



HDBaseT Automotive

Driving the In-Vehicle Architecture of the Future

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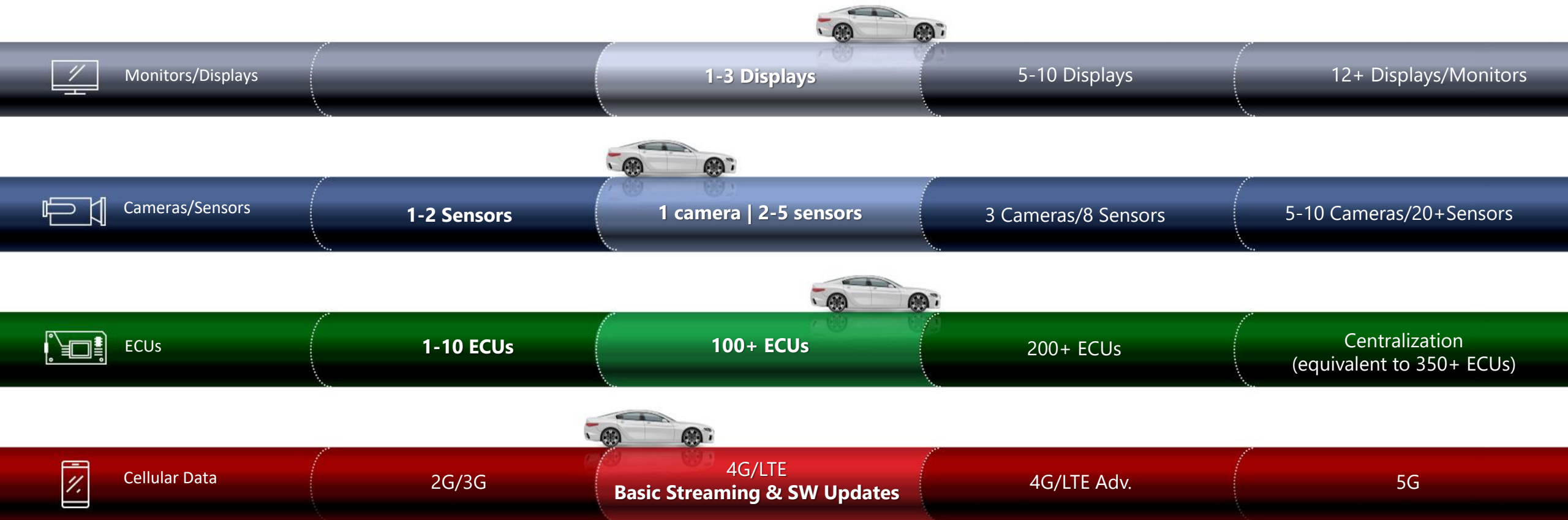
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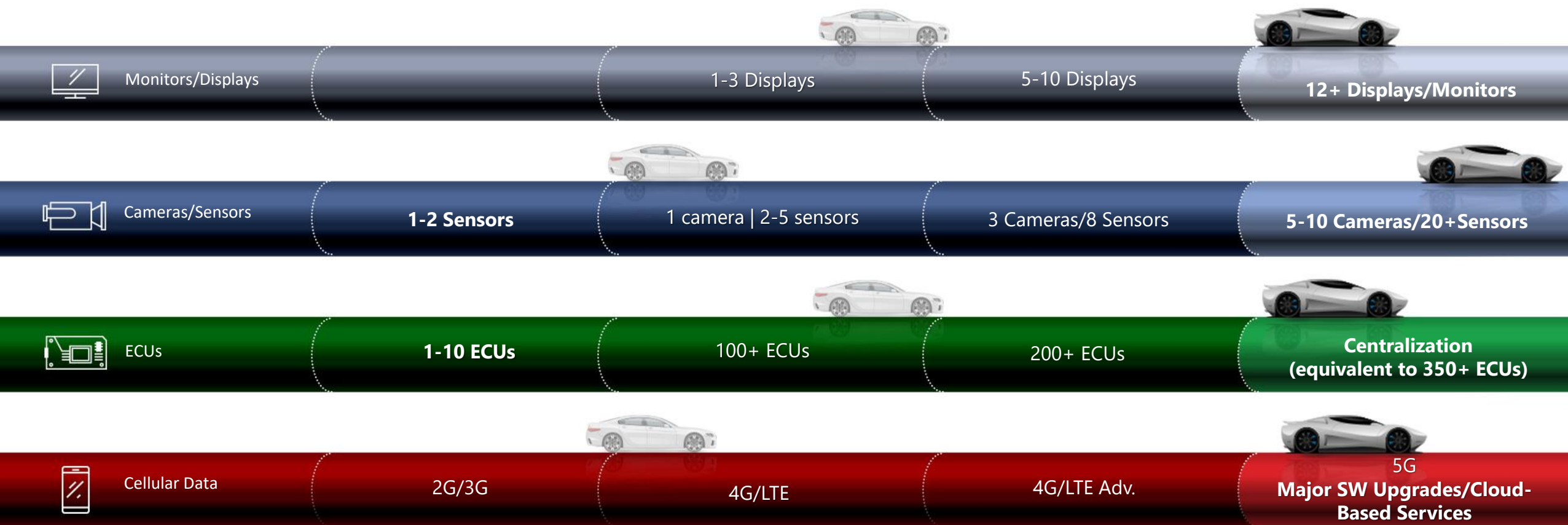
Let's talk about the
elephant in the car.

