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Kerno: building a strategic national asset

Transforming the UAE into a technological powerhouse
through sovereign manufacturing and strategic innovation

2025

Global Race for Tech Sovereignty

Around the world, global and regional powers are investing heavily to localize high-tech manufacturing and secure their supply chains to **reduce dependence on foreign technology, enhance supply security, and develop a skilled local workforce**

UNITED STATES
CHIPS ACT

USA

Over

\$39B

investment to reshore semiconductor production

ISRAEL'S
DEFENSE TECH

ISRAEL

\$14.7B

tech exports in 2024 due to investment in indigenous defense technology

UAE IS MAKING
GLOBAL WAVES IN
SOVEREIGN AI &
SOFTWARE SPACE

UAE

Created languages

Falcon, Jais, K2 Think

Microsoft's \$1.5B

investment in G42

**Announced
Stargate UAE plans**
with OpenAI & SoftBank

**Became home to
11 unicorn startups**

(only one is hardware/
deep tech)

INDIA'S
MAKE-IN-INDIA

INDIA

99%

share of local phone
manufacturing in 2024

Transformed India into the world's
second-largest mobile phone
producer

RUSSIA'S MICRO-
ELECTRONICS PUSH

RUSSIA

Over

\$32B

investment in industry, track
for domestic lithography and
tooling

Millions of computers and servers
produced locally every year



The next frontier –
owning the servers, storage,
and networks that run AI

UAE Leadership has defined the vision

➤ Strategic National Priority

Local manufacturing of advanced IT and AI hardware directly supports UAE's digital sovereignty and technological independence.

➤ Enhancing Local Value Chain

Boost local R&D, talent development, and advanced manufacturing capabilities within the UAE.

➤ Attracting Investment and Innovation

Position UAE as a regional leader in high-tech, encouraging further investment and fostering an ecosystem for future technology startups.

➤ Job Creation and Knowledge Transfer

Generate high-skilled jobs for UAE nationals and accelerates knowledge transfer through partnerships with local universities.

➤ Supporting Economic Diversification

Reduce reliance on imports, strengthens economic resilience, and diversifies the UAE's industrial base.



From Dependency to Sovereignty – Case for Local Tech Vendor

Every server we make
domestically is one less that
needs to be imported

STRATEGY

Achieving ambitions in areas like artificial intelligence, smart cities, and autonomous vehicles means the nation must control the tech value chain to ensure reliability and security.

ECONOMIC IMPACT

Money spent on technology increasingly circulates within the national economy instead of flowing out. Every server made domestically strengthens our balance of trade and resilience.



SUPPLY

Global chip shortages and export restrictions remind every nation that technological dependence is a strategic liability.

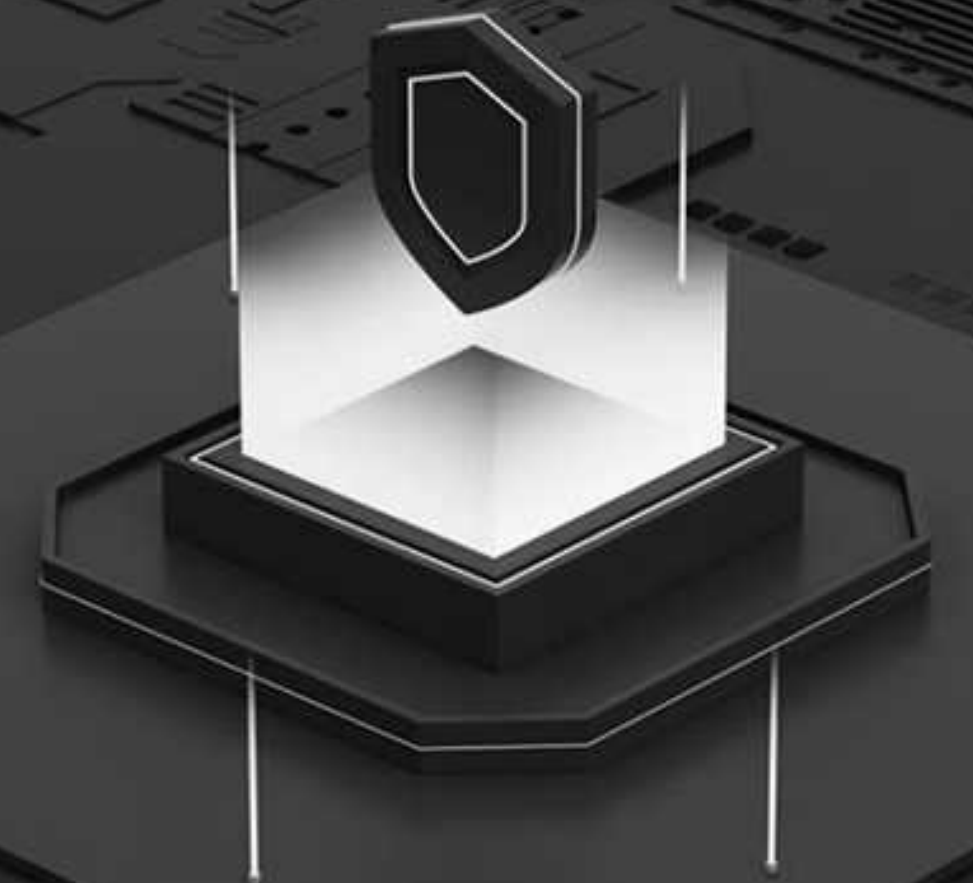
U.S. officials warn that virtually all advanced chips vital for AI, telecommunications, and defence are made in a single, fragile region.

