Autonomy & AI Day

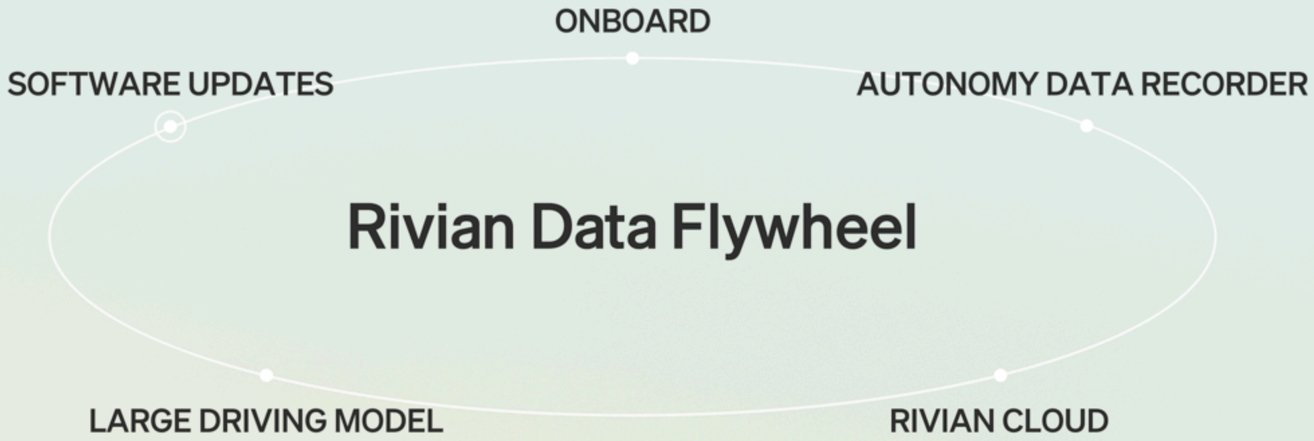
FORWARD-LOOKING STATEMENTS

This presentation and accompanying statements that are made during our 2025 Rivian Autonomy & AI Day contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this presentation and accompanying statements that are made during our 2025 Rivian Autonomy & AI Day that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation statements regarding our roadmap and timeline for the release of our next-generation vehicle autonomy systems, hardware, including ACM3 and LiDAR, and software architecture underpinned by artificial intelligence, including LDM, Rivian Assistant, Universal Hands-Free, and RUI. In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expects,” “plans,” “anticipates,” “could,” “intends,” “targets,” “projects,” “contemplates,” “believes,” “estimates,” “forecasts,” “predicts,” “potential” or “continue” or the negative of these terms or other similar expressions, although not all forward-looking statements use these words or expressions.

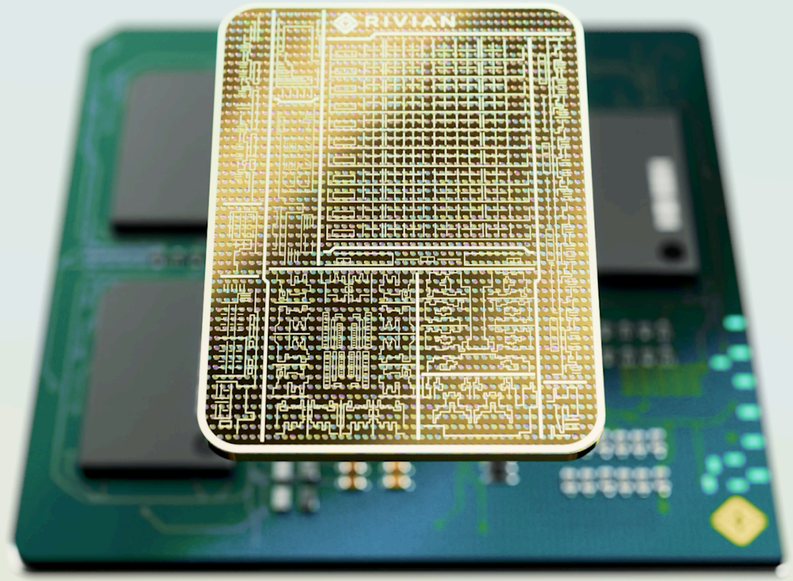
We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition, and results of operations. Forward-looking statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements, including, but not limited to, the important factors discussed in Part II, Item 1A, “Risk Factors” in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2025, and our other filings with the Securities and Exchange Commission. The forward-looking statements in this presentation and accompanying statements that are made during our 2025 Rivian Autonomy & AI Day are based upon information available to us as of the date of this presentation, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain, and investors are cautioned not to unduly rely upon these statements. While we may elect to update such forward-looking statements at some point in the future, we disclaim any obligation to do so, even if subsequent events cause our views to change.

RJ Scaringe

CEO & Founder


ONBOARD
SOFTWARE UPDATES
AUTONOMY DATA RECORDER
Rivian Data Flywheel
LARGE DRIVING MODEL
RIVIAN CLOUD

Rivian Autonomy Processor



NEURAL ENGINE
800 TOPS*

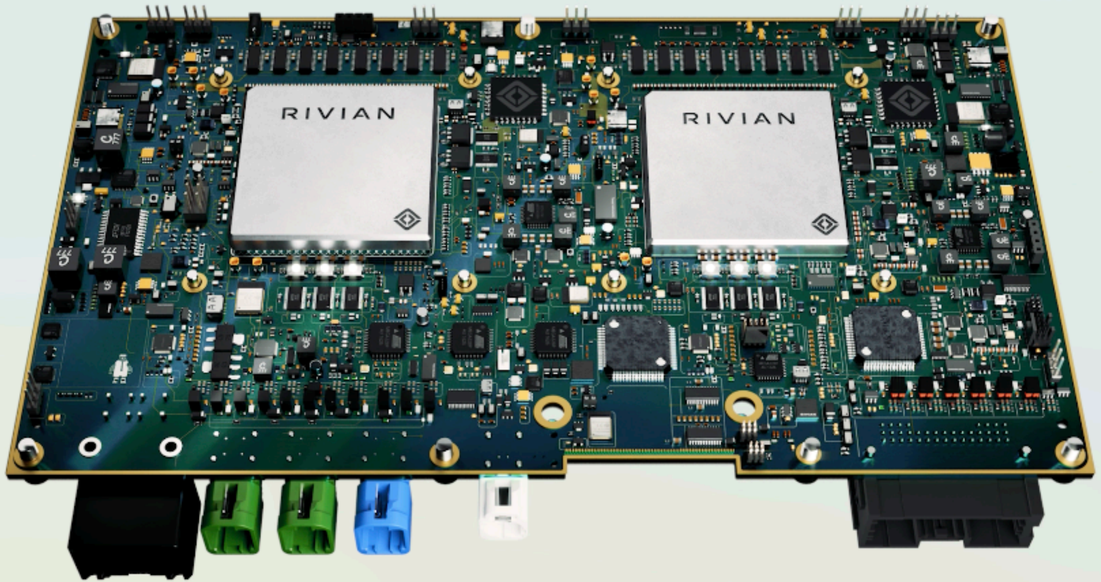
GENERALIZED
Silicon built for physical AI

