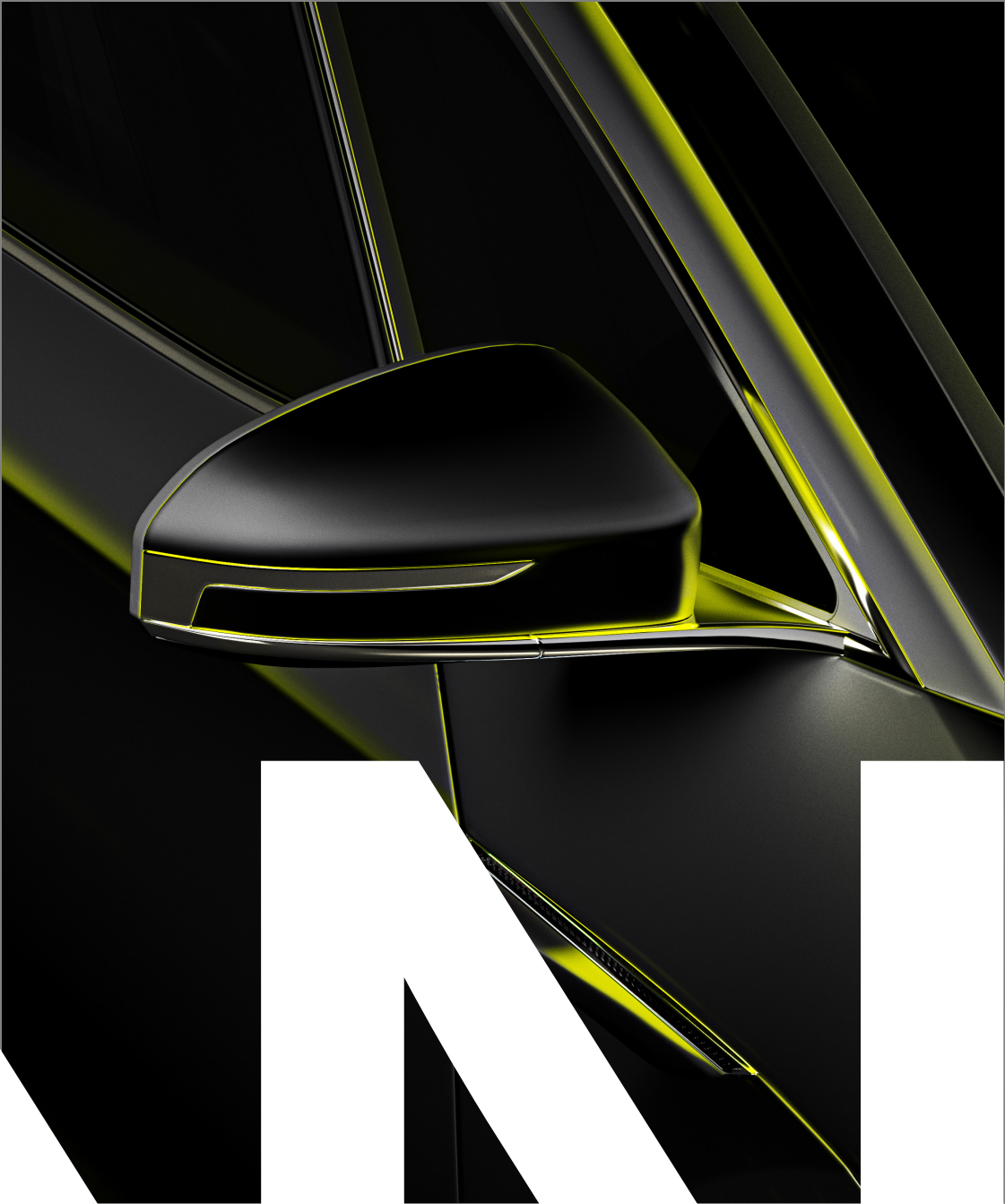


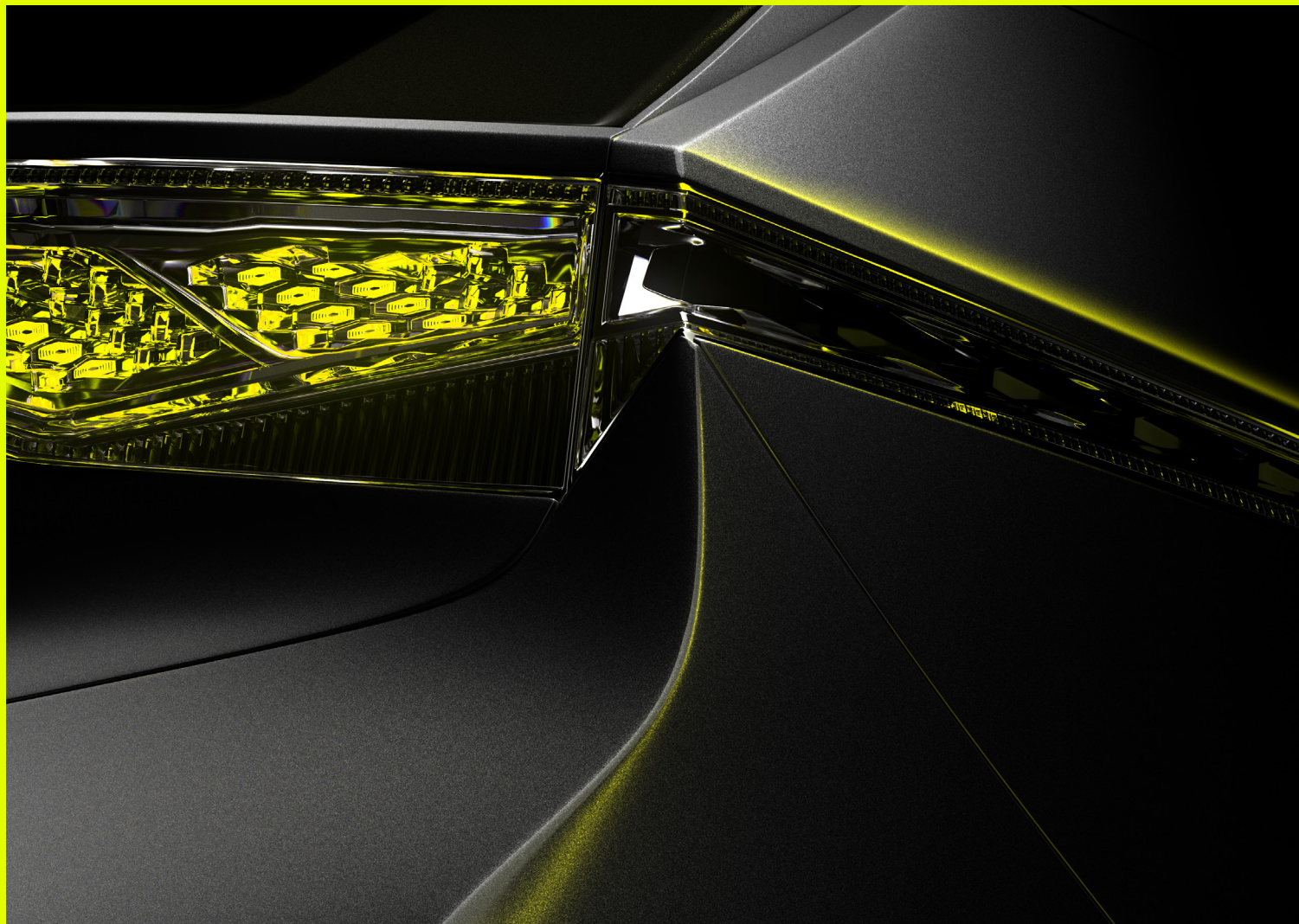
SIGNAL
INTERCONNECT
DESIGN SOLUTIONS

ENNOVI™

ENNOVI.COM



ENNOVI



Our interconnect solutions help EV makers manage the signal density and communications challenges due to the proliferation of sensors, actuators, controllers and other real-time functions for drivetrains, steering, braking, safety, and driver-assist systems.

- + Cost-effective integration of sensors and in-vehicle networking
- + Support for high signal-density and low-latency data flows
- + Vertically integrated stampings and molded modules
- + Custom design collaboration from inception through production

Sensor



CHALLENGES

- + Sensing the constantly changing environment and identifying potential hazards accurately in real-time remains a challenge.
- + Complex onboard sensor networks need high-speed interfaces with robust dielectric materials and packaging.



