



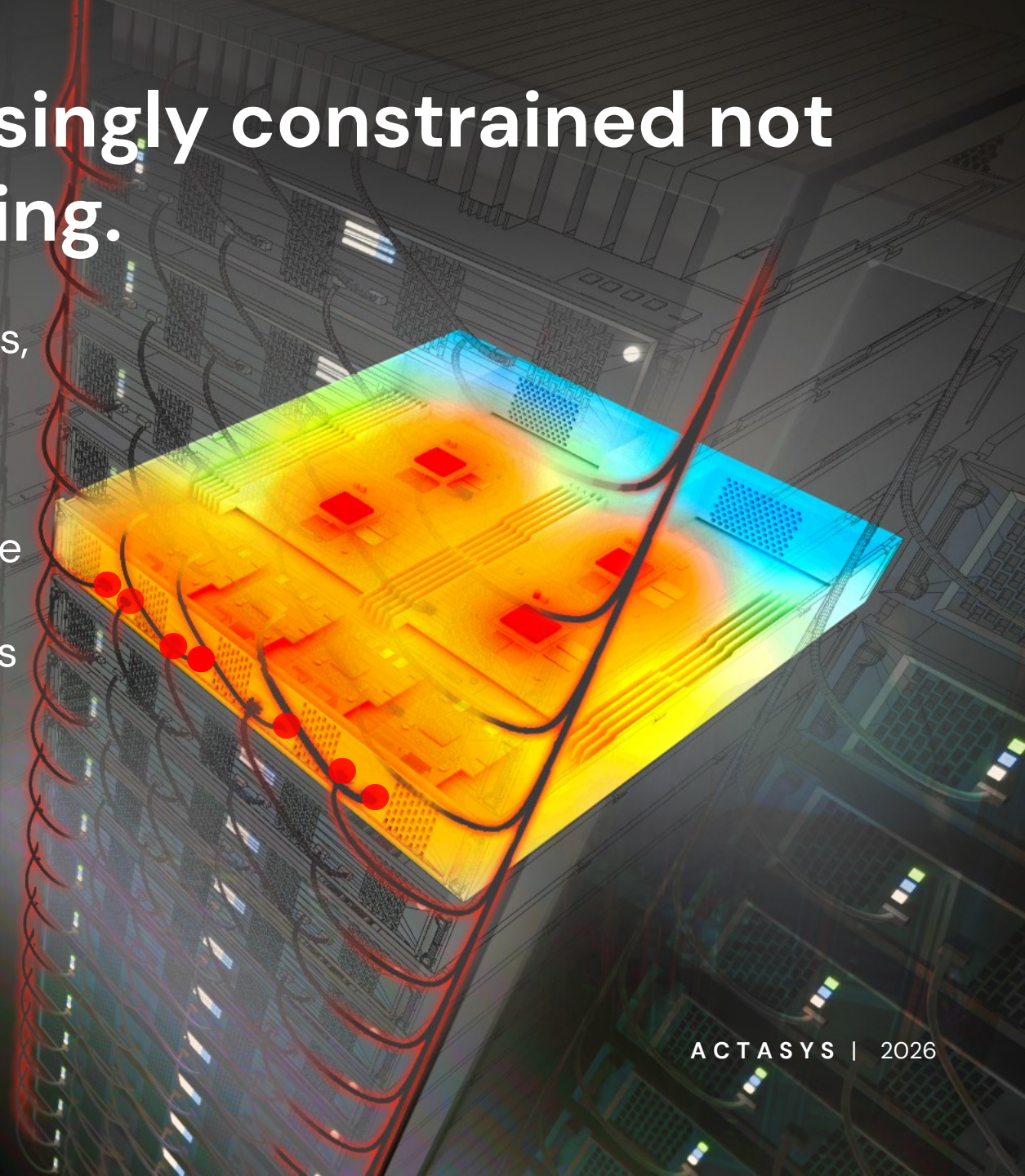
Actasys

Plug & Play Precision-Cooling

AI performance is increasingly constrained not by compute, but by cooling.