SCALABLITY
1-to-N with RivLink

GEN 3 AUTONOMY COMPUTER
1600 TOPS*

PIXELS PER SECOND
5 billion

*Sparse, INT8


RIVIAN
RIVIAN



Universal Hands-Free



Point-to-Point
Universal Hands-Free


RIVIAN

Eyes-Off
Point-to-Point
Universal Hands-Free

Personal L4
Eyes-Off
Point-to-Point
Universal Hands-Free

Rivian Unified Intelligence

Vidya Rajagopalan

Senior Vice President
Electrical Hardware

Sensors

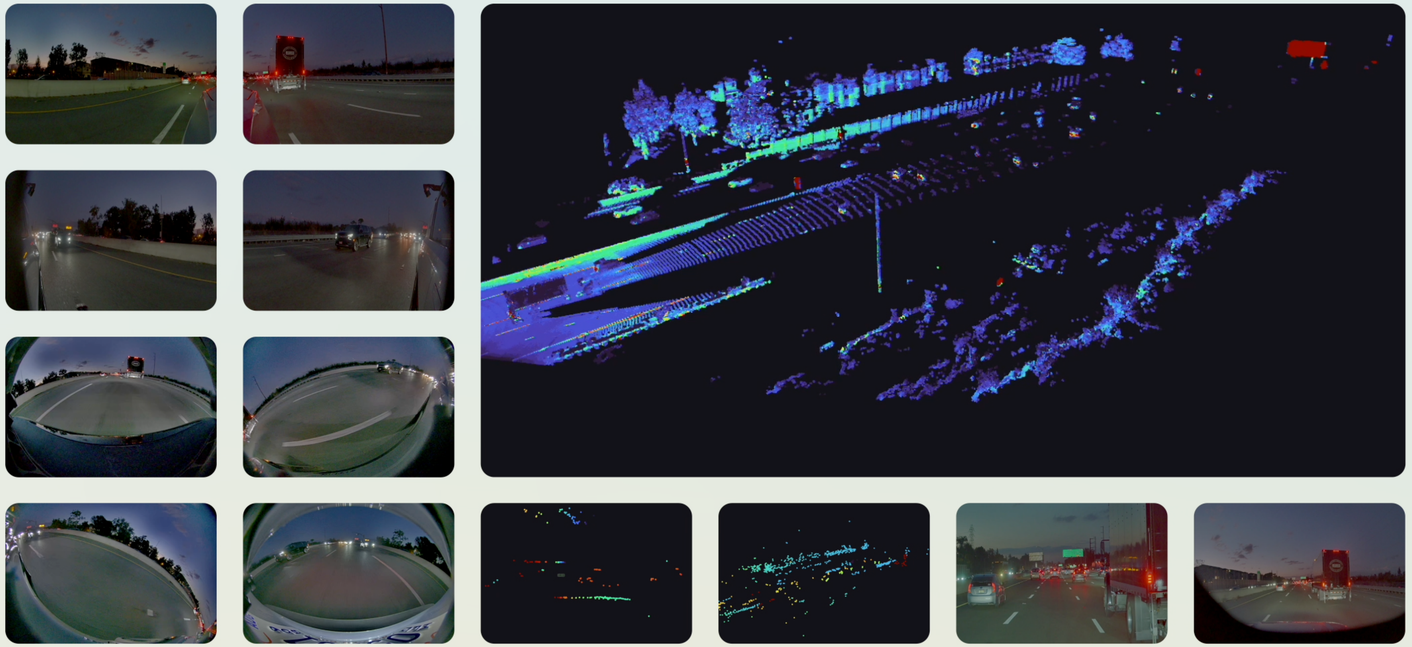
Beyond human,
rich data

Compute

Ready for the
future of AI

Product

Reduced cost,
seamless integration



R2 Multi-Modal Sensors

OVERALL

11× Cameras (65MP)

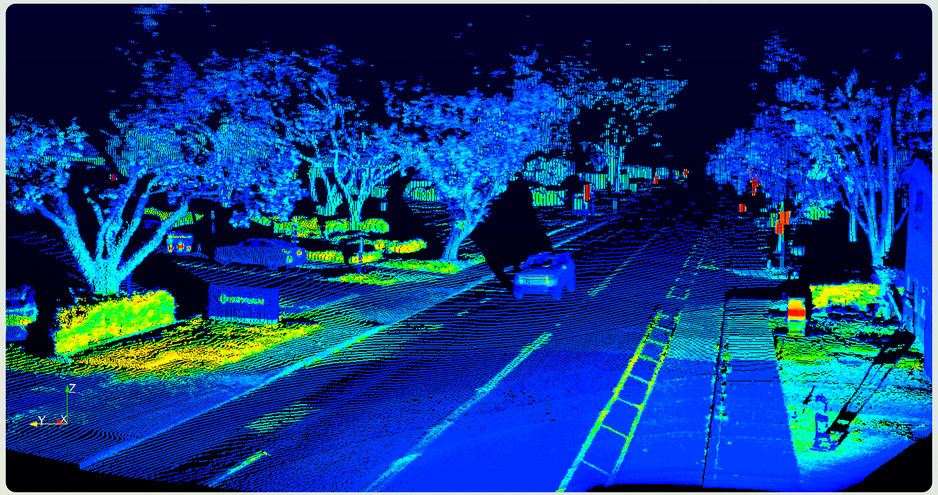
5× Radars

1× LiDAR

2016



2026



Why design our own chip?

