Automation Software Testing improves quality and cut costs at ClearSpeed

Tessolve-Case Study

About the Customer

Tessolve has helped fabless semiconductor company ClearSpeed to improve quality and reduce costs by developing an automated software testing facility and outsourcing additional software testing.

Background

Software testing is a time-consuming and complicated process that can often distract software and hardware developers from their job of developing product and supporting customers. Therefore, fabless semiconductor company ClearSpeed asked test and verification specialist Tessolve to help with an automated software testing facility at its site in Bristol, UK.

The Tessolve Solution

Tessolve arm T&VS staff worked with ClearSpeed to develop an internally automated software testing facility that was completely integrated with the build system and allowed ClearSpeed to perform continuous integration and overnight testing. The tests are run on hardware and software platforms that include all popular PCs and workstations with a variety of chipsets. The verification included demonstrating correctness, ensuring the applications were accelerated by the ClearSpeed technology and ensuring the ClearSpeed technology reduced the overall power consumption of the accelerated application.

Those tests that could not be easily added into the internal automation system were outsourced offshore, helping to reduce costs.

The testing facility freed up ClearSpeed's developers from testing which allowed ClearSpeed to both adopt and hit a more aggressive software release roadmap. Adding independence in the testing process also measurably improved the quality of the company's software, with a large reduction in the number of bugs found in the field.

Client's Remark

"T&VS staff introduced independence into our signoff procedure so that testing was done by test professionals who are motivated and driven by these challenges, rather than by developers who have other priorities. This has had a big impact on the quality of ClearSpeed products." Russell David, vice-president of engineering at ClearSpeed.