Let's talk about
in-vehicle connectivity.

Today

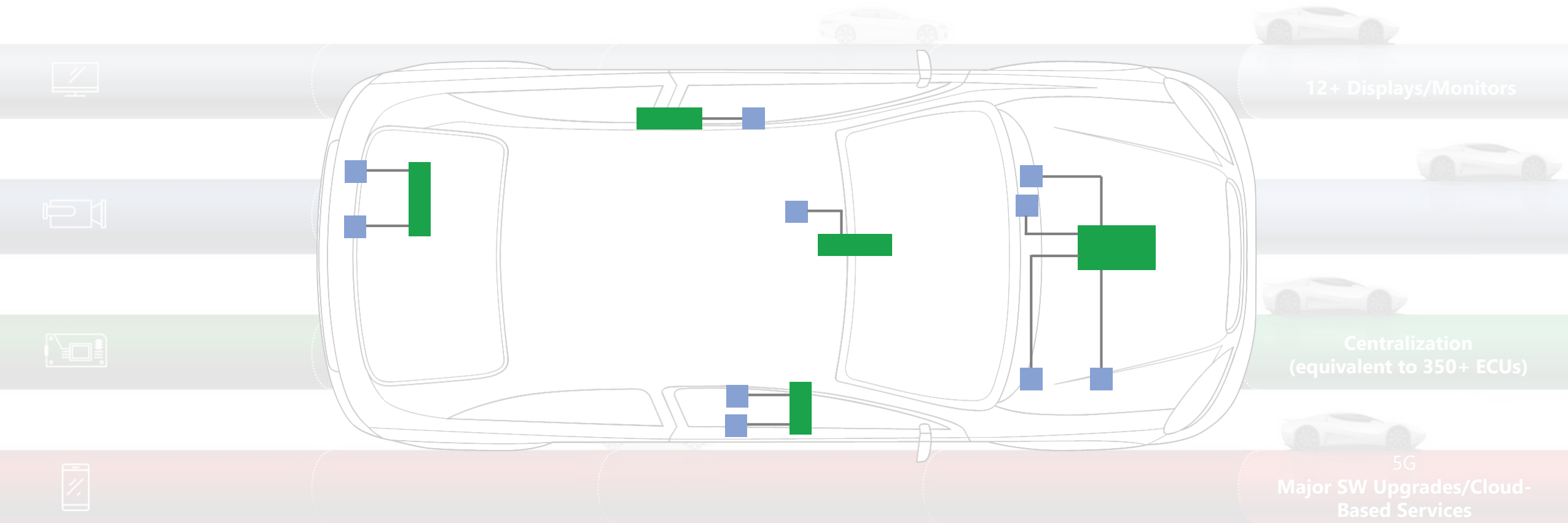


The Future Requires a Technological Leap



