

Key messages for analysts and journalists:

- By incorporating the AMBA™ 3 AXI rules, developed by ARM, into the SolidPC for AMBA 3 AXI product, Averant will enable IP developers to use this powerful verification methodology to test the AMBA 3 interface.
- The cooperation between ARM and Averant combines ARM's experience in AMBA technology with Averant's support for formal verification through the Solidify product
- Formal methods based tools rapidly provide a very high level of verification confidence increasing design productivity.

AVERANT ANNOUNCE SOLIDPC FOR AMBA 3 AXI AMBA PROTOCOL CHECKER

ALAMEDA, Calif. – Oct. 19, 2004—Averant Inc., a leading provider of advanced design verification technology for RTL designers, today announced the release of the Solid Protocol Checker (SolidPC) for AMBA 3 AXI static functional verification tool dedicated to verifying the AMBA™ 3 AXI bus protocol.

Building upon the success of SolidPC for AHB, an existing tool jointly developed by ARM & Averant for verifying designs against the AHB & APB protocols, SolidPC for AMBA 3 AXI extends the advantages of this powerful formal verification technology to ARM's latest bus protocol, AXI. Taken together SolidPC for AHB & SolidPC for AXI provide a complete solution for verifying designs against the AMBA protocols.

ARM is working with Partners across the design chain to ensure that customers designing ARM® core-based embedded systems using AMBA IP can take full advantage of new innovations in design methodologies and tools. The SolidPC for AXI tool from Averant enables customers to verify the ARM AMBA protocol rules using formal methods.

A key verification task for today's system-on-chip designers is to ensure that each component in the system obeys the interconnecting bus protocol. Failure to achieve this can result in poor product quality, ASIC re-spins, and delayed entry into the market with corresponding loss of revenues.

To address the issues of protocol compliance, the two companies have worked together to develop the SolidPC for AXI tool, which is dedicated to verifying that candidate designs obey the AMBA 3 bus protocols. The SolidPC for AXI tool, which is based upon Averant's Solidify product, implements a formal, exhaustive, proof of correctness against a pre-defined set of AMBA technology rules. No testbenches or test vectors are required.

Under the agreement, ARM has licensed the ARM AXI protocol rules to Averant who will be responsible for sales and support of the SolidPC for AXI tool worldwide.

“Formal methods offer an innovative new approach for the verification of AMBA bus protocols, as the static nature means that verification is much faster than through simulation, and corner cases are more readily exposed,” said Tim Mace, AMBA product manager, ARM. “The definition of correct AMBA technology behavior, through the development of AMBA protocol rule sets, has done much to enhance the value of AMBA technology within the industry. By integrating our AMBA protocol rule sets into the SolidPC for AXI and AHB tools, developers will now have a suite of high-performance verification tools that can rigorously check designs against the AMBA protocol rules.”

The SolidPC for AMBA 3 AXI tool encapsulates the AMBA AXI protocol rules enabling ‘push-button’ verification of designs against the AXI protocol specification. If all rules pass exhaustively, then the user has formally proven that their design is fully compliant with the AXI protocol.

If a design fails a particular rule, the SolidPC for AXI tool will produce a set of simulation vectors that when applied to the design in a traditional simulation environment will exhibit the failing behavior. The user can then use this information to quickly debug the design.

“We partnered with ARM in the important area of AMBA protocol verification because we believe ARM's creation and endorsement of the property sets, coupled with the ease of use, execution speed and exhaustive nature of the SolidPC for AMBA 3 AXI tool will make this a compelling product in the market place,” said Ramin Hojati, President, Averant.

For further information and to evaluate the product please contact: info@saros.co.uk
www.saros.co.uk/amba

About Averant

Averant Inc., founded in 1997, is a privately held EDA company pioneering the new methodology and technologies for static functional verification. Averant provides Solidify™, a design tool that delivers unprecedented performance in block-level verification for RTL designs. It is a high-capacity, static RTL analysis tool that verifies the functional behavior of Verilog or VHDL blocks without using simulators or test vectors. Solidify improves design quality, reduces risk and uncertainty, shortens design cycles, and reduces the need for simulation based verification. Averant's products are easily incorporated into synthesis, IP reuse, and FPGA design flows. Averant is on the web at www.averant.com, or can be reached by email at info@averant.com.

About ARM

ARM is the industry's leading provider of 16/32-bit embedded RISC microprocessor solutions. The company licenses its high-performance, low-cost, power-efficient RISC processors, peripherals, and system-on-chip designs to leading international electronics companies. ARM also provides comprehensive support required in developing a complete system. ARM's microprocessor cores are rapidly becoming a volume RISC standard in such markets as portable communications, hand-held computing, multimedia digital consumer and embedded solutions. More information on ARM is available at <http://www.arm.com/>.

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