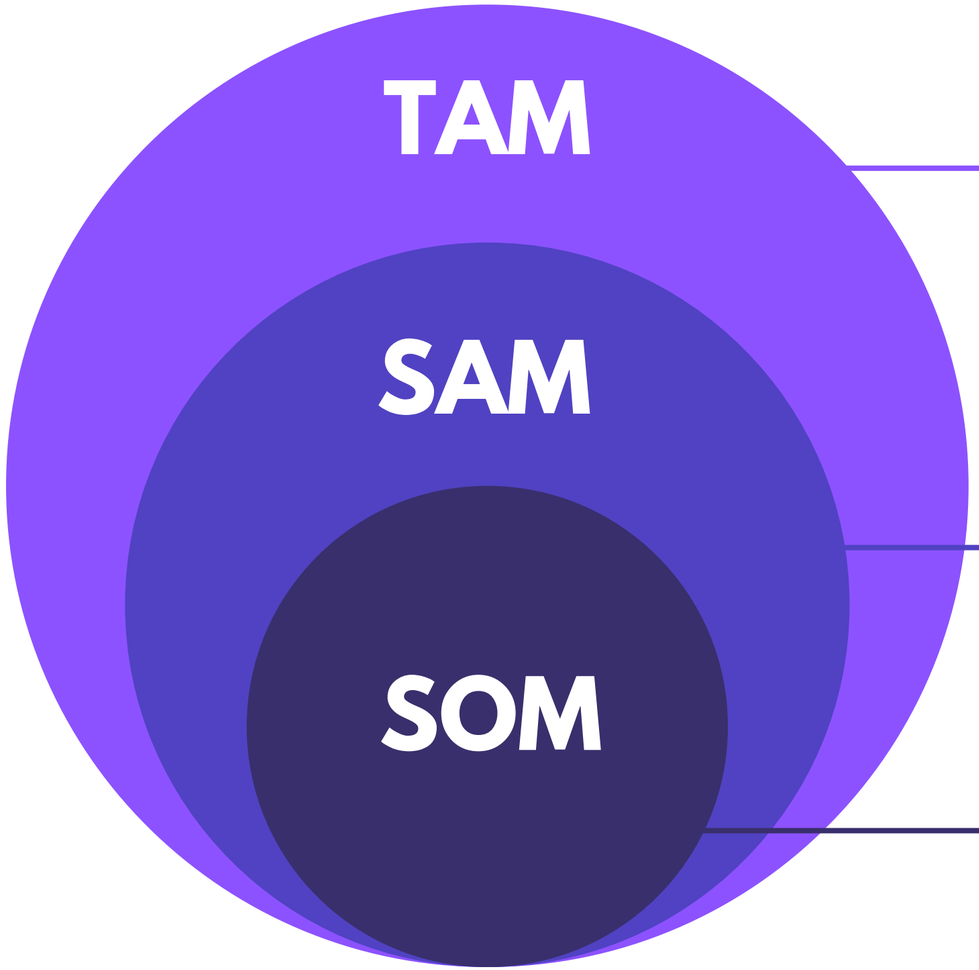
3 systems will be unified into 1 chip. Existing companies will sell every chip/system separately, for higher prices, while Tania reduces the price by uniting all 3 of them in 1 chip.


The Product

Link to explainer video:

https://youtu.be/07Ulabp44HQ

Market Size



$11.5B

$673M

$40M
(by 2030)

Sources:
https://docs.google.com/document/u/0/d/1vlvQs99rc-F3YGWqa125lD28xfGYS3MhmXxDj_1Q5hU/mobilebasic

Competition Comparison

ENCRYPTION/SIGNING

Transmission Rate Tbp/s

	3 SYSTEMS IN 1	SECRET KEY n=128, AES bits/cycle = 12.8	PUBLIC KEY (2^{128} SL)	DIGITAL SIGNATURE (2^{128} SL)	DIGITAL SIGNATURE (2^{256} SL)
OTANIX	✓	0.1059	0.6756	1.2047	6.8089
FALCON Fast-Fourier Lattice-based Compact Signatures over NTRU	✗	-	-	0.0000192	-
KYBER	✗	-	0.00032	-	-
AES-512	✗	0.0698	-	-	-
HQC	✗	-	0.000016	-	-
DILITHIUM	✗	-	-	0.0000125	-
SPHINICS	✗	-	-	-	0.0000038