Across AI data centers and physical-AI systems, key components generate high, localized heat flux inside millimeter-scale footprints.

The limiting factor is no longer compute, but the ability to deliver cooling performance in extremely tight spaces, creating a growing class of AI systems constrained in performance, reliability, and roadmap execution.

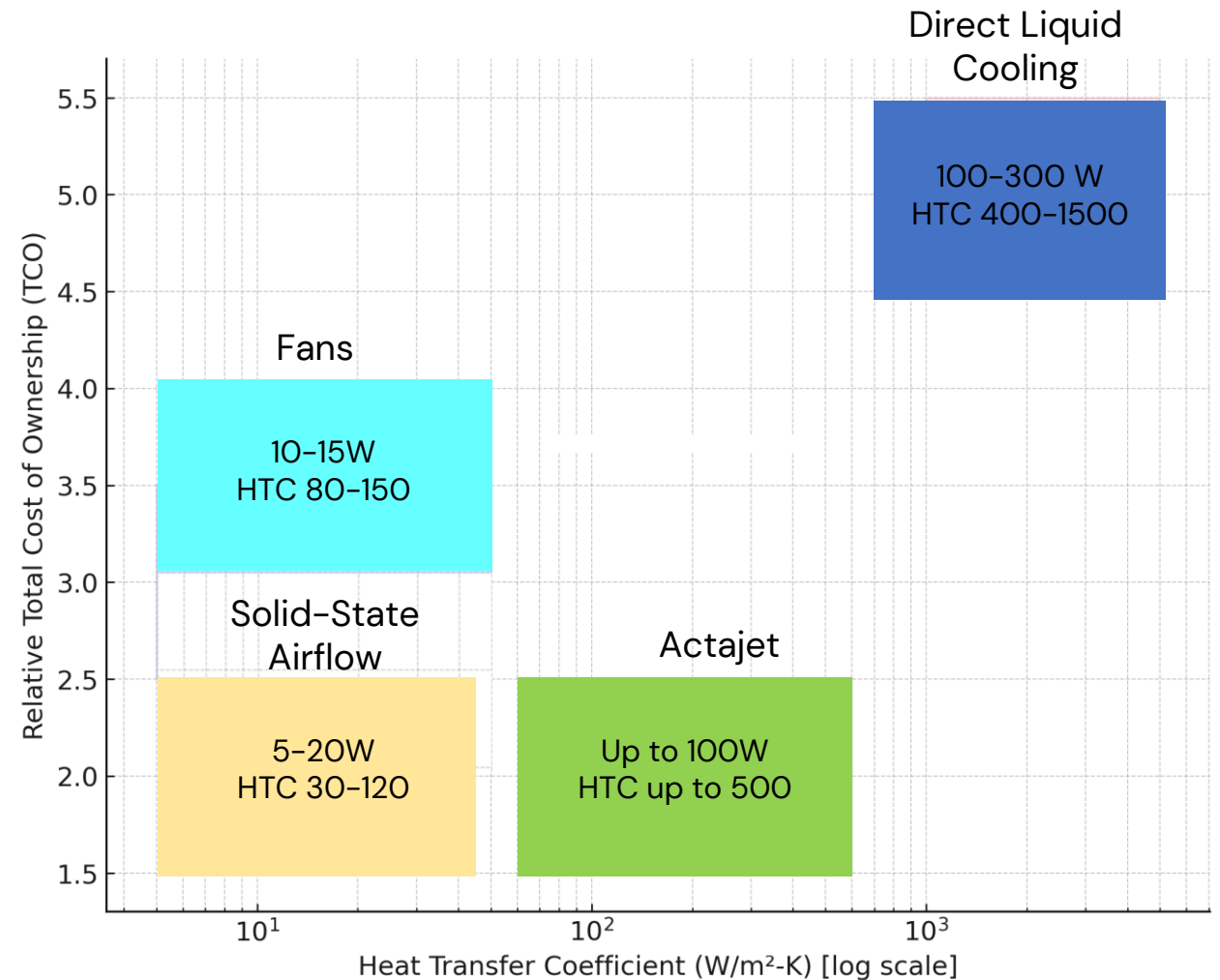


Precision Jet Cooling: A New Category for AI Systems

In millimeter-scale footprints, fans, solid-state airflow, and liquid cooling all fail – they cannot deliver sufficient heat removal within the available space.

