

SUCCESS STORY

PCI Express to SATA II Bridge to Success

THE CUSTOMER

JMicron Technology Corporation is a professional fabless IC company that provides the ultimate in pioneering IC technology — dedicated to the high speed and serial interface technology enabling next-generation interface and storage products.

BUSINESS NEED

In July 2004, while the PCI Express to SATA II Bridge chip development stages were being planned by the client, they decided to go in for a third-party Verification IP so that internal resources could focus on the design.

THE SOLUTION

After exhaustive evaluation of all the products available in the market, JMicron zeroed in on nSys Verification Suite (nVS) for PCI Express, a product developed by nSys Design Systems.

On selecting nVS for PCI Express, Mr. Tim Liu, CEO, JMicron Technology Corp. commented, "Your PCIe nVS has easy usage model and simple environment. We did not need to spend much time for integration."

By selecting nVS for PCI Express, JMicron could develop a world class verification environment to facilitate its design.

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We are really impressed by your quick technical responses. We think of you as a partner in our success and not just another vendor."

Mr. Tim Liu
CEO



The team at JMicon found it very easy to write test case by studying and modifying the test cases that were available in source code format in the Test Suites.

The PCI Express nVS had all the features that the team at nVS felt they needed to create corner cases for their application.

Several bugs were found during functional verification, many of those could have gone unnoticed but for the watchful checker.

Since the real value of Verification IP is in the independent interpretation of the specifications, the engineering team at JMicon was delighted at the prompt responses they got for clarifications too.

As reported by Mr. Tim Liu, "We are really impressed by your quick technical responses. We think of you as a partner in our success and not just another vendor."

SUMMARY

JMicon successfully taped out and launched JMB363, a single chip, one-lane PCI Express to two-port Serial ATA II and one-port PATA Host Controller (PCIe x 1 -to- SATA II x 2 + PATA x 1) . The chip is Compliant with PCI Express Base Spec. Revision 1.0a. It provides integrated 1-Lane 2.5 Gbps PCI Express PHY and 2-port SATA II PHY.

JMicon taped out successfully on schedule and considers nSys as their partner in success!

KEY BENEFITS

- **First-time right silicon** by using nVS for PCIe
- **Higher Verification productivity:** The nVS could create all the corner cases required for verification of a PCIe to SATA II bridge very easily
- **Minimized effort** needed to incorporate the Verification IP in the verification environment
- **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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