::NEW PRODUCT

Nallatech 250S+

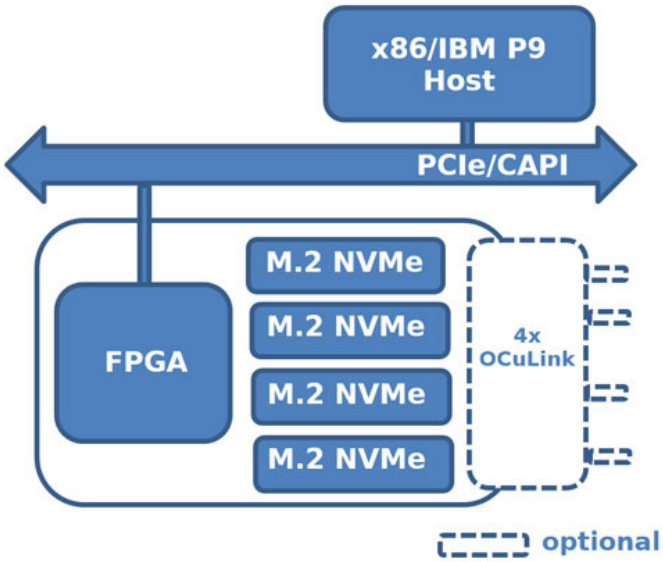
Directly Attached Accelerator (DAA)
Proxy In-Line Accelerator (PIA)

XILINX

The 250S+ is a fully-programmable NIC-sized near-storage accelerator featuring a Xilinx Kintex + FPGA.

This PCIe Gen 4-capable accelerator card can be added to PCIe or CAPI-enabled server platforms introducing an energy-efficient acceleration capability for applications including:

- Database Acceleration
- In-line Compression/Encryption
- Checkpoint Restarting
- Burst Buffer Caching



The 250S+ is available with a choice of two configurations: up to four M.2 NMVe SSDs coupled on-card to the Xilinx FPGA, or OCuLink break-out cabling allowing the 250S+ to be part of a massively scaled storage array.

Fully Programmable, Inline Storage FPGA Accelerator with on-card M.2 NVMe SSD

VIVADO HLx Editions

» Accelerating High Level Design

- Vivado HLx Editions supply design teams with the tools and methodology needed to leverage C-based design and optimized reuse
- Includes IP sub-system reuse, integration automation and accelerated design closure
- When coupled with the UltraFast™ High-Level Productivity Design Methodology Guide, this unique combination is proven to accelerate productivity
- It enables designers to work at a high level of abstraction while facilitating design reuse

Nallatech
a molex company

Nallatech 250S+

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FPGA Accelerator Card

Form Factor
» Half-Height, Half-Length PCI Express card
» Dimensions: 167.7 mm x 68.9 mm
» Single or Double-Width options
» Full-Height PCI bracket options

Host Interface
» 8-lane PCI-Express Gen 4.0 capable
» Actual performance is host computer chipset and operating system dependent

Processing
» Xilinx Kintex UltraScale+ FFVA1156 package
» Default configuration: KU15P
» Core speed grade -2
» Contact Sky Blue or Zerif for other FPGA options

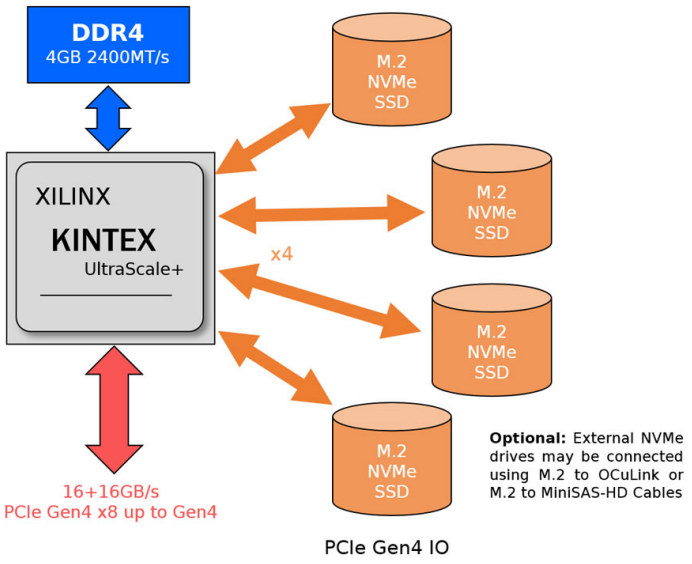
DDR4 SDRAM Memory
» One bank of DDR4 SDRAM x 80 bits
» 4GB per bank (8GB version also available)
» Transfer Rate: 2400 MT/s

Application Development
» Vivado Design Suite HLx Editions: HDL and C/C++ with HLS
» OpenPOWER CAPI SNAP 2.0 for POWER9

Electrical
» On-card power derived from PCIe slot supplies
» Power dissipation is application dependent
» Typical FPGA power consumption ~25-50W
» Card designed to deliver up to 75W power consumption

Quality
» Manufactured to ISO9001:2008 IPC JSTD-001 -Class III
» RoHS compliant

Power Supply Monitoring & Reporting
» Voltage monitoring
» Temperature monitoring
» Fault condition reporting to FPGA



Storage Options
» Four on-board 960GB NVMe SSD sticks
» Four on-board 1.92TB NVMe SSD sticks
» Four OCuLink cables
» Four MiniSAS-HD cables

Cooling
» Single-width passive heatsink for FPGA power up to 25W
» Double-width passive heatsink for FPGA power up to 50W

Environmental
» Cooling: Air convection
» Operating temperature: 5°C to 35°C

Deliverables
» 250S+ FPGA card
» Built-In-Self-Test (BIST)
» 1 year access to online support lounge
» 1 year hardware warranty

Customization: Technical specifications (e.g. FPGA type, size, external memory capacity, single width card solution etc.) can be modified to meet the exact needs of commercial customer applications as off-the-shelf product available to the general market.

Application optimization: Sky Blue and Zerif provides consultancy services assisting customers in the porting, optimization and benchmarking of applications executed on Nallatech FPGA accelerators.

International Distributors

sky blue microsystems

Sky Blue Microsystems GmbH
Geisenhausenerstr. 18
81379 Munich, Germany
+49 89 780 2970, info@skyblue.de
www.skyblue.de

ZERIF TECHNOLOGIES LTD.
A SKY BLUE COMPANY, FOUNDED 1999

In Great Britain:
Zerif Technologies Ltd.
Winnington House, 2 Woodberry Grove
Finchley, London N12 0DR
+44 115 855 7883, info@zerif.co.uk
www.zerif.co.uk