

**Project**

Small Multi-Board Printed Wiring Board Set

**Application**

Controller

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**Customer Need**

Customer had a window of opportunity to present a new design for evaluation and sale if AVID could develop prototypes in record time. Knowing AVID has on-call resources that can respond immediately, they initially contacted AVID on a Thursday for ultra-fast design services. Start data wasn't delivered to AVID until the next day, late Friday afternoon.

**AVID's Solution**

Utilizing three of AVID's professional design staff to work Friday night through Monday morning, AVID was able to coordinate the design efforts around the clock to meet the time-critical delivery to the customer with 100% accurate PCB layouts by first thing Monday.

**Value Added or Technologies Applied**

- Concurrent Design Effort
- Ultra Fast Delivery
- Instant On-Call Start

**Project**

Multi-Layer High-Speed Digital Printed Wiring Board

**Application**

Custom Computing System

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**Customer Need**

Customer's engineering team required expertise in PCB layout of a controller board with large FPGAs, DDR, giga-bit Ethernet, USB and compact flash. The engineer responsible for the project relied primarily on AVID for development of routing constraints for circuit function and performance.

**AVID's Solution**

Utilizing our expertise from completing hundreds of printed wiring board layouts, AVID was able to fully define the routing constraints as well as optimize the stack-up for improved signal integrity. AVID was also able to identify several schematic connection issues and improvements that were able to be corrected before the layout was completed. Ultimately, AVID saved considerable time and money for the customer by avoiding costly board fabrication re-spins and multiple assembly cycles.

**Value Added or Technologies Applied**

- Controlled Impedance
- Pre-Layout Simulation
- Design Rule Constraints
- Post-Layout Crosstalk Analysis