Velocity

Performance

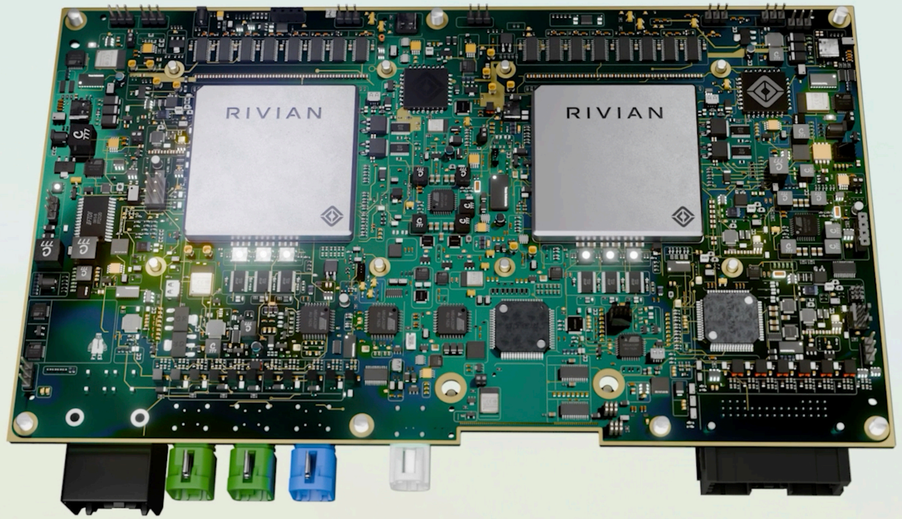
Cost

Gen 3 Autonomy Computer

PERFORMANCE
4× peak performance of Gen 2 computer

POWER EFFICIENCY
2.5× improvement

VERTICAL INTEGRATION
100% Rivian hardware and software stack



The Chip: RAP1

DESIGN
Multi-Chip Module

NODE
TSMC 5nm Automotive

NEURAL ENGINE
Rivian-designed

NEURAL COMPUTE
800 TOPS*

SCALABLE
1-to-N via RivLink

*Sparse, INT8



Integrated Memory Technology

PERFORMANCE

Pioneering Multi-Chip Module for automotive AI compute

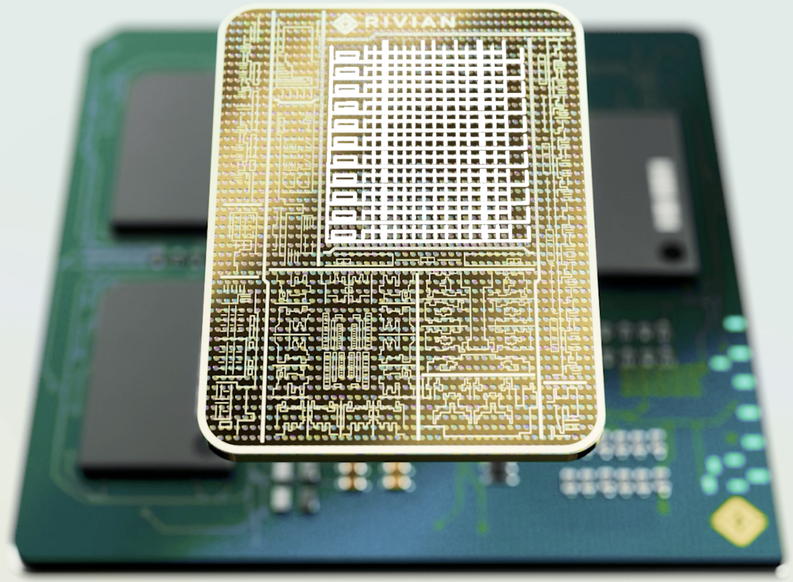
3 independent LPDDR5 channels

205 GB/sec bandwidth



Rivian Silicon
Built for Physical AI

NEURAL ENGINE
800 TOPS*

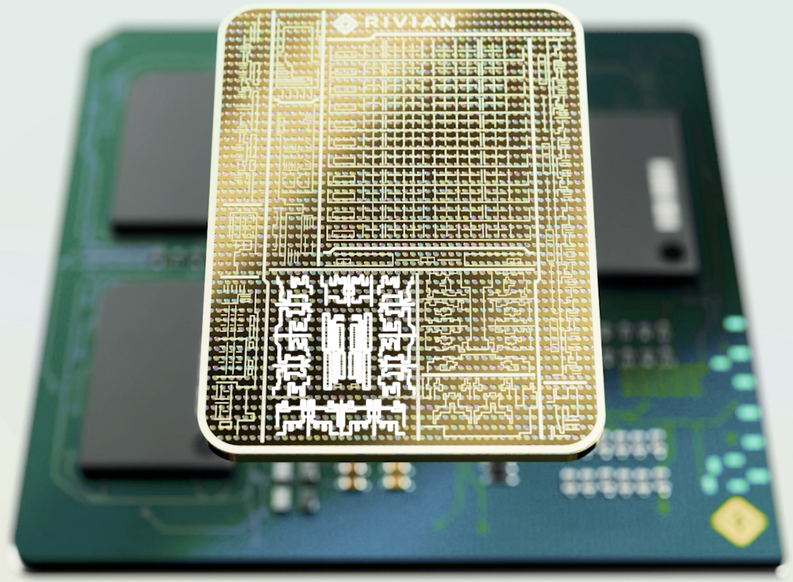


*Sparse, INT8

Rivian Silicon
Built for Physical AI

NEURAL ENGINE
800 TOPS*

APPLICATION PROCESSOR
14× Cortex-A720AE



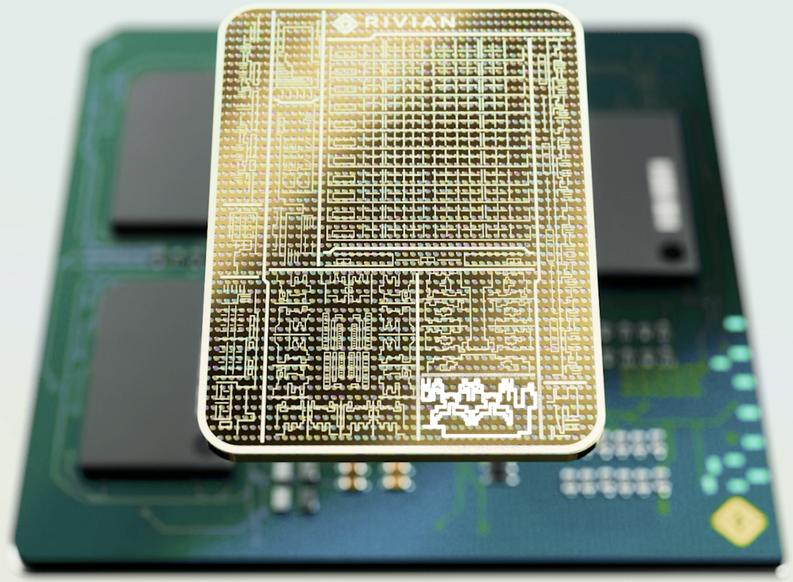
*Sparse, INT8

Rivian Silicon
Built for Physical AI

NEURAL ENGINE
800 TOPS*

APPLICATION PROCESSOR
14× Cortex-A720AE

SAFETY SUB-SYSTEM
8× Cortex-R52



*Sparse, INT8

Rivian Silicon
Built for Physical AI

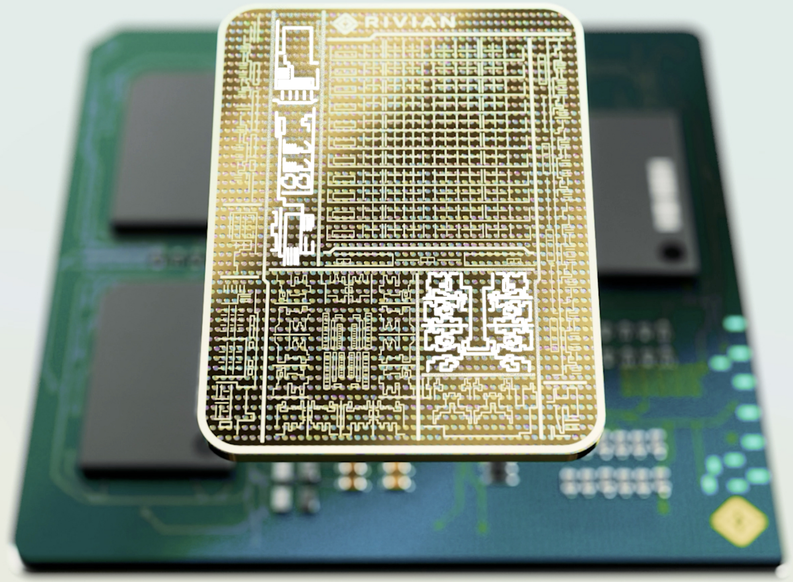
NEURAL ENGINE
800 TOPS*

APPLICATION PROCESSOR
14× Cortex-A720AE

SAFETY SUB-SYSTEM
8× Cortex-R52

OTHER ELEMENTS
GPUs, Encoder, ISP

*Sparse, INT8

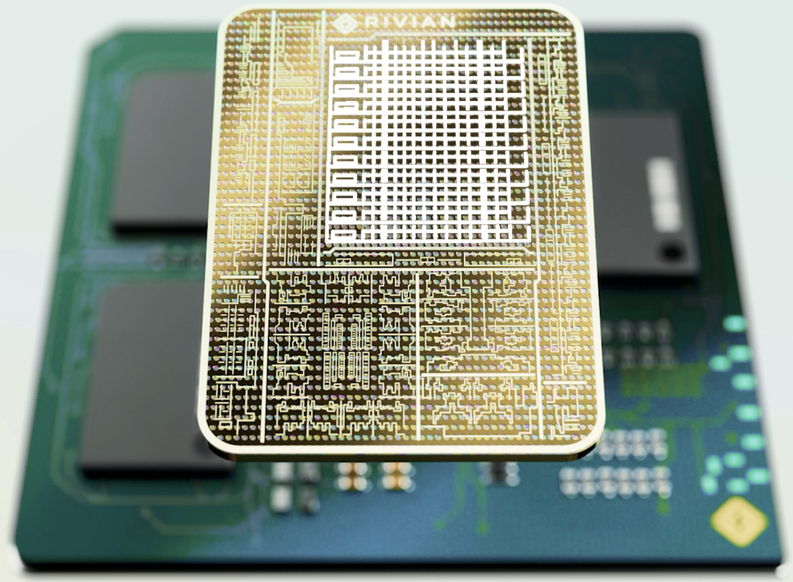


Rivian Neural Engine

FLEXIBLE
Mixed-precision data formats

TRANSFORMER CAPABILITIES
Deformable, multi-headed attention and more

NATIVE HARDWARE SUPPORT
Non-linear functions, CNNs, and more



LIDAR AND RADAR SUPPORT
Unstructured point cloud processing

MULTI-KERNEL SUPPORT
4× concurrent network deployment

PLATFORM SOFTWARE AND TOOLS
In-house compiler and middleware

Functional Safety for Physical AI

FUNCTIONAL SAFETY

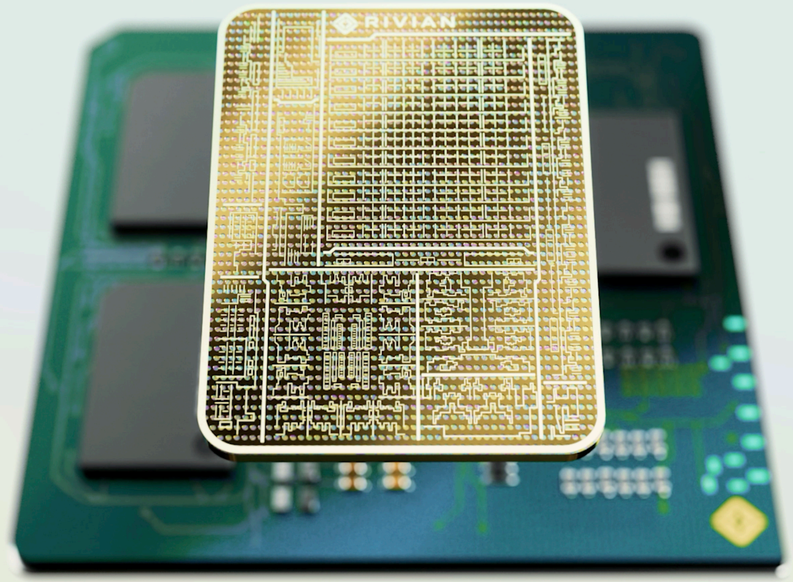
Designed in accordance with ISO26262 Automotive Safety and Integrity Levels (ASIL)