Taiwan



NATIONAL SECURITY

Foreign-manufactured systems may contain hidden backdoors or vulnerabilities. Building locally ensures full oversight of components and software running our critical systems.



Meet Kerno: UAE-based premier IT hardware manufacturer

Bringing world-class competencies to **build local vendor of enterprise IT equipment** to address **AI and digitalization** initiatives

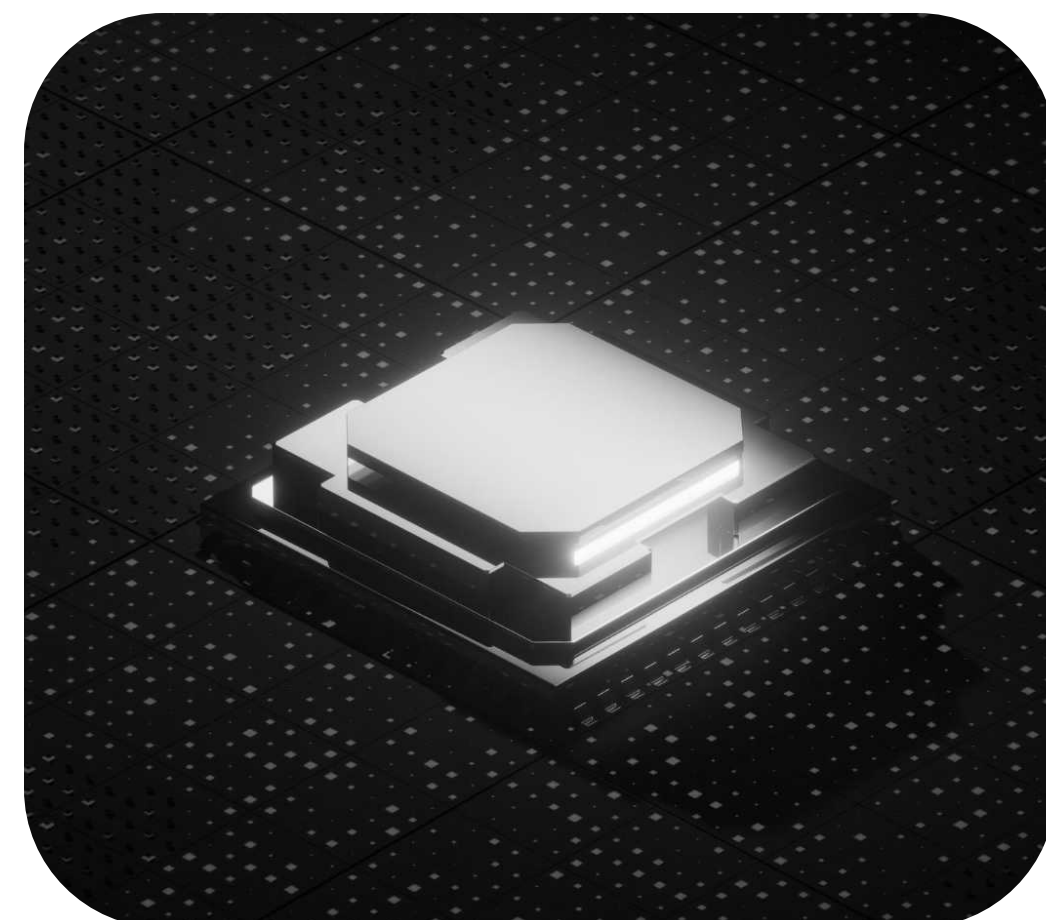
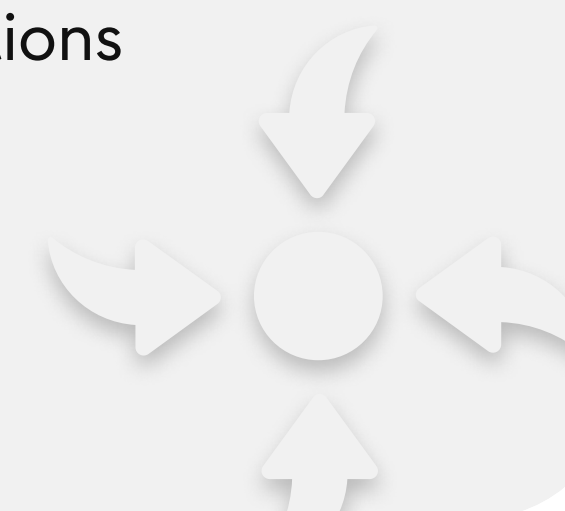


