

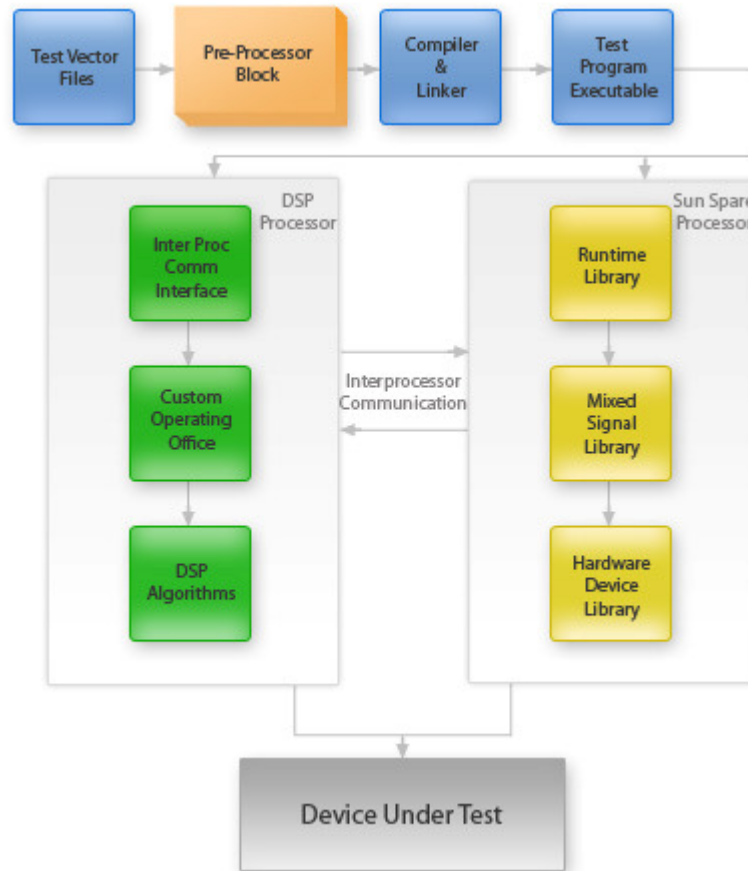
ATE Case Study

Background

An automated test equipment company with specialized experience in digital testers wanted to penetrate the mixed signal testing market. Competing against some of the big names in the ATE area the company put together a team of professionals to execute on this project. Besides background knowledge in ATE this required expertise in building and integrating large systems, an in-depth understanding of system calibration, diagnostics, data-acquisition and system software and firmware. The objective was to develop software that would provide a platform for programming as well as debugging and aid in quick and efficient development of test programs. This would allow application engineers to readily determine what they needed to test rather than focusing on how to perform the test.

The Project

The team worked on this project, starting off by interacting with the marketing team to establish the requirements. The main goals of the project were to concentrate on ease of use, efficiencies and throughput of system software and firmware to achieve per-device test times that add significant value to the customer. The team worked on providing one of the critical components that added great value to mixed signal testing and this was the software for sourcing, sampling, buffering and signal processing of user programmed data. The result of the processed data was used to validate the characteristics and expected behavior of the device under test. The team also architected, designed and implemented the basic diagnostic software for validating hardware and the different sub-systems.



Highlights

System software was resilient with high-throughput.

Strong diagnostics/calibration software aiding in rapid deployment.

Simulation environment for debugging application programs.

Product from concept to delivery.

Project executed on time to meet customer demands.

One among many of the successful products built by the team.

Hundreds of deployments world-wide.