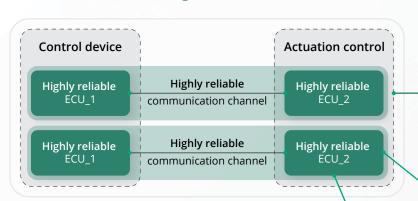


Enabling guaranteed continuous operation, even in the event of safety-relevant electronic system failures



Actuators



QM

ASIL D fail-operational control system

Fail-operation Fail-safe safety application safety app Safety Safety fail-operational OS Full-featured stack **AUTOSAR** stack Critical peripheral registers Fail-operational Non-fail-operational extension

Classic AUTOSAR



Cost-efficient

- Hardware-optimized architecture
- Minimized safety re-qualification and maintenance efforts



Accelerated time-to-market

- Rapid upgrade of existing systems enabled by the seamless integration
- Most relevant hardware platforms supported



Processing performance

- Highly efficient safety design for guaranteed continuous operation
- Minimal CPU resources required

Unique software solution for fail-operational control system using Classic AUTOSAR

An innovative safety concept based on reducing software size and complexity, allowing separation and isolation of the fail-operational and non-fail-operational data communication paths and application execution. Elektrobit's solution contains a comprehensive **ASIL D** - qualified feature set, crucial for future automated driving and x-by-wire systems, ensuring guaranteed continuous operations while addressing key fail-operational requirements. Your existing AUTOSAR fail-safe systems can be easily transitioned into fail-operational systems, saving development time and resources.



Efficient separation and isolation of fail-operational and non-fail-operational application execution



Updates needed in the non-fail-operational part of the ECU application do not require safety re-qualification



Up to 50% savings on hardware cost



Maximized utilization of CPU



Classic AUTOSAR-compliant



ASIL D safety-qualified