

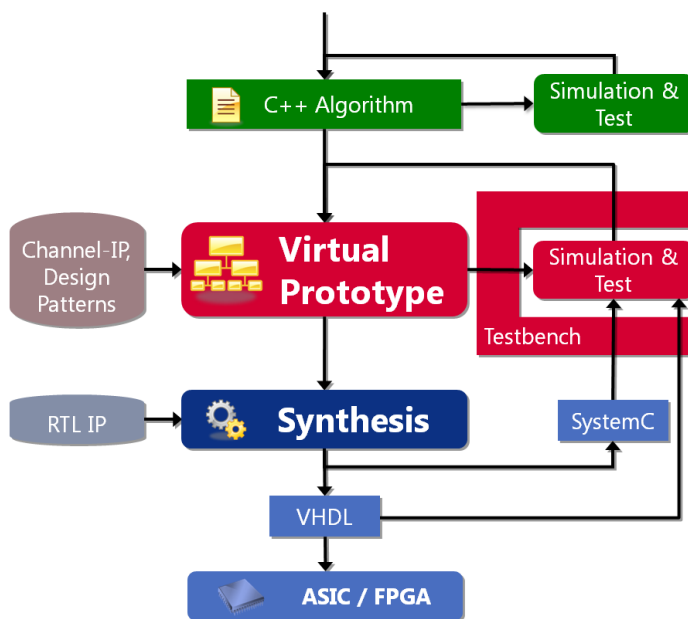
CoSynth at embedded world 2012:

February 28<sup>th</sup> – March 1<sup>st</sup> 2012

Hall 4a, Stand 308b

## CoSynth Synthesizer

### Simply Create Fast Hardware from Software



Oldenburg, January 23<sup>rd</sup> 2012 \*\*\* At *embedded world 2012* CoSynth GmbH & Co. KG presents their newest product. The *CoSynth Synthesizer* is a tool for the creation of FPGA-accelerated systems directly from existing software algorithms.

Once currently deployed embedded PCs do not provide enough performance anymore, there are two options: A faster, but expensive and energy-consuming CPU as replacement, or integration of coprocessors such as DSP, GPU, or FPGA. Since these special processors

require a special design process, high costs for experts or ready-made solutions were required so far.

Now, FPGA development can be made in a standard software process using the **CoSynth Synthesizer**. Usual programs, written in C/C++, are prepared for parallel computation on FPGAs by the use of the C++ library SystemC. Everything up to this point is thus still a pure software design. It can be simulated on all PCs and developed, tested, and optimized with common software development tools. As a last step, the **CoSynth Synthesizer** automatically generates the hardware description required for the FPGA implementation directly from the software model. Function and timing specifications are exactly reproduced, such that the previously tested properties of the system are preserved by the hardware.

In combination with the contained IP cores, resources on the FPGAs are optimally integrated into the system. This also includes local memory and busses, interfaces to the CPUs, and other I/Os. All these components are designed at software layer and automatically mapped to the hardware.

CoSynth will showcase the tool at this year's embedded world in Hall 4a, stand 308b with live demonstrations and hardware demonstrators which were created using the tool. Also shown are CoSynth's Vision IP cores from the CoreSynth family and general services for embedded and FPGA development.

## About CoSynth

CoSynth is a startup in the area of embedded systems design. The company offers design services and tools for fast and efficient development of electronic solutions at system level. The SystemC and C++ based methods are particularly suitable for the design of mixed hardware/software systems and FPGA based solutions. Hardware accelerations for existing software applications are developed fast and precisely with CoSynth's intersectoral methodology and an own synthesis tool. CoSynth offers software development for embedded systems, too. Further information about services and products can be found at the company's website <http://www.cosynth.com>. CoSynth was granted the entrepreneurship prize *Gründercampus Niedersachsen* in February 2011 and a prize for innovative startup from the economic development division of the Göttingen area in October 2011. CoSynth is supported by means of the European Regional Development Fund.

## Contact

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