Silistix Self-Timed Interconnect Solution Supports AMBA Bus Protocol

AHB and APB supported by synthesizedCHip-Area INterconnect (CHAIN) fabric

San Jose, Calif. – Silistix, a provider of innovative software for on-chip communications solutions, today announced support for the on-chip AMBA™ bus protocol with its synthesized self-timed nterconnect technology. The company's CHip-Area INterconnect (CHAIN) solution provides power-dissipation and design-productivity improvements over traditional on-chip synchronous bus architectures. The CHAIN interconnect fabric generated by Silistix' design and synthesis tool suite, CHAINworks™, is a self-timed, packet-based interconnect network that manages data flow between IP cores on a chip without being dependent on the edges of a system clock. This results in lower power dissipation since power is dictated by traffic load and not by a fixed clock rate. Clock domains in the CHAIN fabric do not have to be derivatives of a system clock, freeing IP blocks to operate at their optimal frequencies. Furthermore, the interconnect fabric can be tuned for specific throughput, area and power targets. Using CHAINworks, designers can synthesize a self-timed CHAIN interconnect that interfaces with synchronous blocks of a SoC, such as processors or peripherals, that are connected through a compliant AMBA protocol. "The ARM-developed AMBA bus is a market leader, having been widely adopted for SoC use," said David Fritz, Vice President of Marketing at Silistix. "By offering AMBA support to our customers, we are helping to accelerate the use of Silistix' CHAIN interconnect while providing designers with reduced power and less design effort compared to chips that employ only traditional bus architectures." "We are happy to see that Silistix is supporting AMBA, the de facto industry standard SoC bus," adds Jonathan Morris, General Manager, Fabric IP Division, ARM Ltd. "AMBA is widely used in many of the types of low-power applications that Silistix is targeting with its CHAIN solution, thus simplifying the task of designers who want to merge CHAIN interconnect with their existing IP and chip subsystems." CHAINworks fits within existing EDA design flows. The Silistix CHAIN solution targets OEMs, ODMs and fabless semiconductor companies who are developing products for power-sensitive markets such as cellular handsets, portable multimedia devices and smart cards, as well as for companies who are developing SoCs for complex applications such as HDTVs, set-top boxes, network security devices and SAN/NAS (Storage Area Network/Network Attached Storage) devices. About CHAIN System-on-a-Chip complexity has accelerated to the point that the on-chip interconnection of functional blocks by conventional bus technology cannot meet design requirements. Achieving satisfactory communication among multiple clock domains connected by long, slow wires is the most significant SoC design challenge facing designers. Silistix' CHAIN technology provides a solution to the complexity problem in a manner analogous to that used by telephone systems as they migrated from circuit-switched to packet-switched communication, revolutionizing the industry in the process. Similarly, Silistix' solution relegates the 'Timing Closure' issue to a much simpler class of problem, and reduces on-chip congestion and overall power consumption. About AMBA The AMBA on-chip bus is an established, open specification that serves as a framework for System-on-Chip (SoC) designs.

AMBA 2 comprises two system buses: the Advanced High-performance Bus (AHB) and the Advanced Peripheral Bus (APB). As increasing numbers of companies adopt AMBA, it is rapidly emerging as a de facto standard for SoC construction and intellectual property (IP) library development. AMBA provides the 'digital glue' that binds IP cores together and is a key enabler of IP reuse. About Silistix Silistix is a venture-funded spin-out of the University of Manchester, UK. The company's focus is on the development and deployment of EDA tools for the design and synthesis of self-timed CHip-Area INterconnect (CHAIN) technology for complex system-on-a-chip (SoC) communication. The company has offices in Manchester, England, San Jose, California, and Tokyo, Japan. For more information visit www.silistix.com. About ARM ARM designs the technology that lies at the heart of advanced digital products, from wireless, networking and consumer entertainment solutions to imaging, automotive, security and storage devices. ARM's comprehensive product offering includes 16/32-bit RISC microprocessors, data engines, 3D processors, digital libraries, embedded memories, peripherals, software and development tools, as well as analog functions and high-speed connectivity products. Combined with the company's broad Partner community, they provide a total system solution that offers a fast, reliable path to market for leading electronics companies. More information on ARM is available at www.arm.com ARM and AMBA are registered trademarks of ARM Limited. CHAINworks is a trademark of Silistix

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