HARDWARE MEASURES

Redundancy, ECC, and more

SOFTWARE MEASURES

Key on and periodic checks



Scalability

SCALABLE
1-to-N via RivLink

RIVLINK DATA RATE
Up to 128 Gbps

PERFORMANCE
Ultra low latency

PHYSICAL CONFIGURATION
Liquid or air cooled

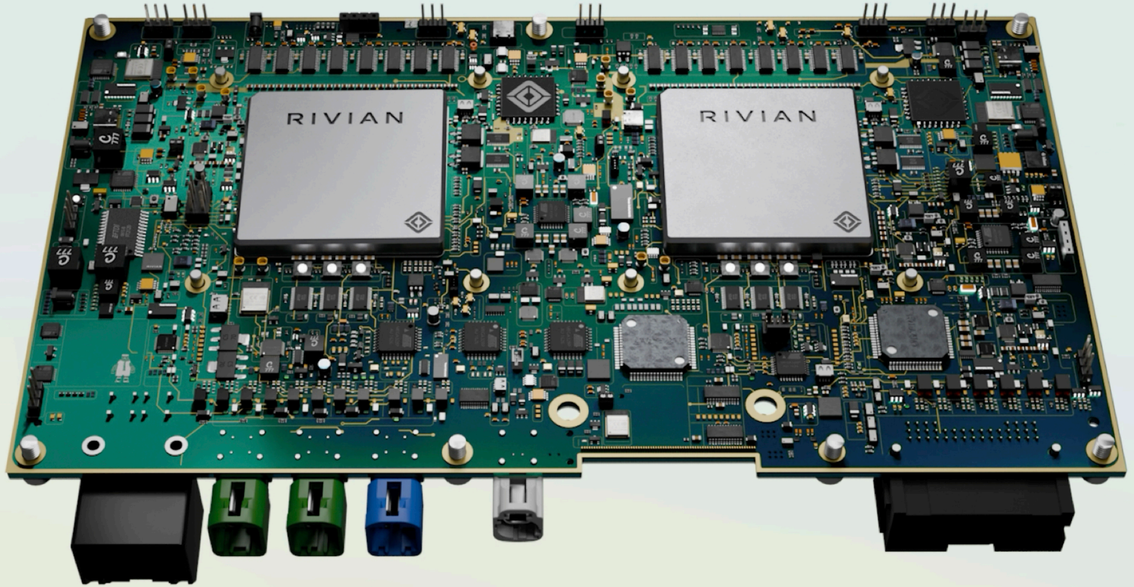


Net System Performance

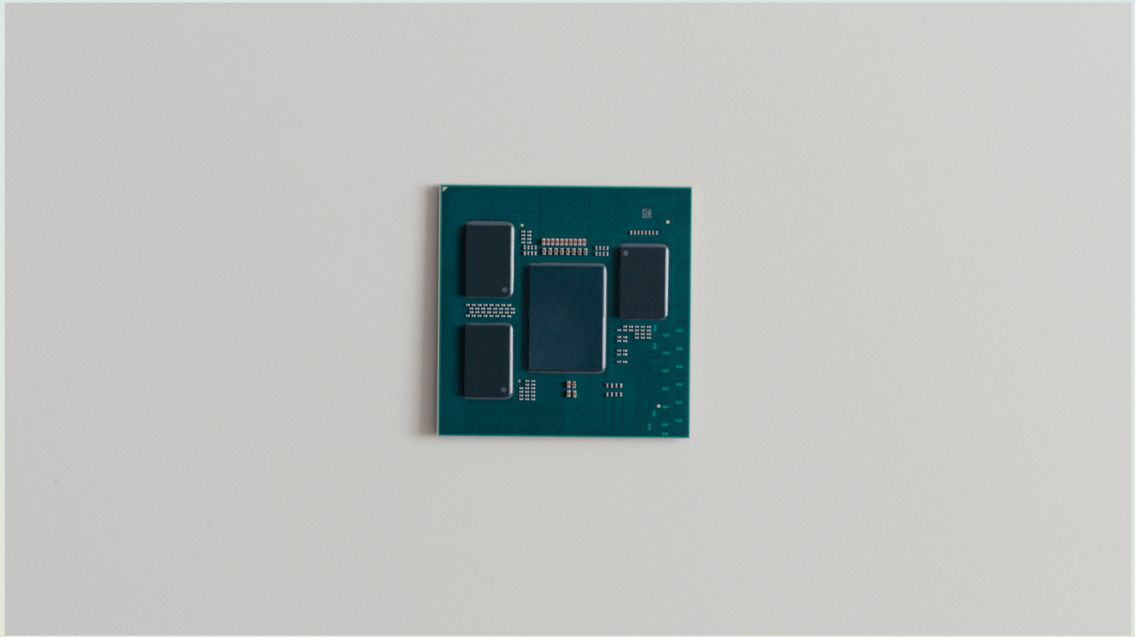
AI PERFORMANCE
1600 TOPS*

PIXELS PER SECOND
5 billion

*Sparse, INT8



A leading combination of autonomy sensors and inference



James Philbin

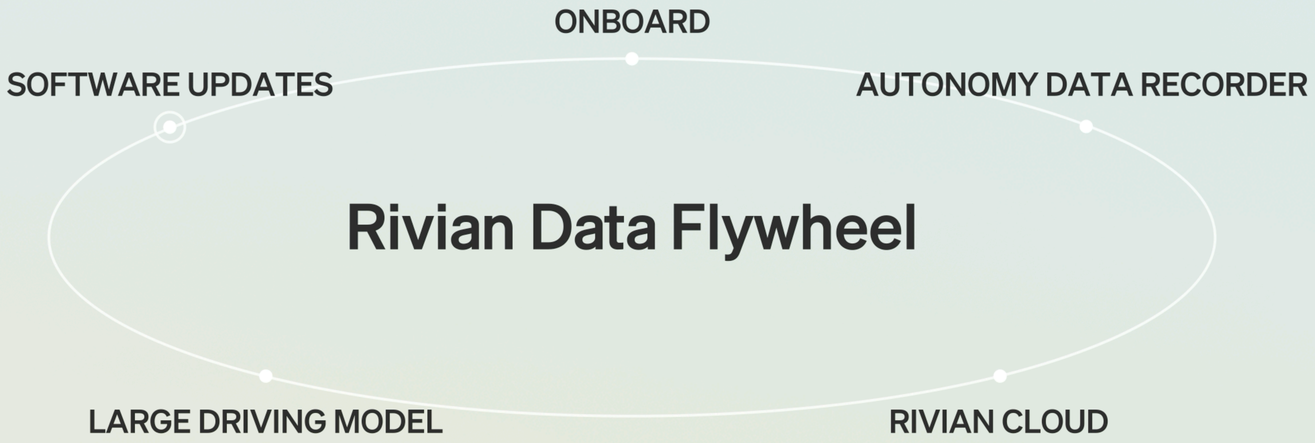
Vice President
Autonomy & AI

Rivian Autonomy Platform

Trained end-to-end

Built in-house

Highly scalable

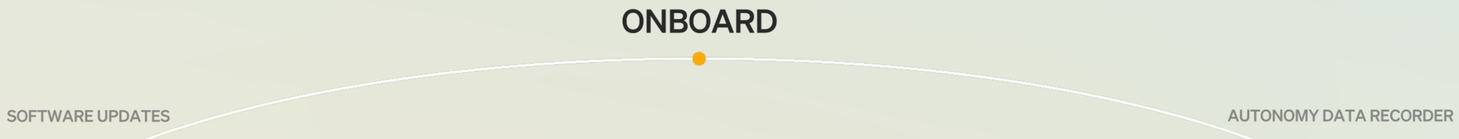

ONBOARD
SOFTWARE UPDATES
AUTONOMY DATA RECORDER
Rivian Data Flywheel