Competition Comparison

DECRYPTION/VERIFICATION Transmission Rate Tbp/s

	3 SYSTEMS IN 1	SECRET KEY n=128, AES bits/cycle = 12.8	PUBLIC KEY (2^{128} SL)	DIGITAL SIGNATURE (2^{128} SL)	DIGITAL SIGNATURE (2^{256} SL)
OTANIX	✓	0.1280	0.1115	0.4055	2.0960
FALCON Fast-Fourier Lattice-based Compact Signatures over NTRU	✗	-	-	0.000057582	-
KYBER	✗	-	0.000274286	-	-
AES-512	✗	0.0698	-	-	-
HQC	✗	-	0.000013714	-	-
DILITHIUM	✗	-	-	0.00006	-
SPHINICS	✗	-	-	-	0.00009596

Target Audience

Defense Sector

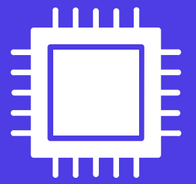
Health Sector

Banks

Cryptocurrencies

Autonomous Vehicles

Aviation Industry



Chip Manufacturers

Robotics

AI Market

Data transmission speeds up to 1 Tbps
Enables real-time, high-volume AI computation at the edge

Smart environments

AI in clothing, furniture, and devices

Health-aware wearables

AI-powered garments detecting real-time medical conditions

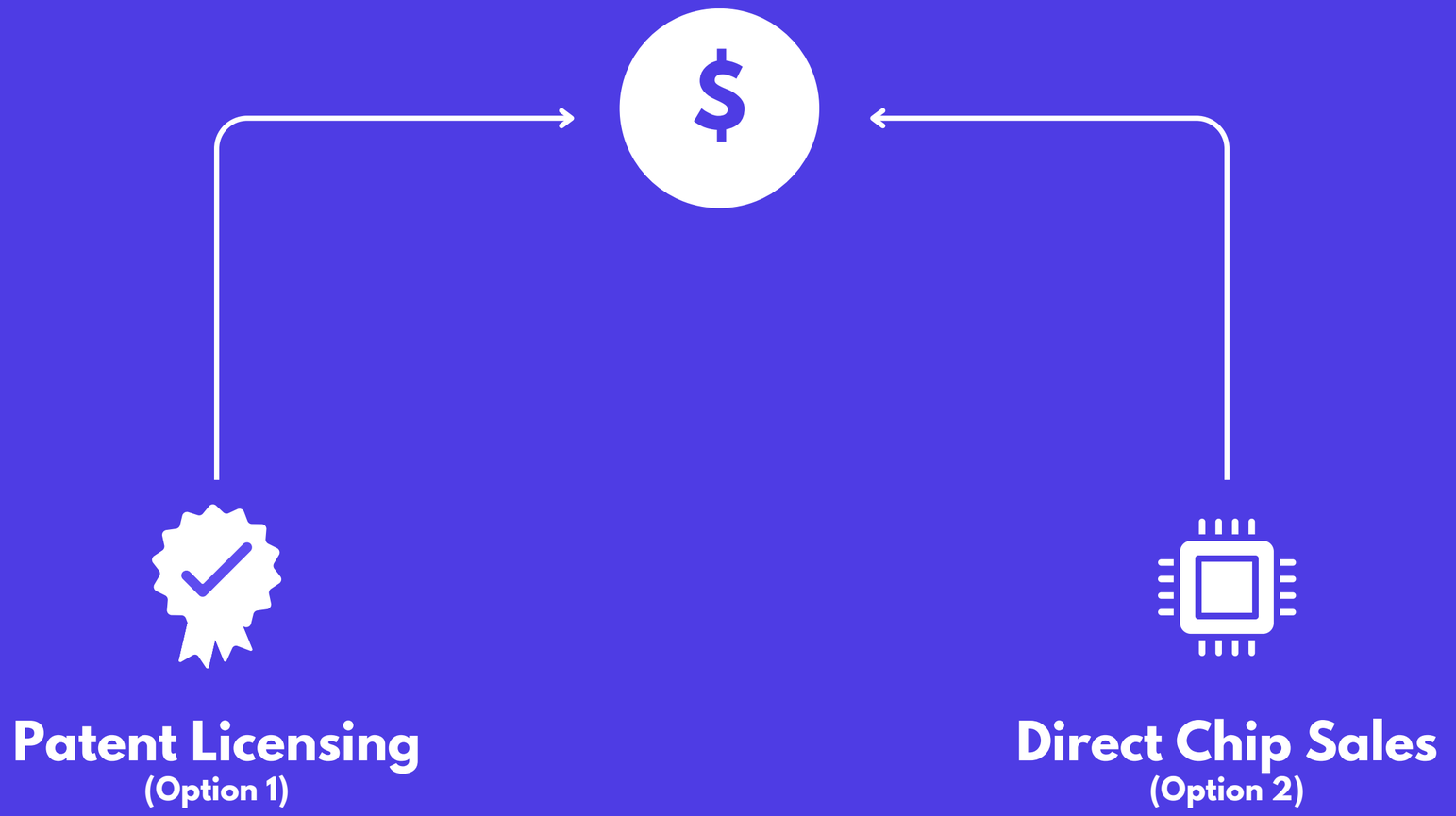
Immersive experiences

Live holograms, AR/VR in real time

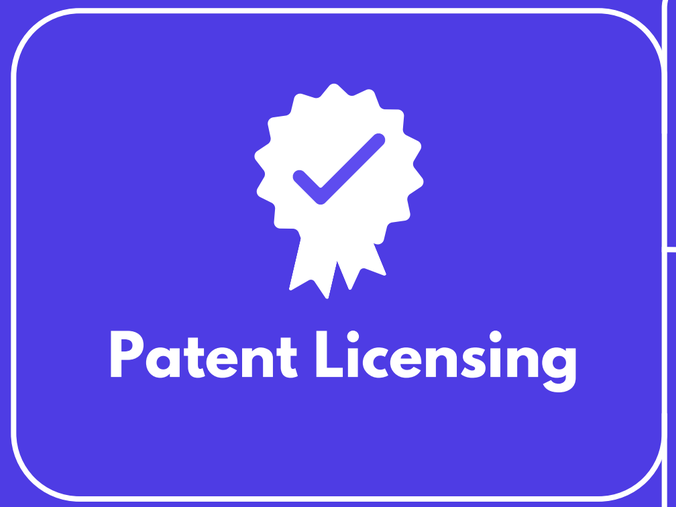
Defense & security applications

Autonomous drones, fast encrypted communication

Revenue Model



Option 1

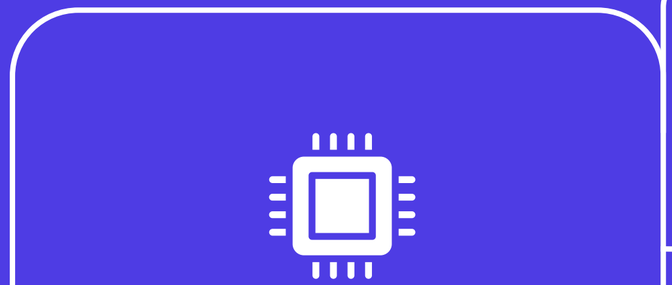


Customers → Chip & PC manufacturing companies

Revenue Streams → Licensing fees for using Tania's technology & algorithms

Benefits → Immediate & recurring income from established companies + technology & chip enhacement

Option 2



Direct Chip Sales

Customers → End Consumers, Organizations & Computer manufacturers (e.g., IDF, Intel, NVIDIA)

Revenue Streams → Direct sales of chips

Benefits → Control over production, meets specific needs, strategic advantage

Certification Strategy

Official Process

- Initiating multi-year NIST PQC standardization process