Stages in Vehicle Architecture Progression: Entry Level

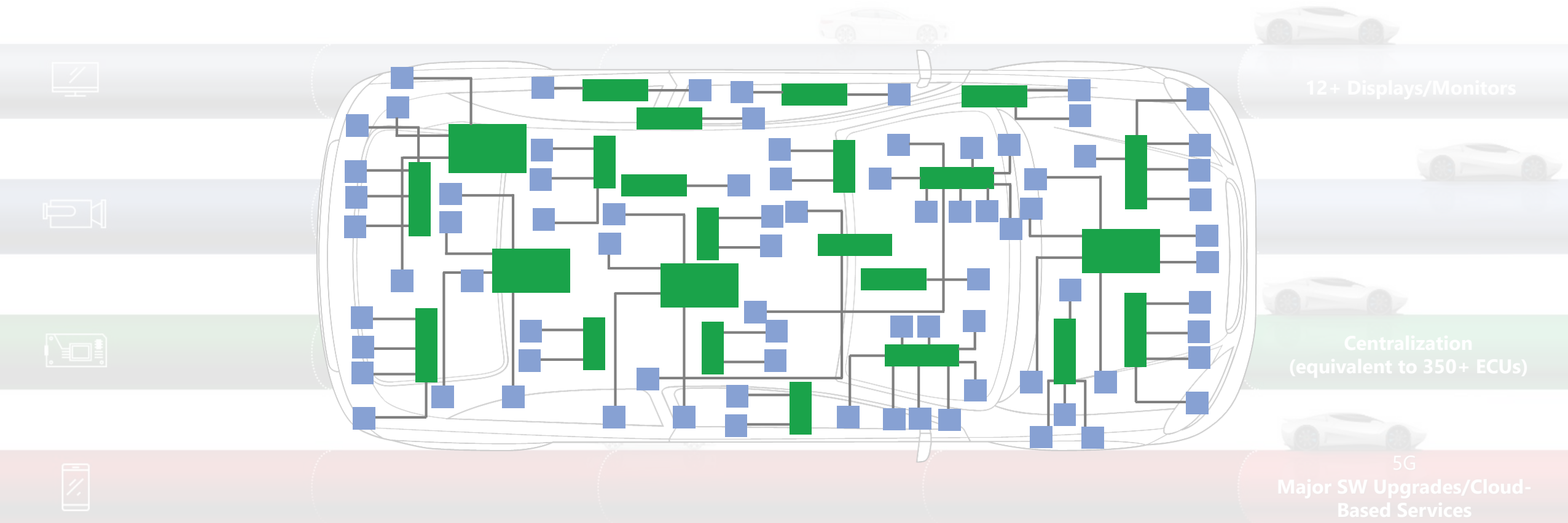
- End Node Devices
- ECU/Computing Units



