



Fast, efficient protection for the AI power era.

Gallium Oxide-Enabled Solid-State Circuit Breakers

Dr Jon McCandless - Founder & CEO

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NVIDIA is moving AI factories to 800 Vdc

Traditional data centers

480VAC

10–20 kW

Per rack

AI factories

800VDC,

1,000 kW

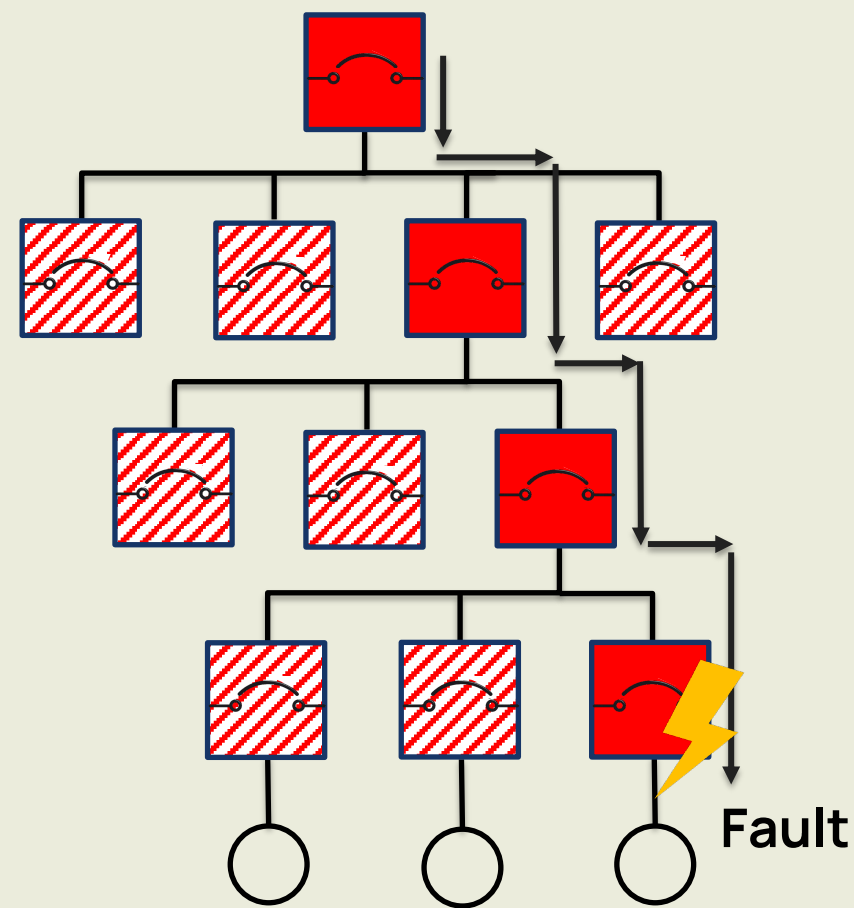
Per rack

That's not an incremental upgrade.

