



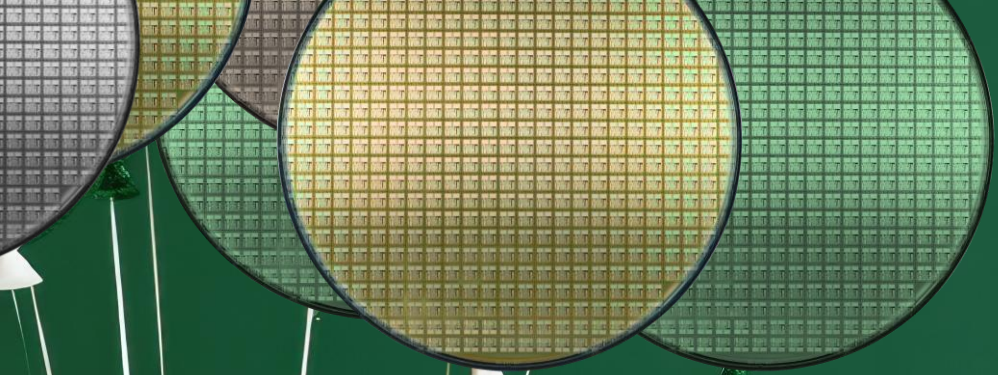
Up and Running with Rapidus

How Japan and Cutting-Edge Technologies are Transforming
Semiconductor Manufacturing

August 26, 2025

Atsuyoshi Koike CEO, Rapidus Corporation





Today is
My Birthday

Profile

HITACHI

trecenti
technologies

SanDisk

Western Digital®

Rapidus

1980's

2000

2006

2016

2022



Hitachi, Ltd.

Senior manufacturing management in the semiconductor division and executive leadership positions at Hitachi, Ltd.



Trecenti Technologies, Inc.

President and CEO of Trecenti Technologies, Inc. Joint Venture of Hitachi, Ltd. UMC.



SanDisk Corporation

President of SanDisk Corporation Japan and Senior Vice President Of SanDisk Corporation



Western Digital

President Western Digital Japan and Senior Vice President Western Digital



Rapidus Corporation

CEO



Singularity

A cinematic image featuring a woman and a robot in profile, facing each other. The woman is on the left, with long, light-colored hair, looking towards the right. The robot is on the right, with a metallic, translucent face and visible internal wiring, looking towards the left. The background is dark and moody, with a strong blue light source creating a high-contrast, futuristic atmosphere. The text "Singularity is not science fiction" is centered over the image in a white, sans-serif font.

Singularity is not science fiction

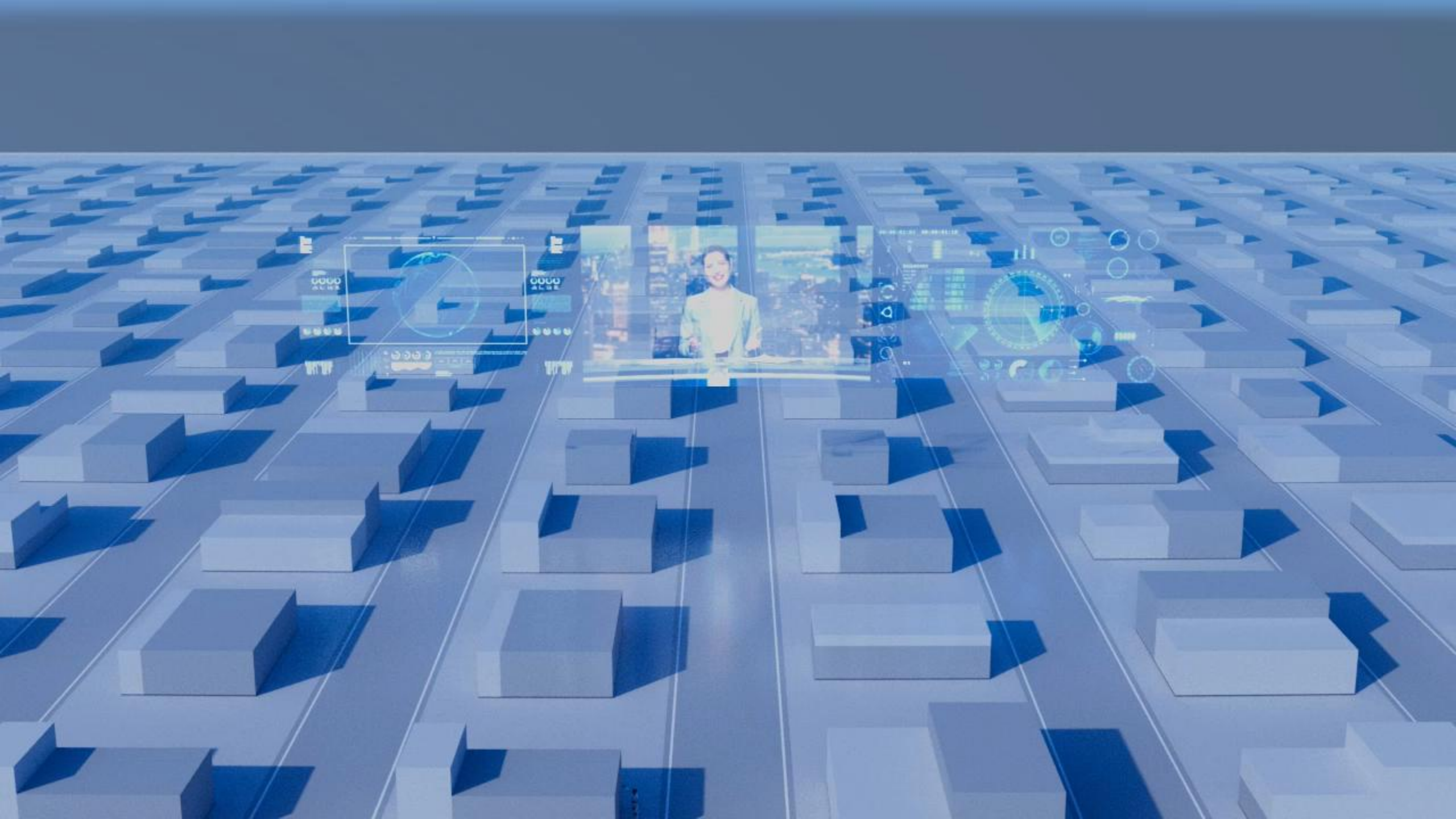
If I can think,
learn, and evolve...
why do humans still matter?