Basic Electronics & Connectivity

Stages in Vehicle Architecture Progression: Advanced

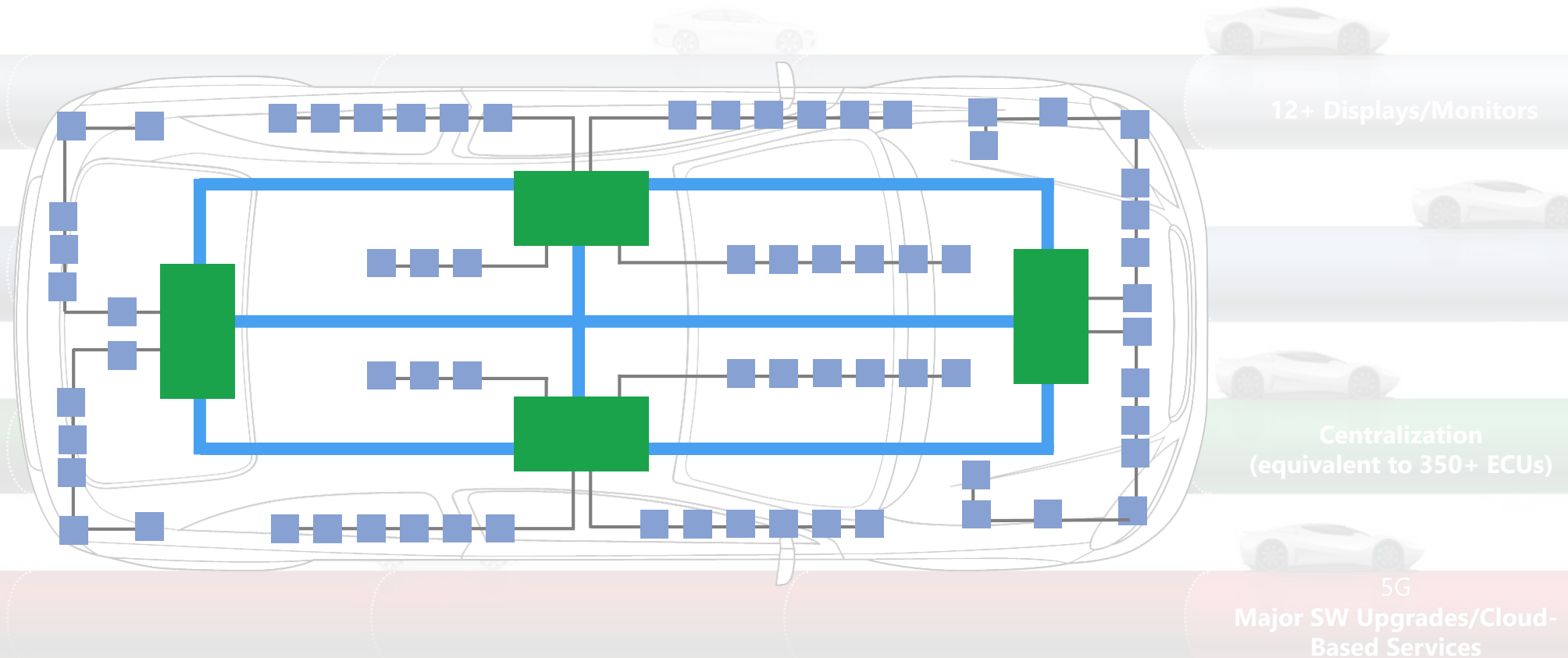
- End Node Devices
- ECU/Computing Units