R&D + IP RIGHTS

Products designed and created within Intellectual Property rights owned by local entity

MANUFACTURING

Number of manufacturing operations starting from PCBA, conveyor assembly, testing of equipment, and warehousing



SUPPLY CHAIN

SCM team to deliver a worldwide network of hi-tech IT components shipments for in-house manufacturing

SECURITY AND SERVICE

Local design, manufacturing and servicing allows to implement end-to-end threat management as the foundation for a Zero Trust approach

MADE IN UAE



Security and control at every phase of the product lifecycle

1 Design →

We use the security development lifecycle (SDL) from the time features are conceived and designed, assuring customers that our products are resilient to cyber and physical threats by design

2 Manufacture →

Our supply chain assurance program implements safeguards across the physical and cyber security to ensure a resilient manufacturing and delivery process

3 Deploy →

Security controls, automation and comprehensive management tools enable zero trust deployments using robust layers of security across hardware and firmware

4 Service & decommission

Security extends all the way to end of life, enabling components and systems to be taken out of production securely by erasing all system data to avoid confidential data compromise and misuse

Scalable hi-tech manufacturing capabilities

UAE on the leading edge of tech



- Tight collaboration with **local universities**
- UAE-based **R&D and Customer Support** create close customer proximity
- ISO standard quality products

Surface Mount Technology (SMT)



- High end manufacturing devices
- Up to **180 000 components per hour**
- **Automated** visual and X-ray inspection

Factory operational Q4 2025



- Up to **60.000 servers per annum**
- **7000 SQM** of space built for a high-end manufacturing process
- **Laboratory-level cleanness**

Partnerships and Ecosystem Enablement

By integrating Kerno into the national economic framework – the UAE is de-risking and accelerating the emergence of a homegrown tech industry