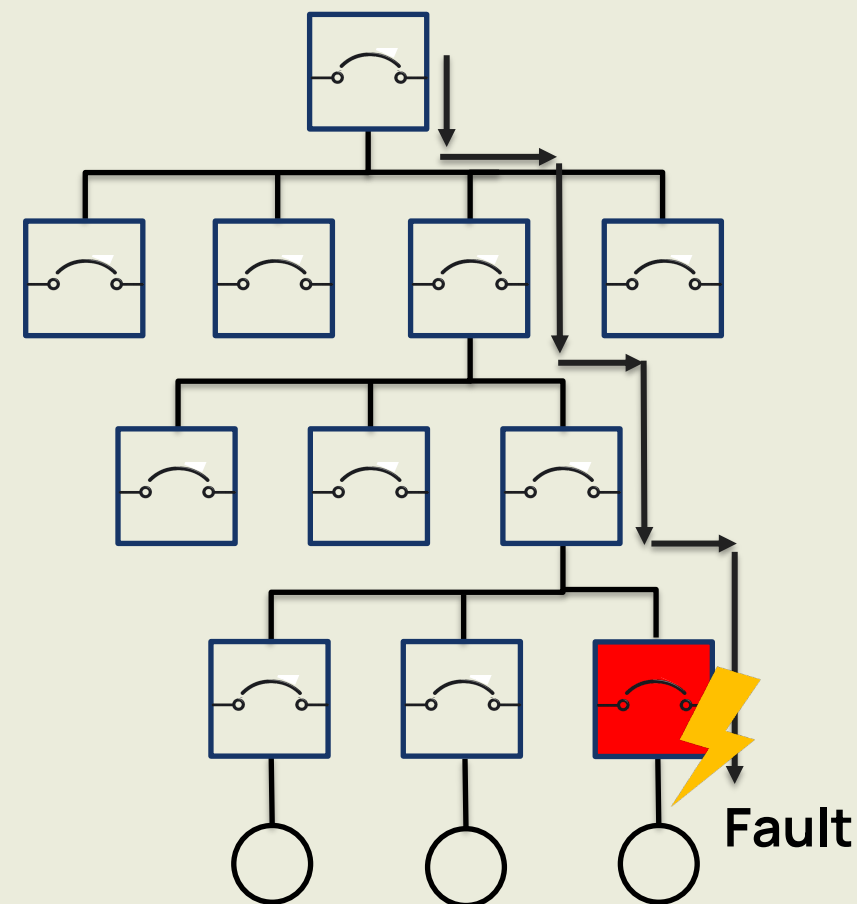
It's a fundamentally different power environment – and circuit protection infrastructure is falling behind.

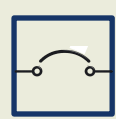
Slow breakers turn local faults into system-level failures

