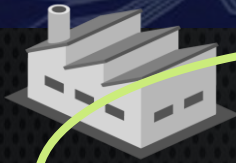


# Functional Safety Services

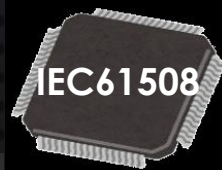
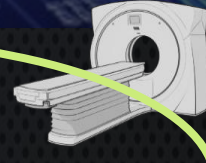
Vtech offers high quality services to achieve functional safety compliant with ISO26262 and IEC61508 standards in LSI development, and to shorten the term and save the cost

- The only independent company in the world with track record for LSI development to cover the entire functional safety flow compliant with the standards
- Offers functional safety management, safety concept, design and verification services aware chip cost and power consumption in LSI development
- Led by Functional Safety Managers (FSM) and Functional Safety Engineers (FSE) qualified for ISO26262 and IEC61508, who have rich experience in LSI design and verification

**Smart Factory**  
Full automation



**Medical equipment**  
Advanced devices



**ISO26262**



**Automobile**  
Autonomous driving

**Industrial Robots**  
Complicated control with sensing technology



## Success Stories

### 1. Industrial robot FPGA for IEC61508 certification

- IEC61508 introduction
- Created checklist for the development flow
- Created design specification format with the traceability
- Built in monitor to calculate the quantitative coverage
- **Development time reduced by 20%**
- **Plus, a 35% cost reduction**

### 2. TOF sensor development for ISO26262 certification

- Safety analysis
- Created Safety Mechanism from safety analysis results
- Performed design and verification
- **Chip cost reduced by 30%**
- **Plus, a 30% power consumption reduction**

### 3. Next generation head light system development

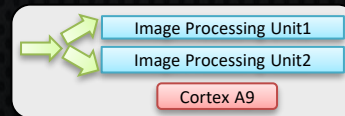
- **ISO26262 introduction for development and quality depts**
- Safety analysis
- Created Safety Mechanism from safety analysis results
- Performed design and verification
- Training for customer engineers

### 4. Functional safety management for ISO26262

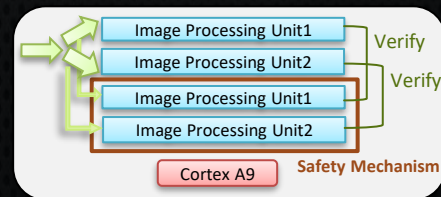
- Configuration Management Leader
- Document Management Leader
- Traceability verification with Reqtify
- **The entire process support with customer safety manager**

## Safety Mechanism case study

### Customer original architecture



### Customer solution Simple duplexing with every cycle comparison



### Vtech solution for success story No. 2