More Cost, More Complexity

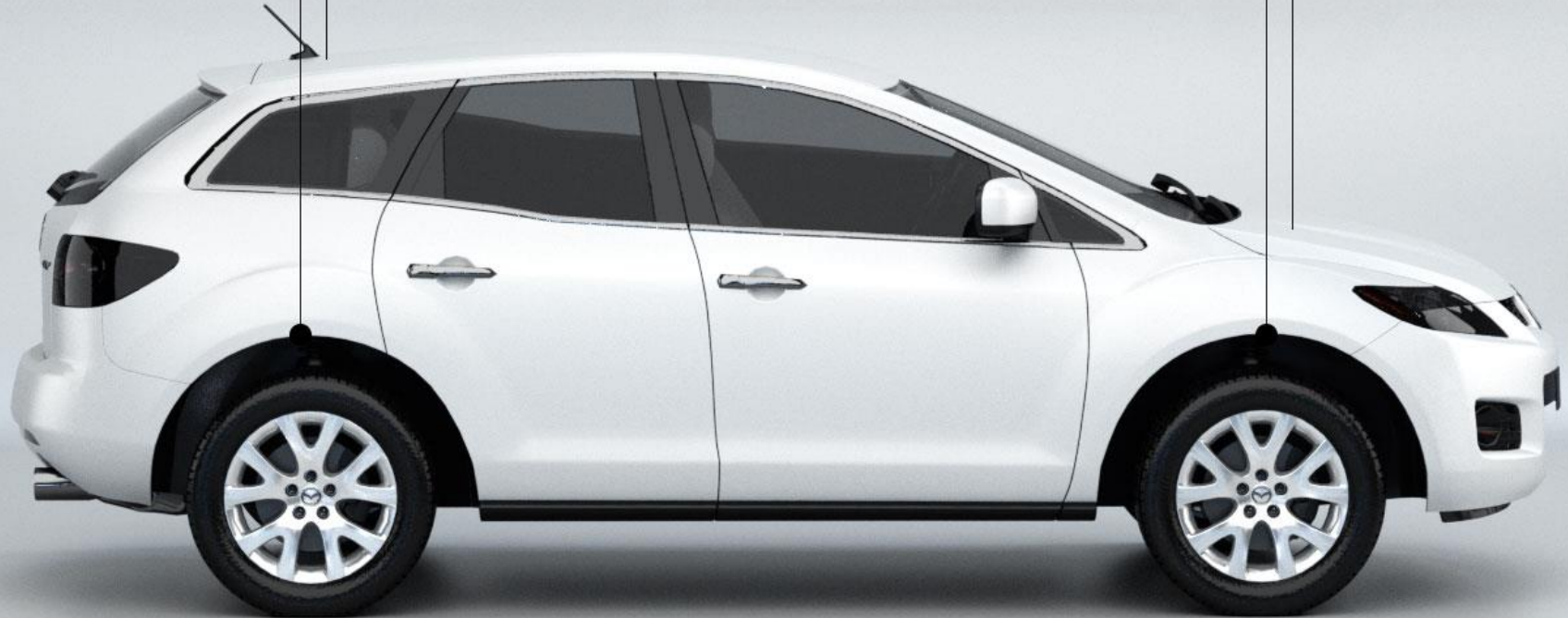
Stages in Vehicle Architecture Progression: Future

- End Node Devices
- ECU/Computing Units



Reduced Cost & Complexity

A Data Center on Wheels?