ActaJet introduces Precision Jet Cooling, a new category that provides AI-grade, component-level heat removal exactly where no other solution can operate.

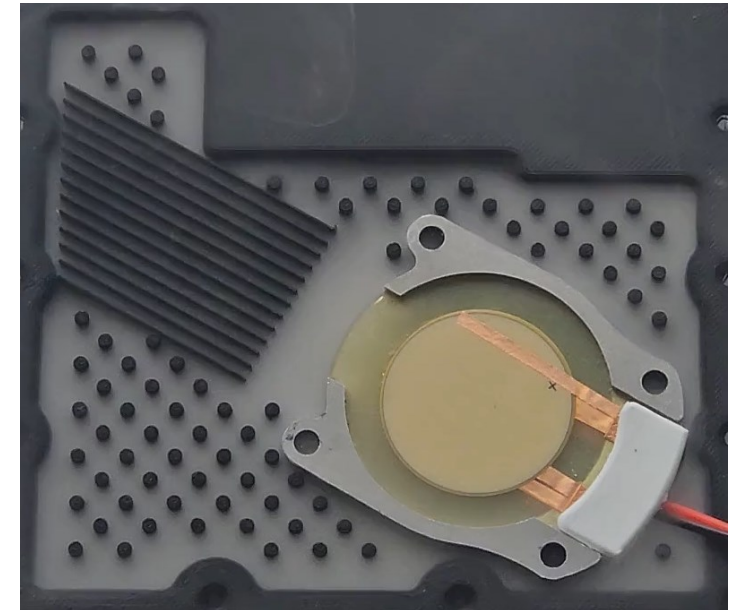
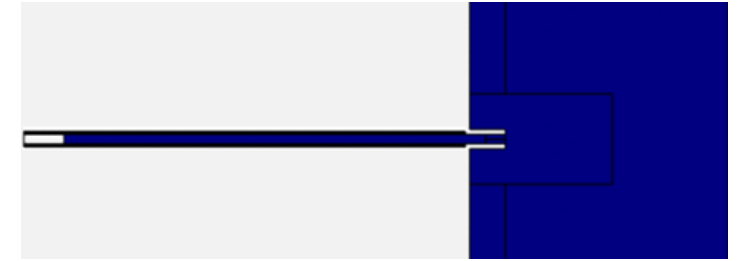
There is no substitute for Actasys in the footprint we serve.



Why Millimeters Deliver Massive Cooling Performance

Turbulent, pulsating jets repeatedly break and refresh the thermal boundary layer, releasing large amounts of trapped heat and driving high convective heat transfer to eliminate hotspots.

This architecture is what makes ActaJet the only solution capable of delivering AI-grade cooling in such a small footprint.



Customer Use Cases & End-User Impact

AI Infrastructure (Optics & Networking)

Problem: Fans cannot scale with rising module power in dense racks.

Actasys Impact: Keeps optical modules **>20°C cooler** at the same power without added airflow.

Business Outcome: Enables higher-power optics and bandwidth upgrades **without rack redesign**, accelerating reuse and time-to-market.

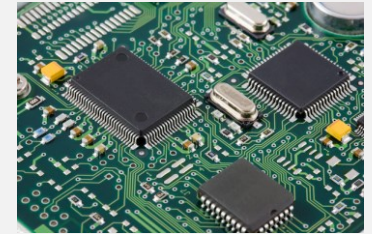


Enhancing Edge Compute Density

Problem: Heatsinks and fans limit board density and usable TDP.

Actasys Impact: Eliminates heatsinks and fans, **reducing stack height by >60%** while supporting higher power at high ambient.

