NEWS RELEASE

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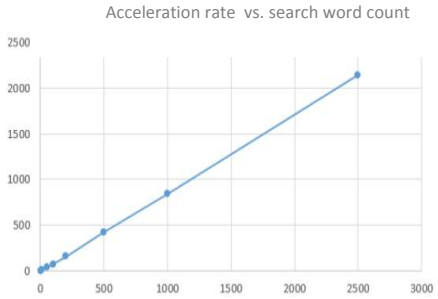
Partnering with Accelize, Nagase provides a Content-Oriented Find and Replace Accelerator Function on AccelStore for Cloud-based Data Analytics Acceleration

April 10th, 2018 - Tokyo, Japan - Unique search engine Axonerve™ search IP core developer NAGASE & CO., LTD. is publishing a text search and replace FPGA accelerator solution for cloud data analytics acceleration on the new AccelStore™ marketplace being announed today from partner, Accelize®. The Hyper FiRe is published as a ready-to-use Accelerator Function for application developers in the cloud, running on both Amazon AWS EC2 F1 Instances and OVH FPGA Instances. Cloud users developing data analytics applications are now able to integrate this ultra fast Find & Replace Accelerator Function from the AccelStore and benefit from its impressive acceleration factor compared to using regular, pure software functions such as SED. Through AccelStore, NAGASE is becoming an international Accelerator Function provider leveraging the Accelize platform to provide its expertise to Cloud users worldwide on ultiple Cloud Service providers. This partnership with Accelize enables a rapidly growing community of cloud FPGA users to leverage the Axonerve™ technology (an advanced content-oriented search technology IP) through the use of the Hyper FiRe Accelerator Function or as a standalone IP core in the Accelize QuickPlay® platform.

The Hyper FiRe Accelerator Function achieves a speed greater than 2000 times faster compared to full software processing (for a search and replace word list of 2500 words) by offloading the regular expression word search processing unit in the text search and replace software running in Linux to the hardware accelerator using Axonerve implemented in FPGA. An increase in the word search and replace count or the size of a text file to be processed normally deteriorates the processing performance in software applications, but this newly developed acceleration that offloads some processing to FPGA prevents performance deterioration caused by an increase in the word count or the size of a text file. This kind of high-speed processing technology has a significant impact on the real-time content analysis and streaming processing applications.

Software [sec]	0.151	0.5407	0.98629	4.683	9.315	20.476	54.751	108.88	278.43
Accelerator [sec]	0.1225	0.1229	0.1235	0.1264	0.12659	0.12733	0.1284	0.12922	0.12993
Search word count	1	5	10	50	100	200	500	1000	2500
Acceleration rate (%)	326531	4.3995118	7.98616	37.0491	73.5817	160.81	426.41	842.568	2142.92

Performance measured on AWS EC2 F1
(CPU: Intel Xeon E5 @ 2.3 GHz)



The Accelize Partner Network program brings together leading providers of FPGA accelerators, IP cores and libraries, FPGA boards and platforms and design services into one unified ecosystem. As a specific example of this development environment, NAGASE is publishing this Hyper FirRe on the Amazon AWS EC2 F1 Instance, leveraging the full power of the Accelize platform. This enables FPGA accelerator developers to design and customize their accelerators using the QuickPlay platform from Accelize and check the operations in the cloud. QuickPlay allows software developers to combine their own custom functions with highly optimized IP cores provided by Accelize partners (e.g., the currently released Axonerve search IP).

About Axonerve

Axonerve is an IP core using unique algorithms and includes a wild card search function. It is suitable for applications such as networking, data mining, and high-performance computing, and can perform search processing with high speed and low latency. For more information, visit www.axonerve.com

About Accelize

Accelize, a spinoff of PLDA Group, is a leading provider of (FPGA) Acceleration-as-a-Service, bringing the benefits of FPGA acceleration to Cloud and Enterprise users. With this focus, Accelize operates AccelStore, a Marketplace of ready-to-use accelerator functions running on FPGA Platforms provided by a broad ecosystem of FPGA IP providers, FPGA design houses and ISV's. Accelize also develops and maintains unique technologies that ease the development of FPGA accelerator functions and their monetization to benefit the entire FPGA supply chain. Its accelerator functions operate on multiple FPGA platforms in Public Cloud, Private Cloud and on premise. For more information, visit www.accelize.com.