Ensuring Reliable Networks TTTech

Central Platform ECU for Advanced Driver Assistance Systems

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Ensuring Reliable Networks TTTech

Piloted Driving

Ensuring Reliable Networks TTTech

Reliability

Robustness

High-Availability

High-Performance

Safety

Fail-Operational

Electronic Robustness for a More Electric and Connected World

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Real-Time Internet of Things

Autonomous & Near Autonomous Operations

$1.9 Trillion

Economic impact of near autonomous cars by 2025

25+ Billion

Embedded and intelligent systems by 2020

Every 2nd

Embedded device will be safety relevant by 2020

Safety & Reliability

Autonomous Operations revolutionise the industry

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Piloted driving is one of the top three areas of innovation in the automotive industry

1. Electrification

2. Connectivity

3. Piloted driving and parking

Source: Audi

Audi Vorsprung durch Technik

From Assistance to Autonomous Operation

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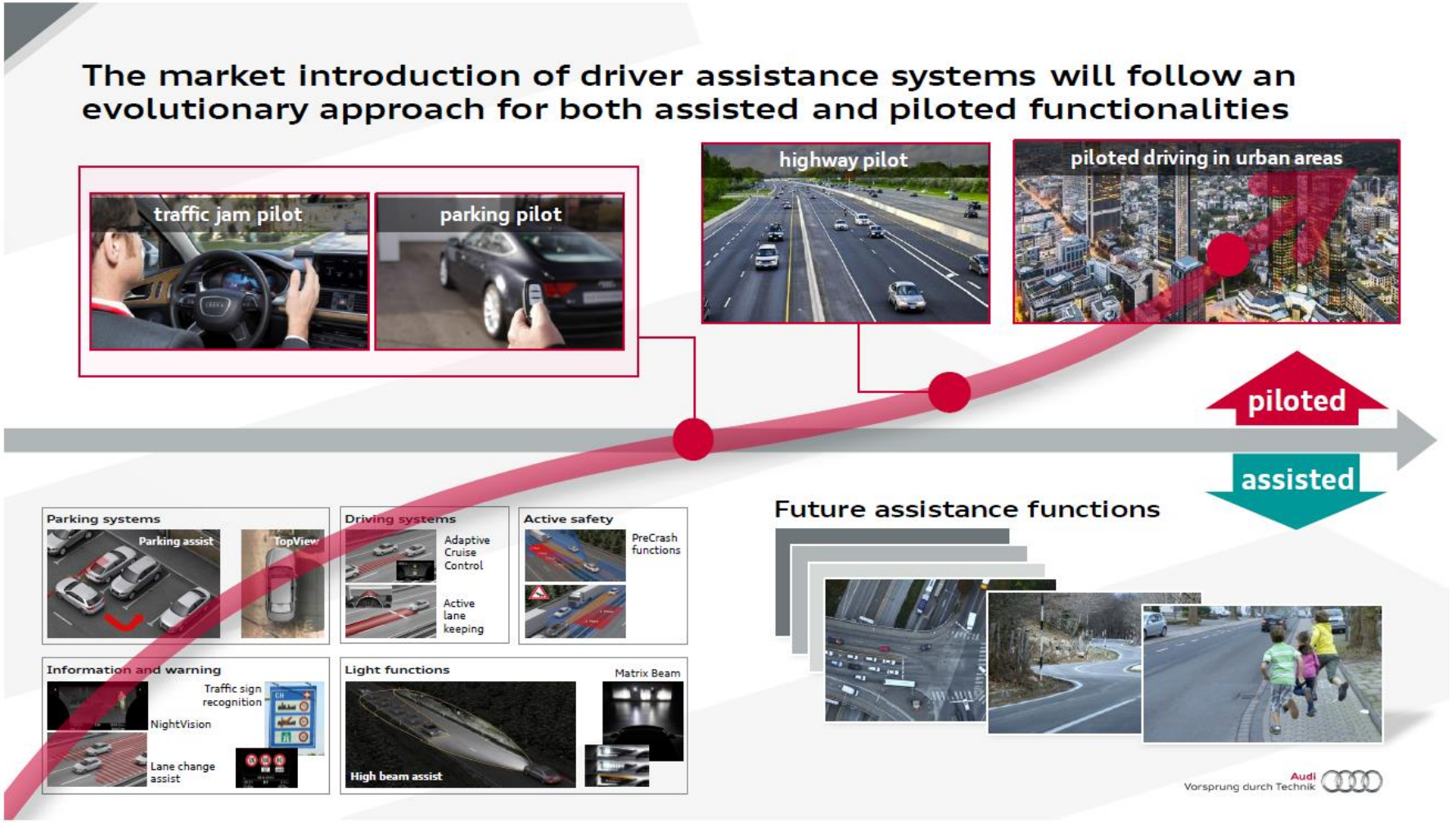