Business Outcome: Up to **3X compute density** and **~25% higher TDP per system**, increasing performance and revenue per enclosure.



Boosting Fanless Thermal Capacity (Harsh Environments)

Problem: Passive cooling limits AI capability in sealed, dusty systems.

Actasys Impact: Increases convection by **~4X**, significantly improving heat rejection.

Business Outcome: **~90% higher thermal capacity**, enabling higher-performance AI and expanded rugged markets.



Enhancing Immersion Cooling Performance

Problem: Immersion efficiency drops due to localized hotspots bulk flow cannot remove.

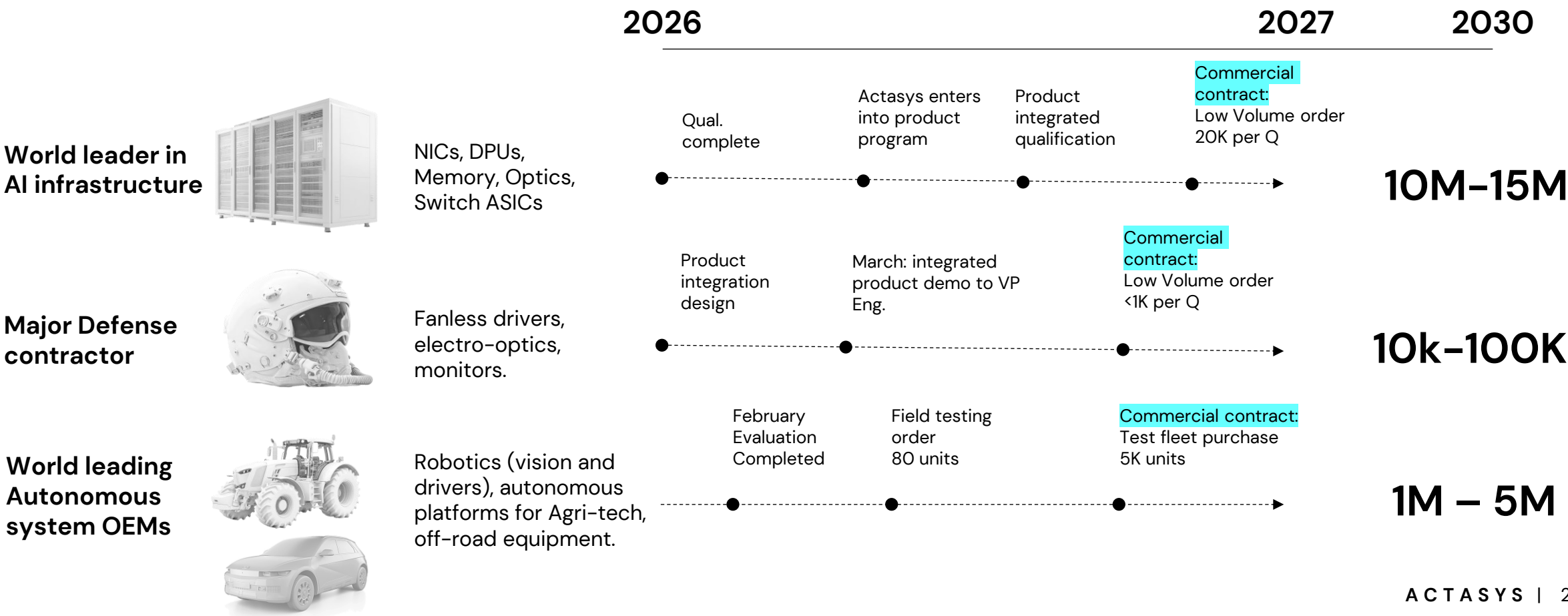
Actasys Impact: Disrupts boundary layers at hotspots, improving local heat extraction; **initial demos completed**.

Business Outcome: Unlocks higher immersion performance **without added liquid flow, complexity, or cost**.

