



Application of Falcon 4210 FPGA Composable Solution to ERP System

CUSTOMER STORY

H3 PLATFORM.

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BACKGROUND

One of the top 10 ERP Software Vendors is H3's customer. As we all know, an ERP system can enhance a business's overall management and reduce the total cost of ownership. Reliability, efficiency, and speed between seconds are top concerns for ERP vendors in manufacturing a series of products. Such resource coordination work needs enormous power for computing. Speed matters. The faster the data processing among systems, the better improvement of the company resource planning and coordination.



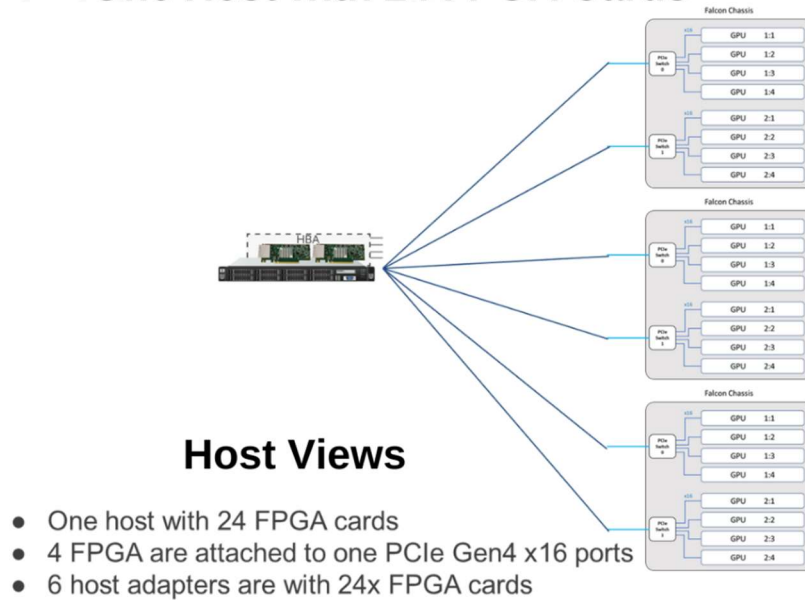
CHALLENGE

However, with the restriction in the traditional infrastructure, the last-week workload always costs the weekend to process for the next week's reference in the ERP system instead of real-time data inferencing. The situation could lead to a benefit loss between minutes. To outgrow this condition, one ERP vendor wants to link one host to 24 accelerators, paralleling them with CPUs, to process data; then get the results as quickly as possible. However, such a technical requirement is still challenging for many IT manufacturers. With high reliability, sophisticated experiences, and sufficient knowledge, H3 becomes their first choice for the Original Design Manufacturing of this system.

SOLUTION

H3 customizes the PCIe expansion system according to their requirements. H3 accomplishes the mission impossible with the composable infrastructure solution using three Falcon 4210 expansion boxes and 24 FPGAs connected by PCIe Gen 4 switches to the host. It works out to accelerate data processing in real-time. In addition, other benefits from the system also meet this enterprise customer's expectations. The first benefit is the stable

One Host with 24 FPGA Cards



power supply. Every drawer has eight slots for devices, and each PCIe slot can gain 350-450 w, more than sufficiency. Second, the automatic fan-cooling system keeps devices under a secured temperature. There is no need to worry about overheating problems. Third, device statuses are present on the GUI dashboard, which this company recognizes as convenient for monitoring and implementing real-time actions. In one sentence, transparent management, flexible configuration, and long-term sustainability are reasons this ERP vendor chooses H3.

RESULTS

H3 recently got a thanks letter from this ERP vendor. They express their acknowledgment of the successful implementation of the composable infrastructure, including 'reliability, quality of construction, and ease-of-use of the management interface and its features.' H3 feels encouraged by this appreciation and attributes the honor to all the team's hard work.