LARGE DRIVING MODEL
RIVIAN CLOUD

Multi-modal strategy

Superhuman sensing

Early fusion

Rich data



CAMERA



CAMERA + RADAR



CAMERA + RADAR + LIDAR



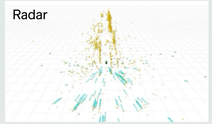
ONBOARD

SOFTWARE UPDATES

AUTONOMY DATA RECORDER

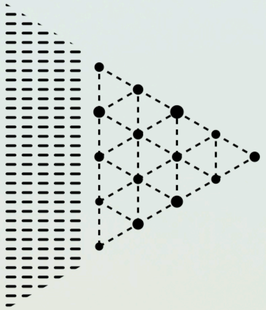
SENSORS



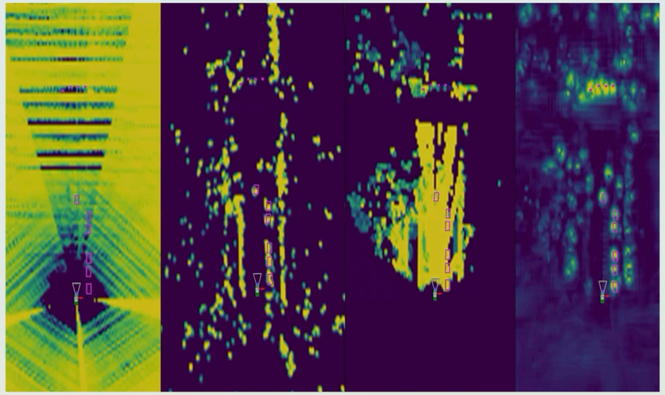




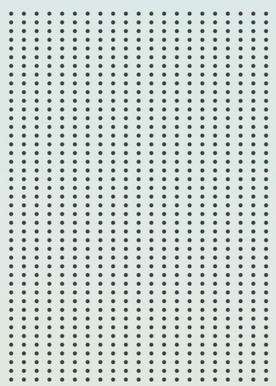
NEURAL BACKBONE



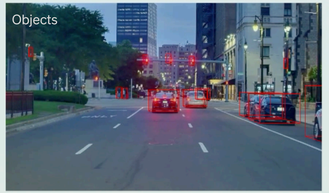
EARLY FUSION

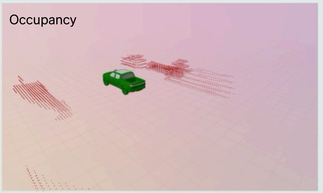


PREDICTION ENGINE



WORLD MODEL









ONBOARD

SOFTWARE UPDATES

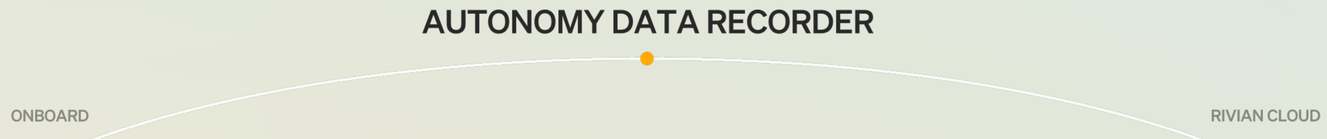
AUTONOMY DATA RECORDER

Converts driving into data

Identifies edge cases

Captures and collates

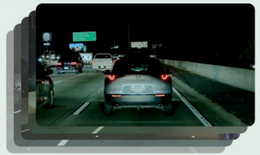
Data on-demand



