Product Capabilities
From Data Ingestion to Model & Simulation to Radar Processing to Computational Finance to Cyber Security to Edge Analytics, the Dual Stratix 10 eXtreme High Performance Compute Node (XhpcN-DS10) is the most versatile and highest performing FPGA Accelerator card to hit the market!

The XhpcN-DS10 is designed to take on today’s data-intensive computing problems by incorporating two of Intel’s revolutionary Stratix 10 FPGAs, massive amounts of DDR4 and plenty of high speed I/O. With the OpenCL support included in the Board Support Package (BSP), the XhpcN-DS10 can now be easily programmed without the need to dive down into complicated Verilog or VHDL code.

Features
- Dual Intel Stratix 10 FPGAs
- Up to 264 GB DDR4 (132 GB per FPGA)
- QSFP+ 40/100GbE
- PEX PCIe x16 Gen 3
- Altera Max10 FPGA
- Freescale K61 Microcontroller
- GPU sized PCIe Form Factor

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**XhpcN-DS10**

**Configurations**

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<td>XhpcN-S10</td>
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**Specifications**

**Stratix 10 FPGA**
- GX280UF50
- 96 XCVR
- 1160 User I/O
- 2.8M Logic Elements
- 11,520 18x19 Multipliers
- Quad-core 64 bit ARM Cortex –A53
- 139 GB/s FPGA-to-FPGA
- Memory Bandwidth: 19.2 x 8 = 153.6 GB/s

**DDR4 RAM**
- 4 GB Discrete
- 4x RDIMM — 264 GB Max
- 2400 MT/s
- 19.2 GB/s

**I/O**
- 40/100 GbE QSFP+ (25 Gbps x4)
- mUSB—B
- High Speed Cable Connector (Optional) - x8 SerDes (18 Gbps x4)

**Power/Monitor/Protect/Config**
- Freescale K61 mController
- Altera Max10 FPGA
- 1024 Mb Boot Flash per FPGA

**Applications**
- Communications
- Computing
- Military
- Broadcast
- Medical
- Test & Measurement

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**Custom Solutions Available!**

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