Nikkei Electronics Products' Trends (November 2024)

EdgeCortix Develops Semiconductors for Edge Inference Low Cost and High Efficiency, 60 TOPS at 8W



EdgeCortix has developed an AI (Artificial Intelligence) accelerator that can achieve 60 TOPS (60 Trillion Operations per Second) of computational performance with just 8W of power consumption. Compared to NVIDIA's GPUs (graphics processing semiconductors), it is specialized for edge inference, offering high power efficiency at a low cost.

One reason for its high power efficiency is the system's ability to reconfigure the data path for each computation. This enables efficient processing of large-scale language models (LLMs) with high sparsity. The previous generation product was optimized for 8-bit integer operations (INT8), but the new product also supports 16-bit floating-point operations (BF16).

By switching between INT8 and BF16 during processing, it is claimed that the system can shorten computation time while improving accuracy. For example, when performing facial recognition with a surveillance camera, the system can switch to high-precision BF16.

It is set to be sold starting at \$299 USD (approximately 40,000 yen, based on an exchange rate of 1 USD = 157 yen) and is scheduled for shipment by the end of 2024.

- Translation prepared by EdgeCortix.
- Nikkei Electronics Products' Trends (2024.11), full original Japanese post: https://bizboard.nikkeibp.co.jp/houjin/cgi-bin/nsearch/md_pdf.pl/0000507498.pdf?N EWS_ID=0000507498&CONTENTS=1&bt=NE&SYSTEM_ID=H0&BZB_DATE_TOKEN=2 c8c1de49fa6335b595b98736245b337ae6c9ab79ae590cf83dd174a1b8c749dc96ede 0a9cb8104bd5bd8bc3bf953669
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