Mechanical
Breaker - Slow

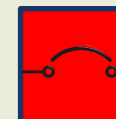


Solid-state
Breaker - Fast



 Uninterrupted Power

 Unnecessary Outage

 Breaker Opens

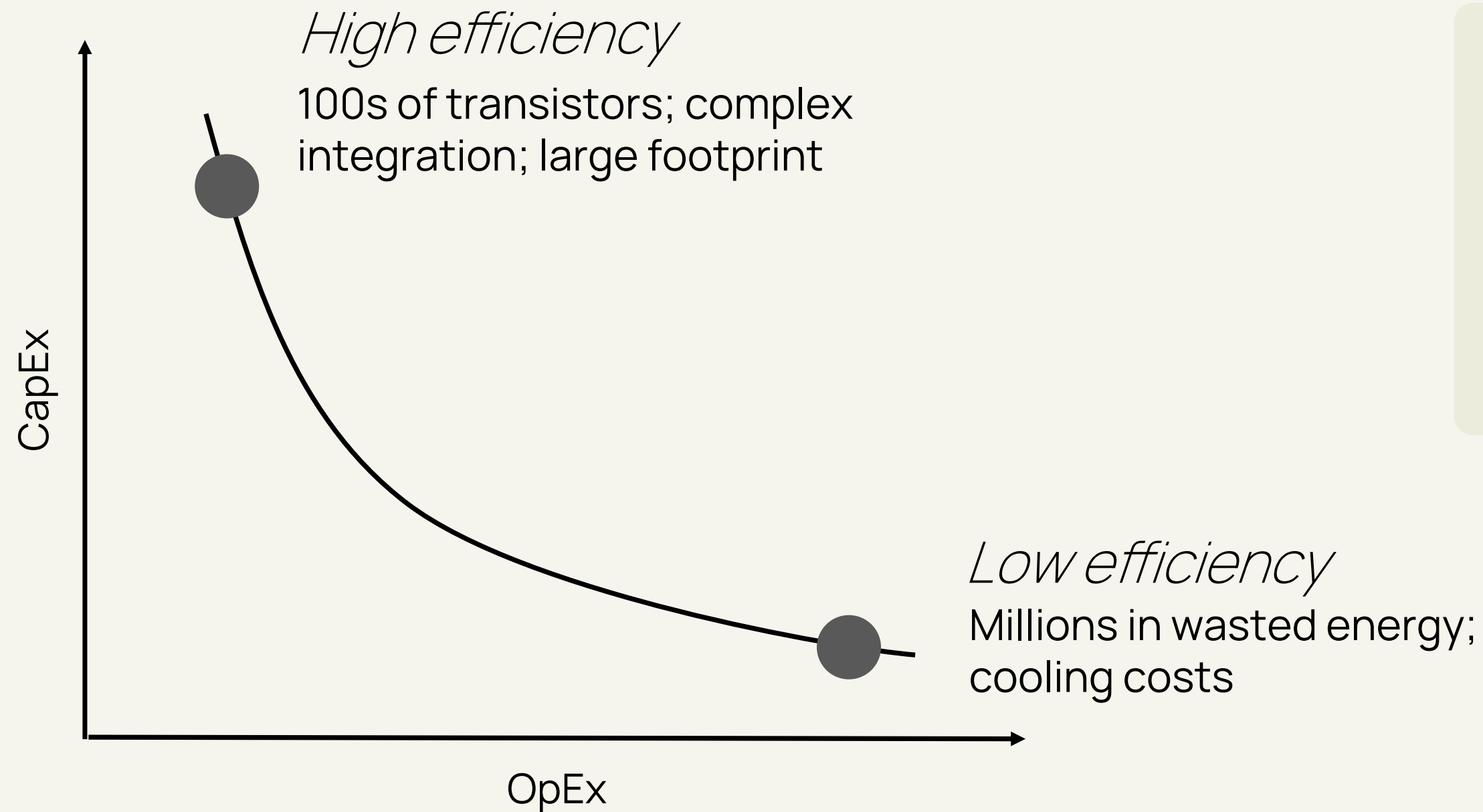
\$9,000/min

Data center downtime costs

>\$1M

1 in 4 operators report their last outage cost over \$1M

Solid-state circuit breakers solve speed – but MW-scale systems break the economics