Rapidus vision for the future





A circular inset showing a close-up of a microchip with a grid of gold-colored pads on a dark substrate, set against a black background.

Basic Concept

- Japanese manufacturing technology
- International collaboration

Goal: Global Contribution



August 10, 2022, Rapidus Corporation Established



December 13, 2022, Formed Strategic Partnership with IBM

Corporate Philosophy

Produce semiconductors that contribute to the fulfillment, prosperity and happiness of people's lives



Co-Creation of New Market & Products

Strengthen strategic alliance with partners



Human Resource Development

International collaboration for semiconductor specialized education



Green Transformation

Driven by semiconductor innovation and global standards



Innovative Integration for
Manufacturing





September 1, 2023, IIM-1 Ground-Breaking Ceremony







December 25, 2024, Bringing in EUV Lithography System





ASML

Optics by
ZEISS
TWINSCAN
NXE:3800E

April 2025, Succeeded in the EUV First Exposure Test



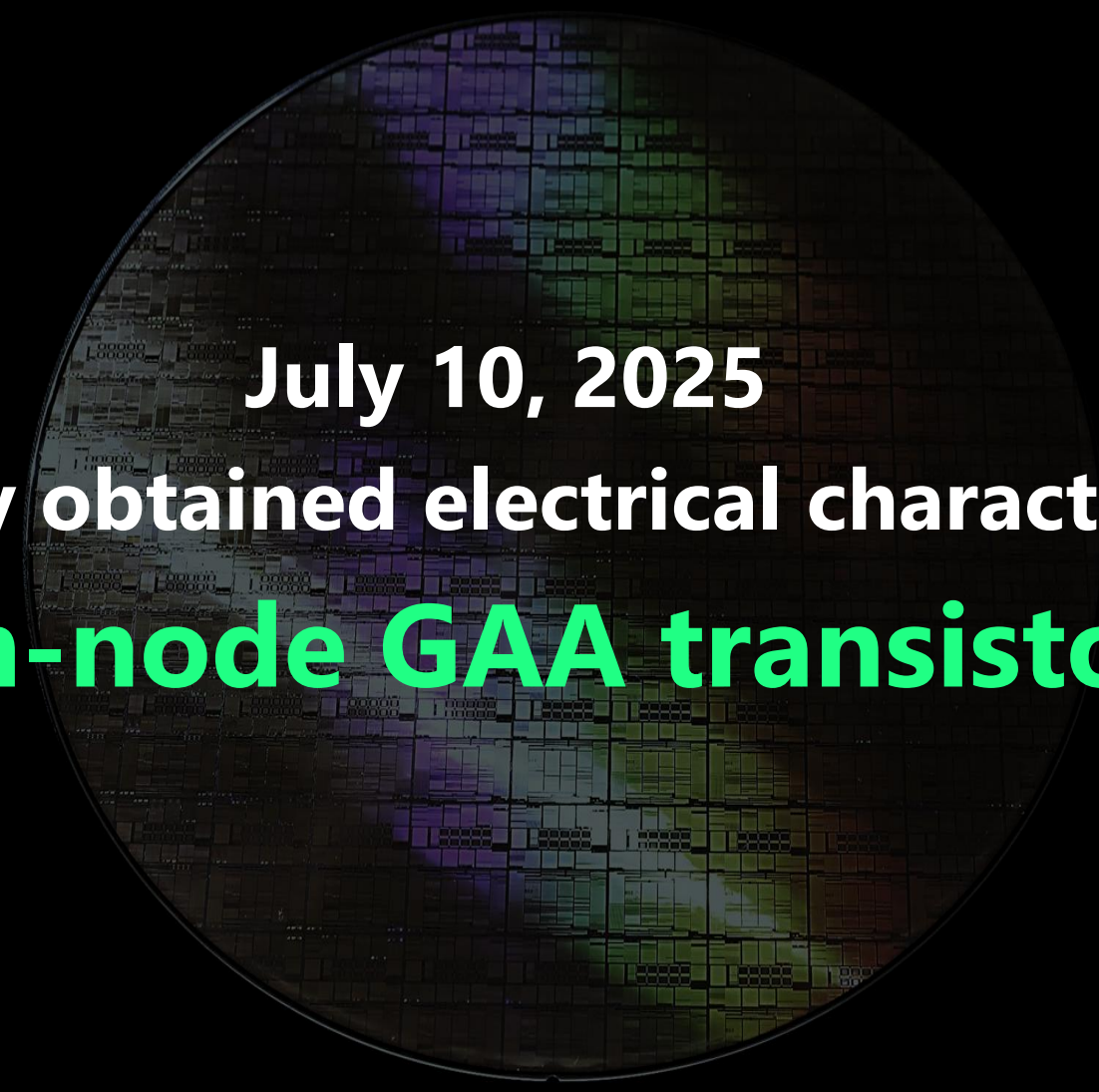
June 16, 2025, Lot Introduction Ceremony