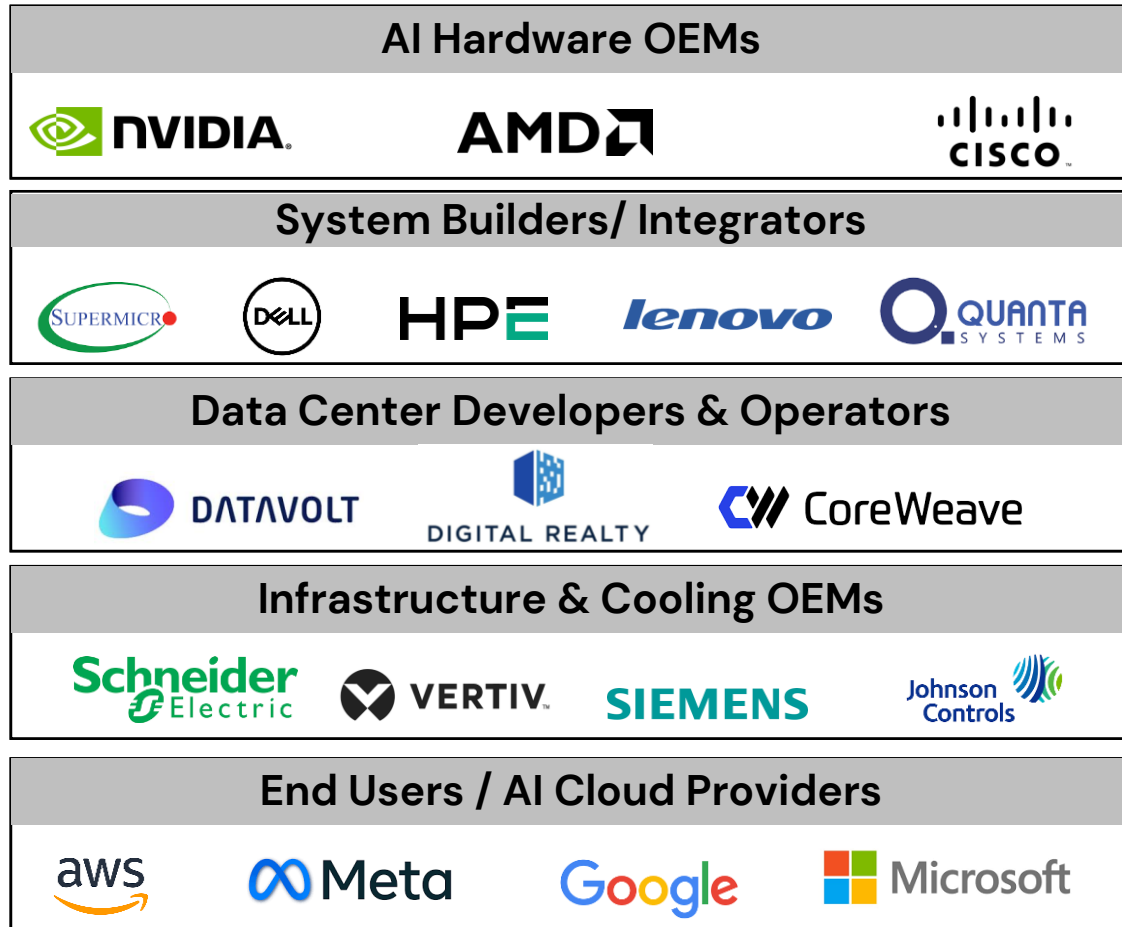


From Evaluation to Revenue: Building the Commercial Engine

2026 focus: close first commercial contracts with industry-leading customers. These wins set the standard for the market and allow us to scale sales systematically.