Government Support

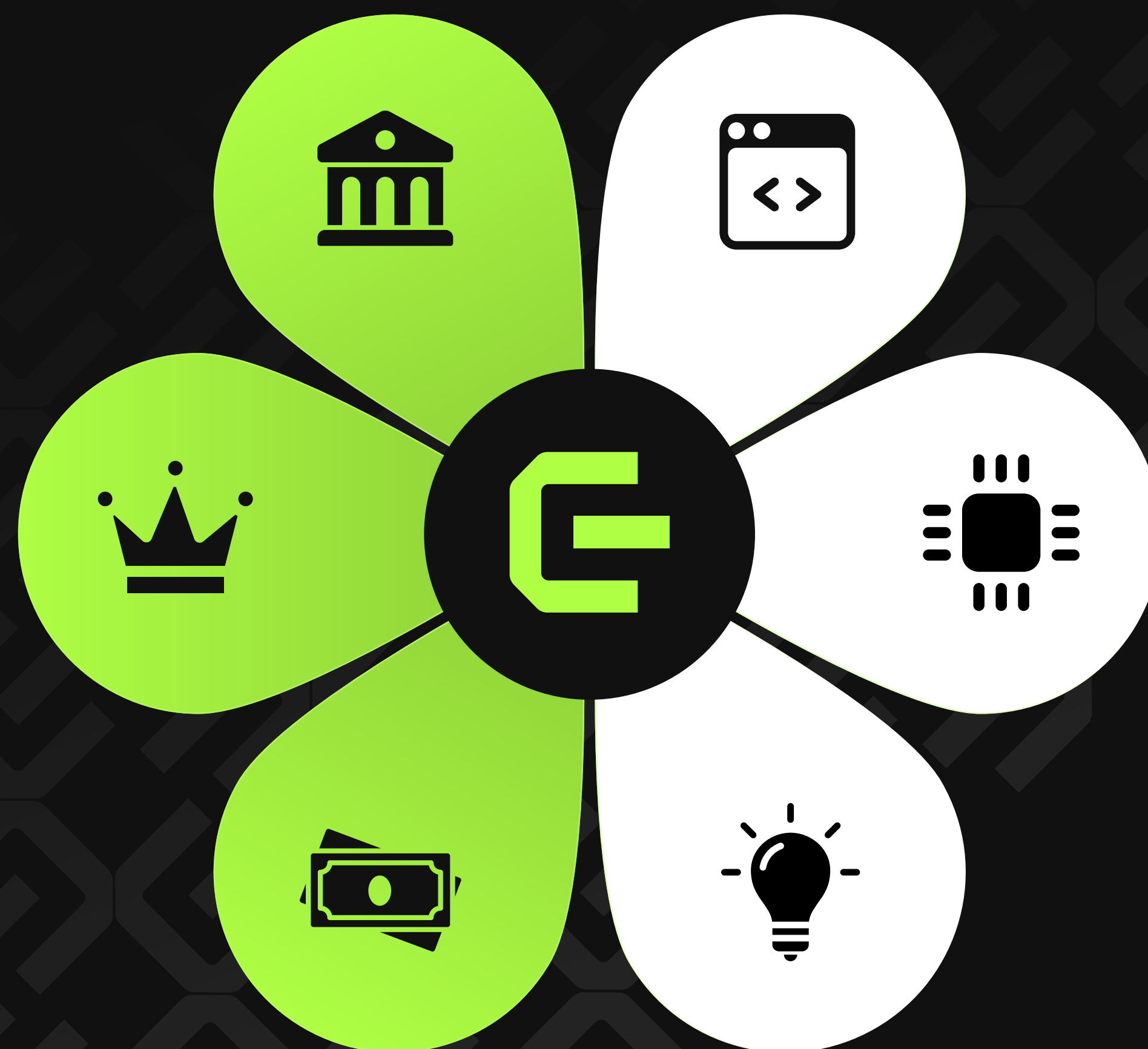
NextGenFDI program endorsement places Kerno among select strategic tech investors in the country

Early Adopters

Government and semi-government entities engaged as early adopters, ensuring robust reference base

Financial Backing

Emirates Development Bank and national funds support ventures aligned with Operation 300bn



Open Innovation AI, IBM & Red Hat

Proven enterprise software for AI orchestration, virtualization, security, storage etc. on sovereign hardware

Global Suppliers – NVIDIA, AMD & others

Working with component suppliers for chips and memory, negotiating terms favoring local assembly

Academic Partnerships

Ties with local universities and research institutes ensure pipeline of ideas and talent, accelerating local R&D contribution

Kerno 2025 product lines

All products are market-ready, and samples can be delivered to the customers for validation