LEFT MERGES



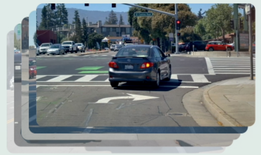
NIGHT



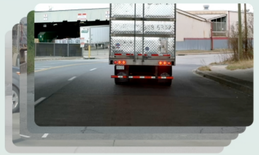
ANIMALS



RIGHT TURNS



SEMI-TRUCKS



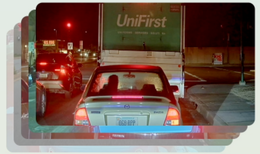
PEDESTRIANS



BIKE RACKS



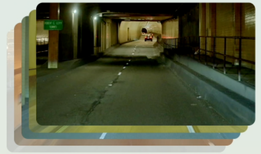
BRAKE LIGHTS



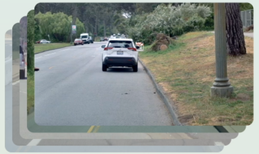
LEFT TURNS



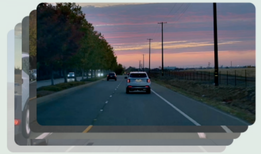
TUNNELS



CYCLISTS



DUSK



AUTONOMY DATA RECORDER

ONBOARD

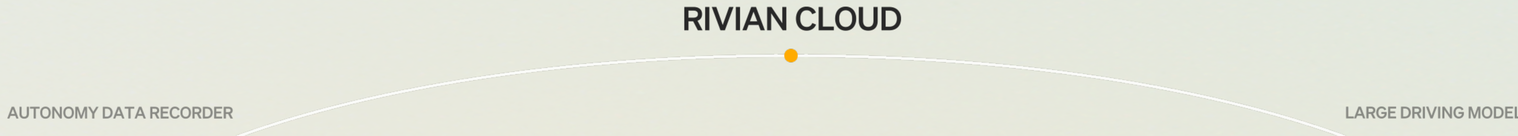
RIVIAN CLOUD

Vast knowledge base

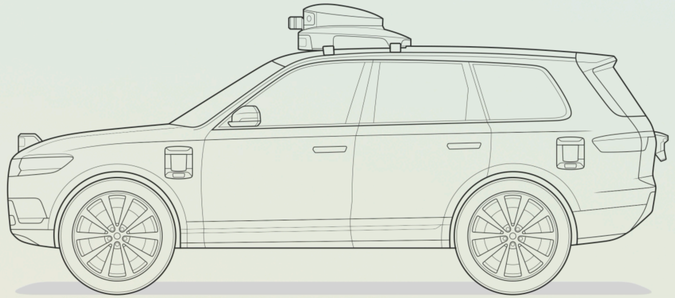
Expanding fleet and usage

Anonymized and auto-labelled

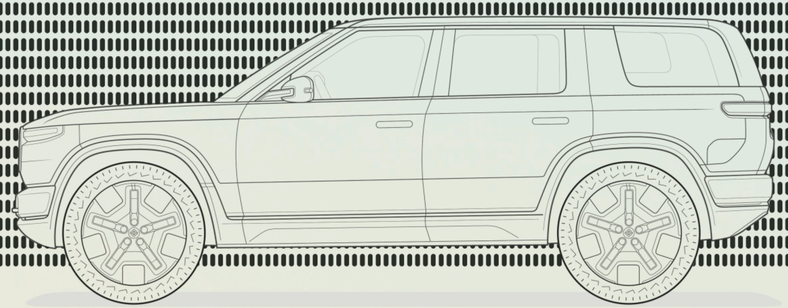
All modalities, richest data



Autonomy Provider Ground Truth Fleet



Rivian Ground Truth Fleet

