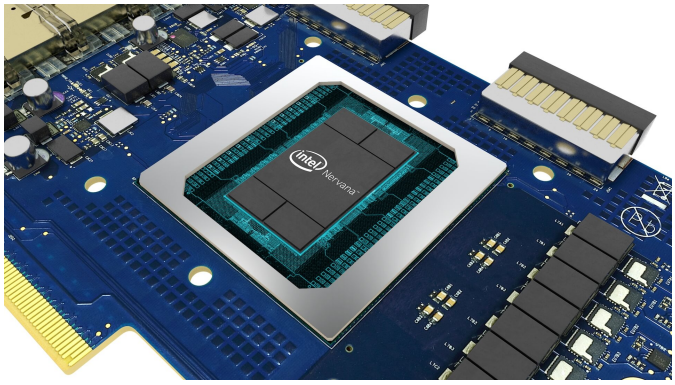
Intel takes on the likes of Nvidia with the presentation of the Nervana Neural Network Processor (NNP), a range of chips designed for artificial intelligence applications.



Previously codenamed "Lake Crest," the NNP is based on technology from Nervana Systems, a deep learning hardware startup Chipzilla acquired for $350 million back in August 2017. Also helping is Facebook, who provided a number of technical insights. As presented at the Wall Street Journal's D.Live 2017 event, the NNP is a high-performance ASIC custom-designed and optimised for deep learning workloads, and looks to replace GPUs in machine learning and AI.

The NNP is a "neuromorphic" chip, meaning it is inspired by the structure of the human brain. Such a design allows it to make decisions based on patterns and association, as well as get smarter over time, making it ideal for cognitive tasks ranging from recognising images, interpreting cardiac rhythms, detecting security anomalies and even composing music.

The first NNP products are a co-processor aimed at datacentre use, making it a direct competitor with the Nvidia's Volta-based Tesla range. It promises robust bi-directional data transfer using a proprietary numeric format (dubbed Flexpoint), together with a shrunken-down circuit size allowing both boosted parallelism and reduced power per computation.

Shipping to select customers should start by end 2017.

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