How We Scale: AI Infrastructure Go-To-Market Across the Vertical Stack



Revenue uplift

+\$300–500 per NIC →
+\$300–500M per 1M units

Simplified assembly & thermal design

+\$30–50 per NIC →
+\$30–50M per 1 M units

Energy efficiency & reliability

\$20–30M annual energy savings;
~14.6 k t CO₂ avoided / yr

Integration opportunity

New addressable market in
hybrid cooling (~\$100 B+)

Sustainability + uptime

Ecosystem-level gains — performance,
energy, and sustainability at hyperscale

1M NICs = \$360–600M value

From digital AI to physical AI — a market transition we’re built to capture

Actasys powers the next wave of AI infrastructure — driving near-term growth in datacenters (NICs, DPUs, switches) and long-term expansion as AI moves to the edge, unlocking a 2–3× larger TAM by 2035.

2030 Market – The AI Factory

Segment	2030 TAM (\$B)
NICs	0.4–0.8
DPUs / Mid-Heat Boards	0.12–0.24
Switch Fabrics	0.9–1.5
Physical AI / Edge (early)	0.1–0.6

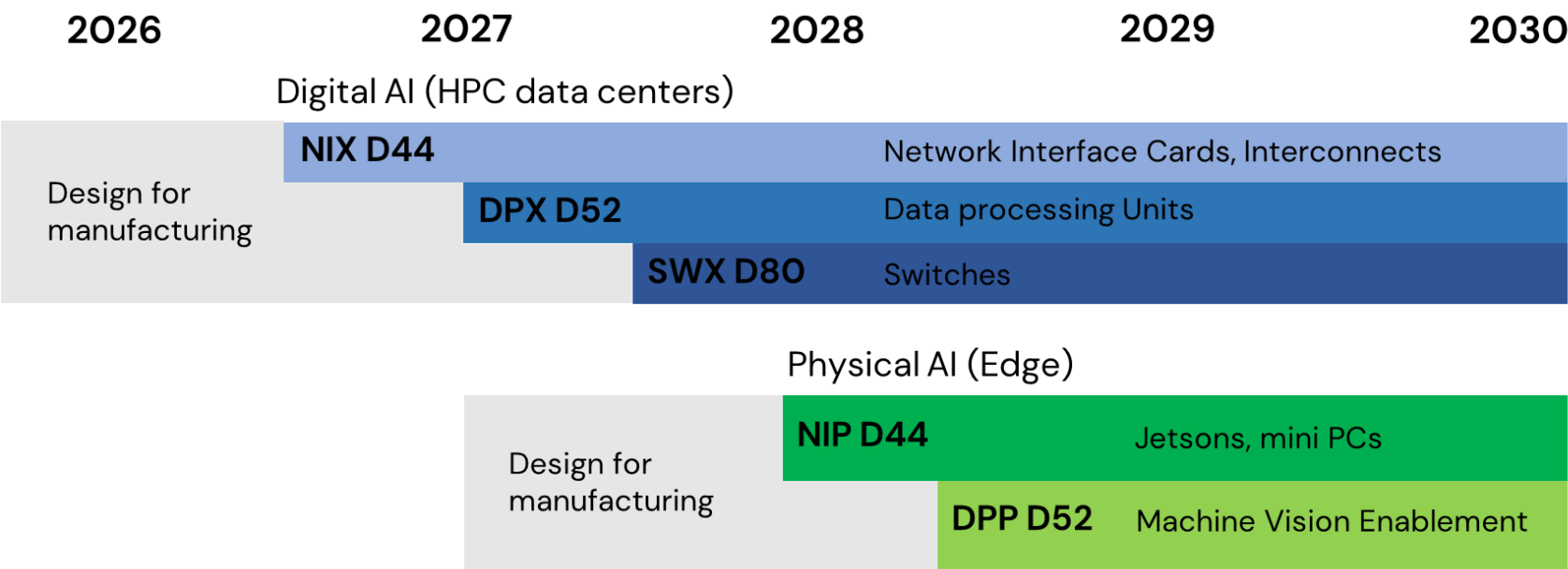
Digital AI TAM: \$3.1B (2030)

2035 Market Expansion –The Physical AI Era

Segment	2035 TAM (\$B)
Edge AI Modules	2.5–5.0
Autonomous Mobility	0.5–1.0
Industrial / IoT Compute	1.0–2.0