Source: Audi

Advanced Driver Assistance Systems require Safety

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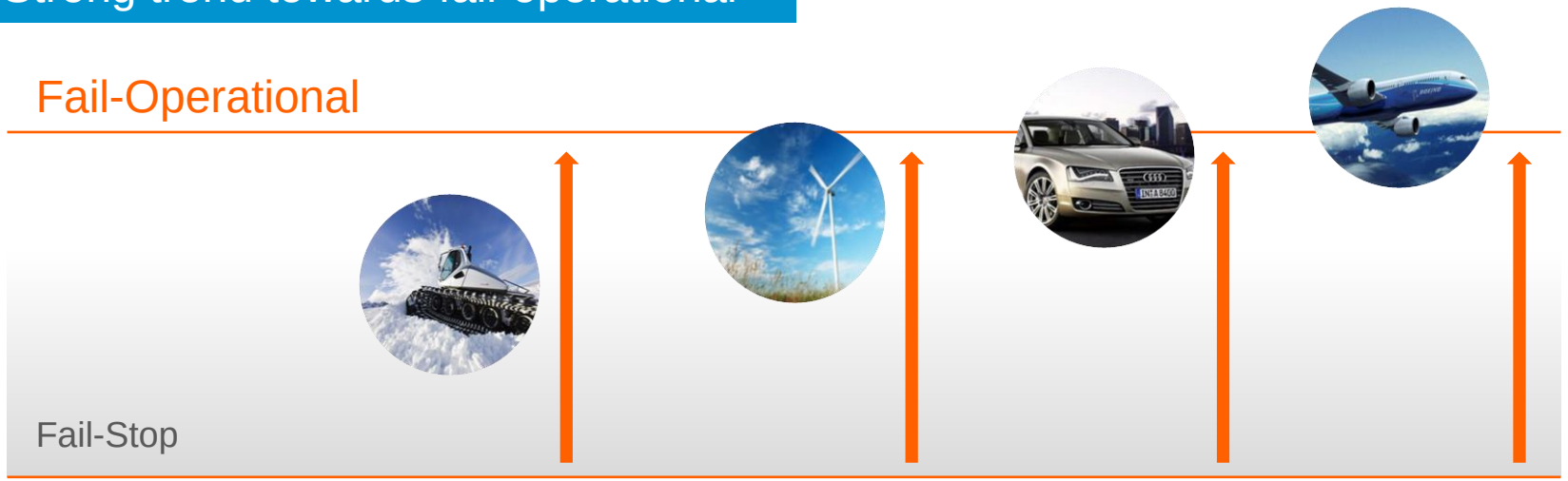
Strong trend towards fail-operational



Autonomous Operations demand for a safe platform

- High-Performance Processing
- Safety up to ASIL D according to ISO26262
- Scalability platform – from entry level ADAS to automated driving
- Integration of application software from several sources

zFAS – High-Performance ECU

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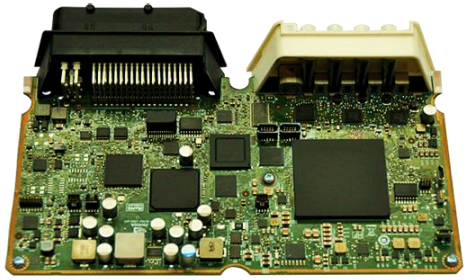

