



# ***AN LHP USE CASE***

***“How ISO 26262 Compliance  
Opened the Doors to New  
Markets for Tier 1 Supplier”***

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# How ISO 26262 Compliance Opened the Doors to New Markets for Tier 1 Supplier

## Company

Customer is a provider of electric vehicle drive-train solutions, traction motors/inverters, and new product development for niche vehicle segments.

## Industries

Specialty and Hybrid Vehicles  
Transportation and Aerospace

## Application Areas

Development and Implementation of the Functional Safety Expressway (FSXpressway) Solution and ISO 26262 Certification from TUV Nord

## Goals of the Project

- Development of ISO 26262 Functional Lifecycle Process for supplier
- Adaptation and Integration of the new ISO 26262 processes and activities with the previous Product Development Lifecycle
- ISO 26262 Certification by TUV Nord in 2018, a worldwide certifying body

## Tools/Technologies/Skills

- ISO 26262 Functional Safety standards
- LHP's FSXpressway Solution
- Functional Safety process implementation
  - Requirement Management Tools
  - Hardware Architecture Metrics Tools (i.e. Medini Analyze)
  - Tool Confidence Evaluation and Qualification

## Challenges

The Functional Safety standards, including ISO 26262, are a barrier to entry for start-ups, small, and large organizations. Aware of the changing compliance landscape, LHP's customer, who is a provider of electric vehicle drive-train solutions, traction motors/inverters, and new product development for niche vehicle segments, decided to invest in their future by approaching LHP to help them with development and execution of the rigorous ISO 26262 process guidelines.

## Solutions

LHP's FSXpressway was the perfect solution for the customer to grow into new markets and ensure a compliant end product for new and existing customers. The FSXpressway allowed LHP to walk our customer through the ISO 26262 guidelines, training, and full implementation and integration into their existing operations. The deliverables of this engagement were the creation and execution of Functional Safety processes and integration of the newly developed processes with their existing operations. LHP also provided support to the customer during the ISO 26262 TUV NORD compliance certification phases.

## Main Features

LHP started this project by performing gap analysis of the current development processes against the requirements of ISO 26262. As part of the solution, LHP mapped the current processes and performed updates to conform to ISO 26262 standards. LHP also worked with the customer to define new processes for which were not previously present for ISO 26262, provided customized documents, templates, and examples for the execution of ISO 26262 and aided in qualification of tools.

## Results

By following LHP's FSXpressway, The customer was able to build their ISO 26262 Functional Safety process from ground zero and obtain TUV NORD ISO 26262 certification. The Function Safety certification from TUV Nord enabled the customer to offer safety critical products and capabilities for the Automotive, Motorcycle and Aerospace market. At the time, the customer was among the first U.S. suppliers of propulsion system electronics, to offer ISO 26262 compliant products to their end customer.

This approach allowed LHP's customer to open the doors to new markets, and spurred an acquisition from a major international automotive industry components and parts supplier.

"We couldn't have done it without LHP's help. We now have a competitive advantage in the marketplace and can grow as the regulations change to cover the expanding vehicle markets."

– President, Tier 1 Supplier