Concurrent Technologies Announces an Artificial Intelligence Accelerator Board

Rugged 3U VPX Accelerator Engine

Concurrent Technologies announce their first, high performance 3U VPX accelerator engine based on an Intel® Arria® FPGA. TR AEx/3sd-RCx is focused around Inference at the Edge applications such as real-time object recognition and behavior monitoring. It has been designed to work in parallel with Concurrent Technologies processor boards like TR H4x/3sd-RCx and TR J4x/6sd-RCx that are in alignment with a proposed SOSA™ Technical Standard.

The application of Artificial Intelligence (AI) techniques to provide Inference at the Edge has generated lots of interest in consumer orientated applications such as autonomous driving. As AI technology has matured, this interest is being picked up by the defense and energy exploration markets. This new AI Accelerator Engine, enables a user to receive and process real-time actionable intelligence from vision, RF or other sensors, providing a faster solution to many problems faced at the edge. The inferencing hardware used on TR AEx/3sd-RCx is supported by Intel's OpenVINO™ Toolkit, a comprehensive toolkit for deploying inferencing solutions on Intel based products. As well as Deep Learning, OpenVINO supports OpenCV and OpenVX: an open source library for computer vision applications and an API for heterogeneous compute use across Intel devices respectively.

TR AEx/3sd-RCx supports popular AI frameworks including Caffe, TensorFlow and MXNet along with neural network models like AlexNet and Resnet for ease of use and compatibility.

Jane Annear, Managing Director of Concurrent Technologies, commented:

"This new AI Accelerator Engine marks an exciting step for Concurrent Technologies, demonstrating our ability to innovate and provide more proactive solutions for problems and demands for challenging markets. Our objective is to provide solutions based around our existing processor board products and this is a significant step forward."