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> Our goal is leadership in piloted parking and piloted driving. For this purpose TTTech and Audi are developing a highly advanced high-performance central electronic control unit.
>
> Ricky Hudi, Head of Electronics, AUDI AG

Piloted Driving Experience

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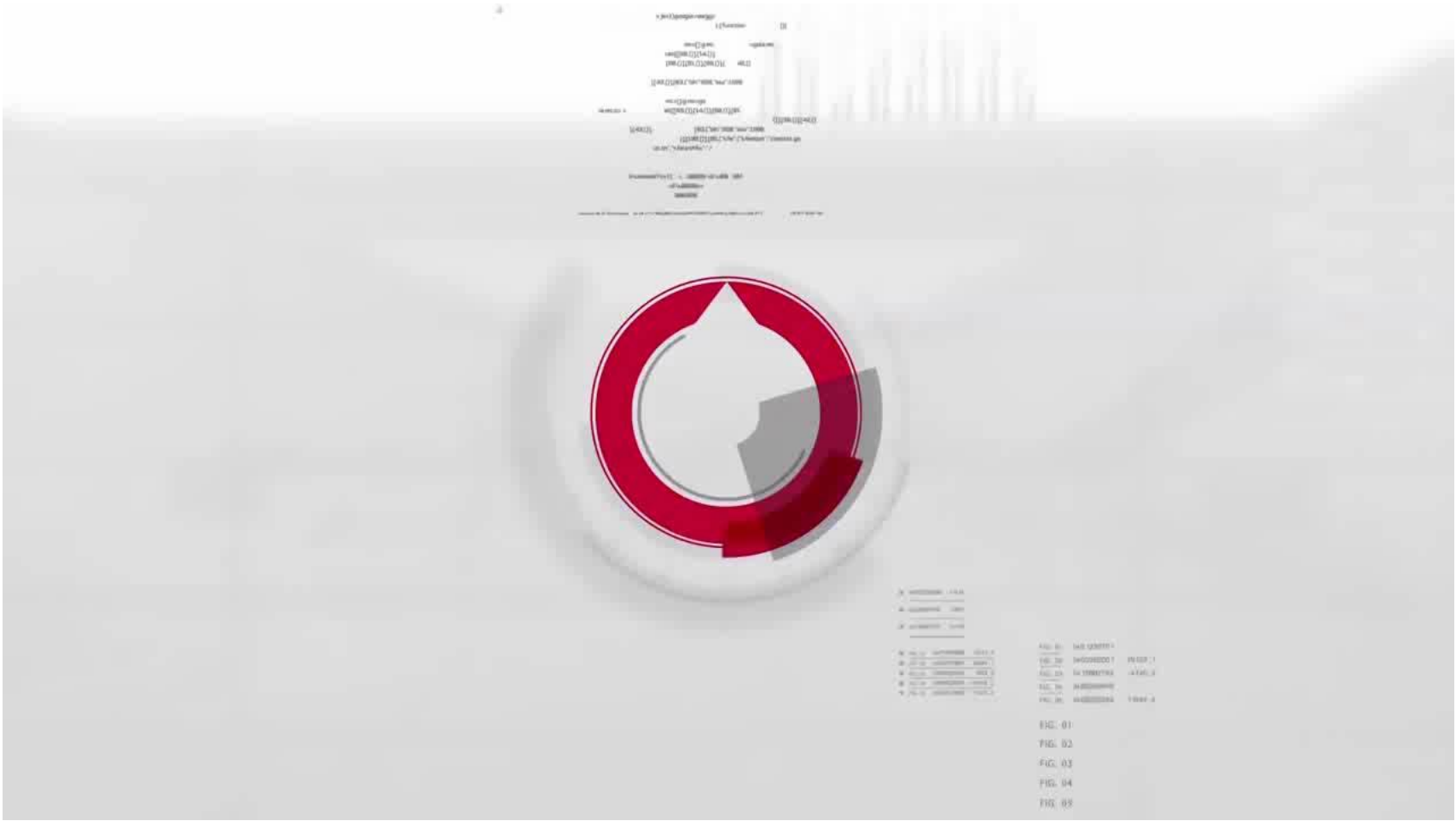