Physical AI TAM: \$8B (2035)

Platform Roadmap: Phased Expansion From Data Centers to Physical AI



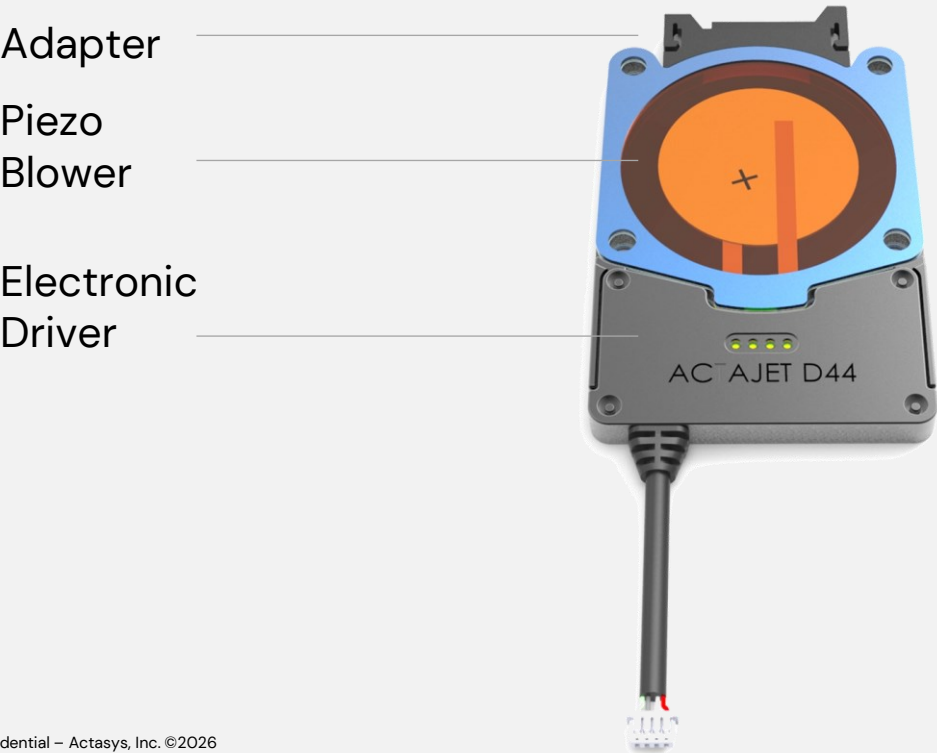
ActaJet™ evolves in three phases:

- Data center electronics cooling, 2026 –
- Edge AI cooling, 2027 –
- Micro-scale cooling, 2028 –



