KEY TO EV ADOPTION - INTEGRATED DC-DC + OBC + PDU

Tata Elxsi was involved in conceptualizing a combined architecture that integrates multiple systems into one unit for an OEM customer. ASIL compliant product development where we are responsible for the integrated unit’s software, hardware, and mechanical design.

**Design Challenges**
- Complex architecture due to the integration of multiple subsystems into one
- Need for careful design to meet the performance, safety & reliability requirements
- Simulation of power stages, magnetics design, and simulation

**Our Solution**
- System requirement analysis and architecture design
- Hardware & software requirement analysis
- Development of PoC prototype to prove the concept and advance to the product development stage
- Supplier coordination
- Development of test framework
- Enclosure packaging design, internal packaging
- Proto Manufacturing & mechanical qualification testing

**MARKET**
USA, Asia

**MODEL**
Fixed Price

**PHASES**
Two

**PERFORMANCE**
1st phase completed with all the requirements & architecture finalized

**BENEFIT TO CUSTOMER**
A simpler design that is modular and scalable, resulting in reduced weight, cost, and enhanced reliability.