

CONTINENTAL

Automotive Electronics/Embedded Systems

ALTEN ADDED VALUE

Extensive experience with AUTOSAR-compliant software and platform development

Expertise in Ethernet, CAN, diagnostics (UDS), NVM, and I/O hardware stack

Functional safety expertise

Supplemental HILS testing as a peripheral ECU component across different vehicle domains

KEY TOOLS & TECHNOLOGIES

Vector DaVinci, CANoe, Eclipse, winIDEA, IBM Rhapsody, ISO 26262 Functional Safety

KEY DATA

Team Size: 10 Engineers

Time: Since July 2020

Location: USA/India/Mexico

IQP3 Work Package

ALTEN TECHNOLOGY

ESCL SOFTWARE DEVELOPMENT (ASIL D, AUTOSAR)

OVERVIEW

The electronic steering column lock (ESCL) is a security system that locks and unlocks the vehicle's steering column. It is a mechatronic product that combines an electronic control unit with a mechanism to lock the steering column.

The lock and unlock operation is controlled through two microcontrollers, the main micro and the co-micro, to fulfill safety and security requirements.

ALTEN Technology's role is to provide the software.

PROJECT DETAILS

ALTEN Technology team

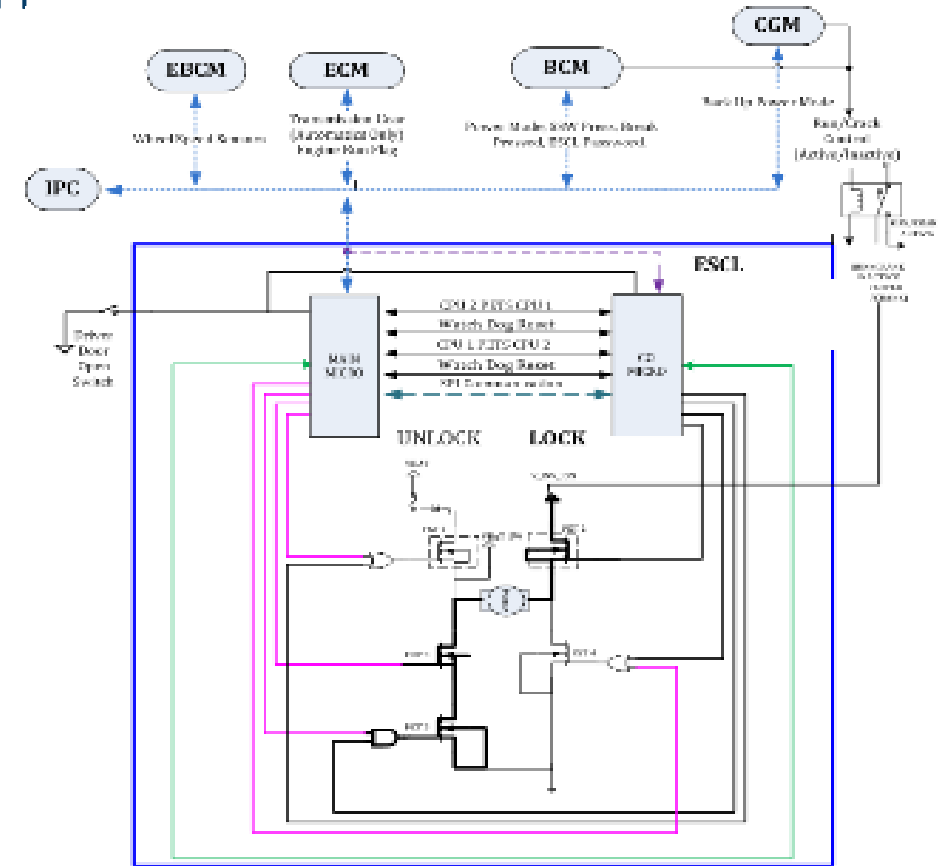
- Coordinated and led development based on technical requirements from Continental; coordinated the teams in India and Mexico
- Responsible for performing the functional safety activities (HARA, FMEAs, TSC, safety concepts, etc.)

ALTEN India team

- Responsible for software architecture (use case, functional and physical architecture, etc.)
- Responsible for software development (implementation, coding, sanity tests, integration, etc.)

ALTEN Mexico team

- Responsible for system engineering
- Responsible for software verification, including the creation of test cases



CHALLENGES

Inconsistent requirement traceability

- System requirements and GM requirements not aligned
- Poor traceability between code and requirements