

EV COMPONENT SUPPLIER CHECKLIST

After defining your component needs and performance criteria for your EV application, use this checklist to help you select the best supplier to ensure success in your design.

EXPERIENCE AND COMPONENT RANGE

Evaluate supplier's experience in supplying components for EV applications.

Confirm supplier's technical capabilities are in line with projected needs for your EV design.

Consider whether or not your supplier is design-responsible.

Ask if the supplier can modify standard products in order to meet your specific requirements.

Request customer references or case studies related to previous projects that the supplier has worked on.

QUALITY AND RELIABILITY STANDARDS

Confirm that supplier complies with established standards and regulations for the automotive industry (e.g., ISO 9001, IATF 16949, PPAP, regulatory requirements, etc.).

Ensure supplier has an internal quality management system in place and review relevant documentation.

Review supplier's estimated parts per million (PPM) defect rate and published quality records.

Evaluate supplier's product development and revalidation testing requirements.

SUPPLY CHAIN RESILIENCE

Review supplier's production capabilities, including average tooling and lead times for shipment and on-time delivery.

Verify that the supplier's production capacity can scale to accommodate fluctuations in demand, design changes, or material shortages.

Confirm that the supplier has processes in place to address the control of changes made to the product or process so that the supply chain and production cycle is not adversely affected.

Consider the location of supplier's manufacturing facilities.

TECHNICAL SUPPORT AND VALUE-ADDED SERVICES

Get details on any value-added services that the supplier offers, including items such as preventative maintenance, testing, local sales support, warranties, material analyzers, safety stock, and engineering design support.

Ask about how the supplier develops their employees, including any internal training they provide to their engineers and manufacturing staff.