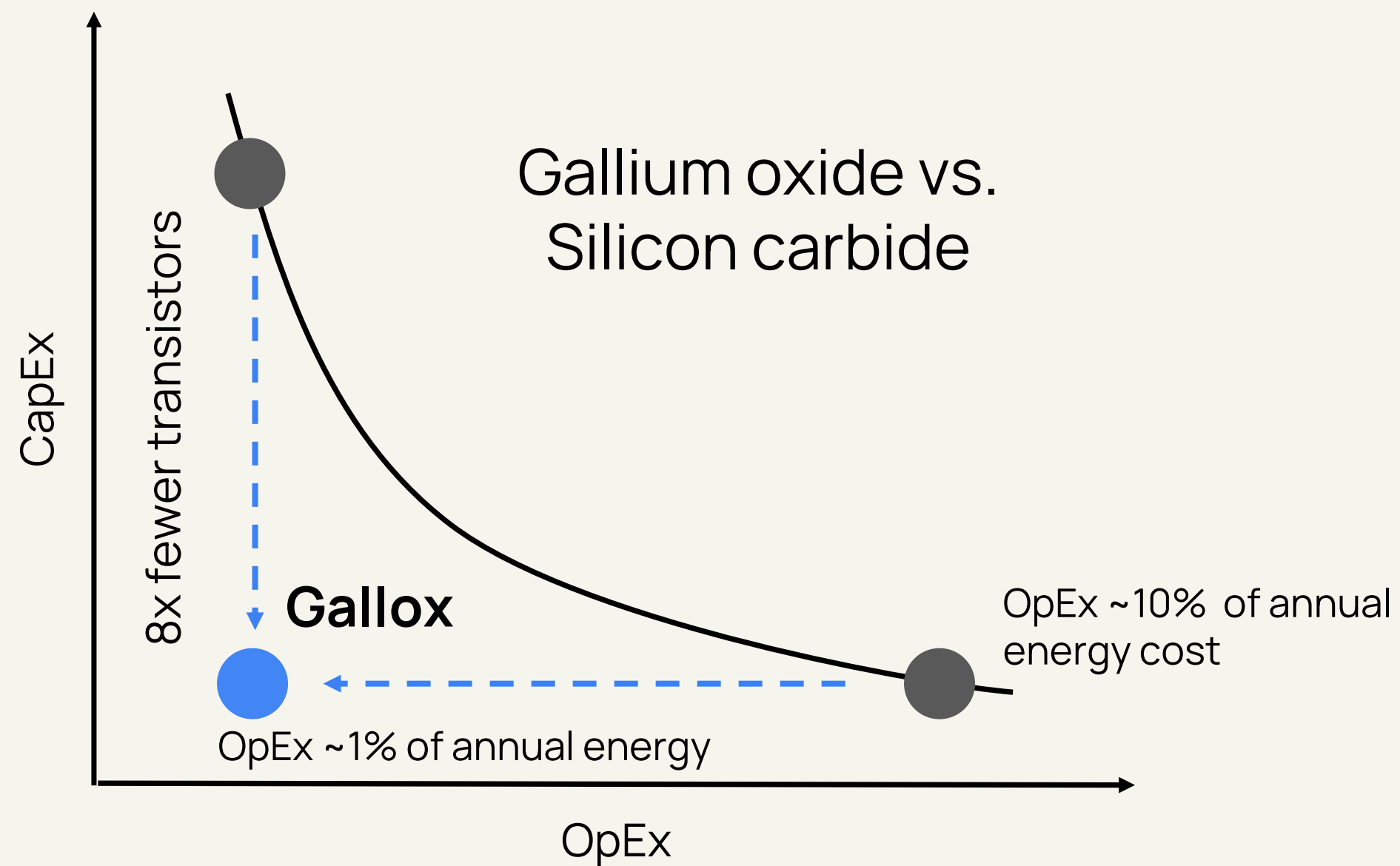


NVIDIA identifies solid-state circuit breakers (SSCBs) as critical technology for AI data centers.

SSCBs trip $>1,000\times$ faster than mechanical breakers.

The bottleneck is semiconductor devices

Gallox builds power devices that make solid-state circuit breakers practical



Gallox designs and sells Ga_2O_3 devices and power modules; breaker OEMs integrate them into SSCBs.

Revenue
\$100M *per 500 MW data center*
~1% of non-IT data center cost

Beachhead market: \$7B/year
excludes expansion markets into defense,
transportation, space, and grid

Business Model

Gallox is a fabless semiconductor company. We own and design the architecture. We outsource fabrication and packaging.

We sell power modules to circuit breaker OEMs

Based on bottom-up market size of data centers globally; includes modules for initial wedge (SSCB) + modules for SST opportunity in data centers
\$17.5M/MW shell & core baseline, Goldman Sachs, "Tracking Trillions: The Assumptions Shaping the Scale of the AI Build-Out", May 1, 2026

Industry leaders are already engaged

Letters of support

3 multinationals: breaker OEM,
foundry partner, defense prime

Working prototypes

High-voltage transistors, diodes,
fail-safe, normally-off devices

\$1.7M non-dilutive funding

Leveraging \$6M in Air Force Ga₂O₃ investment at Cornell

Breakthrough Energy,
Activate, government grants/contracts

120+ customer interviews

Breaker OEMs, Defense and
Aerospace, Utilities, EV

Global recognitions

Hello Tomorrow pitch winner
Cleantech 50 to Watch 2025

We are raising

\$4M

SAFE to deliver customer-evaluable
prototypes and de-risk scale-up.



Dr Jon McCandless – Founder & CEO

- PhD at Cornell; NSF Graduate Research Fellowship
- Former Ga₂O₃ and GaN process engineer at Air Force Research Laboratory, GaN process transfer to industry



Dr Atsushi Shimbori – Device Engineering

- 20 years of device engineering experience @ Wolfspeed, Renesas, Samsung, and Ford



Dr Kazuki Nomoto – Process Engineering

- 15+ years building and testing state-of-art semiconductor devices

Advisors

- Dr. Nick Fichtenbaum – Co-founder, Navitas Semiconductor, leading GaN company, \$1.7B IPO.
- Dr. Bruce Fishbein – Fmr. VP AMD/Marvell; CDO Innovium, facilitated \$1.1B exit to Marvell.
- Debdeep Jena – Prof. @ Cornell
- Grace Xing – Prof. @ Cornell



Gallium oxide replaces silicon carbide.

**We're starting with circuit breakers
because that's where the need is now.**

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