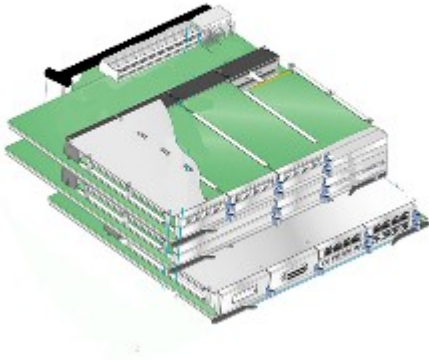


Customer

This project was performed for a Tier 1 supplier of Packet-Optical platforms and telecom applications, who engaged AimValley to develop a mezzanine card that would slide into their chassis.



Customer Objectives

- > Fast turn-around time on the design of a mezzanine board.
- > Need for Telecom carrier-class reliability, quality and performance.
- > Compatibility with the platform itself and high-speed signals.
- > Adherence to criteria for clock signals and synchronization.

AimValley Solution

Hardware design of the 800 Gigabit per second mezzanine board.

- > Interface between high-speed coherent optical board and packet switch backplane & modules.
- > Scalability to 1.6 Terabits per second for envisioned future optics.
- > Gearbox and timing between 50G PAM4 and 25G.

Key Technologies

- > High-speed digital circuitry design.
- > 3D Electro-Magnetic (EM) field simulation.
- > Printed Circuit Board layout.
- > Optimizing Performance



Results and Added Value

📍 Efficient

First-Time-Right design on fast turn-around due to AimValley's experienced engineers, coupled with an intelligent leverage of tools such as EM simulation.



Partnership

AimValley Engineers worked closely with customer's team to ensure compatibility with coherent optics, packet switch and overall platform.

★ Successful

Fixed cost project done rapidly within defined timelines that met quality and reliability criteria.



Innovation

Dealing with 800G, 50G PAM4 and 25G data steams.