Autonomous vehicles will use **4,000GB** of data per day

Source: Intel



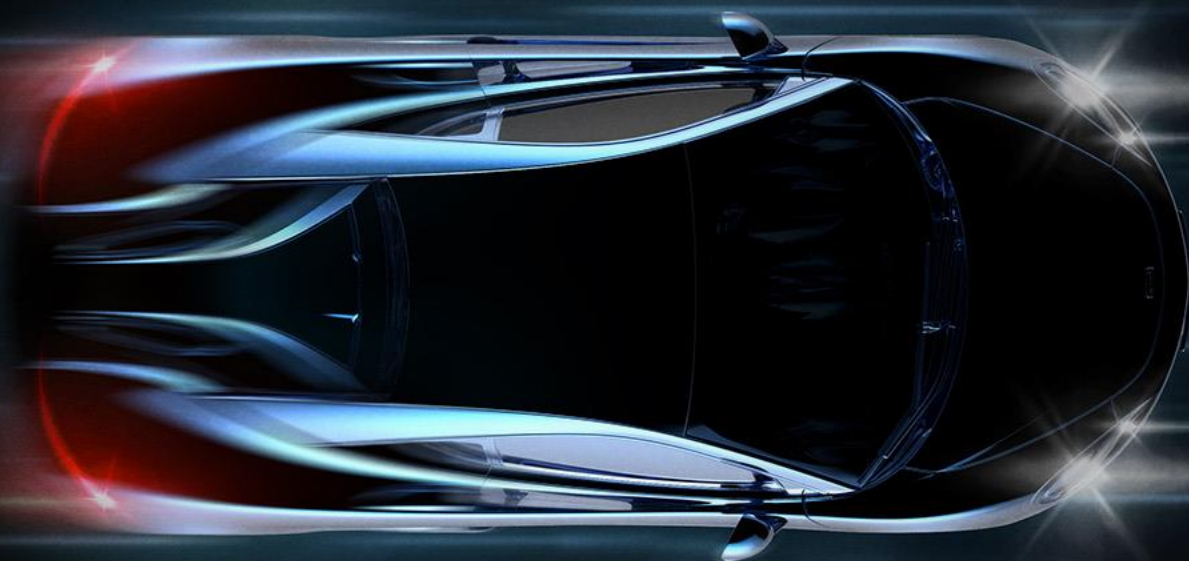
Time for a New Approach

Limitations of Existing Connectivity Solutions

- > **Too slow to support advanced architectures** – more bandwidth is needed
- > **No common solution** – different use cases require different connectivity technologies
- > **No native system convergence** – gateways must be used as data bridges
- > **Use costly wiring harnesses** – shielded, expensive cabling is needed to overcome EMC challenges
- > **Wiring length is limited** – imposes constraints on system topologies

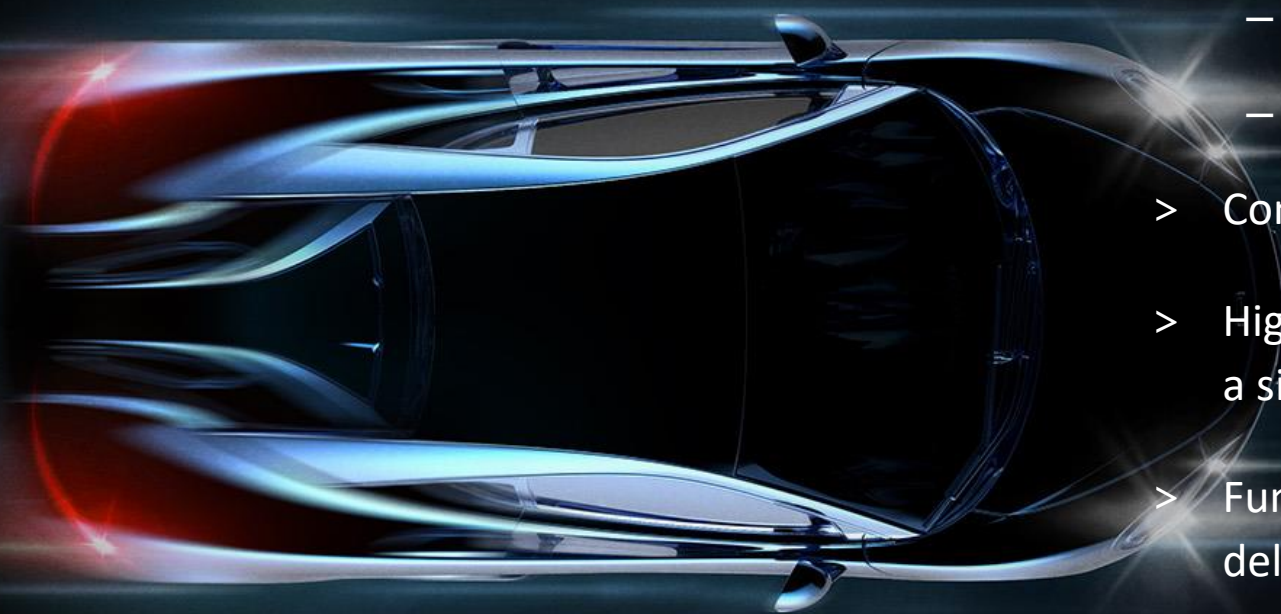


A CONNECTIVITY REVOLUTION IS REQUIRED.