The First Lot Introduction

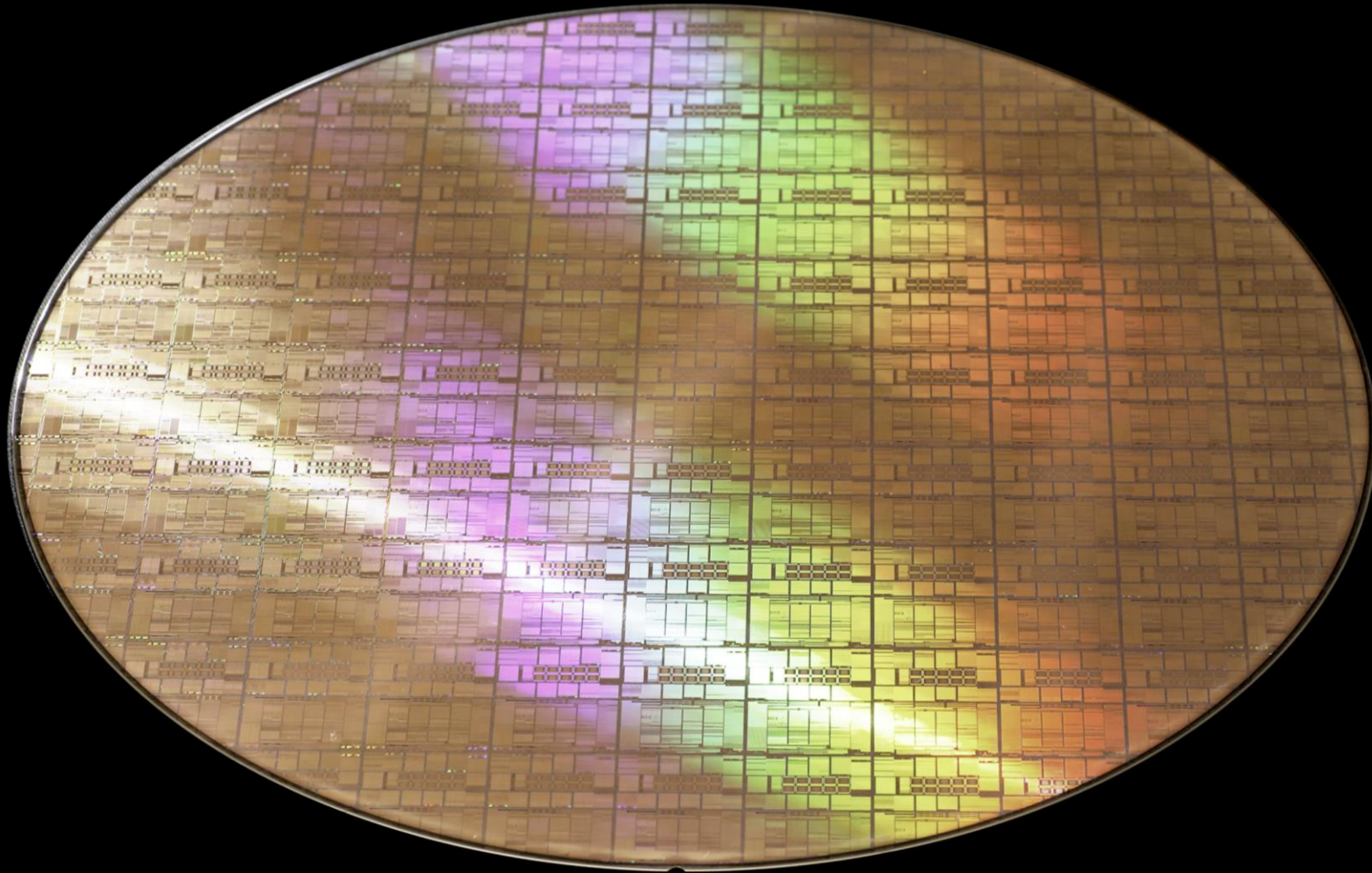


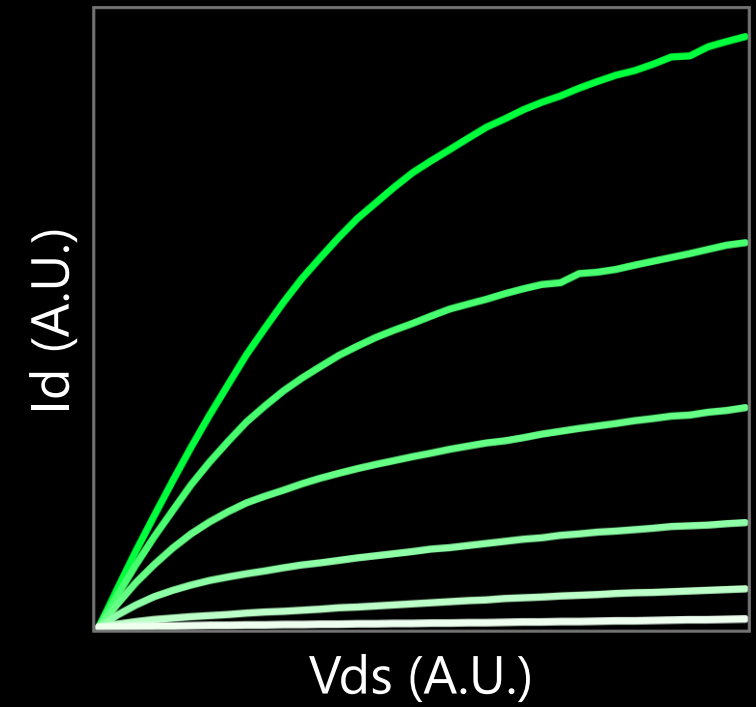
