



**PRESS RELEASE**

## **Aldec's TySOM Family of Embedded System Development Solutions Now Supports Xilinx PYNQ (Python Productivity for Zynq)**

**Henderson, USA – October 26, 2020** – Aldec, Inc., a pioneer in mixed HDL language simulation and hardware-assisted verification for FPGA and ASIC designs, has added PYNQ Python Productivity for Zynq from Xilinx, Inc. to its TySOM family of Xilinx Zynq SoC based boards and its TySOM Embedded Development Kit.

The Xilinx PYNQ framework (pronounced “pink”) is the popular open source platform that is enabling software engineers to develop applications for Xilinx SoC and MPSoC devices with reduced reliance on support from hardware engineers.

The popularity and ease of use of the open-source high-level programming language Python, at the heart of PYNQ, is making the development of Zynq SoC- and MPSoC-based applications significantly easier for both hardware and software engineers alike.

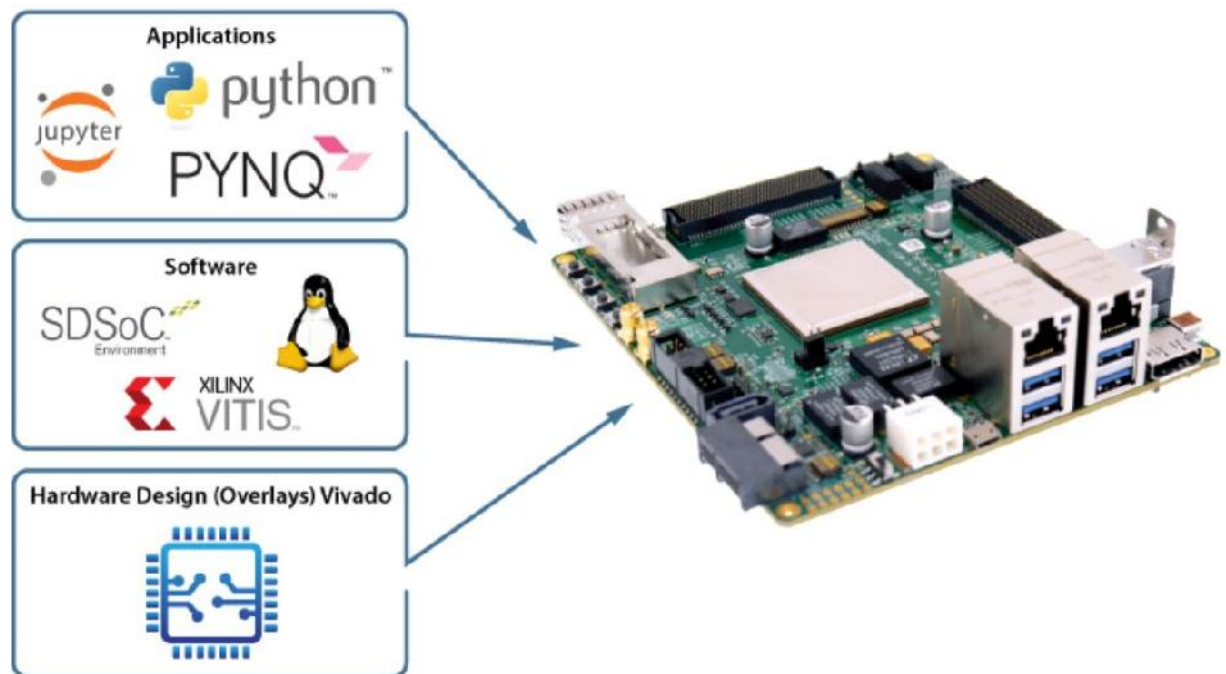
*“The ability to use the high-productivity scripting language Python is one of the main enablers for making Xilinx devices more accessible to designers without a hardware background,” commented Zibi Zalewski, General Manager of Aldec’s Hardware Division. “With the recent PYNQ image developed for TySOM, SoC designers can now develop their PYNQ-based applications using our TySOM embedded development boards.”*

TySOM, Aldec’s broad family of Zynq SoC- and MPSoC-based embedded development boards – plus the TySOM embedded development kit (which includes Aldec’s Riviera-PRO advanced verification platform) – supports all PYNQ’s high-level features.

The PYNQ image developed by Aldec for TySOM enables:

- ) Software developers to program applications on PYNQ-enabled Zynq platforms much more productively by abstracting them from the details of programmable logic.

- ) System architects who want to create a rapid prototype for their Zynq based project.
- ) Hardware designers to more productively design platforms which can be reused not only by engineers who have the knowledge of FPGAs, but also by a much larger community of systems and application developers.



*“PYNQ is an open source framework from Xilinx Research Labs which uses Python, JupyterLab and Jupyter notebooks. It makes developing applications on Xilinx Zynq and ZynqUltraScale+ devices easier and more productive. Moreover, PYNQ enables a broad community of application and systems developers, many of whom may have no hardware background, to create high-performance applications using Xilinx Zynq SoCs and MPSoCs. Aldec is a long-standing and highly respected technology partner and we are excited that Aldec's TySOM embedded development boards now support PYNQ,” says Patrick Lysaght, Senior Director, University Program and Research Labs, Xilinx, Inc.*

TySOM board can be easily programmed in Jupyter Notebook using Python. With PYNQ designers can use hardware libraries also called overlays on the programable logic. Developers can use the right overlays that matches their application. Aldec provides the PYNQ image for the boards as well as the “How To” tutorial on using them.

### **About TySOM Embedded Development Kit**

The TySOM™ Embedded Development Kit is for the embedded designers who need a high-performance RTL simulator/debugger for their embedded applications such as IoT, Automotive, Factory automation,

UAV and Robotics. The kit includes Riviera-PRO™ Advanced Verification Platform and a TySOM development/prototyping board. TySOM boards come with either a Xilinx Zynq-7000 chip (FPGA + Dual ARM® Cortex™-A9) or with a Zynq UltraScale+ MPSoC device. These boards include memories, and various communication and multimedia interfaces in addition to FMC connectors for peripheral expansion. Reference designs for application such as IoT, ADAS, 4K UltraHD imaging and Robotics and a complete reference design, which contains the SW (Linux) and all the hardware blocks required to support the peripherals on the board, are provided.

### **About Aldec**

Aldec Inc., headquartered in Henderson, Nevada, is an industry leader in Electronic Design Verification and offers a patented technology suite including: RTL Design, RTL Simulators, Hardware-Assisted Verification, SoC and ASIC Prototyping, Design Rule Checking, CDC Verification, IP Cores, Requirements Lifecycle Management, DO-254 Functional Verification and Military/Aerospace solutions.

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