

# Verification Challenges

## at Infineon Automotive

Martin Ruhwandl

Principal Engineer

Functional Verification

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## 3 Top Challenges

- Safety: ISO 26262
- Multi-site strategy/short term contractors
- Analog-mixed signal engineers vs. digital engineers

# Challenge 1

## **ISO 26262: „Road vehicles – functional safety“**

- Find effective methodologies  
(e.g. fault insertion, fail-save functionality, ...)
  
- Improve verification flow  
(e.g. tracking, traceability, ...)
  
- Requirement based verification

## Challenge 2

### **Multi-site strategy/short term contractors**

- Communication is very time consuming and often underestimated;
- Doing verification with (short term) contractors may not always result in required quality; much of know how is finally lost;
- Shifting verification tasks accross sites may not be ideal to reduce effort and increase quality;

## Challenge 3

### **Analog-mixed signal engineers vs. digital engineers**

- Analog designs may be differentiator for chips ...  
... but it requires that digital controller design works perfectly
- Analog designers should not create digital controller part in mixed-signal
- Verification sometimes seems to be an unknown word in analog design area – at least analog verification methodologies cannot be compared with methodologies of digital verification:  
How to apply digital verification methodologies to analog design?



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