



SANMINA

With 20 years of experience in the automotive industry, Sanmina used its well-established proprietary supply chain risk tool to improve flexibility - reducing the company's costs by \$1.5M USD annually

## CASE STUDY

# IMPROVED SUPPLY CHAIN RELIABILITY REDUCES COSTS BY \$1.5M ANNUALLY

## THE CHALLENGES

A global Tier-1 automotive company supplying infotainment electronics to some of the world's leading automobile Original Equipment Manufacturers (OEMs) had identified a critical supply chain risk that could lead to significant consequences: 15 of their products contained high-risk components. These components were either going obsolete, only available from a single manufacturer, or could only be purchased from one source. Any gap in the supply of these components could halt the entire automotive assembly line. In an industry where high quality means adhering to strong safety standards, any component change in the supply chain would also be subject to necessary automotive regulatory scrutiny.

The company realized they needed a global EMS partner with strong knowledge of the numerous industry-specific regulatory certifications to help create a flexible, highly-reliable supply chain, while reducing costs. They chose Sanmina.

## WHY SANMINA

Sanmina's automotive engineers have over 20 years of experience in the automotive industry, improving supply chain risks including component selection and qualification. Our experts also have deep knowledge of the rigorous requirements needed to meet automotive regulatory standards, such as the TS16949, Automotive Electronic Council (AEC), Robustness Validation and the Part Production Approval Process (PPAP).

## SOLUTION: A 1.5M (USD) COST REDUCTION

Using Sanmina's proprietary supply chain risk analysis tool, our highly-skilled automotive component engineers provided cost-effective, reliable alternatives to 45 high-risk components. As a result, the company achieved a cost savings of \$1.5M annually. Our supply chain risk analysis reclassified 25 high risk and 20 medium risk components into low risk categories - significantly improving the company's supply chain reliability and flexibility.

## APPROACH: AN EFFECTIVE SUPPLY CHAIN RISK ASSESSMENT TOOL

Based on years of experience, Sanmina already had an effective, proprietary algorithm in place to perform an initial risk assessment. The tool classified the level of risk using five types of criteria:

- **Multi or Single Sourced:** Components sourced from a single manufacturer put the supply chain at a higher risk. Preferred Suppliers or Customer Directed Suppliers: Preferred suppliers have built a long-standing partnership with Sanmina, and have consistently met delivery and quality goals



- **Life-Cycle Status:** The component can be in many stages of its life-cycle – from the growth phase to the final stages of phase-out and obsolescence. A component currently produced in high volumes is considered lower risk.
- **Environmental & Regulatory Standards:** Components vary in the degree to which they meet certain environmental and regulatory standards, such as the RoHS Compliance. Low-risk components meet current or newer standards.
- **Length of Lead-Time:** Components are categorized based on short, medium or long lead times and allocation status. Parts with shorter lead times create a supply chain that can more easily adapt to changing customer demands.

To reduce supply chain risk and cost, Sanmina delivered a list of cost-effective, reliable substitutions, which included a detailed design impact assessment and final risk analysis. Alternative components identified were:

- Electrically and mechanically, pin-to-pin compatible, with minimal design changes. In cases where design changes were necessary, our component engineers offered alternatives, optimizing cost and supply chain reliability.
- Within the delta qualification specifications. Engineers carefully assessed and compared the technical requirements for each component and chose component alternatives to minimize re-validation and re-qualification activity.
- Validated for supply chain, function and reliability.

By leveraging both Sanmina's experience in the automotive industry, as well as our global supply chain management expertise, a more robust and flexible supply chain was put in place – helping the company save \$1.5M per year.



## ABOUT SANMINA

Sanmina makes some of the most complex and innovative optical, electronic and mechanical products in the world. Recognized as a technology leader, Sanmina provides end-to-end design, manufacturing and logistics solutions, delivering superior quality and support to Original Equipment Manufacturers (OEMs) primarily in the communications networks, computing and storage, medical, defense and aerospace, industrial and semiconductor, multimedia, automotive and clean technology sectors.

More information regarding the company is available at <http://www.sanmina.com>.