SOLUTIONS

- + Our core enabling technologies provide a wide range of solutions, delivering **reliable and repeatable connections** within robust packaging.

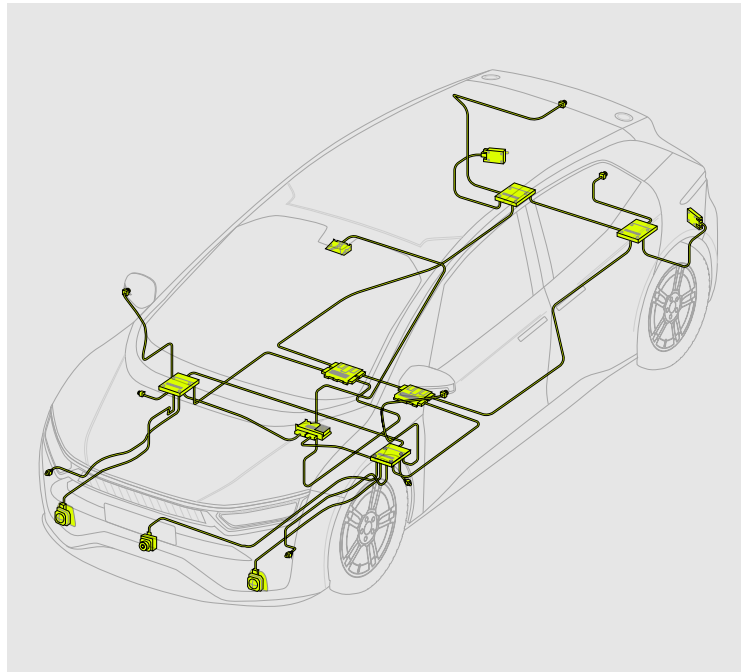


BENEFITS

- + We enable **complex, robust and reliable RADAR, LiDAR and camera sensors**.
- + Our vertically integrated capabilities and global footprint ensure **fast turnaround and short time-to-market**.

OUR PRODUCTS

- + Automotive Ethernet Connector, ENNOVI-Net
- + Radar Interconnect
- + LiDAR Interconnect



Controller



CHALLENGES

- + As the number and types of sensors increase, the sheer amount of **data that must be meshed together and analyzed in real-time** becomes a challenge.
- + Modern ECUs require **faster speed communications while retaining signal integrity** in compact packaging.



SOLUTIONS

- + We provide a range of solutions for **higher speed signaling, dense pin-counts, and small footprint** while delivering robust, reliable and repeatable connections.

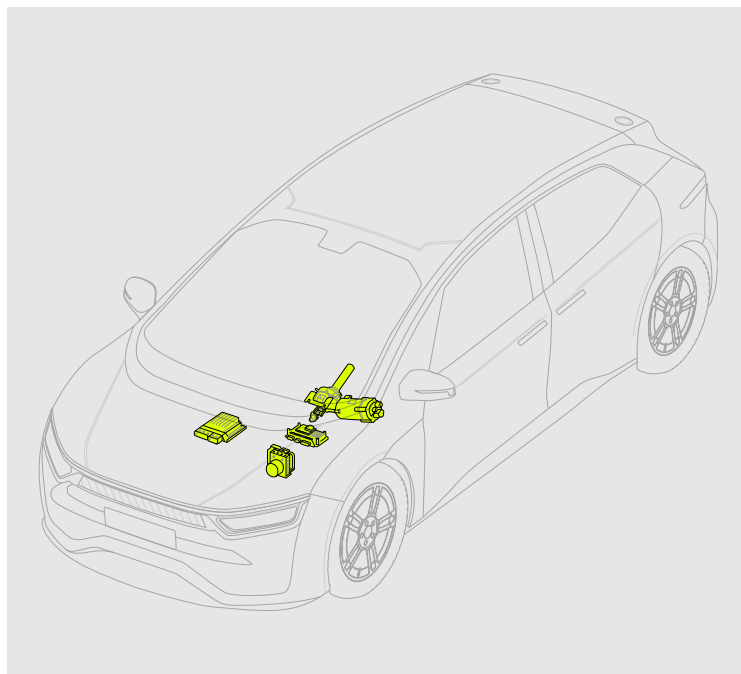


BENEFITS

- + We enable compact Electronic Control Units (ECUs) that support **reliable high-speed transmission**.
- + Our vertically integrated capabilities and global footprint ensure **fast turnaround and short time-to-market**.