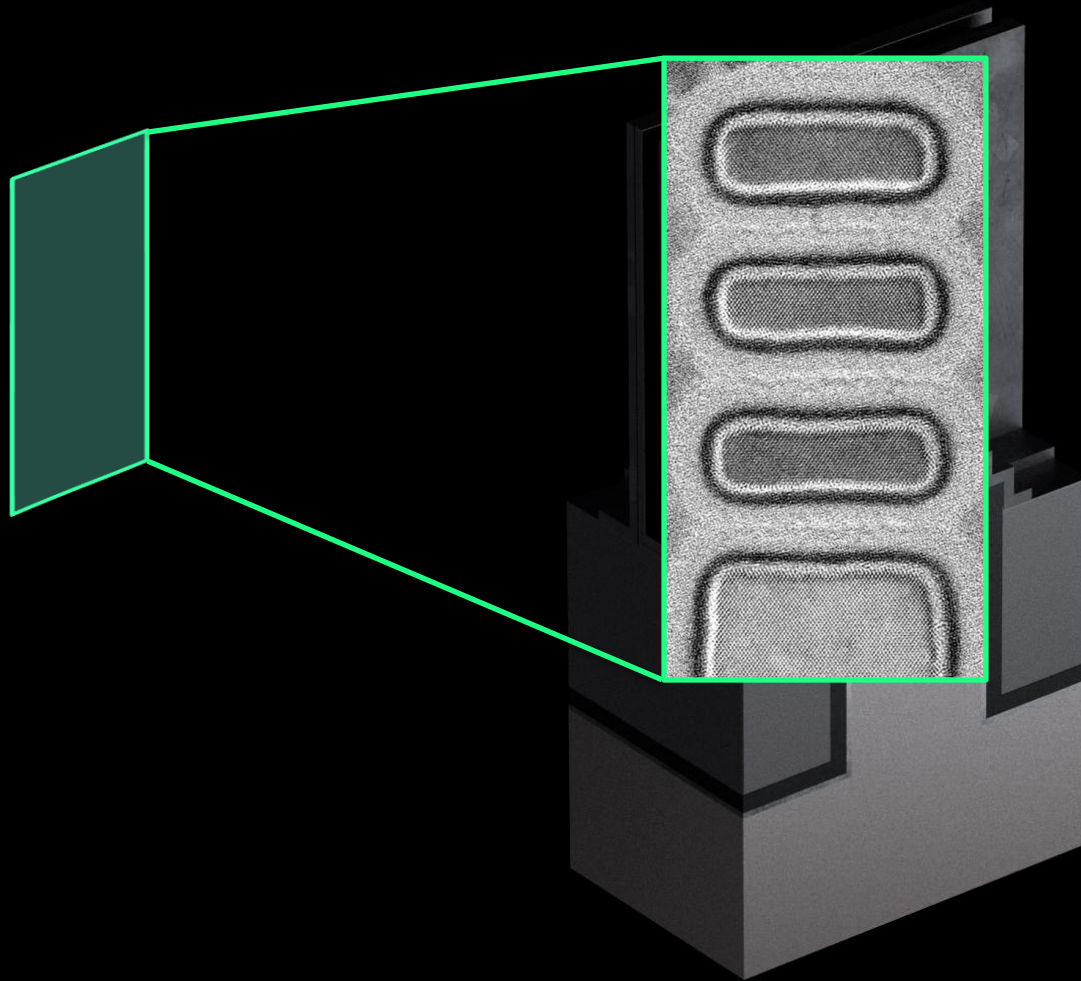
12:18:44:32
days hours min sec