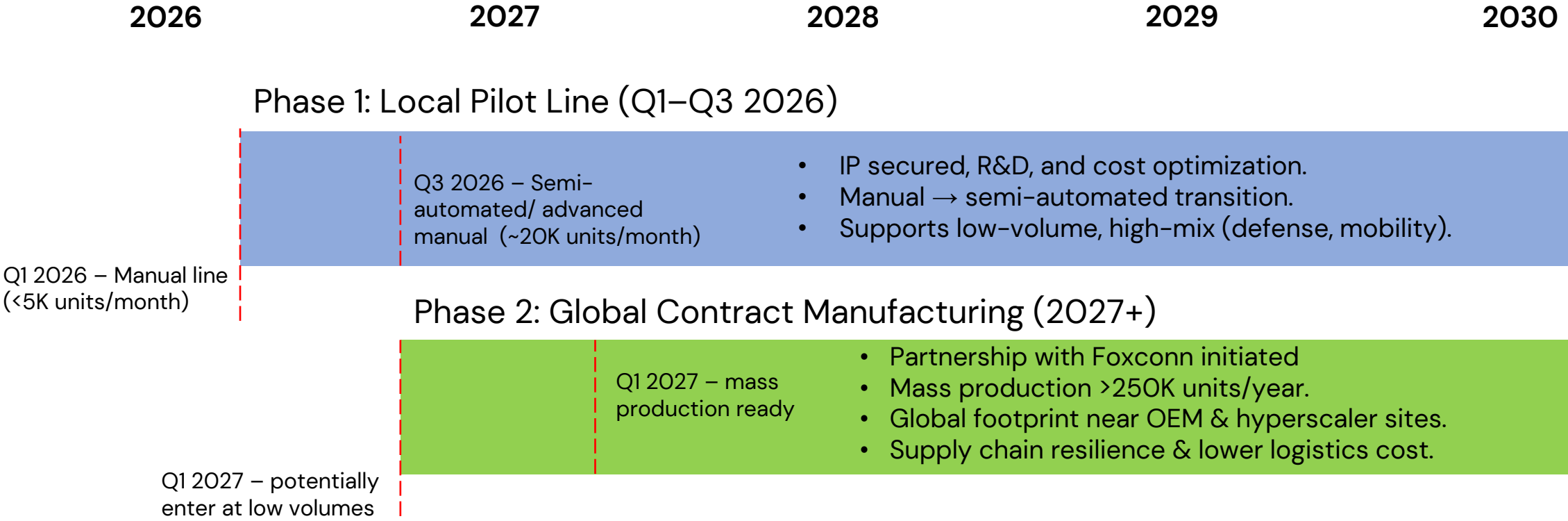
One Core Product. Many Markets.

ActaJet performance is defined by a common solid-state actuator. Industry-specific requirements are addressed through **adapter design and software control**, not actuator redesign.



Specs	NIX	DPX	SWX
Dimensions (mm)	OD 44	OD 58	OD 80
Height (mm)	4.5 mm	4.5 mm	4.5 mm
Weight (G)	20	30	50
Life L10 (hrs.) @40C	150,000	175,000	200,000
SPL (dBA) @1M	45-65	45-60	40-60
Voltage (Vrms)	0-85	0-100	0-100
Frequency (Hz)	200-400	150 -300	50-200
Jet output (m/s)	0-80	0-80	0-80
Total power (W)	<10	<10	<10
Actuator Power	0.5 - 3	0.5 - 4	0.5 - 5
Communications	I2C	I2C, CAN, LIN	I2C
Input Voltage (VDC)	10-14	10-14	10-14
HTC (W/m²·K)	+250	+300	+500
30×30 mm plate (IHS-sized)			
82×40 mm plate (2× QSFP-sized)	+100	+120	+200
Integration	Optical transceivers	DPU's / SmartNICs	Top-of-Rack switch

Execution: Phased Manufacturing from Local Line to Global Scale



Manual → Semi-Auto → Contract MFG → Global Scale

Our biggest challenge is to supply 1M units starting 2028

We've got the best people to do it



**David Menicovich, Phd.
CEO Co-founder**

Since founding Actasys, David's vision drives innovation and growth, building a world-class team focused on lasting value for stakeholders and customers.



**Jeff Webster
COO**

With 30 years leading global operations across 19 countries and \$3B in revenue, Jeff has the proven expertise to drive our growth as a top global supplier.



**Advitya Patyal, Phd.
CTO**

Advitya is a trusted leader recognized by our customers worldwide for advancing emerging actuator technology and building strong industry partnerships.



**Anthony Mickalauskas
VP R&D**

Anthony drives innovation in piezo-driven actuators, spearheading Actasys' breakthrough technology from concept to commercial success.

Raising Series A to Scale Revenue and Create Value

	2025	2026	2027	2028	2029	2030
Total revenue	\$150K	\$600K	\$12M	\$45M	\$120M	\$500M
Unit Sales (qty)	50	15K	400K	1.5M	5M	24M
Average Selling Price (USD)	n/a	40	30	30	24	22

- Gross margin at mass production=50%–60%.
- Securing major commercial orders.
- Building a gold-standard supplier: local production → global scale
- Partnering US, EU and ASIA partners: leverage commercial & defense networks across the globe.



Actasys

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