Acronics Solutions

High-performance computing platform

The high-performance computing platform on the FPGA provides flexibility and hardware processing acceleration in various applications, aimed at solving complex science, technology, and business problems that require broad bandwidth, advanced networks, and robust computing capabilities.



OUTSTANDING FEATURES

- ***Fully master the core technology***

Integrated circuits design controlling program de elopment ensure safety malware-free and none of bac door.

- *Proactively e pand and upgrade the system*

Pro ide multiple clusters for scalability increased speed and upgraded features according to demands and wor loads.

- *Accelerate processing time up to 100X*

Acceleration capability is up to 100 times faster than a CPU.

- *Develop and build specific functions*

Designing all logic functions using process acceleration solutions compared to CPU or GPU.

- *System operations management*

Diagnose system operation status and pro ide alerts.

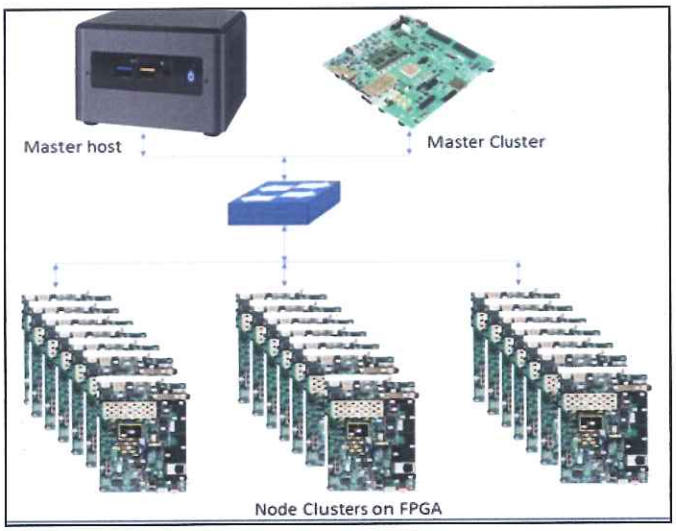
- *Ability to remove and hot-plug clusters while the system is running*

Flexible maintenance is possible e en while the system is operational.

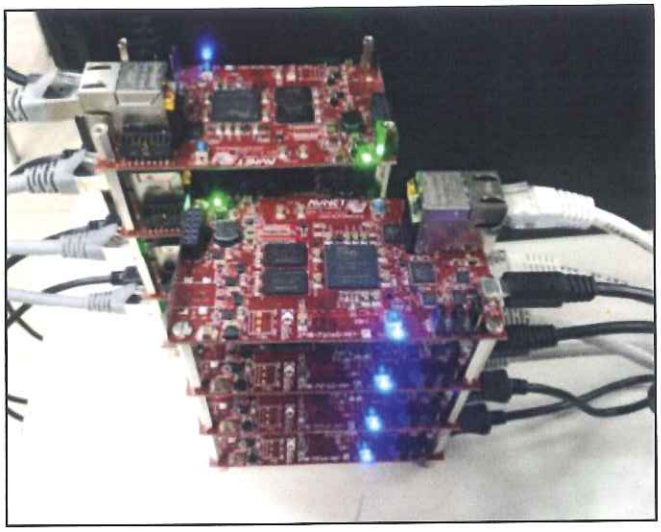
Main applications:

- **Network security:** Provides efficient computing and encrypts network packets in high-speed secure transmission lines. sed for security applications such as packet DPI and real-time network applications.
- **Real-time video processing:** sed for video livestreaming and broadcasting applications, ensuring quality and reducing costs.
- **Big Data search and analytics:** Addresses the variety and volume of data in today's metadata applications.
- **Financial analytics:** Delivers faster, more accurate results in risk modeling and analysis, transaction analysis, and securing transaction information for financial institutions.
- **Parallel computing tasks:** Capable of performing millions of calculations per second with low latency.
- **Diverse algorithms and processing methods:** Allows flexible programming and reprogramming to rapidly deploy custom hardware designs corresponding to different algorithms and work requirements.
- **Science-technology research:** Providing the fastest, most accurate computing platform compared to CP .

High-performance computing platform model



High-performance computing platform model



Self-designed high-performance computing platform

High-performance Computing Platform s etaile information

Appliance	
FPGA Technology	AMD-Xilinx - USA
Processor	ARMs Processors
Inspection port	
PCI slot 10/100/1000 Copper Ethernet 10G Fiber Optic SFP/SFP+	Unlimited Unlimited Unlimited
Management port	
USB and Ethernet	USB; Ethernet
Performance and features	
Performance (*)	
FPGAs	Unlimited
Program	Dynamic Reconfiguration
Frequency	1.6 GHz
Power Consumption	20W/Cluster
Power Saving	Automatic
Support application	
Supported	Data Analytics, Machine Learning, Scientific Simualators, Financial Trading, Network Packet Processing, Image Processing, Cloud Computing, Internet of Things (IoT),…
Certificate	Electronic components, white circuit board of A AMD-Xilinx; Digilentic - USA - certification ISO9001; DO-254, IEC61508, ISO26262; ISO45001; ISO14001 and RoHS Compliant according to international standards
Origin	Vietnam Software shelf life: Permanent