

# CIREXX RESTORES FAITH IN RIGID-FLEX TECHNOLOGY AFTER INITIAL FAILURES

## CLIENT / INDUSTRY

OEM  
Designer/Developer

## PROJECT SIZE

\$200,000 Project  
1,000 Units

## THE CLIENT

A High-Technology global OEM (original equipment manufacturer) that designs and develops high-end board-level solutions and is known for leveraging industry-leading FPGA technology to reduce complexity and time to-market risks for their customers.

## INTRODUCTION

The customer had procured rigid-flex circuit boards from a supplier which, upon receipt, and during evaluation, did not function properly. After losing valuable time trying to resolve these issues they reached out to Cirexx as an alternative. Cirexx immediately allocated the necessary resources to assist the OEM in getting their project back on schedule, and in restoring their faith in Rigid-Flex Circuit Boards as a viable interconnect solution.

## NEEDS ASSESSMENT

The customer needed to quickly identify the root cause of the failures, revise this design as necessary and have new items manufactured.

All of this needed to happen quickly and against the backdrop of a customer who was becoming leery of the technology.

**“The customer needed to quickly identify the root cause of the failures, revise this design as necessary and have new items manufactured quickly”**

Customer engages Cirexx in a panic mode with failed product and loss of confidence in the technology

Cirexx evaluates the product and the design documentation

Cirexx identifies the failure mode and recommends revisions

Cirexx assists the customer in the implementation of the revisions and manufactures new working, reliable boards

## SOLUTIONS

Cirexx identified the root cause of the malfunctioning boards – impedance was incorrectly modeled and designed. Cirexx met with the customer’s key personal and others in the OEM supply chain, including engineering and executive management. Initiated and facilitated design guidance discussions for rigid-flex printed circuit boards and conducted a thorough product analysis specifically focused on where and how the observed samples likely had failed. After identifying the key areas of failure Cirexx recommended the solution. Cirexx worked with the customer to implement design revisions, including construction changes. Cirexx modeled the impedance with the industry-leading software and fabricated new Rigid-Flex Circuit Boards in 5 days – 1/3 the turn time of the previously supplied failed items.

**“Cirexx was able to make new working parts in 5 days versus the 3 weeks from the original supplier.”**

## FINAL OUTCOME

Cirexx was able to dedicate highly focused attention and critical needs engineering to the customer’s problem. Cirexx quickly analyzed the situation, identified the problem and recommended appropriate solutions. As a result the OEM was able to pivot to the Cirexx solution, rescue its product launch window, restore it’s faith in Rigid-Flex technology and invite Cirexx to become a partner in future Printed Wiring Board design, fabrication and assembly needs.

## HIGHLIGHTS

- Quick allocation of competent resources immediately after initial engagement
- Rapid failure analysis and development of alternatives
- Recommend solutions to not only resolve, but also improve performance
- Create a new supply chain partnership