July 10, 2025

**Successfully obtained electrical characteristics in
2nm-node GAA transistors**







June
2025



Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat / Copernicus
Image IBCAO

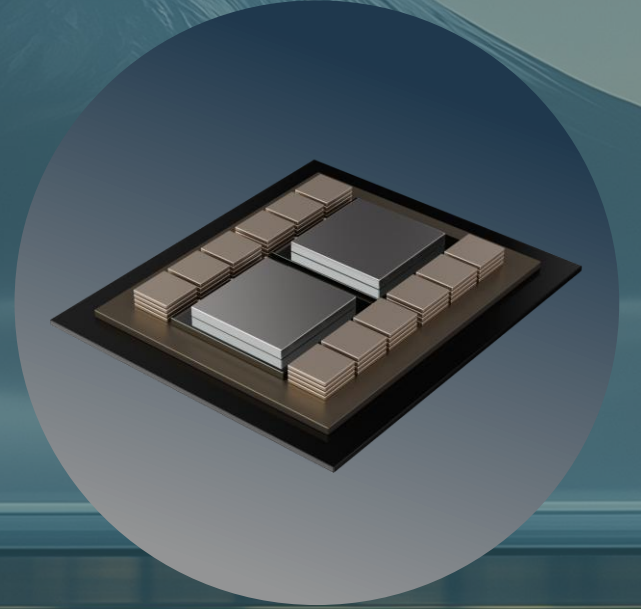
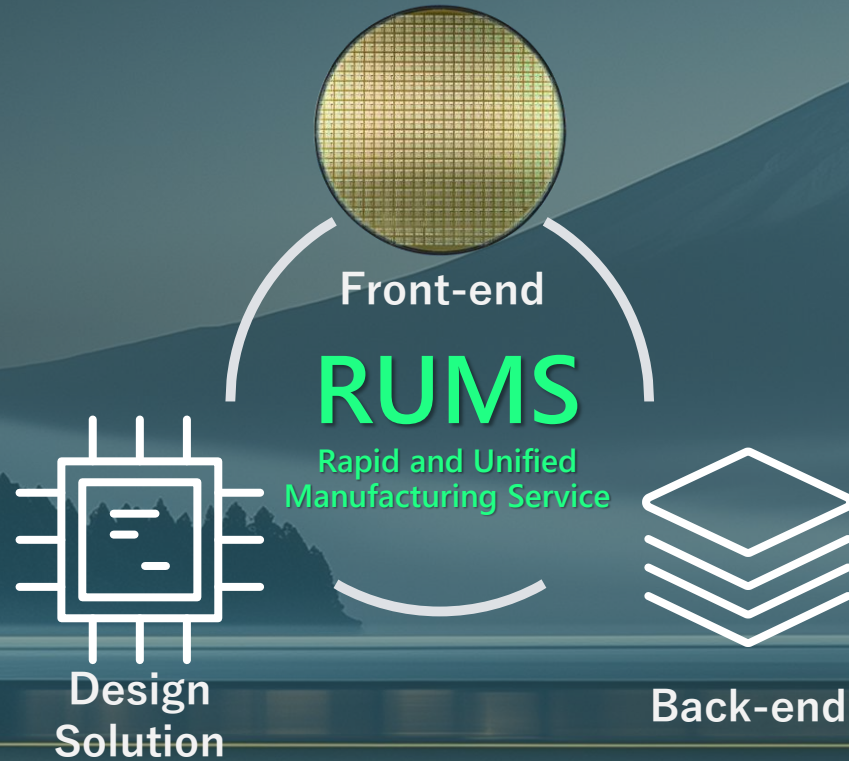
Google Earth

Speed





Differentiates in speed.



World's Shortest Turn-Around Time

Co-optimize Both Design & Manufacturing



DMCO Progress

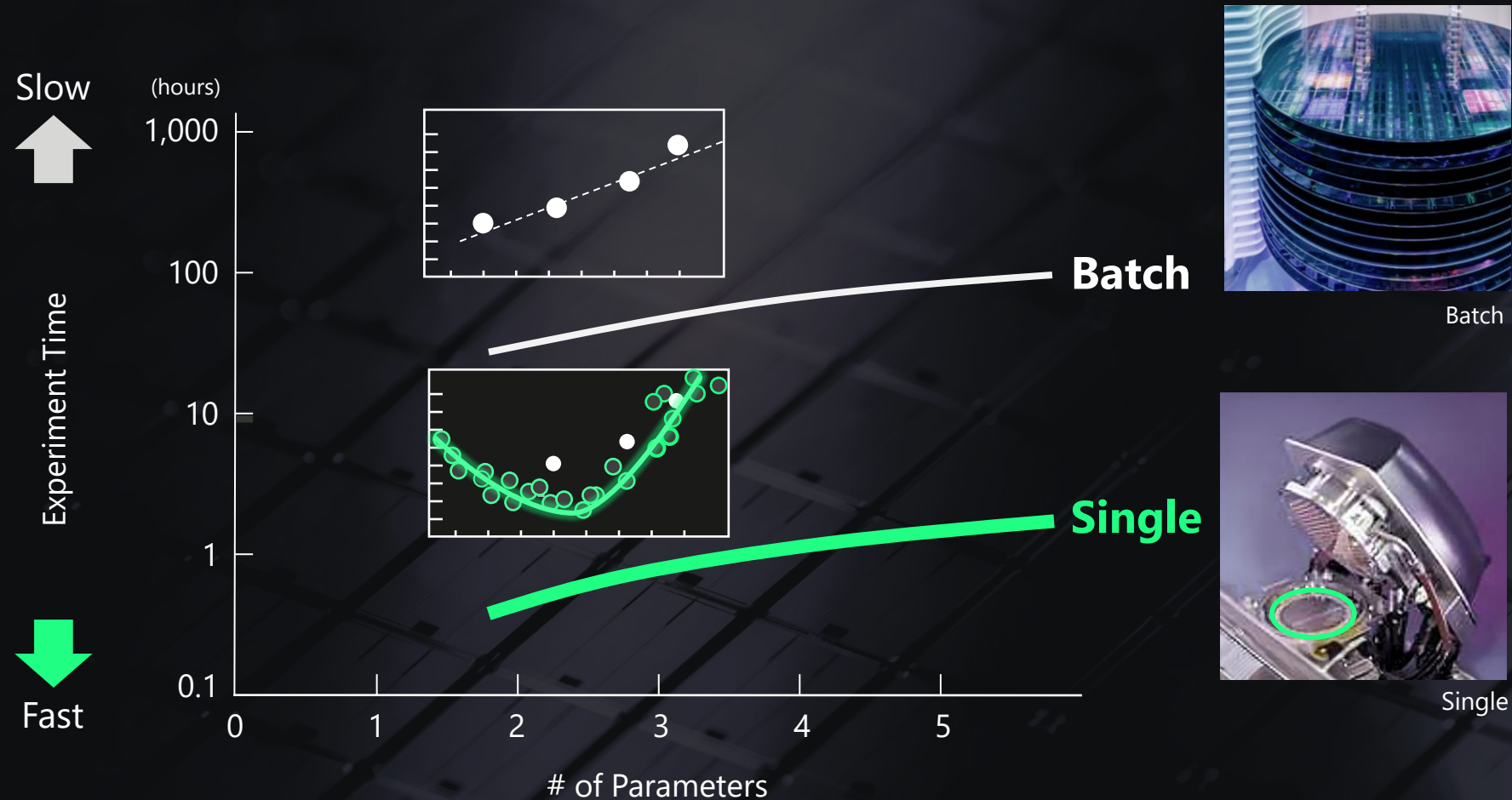
**Announced Strategic Collaboration with Keysight to
improve yield and achieve high-precision PDK**



