In-Circuit Test Channel Partner Interview Series

Solution Sources Programming Inc.

Case Study

Dan Orlando

President
Solutions Sources Programming
San Jose, CA

Since 1973 in a start up division of Intel, Dan has gained a vast amount of information in this industry through education and hands on experience. He has learned that the key to success in any company is through service, quality products and on time delivery. As president of Solution Sources Programming, Inc. for over 16 years, he has employed and refined this formula to help his customers "make money" and gain "market share."

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Keysight Technologies, Inc.'s in-circuit test (ICT) product has been around for decades and as such has a variety of established partnerships. As a way to provide some educational information to our install base, an interview series with 5 programming houses that we regularly work with is underway. Recently, the Americas Development Manager associated with our ICT products, Stacy Johnson sat down with Dan Orlando. Dan Orlando is the President of Solution Sources Programming, Inc. (SSP). As such, our first article begins!

Keysight/Johnson: What changes has your company seen within the ICT programming industry for the last five years or so?

Orlando: Over the past five years, Solution Sources has witnessed a sharp decline in the outsourcing of simple to medium complexity board in the United States, a decline of expertise in highly qualified ICT engineers and a sense of cutting costs in all areas while maintaining the goal of on-time product delivery.

Keysight/Johnson: What do think is driving that?

Orlando: There is pressure in all arenas to keep costs down and the complexities of outsourcing, especially to overseas organizations, has been a big contributor. Additionally, the pool of in-circuit test engineers is shrinking daily. A lot of the change in general is fueled by a "share holder" return and the original equipment manufacturer's (OEM's) are thinking about short-term savings rather than holistic savings – both from a dollars and cents perspective and a quality perspective.

Keysight/Johnson: What are you doing to respond?

Orlando: We are trying to educate our customers and we are continually trying to help them identify the critical path in their projects associated with test steps and better test strategies. A differentiator for us has been the ability to provide ongoing training to elevate the novice programmers internal to our customers to a higher working knowledge in a short period of time. This cohesive solution, rather than just selling the cheapest

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program, is what is making our customers successful. We have the ability to dig in and illustrate the return on investment that can convince technical entities, finance and upper management on the value of test. SSP has seen as much as a 24% higher coverage when compared with some of our competitor's programs.

Internally, SSP continues to invest in equipment, learn about new technologies, educate our programmers and engineers so we can leverage that expertise into many of our customer's products.

Keysight/Johnson: **What technology changes with ICT do you see impacting the programming house industry the most?**

Orlando: With the pace that technology is evolving at these days, there are a lot of changes impacting the programming houses. On-Board Power Supply circuits are a big problem in that they are very sensitive to loading. Loading can prevent the power supplies from coming up and at times they create a noisy power plane which creates a major problem on low voltage boards. Another challenge we see is the growing limited access situation, especially when customers do not provide test points and do not ask for input up front. DDR Memory testing is a challenge because of the number of vendors that provide the parts as are boundary scan devices that do not support 1149.6 on the high speed lanes. An emerging challenge is probing less than 1mm center to center spacing.

Keysight/Johnson: **What benefits does having a channel partnership with Keysight provide your customers?**

Orlando: Channel partnership with Keysight provides a great communication tool between our companies to enhance existing product hardware and software tools. Customers benefit from both Keysight and SSP working together as we can put "beta" products to a more stringent test due to our internal expertise.

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