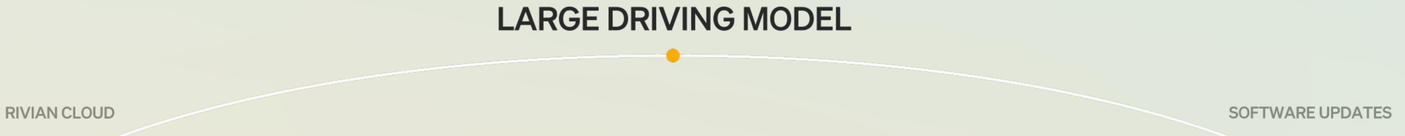


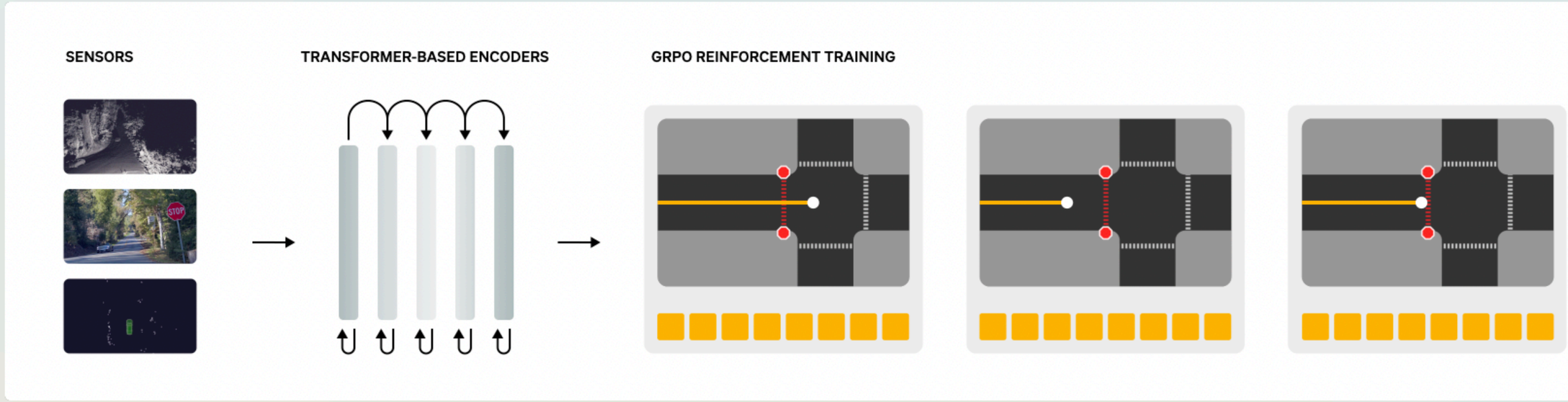
Moving at LLM speed

Transformer based

Tokenized data

GRPO learning

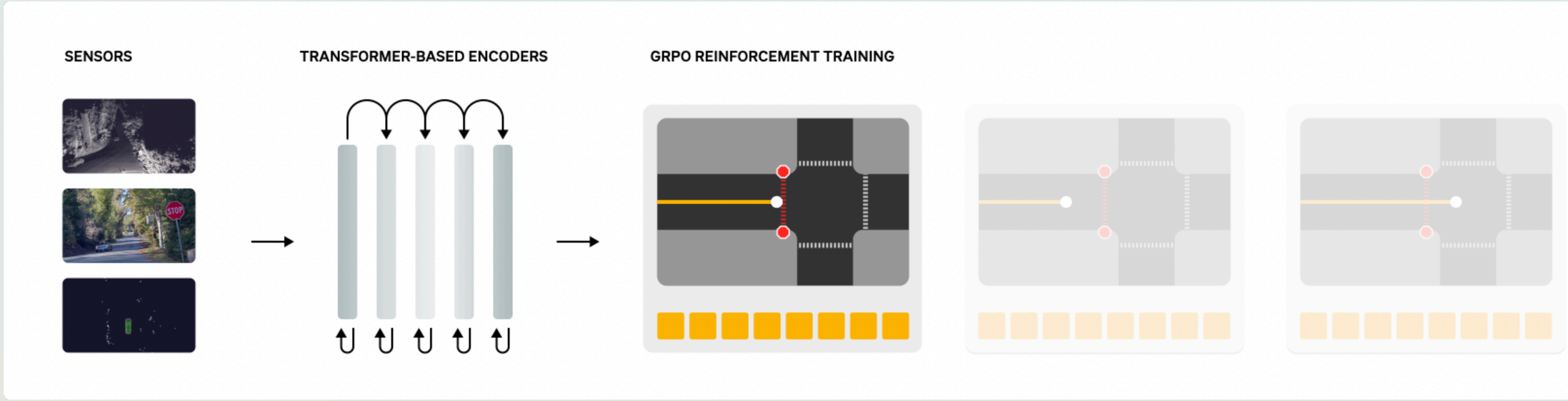




LARGE DRIVING MODEL

RIVIAN CLOUD

SOFTWARE UPDATES



LARGE DRIVING MODEL

RIVIAN CLOUD

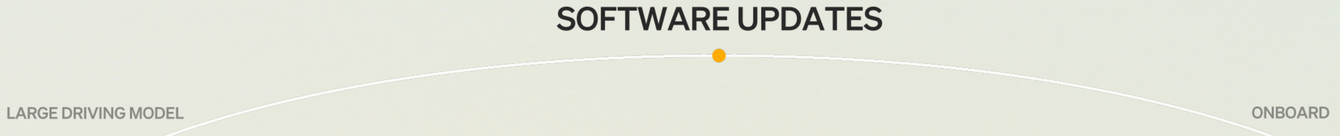
SOFTWARE UPDATES

New features and enhancements

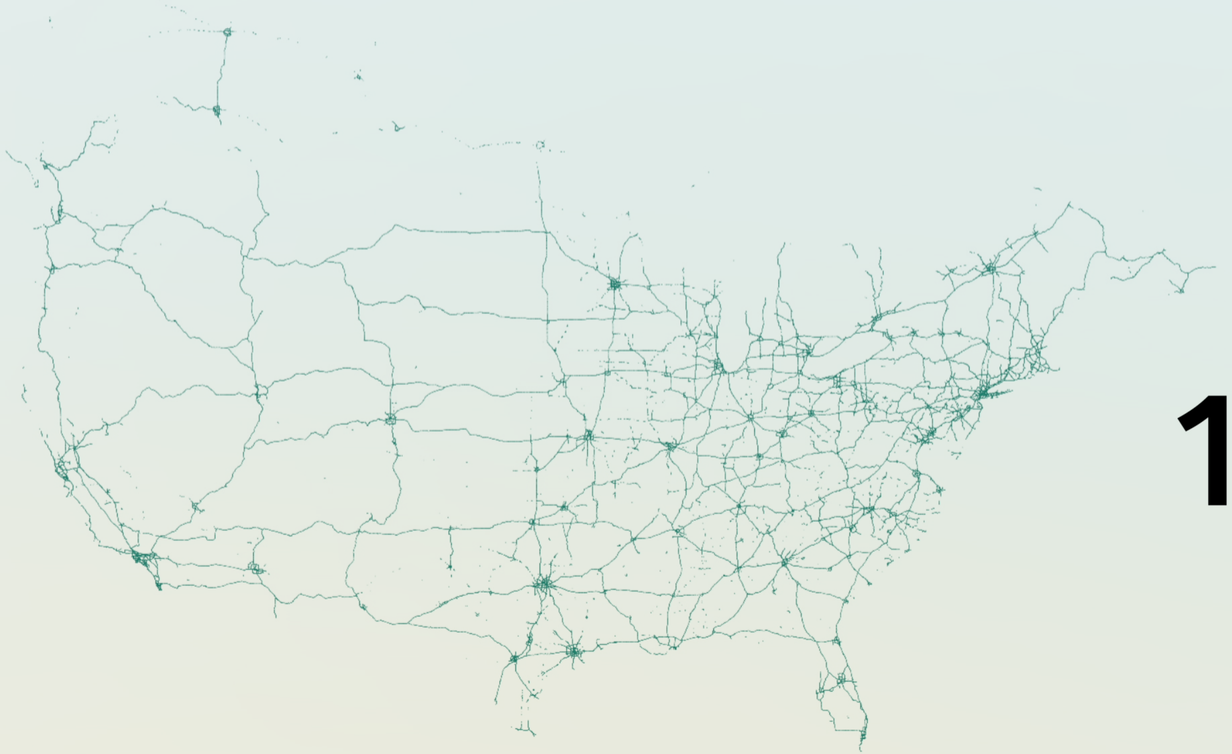
Simulation at scale

Apprentice Mode

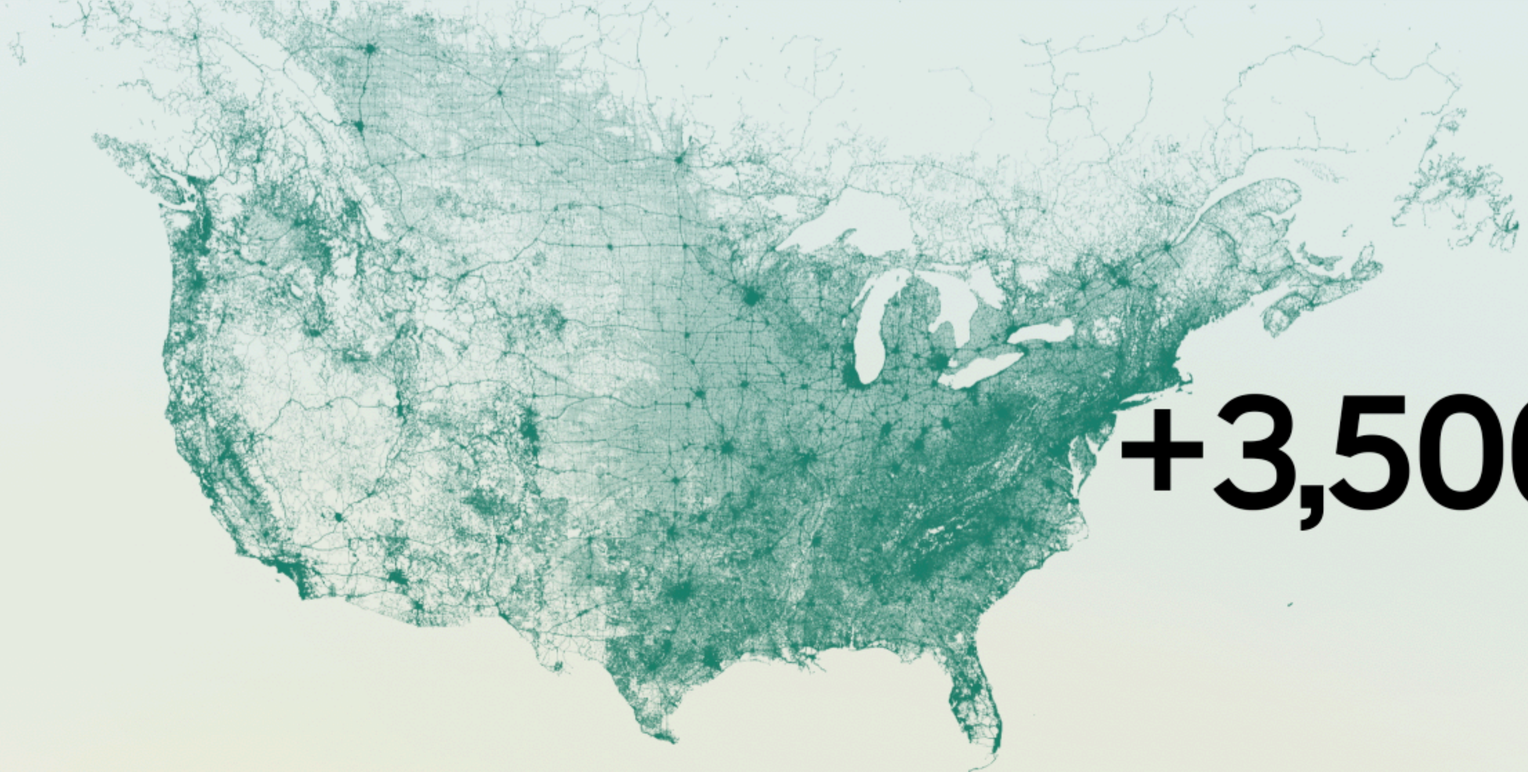
Always improving







135,000 miles



+3,500,000 miles

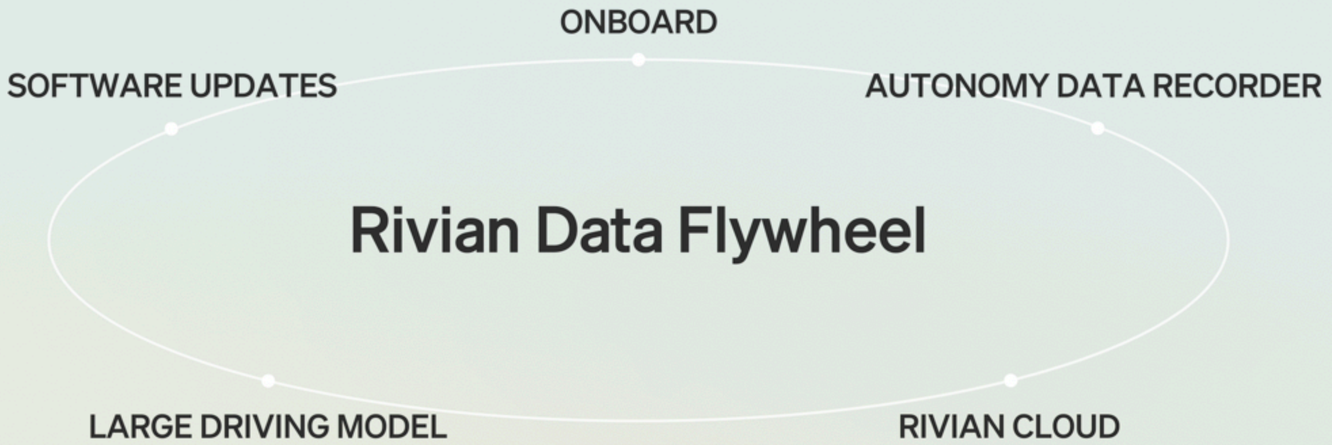
Universal Hands-Free



Over 3.5 million miles

Autonomy+

$2,500 USD or $49.99 / month


ONBOARD
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LARGE DRIVING MODEL
RIVIAN CLOUD