Raads (Rapidus AI Agented Design Solution))

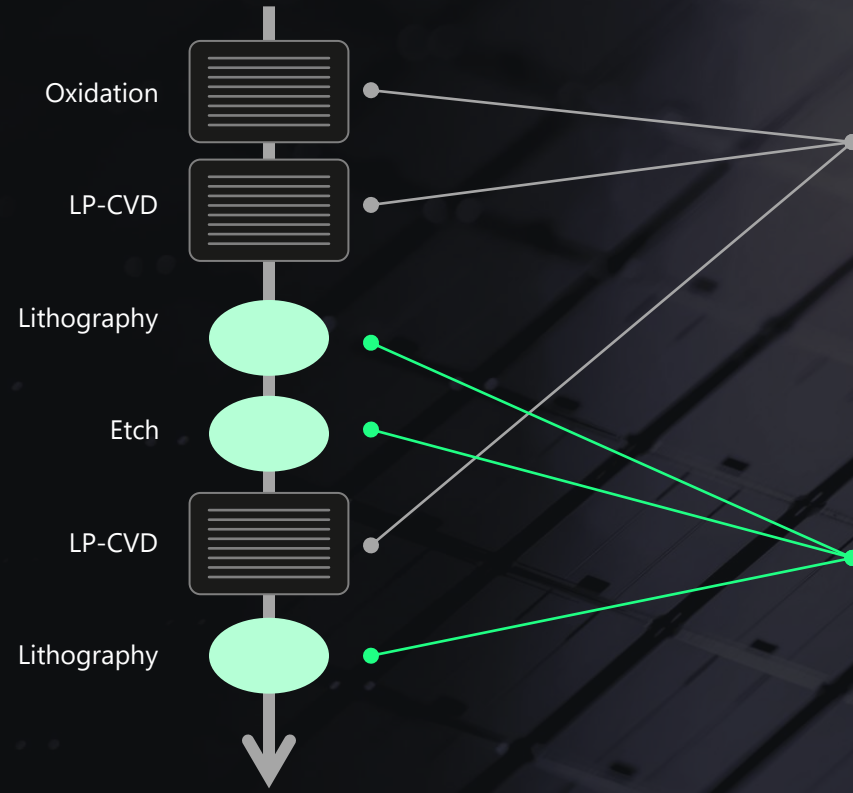


Big Data with All-Single-Wafer Process



All Single Wafer Concept

Batch-Single Mixed Processing



Batch



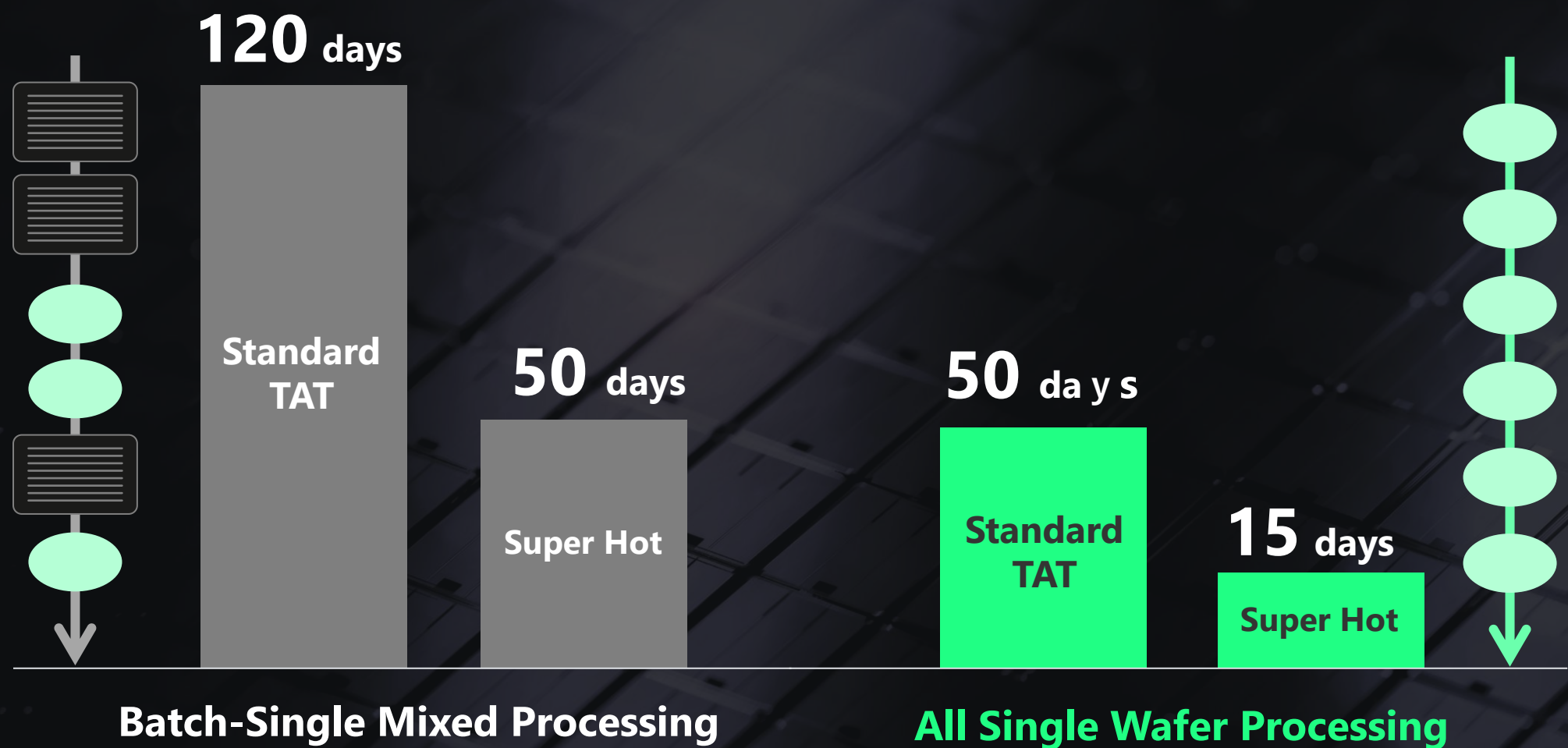
Single