High Performance Computing

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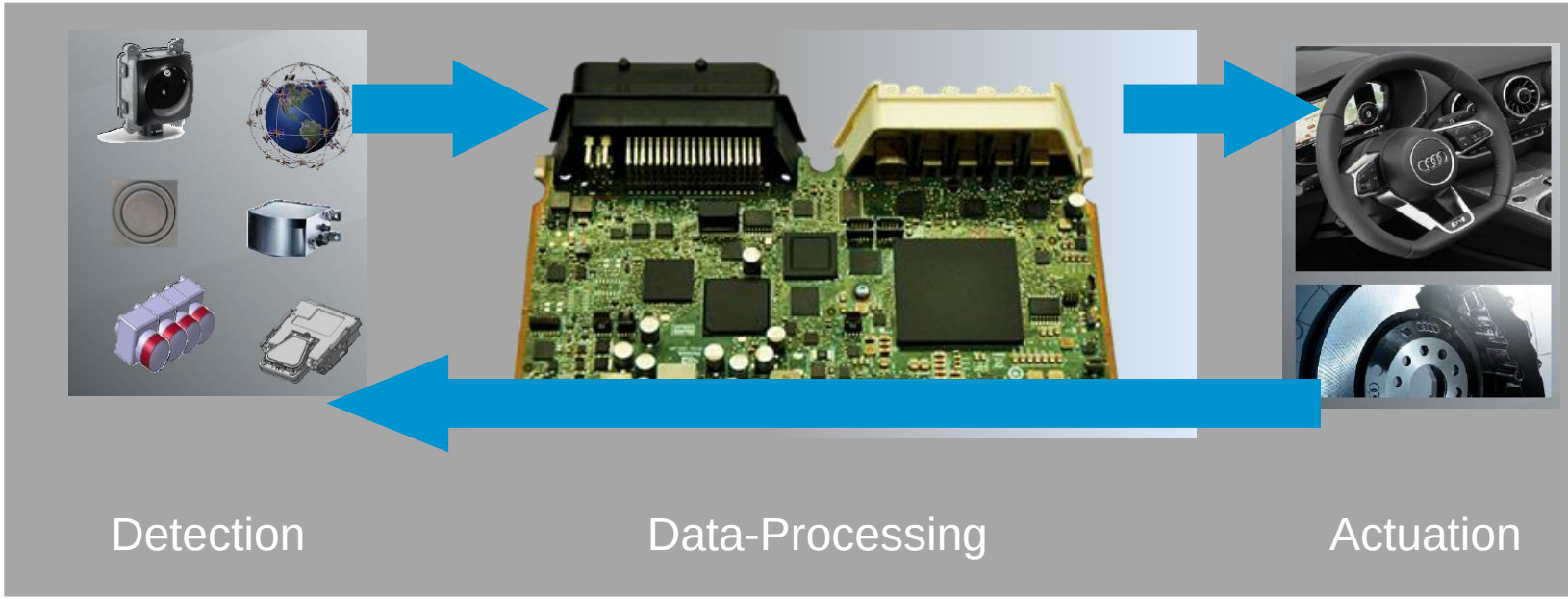

- A large number of sensors and redundant sensor technologies ensure the surroundings are reliably identified
- The central ADAS-ECU processes an enormous amount of input data and several different application software modules and generates input for safe actuation of steering and braking systems

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