

Product Brief



PRODUCT SUMMARY

The FALCON-NEST FPGA server provides with its extreme density inside a 1U chassis a maximum of I/O networking bandwidth and compute power. 4x dual slot prodesign FALCON Stratix 10 FPGA accelerators combined with Intel Xeon Silver CPUs 4310T powered by Thomas Krenn offer highest scalable performance made in Germany. This trend-setting solution gives a great ecological footprint compared to traditional server configurations. FALCON-NEST has lower power consumption and takes up less space at a very attractive price.

KEY MARKETS

- → High Performance Computing
- → Al and Machine Learning
- → Video Broadcasting
- → High Frequency Trading

KEY FEATURES

- → 4x prodesign FALCON Stratix® 10 **Acceleration Card**
- → Up to 32x 100Gbps or 16x 200Gbps or 128x 10/25Gbps
- → Ultra high density in a 1U standard FPGA server

1U FPGA SERVER CHASSIS





prodesign FALCON-NEST







PRO DESIGN IN-HOUSE ADVANTAGES

R&D team (HW, SW):

- → Board modifications
- → Customization
- → Custom module development

Production Lines:

Full cycle with 40 years of experience

- → fast and determined lead times
- → several SMD lines

Test Facilities

- → Quality
- \rightarrow Reliability
- → Service support

Further Information

Please visit:

www.prodesign-fpga-acceleration.com

Contact

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FURTHER SPECIFICATIONS

Acceleration Cards	4 x prodesign FALCON Stratix® 10 Acceleration Card: → based on Intel® Stratix® 10 MX or NX FPGA incl. HBM2
CPU	Intel Xeon Silver Processor 4310T
Memory	8x 32 GB (1x 32768MB) ECC Registered (RDIMM) DDR4 3200 RAM 2 Rank
Storage	1 x 960 GB M.2 PCIe x4 2280 with PLP
Riser Cards	4 x flexible Riser Card PCle x16(PCle 4.0) 70cm
CPU-Cooling	1U CPU-Cooler (Intel LGA 4189, passive) internal Cooling via 9 x Fan
Power Supply	Redundant 1U 1300W
Chassis	1U rack system (45 x 479 x 763 mm)
Order Code	PD-FALCON-NEST

WHY prodesign FALCON-NEST?

- \rightarrow Enormous performance density within a 1U chassis.
- \rightarrow Highest level of compute and network capabilities.
- → Server and Accelerator Cards are assembled in Germany (TAA compliant).
- → Fully pre-configured and tested solution.

EXAMPLE USE CASES



Live Broadcasting Infrastructure Software



Network Protocol / Storage Protocol for HPC