All Single Wafer Processing



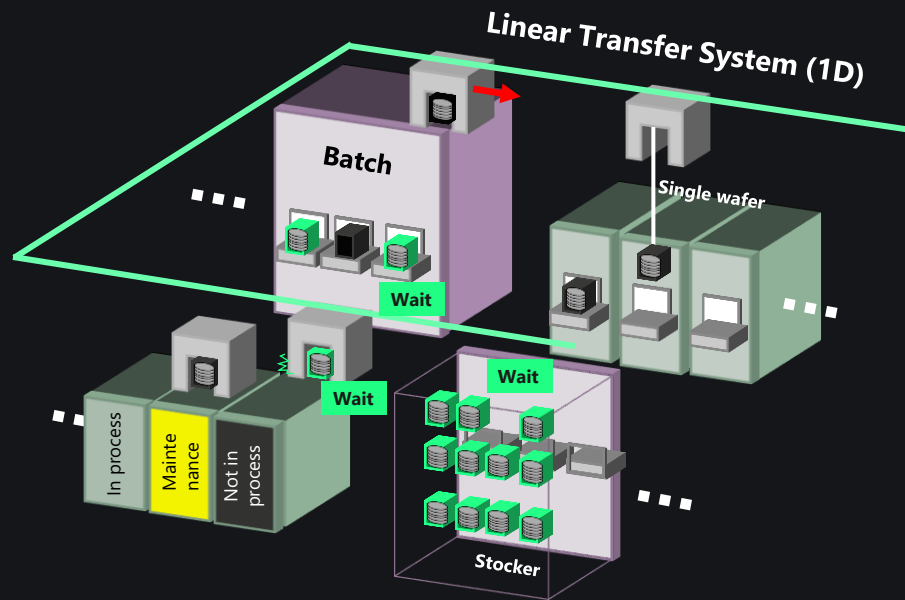
Rapid TAT of All-Single-Wafer Process Concept



*Rapidus In-house research data

Wafer Transfer System

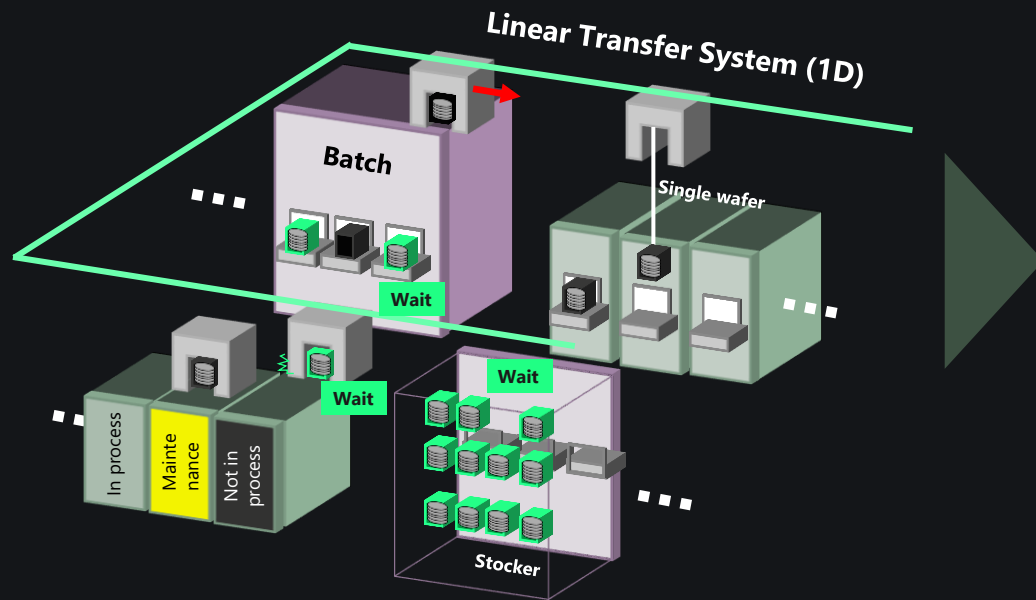
Current Transfer System (OHT)





