

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 requirements analysis and architecture design
- Hardware & software requirements analysis
- Development of PoC prototype to prove the concept and advance to the product development stage
- Supplier coordination
- Development of test farmwork
- 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