- Long-term goal for wide civil & commerce adoption

Field-proven Trust

- Open publication of Tania algorithms for global reviews
- External testing by cybersecurity experts
- Early adoption by high-trust sectors (e.g. IDF, Rafael, Elbit)

Go-to-market Strategy

SaaS → SaaS API model for cryptographic acceleration, easy integration into existing apps/cloud pipelines.

→ Usage-based subscription (per request / per throughput tier).

FPGA Boards → Design & deliver high-performance FPGA boards, enabling customers to access terabit-scale cryptography acceleration.

→ Develop FPGA boards optimized for TANIA and sell them per unit

Unit Cost & Margin Evolution

Phase	Price per Unit	Cost per Unit	Gross Margin	Goal
2026-2027, Penetration	$15,000	$14,700	~2%	Adoption & Validation
2028-2029, Optimization	$13,500-11,000	$8,000-4,100	~60%	Scaling with better unit economics
2030, Profitability	$10,000	$1,948	~80%	Strategic profitability at volume

Revenue Potential & ROI

Total Projected Revenue (2025-2030)	$56.1M USD
Rapid revenue scale	2026 - $600K 2030 - $30M annually
Start of Monetization	2026 - 40 units sold, generating $600K in revenue
Break-Even Year	End 2028
ROI by 2030	≈ 35.8x (3580%)

Required Pre-Seed Investment

R&D	$450.000
Operating Expenses	$50.000
Capital Expenses	$6.000
Contingency Fund	$94.000
Required Investment (12 months)	$600.000

Future Roadmap

Market Value
FEB 2025

Collaborations with Bar-Ilan
MAY 2025

Pre-seed funding
SEP 2025

Algorithms development
OCT 2025

Comparison & performance
DEC 2025

Immunity test

JAN 2026

International Recognition

APR 2026

Implementation on first customers

MAY 2026

Seed Funding

SEP 2026

NIST approval process + Production scalability

NOV 2026

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