**HDBaseT Automotive:
The Future is Here.**

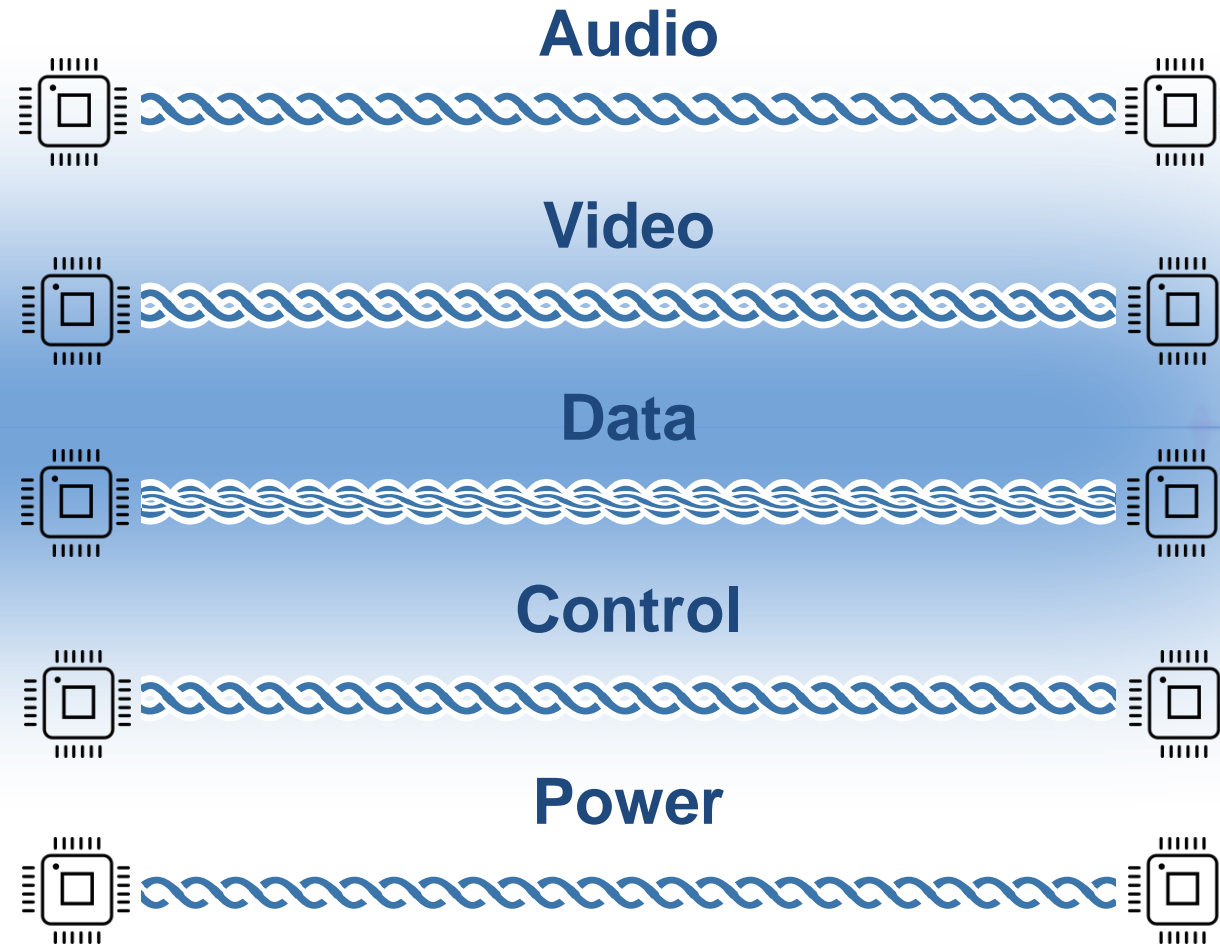
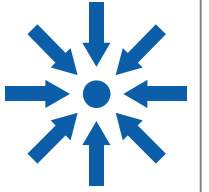
HDBaseT Automotive: Delivering Smart Connectivity



- > A single technology solution to address all use cases
 - Asymmetric or symmetric links
 - Various multi-gig link speeds
- > Convergence of multiple native data interfaces on one link
- > Highly robust EMC performance enables 15m/50ft reach over a single cable (UTP/STP/Coax) with up to 4 inline connectors
- > Functional safety through redundancy, reliability and all-delivered protocol
- > Suitable for point-to-point and networking topologies with near-zero latency