OUR PRODUCTS

- + High-Pin-Count Header
- + Integrated Connector Housing
- + Automotive Ethernet Connector, ENNOVI-Net



Steering & Braking



CHALLENGES

- + **Safety and compactness** remain the top concerns in developing steering and braking systems.



SOLUTIONS

- + Our solutions for high-density board-to-board connection deliver **reliable connection in a highly configurable and compact form factor**.

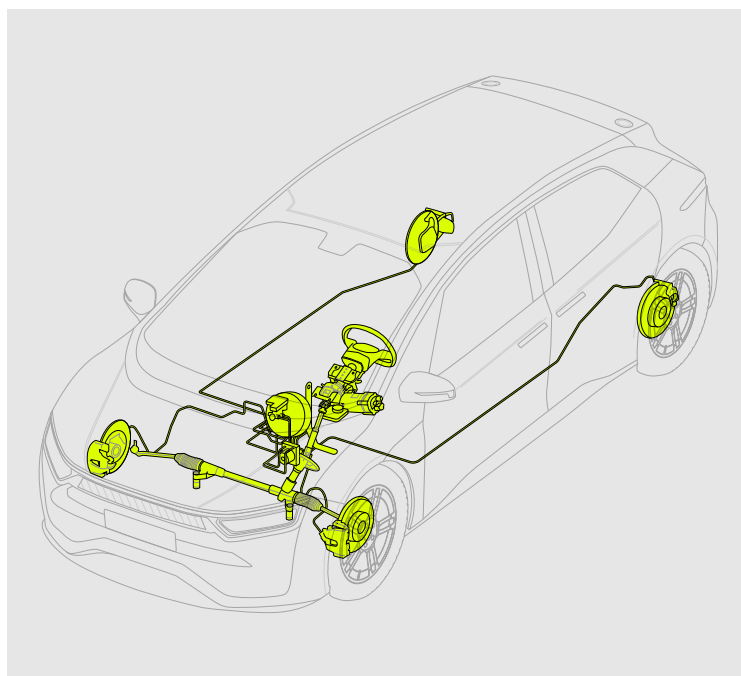


BENEFITS

- + **Enhanced design flexibility** in the development of steering and braking systems.
- + Our vertically integrated capabilities and global footprint ensure **fast turnaround and short time-to-market**.

OUR PRODUCTS





- + Multi-Row Board-to-Board Connector

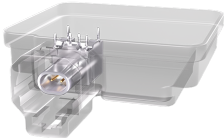




Applications & Capabilities

ENNOVI signal interconnects, ECU connector solutions and Press-Fits are configurable and customizable across the entire electric drive control system.

The table below provides a quick reference regarding applications for the various ENNOVI offerings.

PRODUCTS	RADAR INTERCONNECT	LIDAR INTERCONNECT	HIGH-PIN-COUNT HEADER	INTEGRATED CONNECTOR HOUSING
IMAGES				
APPLICATIONS	Sensor	Sensor	Electronic Control Unit	Electronic Control Unit
CAPABILITIES	Precision Stamping Insert Molding Plating PVD Coating Membrane Welding Dispensing Air Leakage Testing Automation Assembly	Precision Stamping Insert Molding Plating PVD Coating Membrane Welding Dispensing Air Leakage Testing Automation Assembly	Precision Stamping Molding Plating Stitching Automation Assembly	Precision Stamping Insert Molding Plating Ultrasonic Welding Laser Marking Automation Assembly

PRODUCTS	AUTOMOTIVE ETHERNET CONNECTOR	MULTI-ROW BOARD-TO-BOARD CONNECTOR	PRESS-FIT
IMAGES			
APPLICATIONS	Electronic Control Unit	Steering & Braking	Sensor Electronic Control Unit Steering & Braking
CAPABILITIES	Precision Stamping Molding Plating Automation Assembly	Precision Stamping Insert Molding Plating Modular Snap-in Design Automation Assembly	Precision Stamping Plating