OKAM Universal servers



1U and 2U rack servers based on latest Intel and AMD chips suitable for vast majority of enterprise use cases

Access control / Application / DNS server, Hyperconverged environments, Virtualization, Big Data analytics

OKAM Edge servers



Maximum GPU and CPU compute packed in short depth 2U chassis

Near edge environments, Smart Factory, Worker safety, Safe City, Traffic analytics, camera-based quality inspection, predictive analytics

UQLEAD AI servers



Powerful GPU servers in 2U, 4U, 5U form factor with top of the line PCIe 5.0 and SXM GPUs

Production deployment of ML/AI applications, AI training and inferencing

OTAON Storage systems

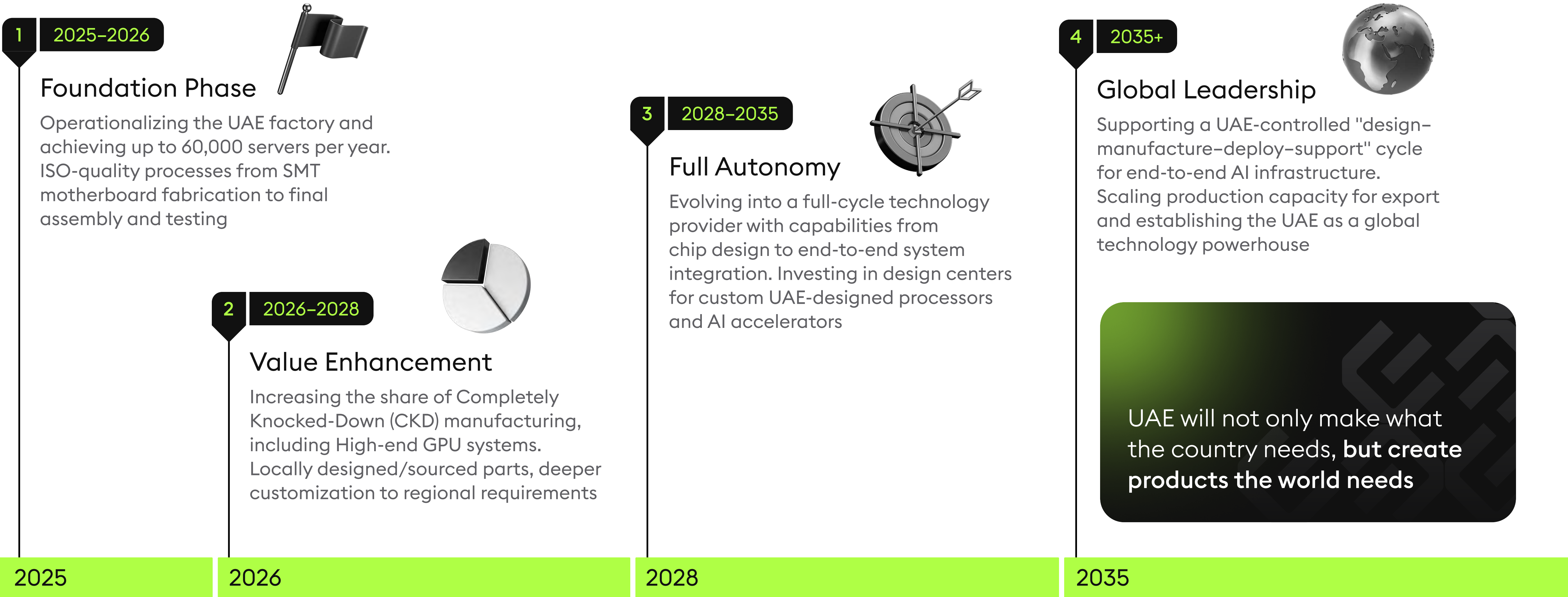


Scalable, fast and simple SAN/NAS storage system based on erasure-coding algorithms

Media archives, cold storage for AI clusters, mixed data-center workloads, Data Lakes

Strategic Roadmap – From Assembly to Autonomy

Kerno has a clear path to evolve into a fully self-sufficient pillar of technological sovereignty





Let's define
the future **together**

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