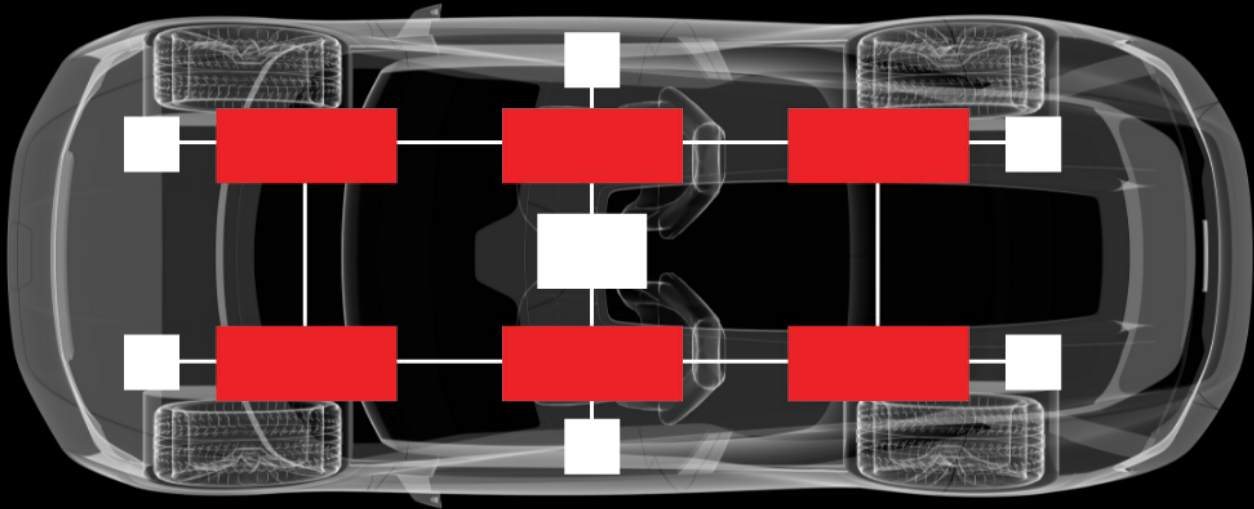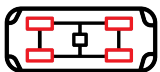# Zonal Architecture Solution
Design zonal architectures that adapt to changing needs

Achieve more efficient and flexible vehicle E/E architectures

Build zonal networks that have the flexibility and resiliency to support diverse applications of mixed-criticality throughout vehicle lifetimes.

Dynamically adapt zonal networks at any time

Manage zonal network and vehicle service configurations from the cloud with lightweight policies to accommodate evolving needs for new in-vehicle applications and features.

Optimize for mixed-critical applications

Topology and service aware provisioning allows critical traffic to be prioritized while ensuring flexibility to continually support new updates and changes.

Eliminate points of failure with built-in resiliency

Provision the network to handle link outages and reconfigure the network dynamically should such events occur, guaranteeing delivery of safety-critical messages.

SONATUS

Zonal Architecture Solution features

Ensure robust network resilience and Quality of Service for critical functions, dynamic traffic configurability and optimal performance of Service-Oriented Architecture (SOA) applications. Centralize management of zonal networks and manage vehicle-wide distribution of updates.

Dynamic configuration

- Network routing
- Quality of Service
- Network security
- Frame Replication and Elimination for Reliability (FRER)
- Time synchronization

Network monitoring

- Network visualization and diagnostics
- Performance management
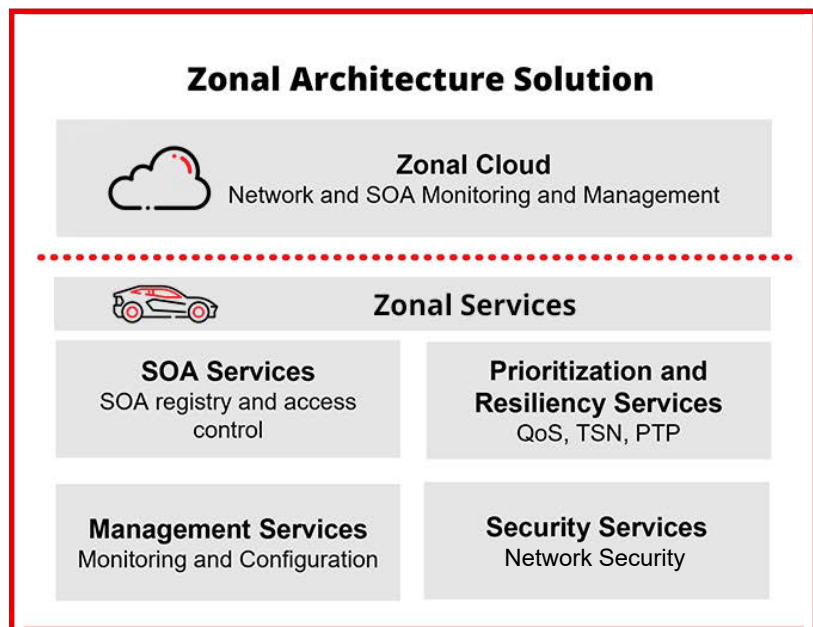- Ethernet and CAN network monitoring

SOA management

- Registry for service discovery and subscription
- Access and communications management
- Security, health and performance monitoring

Update framework

- Distribution of updates across all zones
- Applied to Ethernet and CAN ECUs
- Configuration policies, applications, containers, and more

Solution Partners

NXP

MARVELL

BROADCOM

Zonal Architecture Solution

Zonal Cloud
Network and SOA Monitoring and Management

Zonal Services

SOA Services	Prioritization and Resiliency Services
SOA registry and access control	QoS, TSN, PTP

Management Services	Security Services
Monitoring and Configuration	Network Security

Standards Supported

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