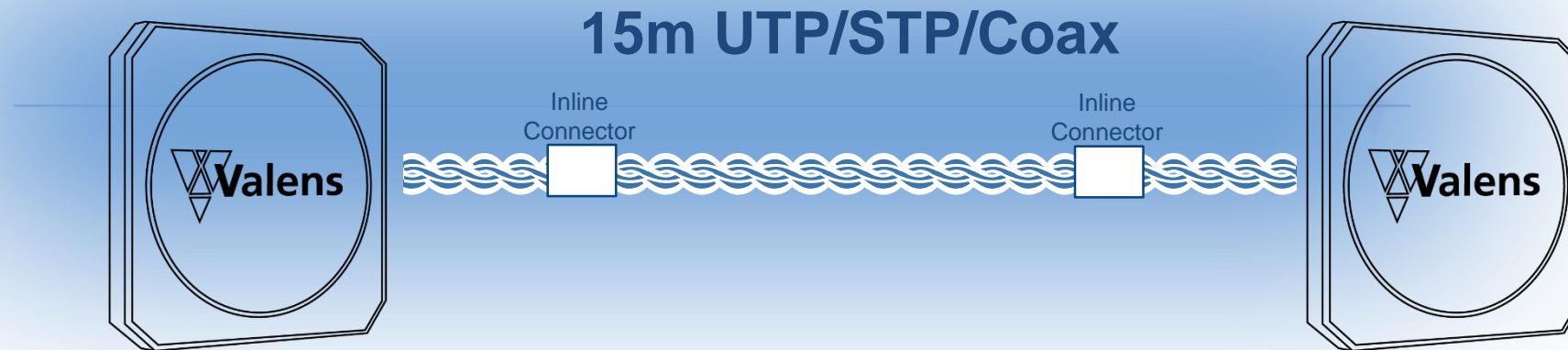
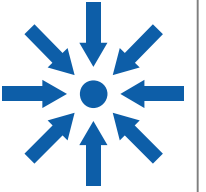
Connectivity Optimization Through Convergence

Reducing links, connectors and chipsets



Connectivity Optimization Through Convergence

Reducing links, connectors and chipsets



Delivering Optimized In-Vehicle Connectivity



Multi-Gigabit
Bandwidth



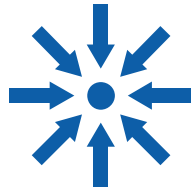
Low Latency



EMC



Robustness



Connectivity
Convergence



Cyber Security



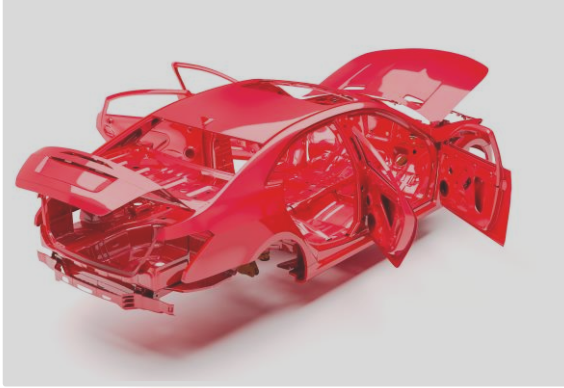
Diagnostics

Unprecedented Bandwidth

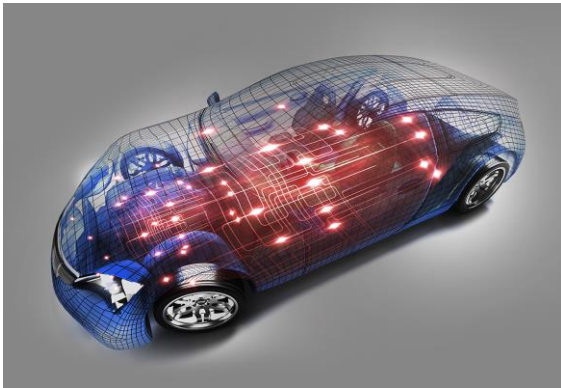


Tunneling of multi-Gigabit, bi-directional, simultaneous streams of high-definition video & audio, data, USB, and power over a single pair; scalability over multiple pairs

Applications



**Body/Chassis
Connectivity**



**High-Performance
Computing**



**Infotainment/
Telematics**



Autonomous



Thank you

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