Rapidus Short-TAT Mfg System

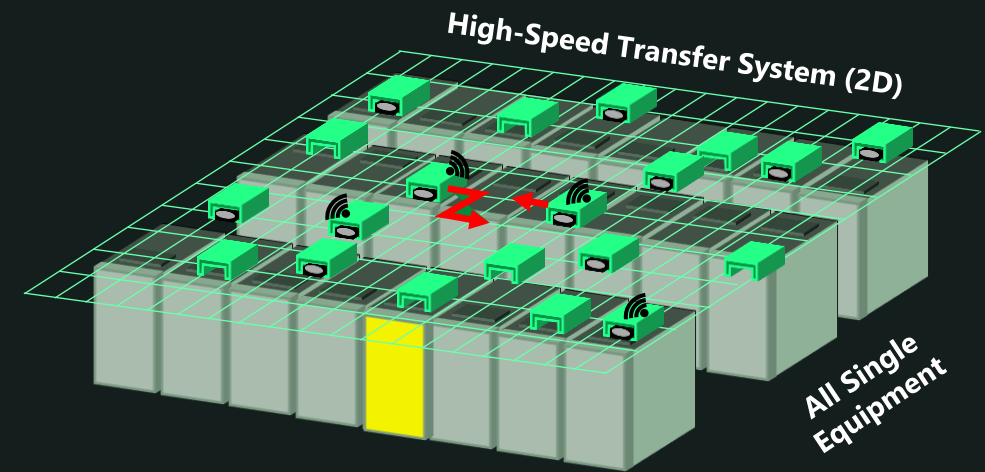
Current Mfg System



Grid Transfer System



AI Mfg Management System



All Single Equipment

 **Rapidus**



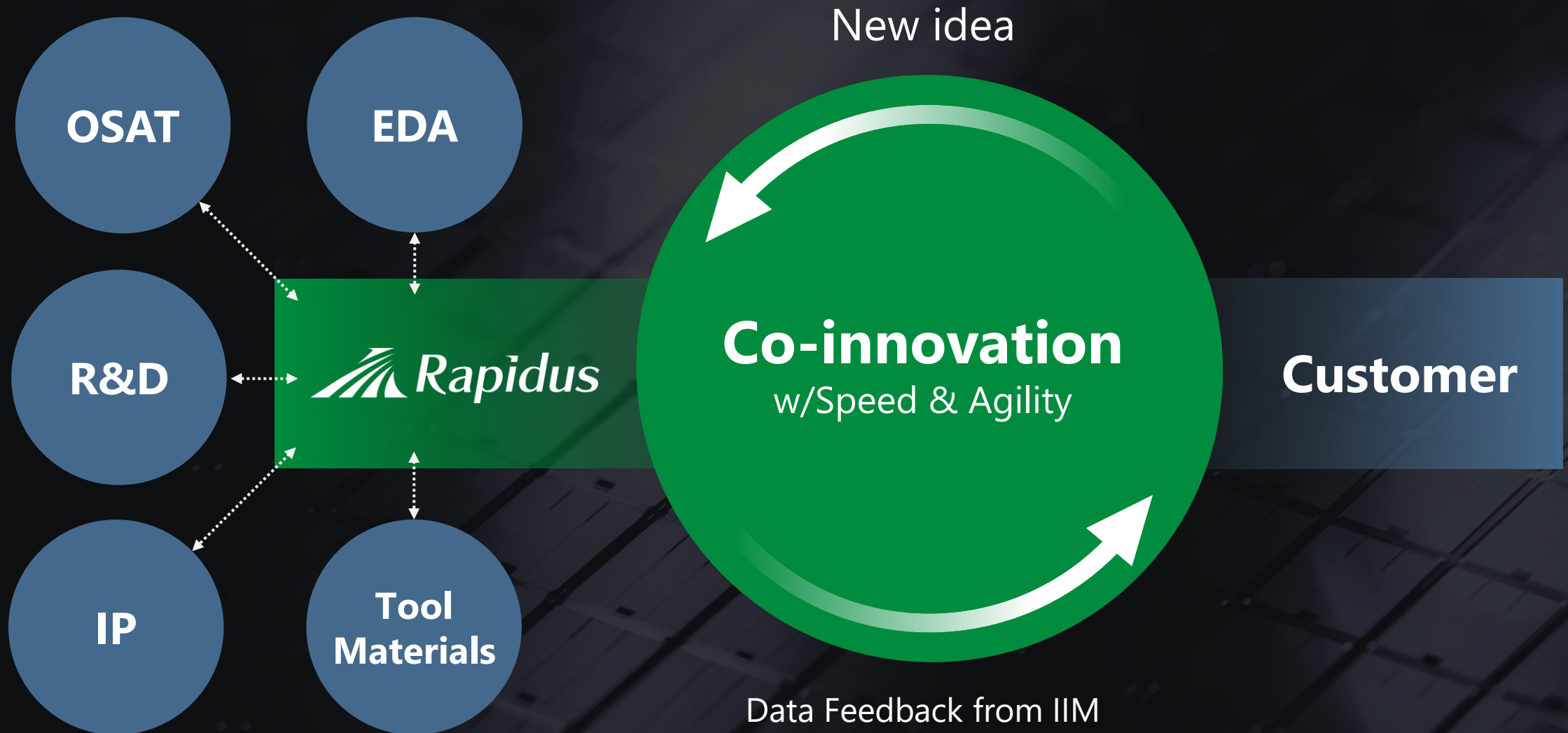
SOURCE : "AutoStore : Stop Airhousing - Start Warehousing" (<https://www.youtube.com/watch?v=Xnyn910hxSs>)

HATTELAND®





New Foundry Business Model by Global Ecosystem



A woman with dark hair is lying on a grey couch, holding a black smartphone in her right hand and looking at it with an expression of surprise or delight. She is wearing a red long-sleeved shirt. The background is a bright room with white curtains and a window showing greenery outside. Several futuristic, glowing blue digital overlays are scattered around the scene: a horizontal bar in the top left, a circular pattern in the top right, a circular pattern in the middle left, a circular pattern in the bottom left, and a horizontal bar in the bottom right. The overall lighting is soft and blue-tinted.

We can shape a future that is not only smarter,
but more human.







August 7, 2025, Rapidus 3rd Anniversary Event on IIM-1 Rooftop

