

SUCCESS STORY

Pericom Bridges and Switches

THE CUSTOMER

Pericom offers the complete interface solution for a global customer in an extensive variety of market segments. The company is a U.S. publicly traded company headquartered in Silicon Valley - San Jose, CA. Pericom offers a fabless business model so that the company can focus on customer designs, research, and development.

BUSINESS NEED

While planning for their first PCI Express based design, Pericom decided to go in for a third party Verification IP solution. This decision was based upon their experience of developing several PCI & PCI-X based designs.

In late 2003, Pericom decided to evaluate the various Verification IP solutions available in the market.

The chip development was to be done by teams located in San Jose, Taipei and Hsinchu.

THE CHALLENGES

Pericom was looking for a commercial VIP which could be easily integrated with their verification environment. In the words of Mr. Wen-Deh Wang, Director R & D at Pericom, some of his main concerns were:

- Can the VIP run compliance tests and generate coverage report?

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Mr. Michael Chen
VP ASIC Engineering

- What were the number of rules that were checked by the VIP?
- Can we modify the VIP if needed?
- Will the VIP support development of End-to-end checker?

THE SOLUTION

After exhaustive evaluation of all the products available in the market, Pericom zeroed in on nSys Verification Suite (nVS) for PCI Express.

On selecting nVS for PCI Express, Mr. Michael Chen, VP ASIC Engineering, commented, "Our development team that has experience of developing PCI & PCI-X based chips has been very impressed with the excellent system level features of your Verification IP. They were also helped significantly by the trainings that you conducted separately for our teams at San Jose and Taipei."

Pericom could rapidly deploy the nVS since nSys provided the End-to-end checker as a standard feature in the nVS

within weeks of receiving the request from Pericom.

The End-to-end checker as well as other system level features helped Pericom quickly build the verification environment that they needed for their Bridge as well as Switch designs. The fine grain programming that the nVS parameters provide, helped Pericom engineers very easily create the corner cases for their designs.

SUMMARY

After using the nVS since 2004, Michael Chen recently said , "Our decision to choose the nSys PCI Express nVS has been proved so very right as we have successfully taped out several chips such as PCI Express Switch and PCI Bridge."

Pericom successfully taped out several PCI Express chips on schedule.

KEY BENEFITS

- **Multiple First-time right silicon** by using nVS for PCIe
- **Higher Verification productivity:** nVS for PCIe provided all the flexibility needed to generate the desired PCI Express traffic in very easily
- **Minimized effort** needed to incorporate the Verification IP in the verification environment for Bridge as well as Switch
- **Faster learning:** Since the nVS for PCIe is very intuitive to use

About nSys

nSys leverages the world's largest portfolio of Verification IPs to provide products & services to Accelerate Designs for its customers developing ASIC, FPGA or IP.

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