

Customer

A leading supplier to the semiconductor industry.

“Open communication, trust & competence. We are impressed by AimValley’s professionalism and competence.”

Customer Feedback



Customer Objectives

- > Full design and delivery of a Multi-channel Power Amplifier Controller Board, including firmware and mechanics. This board interfaces between Motion Control and the Power Amplifiers.
- > Creation of prototypes for early integration.
- > Fully executed in customer's development process.
- > Stringent latency requirements apply.

AimValley Solution

Design of the electronics board and FPGA design. Execution of end-to-end design process from specification, design, design qualification, development and prototype manufacturing. To achieve the optimum result, AimValley's engineers worked on customer premises on a part-time basis to fully adopt the customer's way of working.

Also part of the project was extensive reverse engineering of the original design. Bugs were discovered in a generic ready-to-use block that could have become a showstopper for the project. With joint effort, delays on the project were successfully prevented.

Key Technologies

- > Gigabit Ethernet – [Time Sensitive Ethernet](#)
- > [FPGA](#) – Intel ARRIA10
- > Low Cost Serial Link
- > Gigabit Serial Link

Results and Added Value

Efficient

Fast lane prototypes delivered according to customer process and way of working, for early integration.



Partnership

Due to the close collaboration, we were able to deliver the prototypes 6 weeks earlier than requested while still being compliant with customer development process. Proactively reverse engineered the design.

Successful

Close co-operation of customer FPGA/HW teams and AimValley resulted in first-time-right initial design and proved time saving.

Innovation

Because of this inventive design, additional functionality could be added by moving the power supply and Ethernet interfaces onto another board. In the original design the desired additional functionality did not fit on the board.