The PowerPC® Solution
for Development, Debug and Test

Highlights

• Get the best PowerPC® solution on the market
• Accelerate your development cycle
• Reduce debug time and improve productivity
• Identify system defects
• Optimize system performance
• Improve product quality
• Implement a flexible, cost-effective solution

Your system requirements are getting increasingly complex. You need more features and more system speed to be competitive. The time-to-market window keeps shrinking, increasing the pressure for a successful release. But as development and test time shrink, you can’t compromise product quality or you’ll have even bigger problems.

To deal with all this, you need tools that maximize productivity and are still easy to learn. And they should work not only for this project, but for the next one too.

Applied Microsystems offers a PowerPC® Solution that meets all these requirements and more. Our PowerPC solution spans the entire project cycle, including system development, debug and test. To find out more, read on. Then call your Applied Microsystems representative. Because your schedule isn’t going to wait.
Superior PowerPC Development and Debug

- Connect your PowerPC system to your favorite debugger
- Connect your PowerPC system to your Ethernet network without using target resources
- Save development time with fast code downloads
- Lower your tool costs with a reusable debugging tool
- Trace software execution in real-time—event out of cache
- Trace embedded programs at source, control-flow, or high level
- Capture over 100 thousand source lines of execution in Deep Trace mode
- Use powerful triggering and trace display options to zero in on problems

The Most Flexible Solution Available

Applied’s PowerPC Solution brings you the most powerful tools available for embedded software developers. Supporting all versions of the PowerPC processor, it provides the key link that facilitates software development activities over the network. Source-level debugging can be executed from any network host without Ethernet hardware or software on the target system.

In addition, the PowerPC Solution amplifies the power of source-level debuggers using a Virtual UART, which provides a network communication path through which host-based debuggers can communicate with target-based monitors.

No PowerPC tools provide a wider range of download options, host software and low-cost debugging support.

Unmatched Trace Capabilities

Applied’s PowerPC Solution also provides a powerful trace capability, enabling you to trace the execution history of your program. In normal mode, the trace buffer captures the equivalent of 10 thousand source lines of execution. In deep mode this history approaches 500 thousand lines of source execution. Powerful triggering, storage and display options give you unprecedented visibility into your program’s behavior.

Trace can be displayed at three levels of abstraction: “high-level trace,” “control flow trace,” and “source trace.” High-level trace showsRTOS events and function executions to give you “the big picture” of program flow. Control flow trace adds the dimension of displaying each executed decision statement within the executed function. Source trace

Link your host and target over your Ethernet LAN without using target resources.

Applied’s Solution fits easily into your host environment, and lets you use any debugger for PowerPC software development and debug.

PowerPC Solution trace displays are remarkably easy to follow, even for first time users.

Get a ROM connection and run control for every PowerPC processor and enhance the capabilities of your debug monitor.
adds all executed source statements to the display, revealing the complete execution history.

As special, productivity-boosting feature, loops in the trace display are collapsed, so that instead of countless recurrences of the same statement in the trace, they are consolidated into one statement with a count displayed. And since each captured statement is time-stamped, you can easily measure such items of interest as loop times and path execution times.

The PowerPC Solution offers powerful triggering, versatile software-oriented displays, and the deepest trace on the market today, with no pre-fetch or cache execution confusion. It even traces dynamically relocated code! It all adds up to the best value in PowerPC tools available!

**PowerPC Software Test and Verification Options**

You can choose to put additional, powerful test and verification capabilities into your PowerPC solution. These options let you:

- Identify bottlenecks and optimize your PowerPC code performance
- Observe exactly how your PowerPC code is operating
- Investigate your code execution and improve your testing coverage
- Locate memory leaks and pointer errors before you ship your product
- Find and fix defects earlier in the development & test process

By applying these tools at the unit, integration and system testing stages, many defects can be detected and corrected earlier in the development cycle—reducing costs, improving reliability and improving predictability.

*Program trace can be displayed in “high-level” mode where only task activity and function entries and exits are shown. It’s easy to follow program flow with this “big picture” view. Trace can also be displayed in in source-level and control-flow views.*
The PowerPC Total Solution—from Applied Microsystems

Flexible, Reusable Tools
Applied’s PowerPC Solution offers you rapid and effective development. With a variety of ways to connect to your target system, you get the most robust support available.

Even better, the Solution is reusable, supporting not only your favorite PowerPC processors but other microprocessors as well.

More Productivity—and Less Time to Market
You can accelerate your embedded development process with network connectivity to your target system enhanced power for your existing debugging solution, and comprehensive trace information.

Add Options for Better Product Quality
Additional tool options for PowerPC can help you improve product quality. You can identify performance bottlenecks to help you improve system performance. Improve testing with interactive measurements of code execution coverage. And pinpoint memory errors, leaks and untested blocks of code—before you ship your first product.

Applied Microsystems Support
We take product support very seriously. In fact, we call our program Customer Satisfaction.

Keeping you satisfied means more than just answering your questions. The leader in embedded development tools, Applied has the qualified and committed people it takes to provide thorough on-site training and superior engineering assistance, technical guidance.

Our Applications Engineering Group is backed by a network of experienced Field Application Engineers, our own design teams, and the commitment of the entire company. And with over 10,000 installed solutions and more than seventeen years of leadership in embedded hardware and software development tools, our team is an important asset to have on your team.

A Universal Solution for Today—and Tomorrow
Applied Microsystems PowerPC Solution is simply the best support available for PowerPC development. You get a cost effective and broad feature set that gets you through the complete PowerPC Development-Analysis-Test cycle. Choosing Applied’s Universal Solution lets get you to work on your target right away, and helps you get a better product to market on time.

And Applied’s Universal PowerPC Development, Debug, and Test Solution addresses not only your current PowerPC design but also works with your next generation project—PowerPC 603e today, MPC860 tomorrow.

To find out how your projects can go more smoothly with Applied’s PowerPC Solution, contact your Applied Microsystems representative or call 1-800-426-3925 today.

For more information, call 1-800-426-3925, e-mail info@amc.com, or browse http://www.amc.com

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