

Top 10 Reasons to Debug Hardware with Your OS and Application Software

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Despite opinions to the contrary, it is clear that the best tool to debug new hardware is the Operating System and Application Code which will run on it. In an effort to settle this debate once and for all, we have developed the following list which you can use if your Management seems unconvinced.

10. Codevelopment is an important trend in Engineering. Creating totally untested hardware and software simultaneously and testing each with the other carries this modern approach to its logical optimization.
9. The significantly increased interaction required between your OS and Application Developers and your hardware designers over several months of hardware debug will generate an increased sense of teamwork.
8. Nothing impacts the pride a software designer feels in their code more than running it hundreds of times while an appreciative hardware developer tracks down a tricky typo in their schematic.
7. Analyzing an Application Program to evaluate the hardware fault coverage it provides gives programmers a great sense of the sophistication of their development efforts.
6. Since your software developers will be spending a lot more time focusing on hardware test, they won't waste nearly as much time working on features the customer probably didn't mean to ask for anyway.
5. Communication between hardware and software developers will increase dramatically, and communication is always important in an organization. Since much of this communication will occur at high volume, many others can easily participate in the process.
4. The software development team will be spending much more time in Manufacturing working on their tests, and will develop a strong sense of the overall organization's objectives and challenges.
3. Power-on Self Test is an important function of any test system. Why settle for wimpy and complex error messages like "Memory Error at Address 0x187634" or "USB Port 3 – pin 1 appears open" when you can get a crisp, bold error indication like a blue screen?
2. The easiest way to maximize the effectiveness of Application Software in the debug environment is to minimize changes from one hardware generation to the next. This frees hardware developers from time spent creating new features and improve their efficiency. As an added benefit, Product Marketing will waste much less time dealing with customer requests for new hardware functions.
1. Process optimization will often result in the elimination of product generations. Forward thinking organizations will extrapolate this trend and never even begin new products, producing incredible savings in development spending.

If the list above still hasn't convinced you that your OS and Application code is your hardware Engineers' best debug tool, visit www.kozio.com for an alternative.

About Koizio, Inc.

Founded in 2003, Koizio provides packaged solutions for hardware validation and circuit board test to leading edge customers across the globe. Our tools are constructed from a library of over a million lines of proven diagnostic code that has been run thousands of times, on hundreds of designs throughout the whole product life cycle. Comprehensive hardware design validations are performed in minutes, not weeks, accelerating time-to-market with reduced risk and better allocation of engineering resources. Whether your application is in Engineering, Manufacturing, or In-Field test, Koizio is the trusted leader in In-System Diagnostics and your fastest path to reliable hardware. For more information, visit us at www.koizio.com