Wassym Bensaid

Chief Software Officer

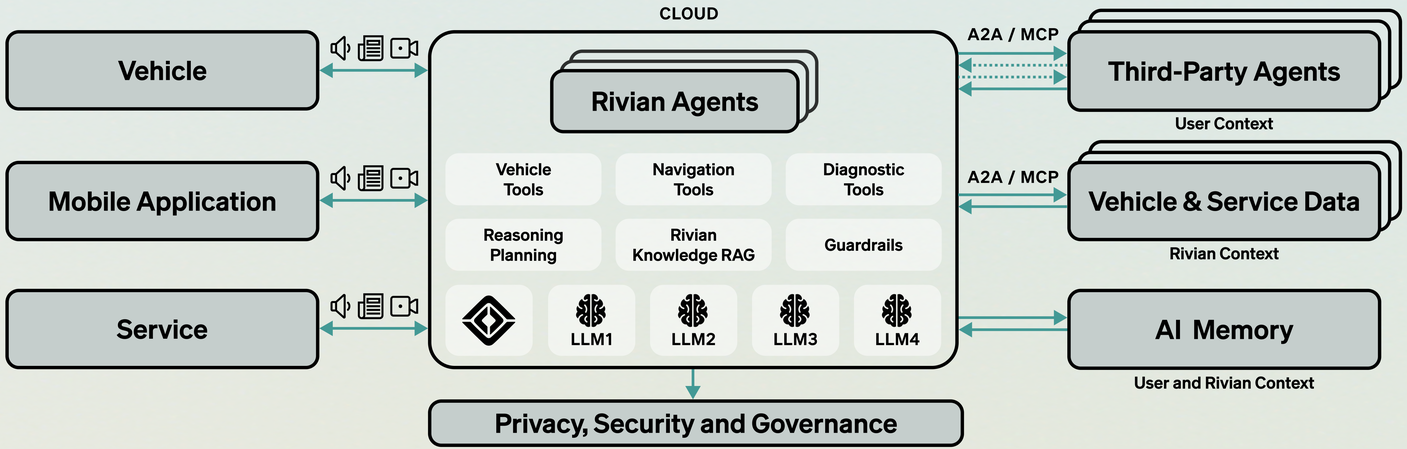
Rivian Unified Intelligence

Multi-Agent

Multi-LLM

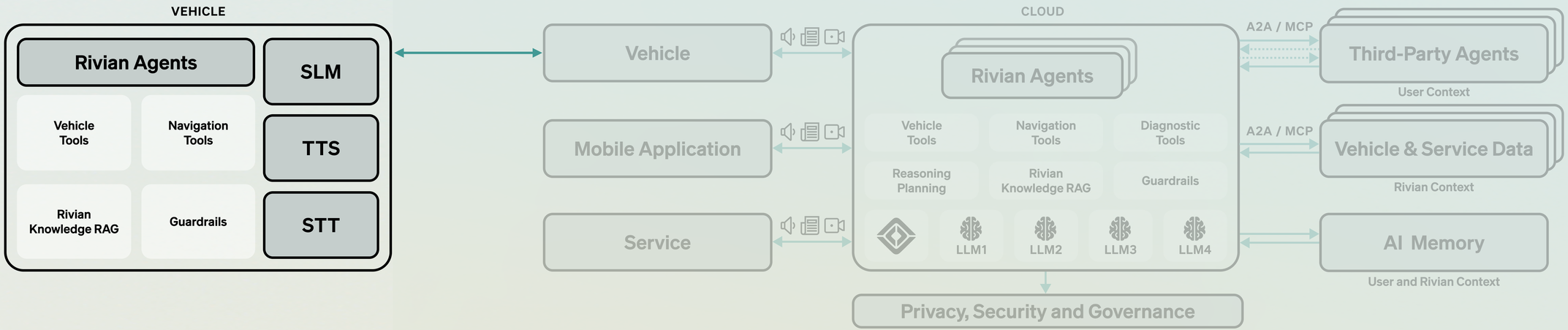
Multi-Modal

Rivian Unified Intelligence



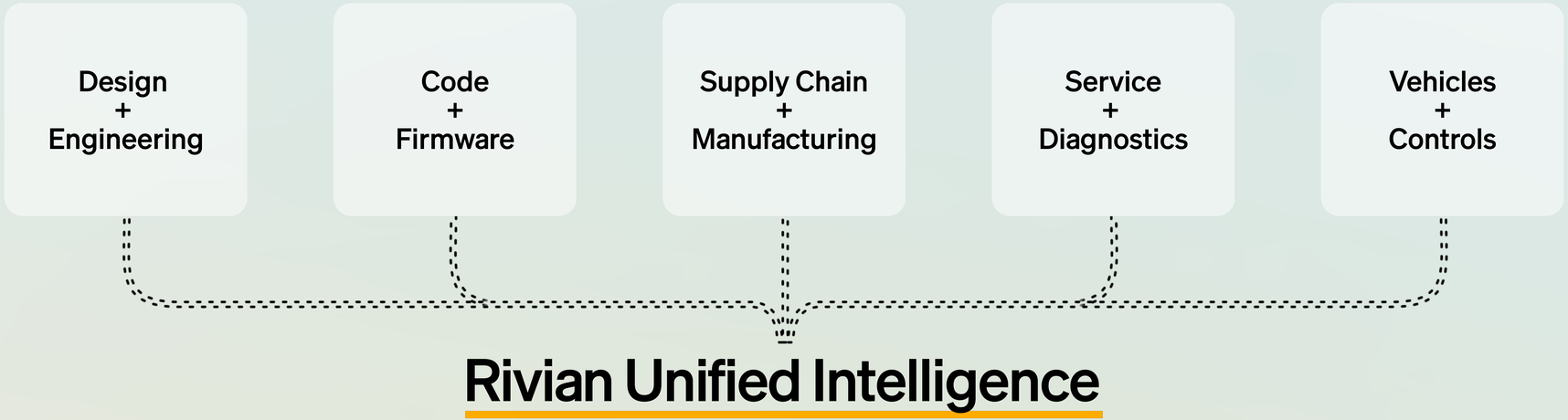
Rivian Edge AI

Rivian Unified Intelligence



R2

~100 additional TOPS of Edge AI compute dedicated to in-cabin experience


Design + Engineering
Code + Firmware
Supply Chain + Manufacturing
Service + Diagnostics
Vehicles + Controls
Rivian Unified Intelligence

Rivian Assistant

Video from livestream

Video from livestream

Deeply integrated agentic framework

MCP and Agent to Agent communication

Controls vehicle systems and closures

Blends personal and vehicle context

Video from livestream

Seamless messaging

Native integration

Contextual awareness

Memory

Software-Defined Vehicle

AI-Defined Vehicle

Autonomy & AI Day