

Mythic Chooses Codalip to Deliver RISC-V Computing in their Revolutionary Neural Network Platform

Campbell, California – December 10th, 2018 – Codalip, the leading supplier of RISC-V[®] embedded processor IP, announced today that Mythic, a leader in artificial intelligence (AI) computing technology, has selected Codalip's configurable Bk5 processor and Codalip Studio for future neural networking chips.

Mythic, based in Redwood City, California, and Austin, Texas, will deliver powerful, life-enhancing AI solutions that customers can push into anything, from fitness bands and hearing aids to self-driving cars and security cameras. The solutions are developed on a unique approach to neural network processing. The Mythic Intelligence Processing Unit (IPU), which performs the inference step of deep neural networks inside the same flash memory array which stores the neural network's weights, delivers huge advantages in performance, cost, and power consumption versus alternative solutions.

"We chose Codalip's Bk5 RISC-V processor and Codalip Studio for our PCIe-attached IPU deep learning accelerator because it gave us the flexibility to create a truly unique processor that was specific to our needs, while maintaining compliance to the RISC-V standard," stated Ty Garibay, VP of Hardware Engineering at Mythic. *"While we have the expertise to build our own RISC-V processor, we determined that Codalip Studio, with its automatic generation of both verified hardware and fully compatible software toolchain, was a more efficient approach and allowed us to focus on other critical areas of the product development."*

The Codalip Bk5 processor, based on the RISC-V open instruction set architecture (ISA) definition, features a single 5-stage in-order execution processor pipeline and offers optional caches, IEEE 1149.1 debug, branch prediction, and industry standard bus interfaces. Further, the Bk5 – like all Codalip RISC-V implementations – is fully configurable and extensible, offering great advantage over traditional, fixed-configuration processor IP cores.

With Codalip Studio, designers can begin with a high-level description of a RISC-V micro-architectural implementation defined and delivered by Codalip, and then describe their desired architectural and ISA modifications in the CodAL architecture description language, and then automatically synthesize the design's RTL, testbench, virtual platform models and processor SDK (C/C++ compiler, debugger, profiler, and other parts). Time that would otherwise be required to maintain a complete SDK and implementation is significantly reduced thanks to the methodology that uses an Instruction Accurate (IA) processor model in CodAL for SDK generation and a Cycle Accurate model for implementation.

"We welcome Mythic to the growing roster of customers that are partnering with Codalip to deliver innovative products based on the RISC-V architecture," stated Chris Jones, Codalip's Vice President of Marketing. *"RISC-V is ideal for machine learning applications, and Mythic will deliver revolutionary products that employ highly optimized Codalip RISC-V cores."*

About Cudasip

Cudasip delivers leading-edge processor IP and high-level design tools that provide ASIC designers with all the advantages of the RISC-V open-standard ISA, along with the unique ability to automatically optimize the processor IP. As a founding member of the RISC-V Foundation and a long-term supplier of LLVM and GNU-based processor solutions, Cudasip is committed to open standards for embedded processors.

Formed in 2006 with research and development located in Brno, Czech Republic, Cudasip currently has offices in the US and Europe, with representatives in Asia and Israel. Cudasip is currently venture-backed by Credo Ventures, Ventech Capital, Shenzhen Capital, Paua Ventures, and Western Digital.

For more information about Cudasip's products and services, visit www.codasip.com.

About Mythic

Mythic is accelerating AI that works for everyone. Today, it is difficult, time-consuming and expensive to build and deploy reliable AI. By offering mixed-signal chips with revolutionary power, cost, and performance capabilities, along with easy-to-use software tools, Mythic is removing those limitations and empowering every AI developer. Mythic's focus is simple: to enable the next great wave of AI innovation.

Mythic is supported by leading venture capital investors including Softbank, DFJ, Lux, and Data Collective. The company has offices in Austin, TX, and Redwood City, CA. For more information about Mythic, visit www.mythic-ai.com.

About RISC-V

RISC-V is an open, free instruction set architecture (ISA) enabling a new era of processor innovation through open standard collaboration. Born in academia and research, RISC-V ISA delivers a new level of free, extensible software and hardware freedom on architecture, paving the way for the next 50 years of computing design and innovation. For more information, visit www.riscv.org.