

Data Sheet

FUJITSU PRIMERGY Intel® Xeon Phi™ 3120P / 5110P / 7120P

PRIMERGY server meet requirements for HPC coprocessing clusters

With the ever-increasing demand for more computing performance, systems based on CPUs alone, can no longer keep up. The CPU-only systems can only get faster by adding thousands of individual computers – this method consumes too much power and makes supercomputers very expensive. A different strategy is parallel computing, and the HPC industry is moving toward a hybrid computing model, where Co-Processors and CPUs work together to perform general purpose computing tasks. As parallel processors, GPUs excel at tackling large amounts of similar data because the problem can be split into hundreds or thousands of pieces and calculated simultaneously.

PRIMERGY Intel® Xeon Phi™ 3120P / 5110P / 7120P

High-level parallel processing using Intel® Xeon Phi™ coprocessors helps to accelerate very complex tools, for example those used by designers and engineers. Accelerating tools with a coprocessor is exponentially much quicker than adding a second CPU.

The Intel Xeon Phi 3120P, 5110P and 7120P coprocessors offer excellent computing performance per Watt and will help you to overcome the major challenges. These coprocessors help you to get extremely high performance rates from your parallel applications. The Intel Xeon Phi coprocessors are designed for diverse needs. The Intel® Xeon Phi™ 3120P coprocessor is an excellent choice for

compute-bound workloads. The Intel® Xeon Phi™ 5110P coprocessor is optimized for high density computing and is well-suited for workloads that are memory-bandwidth bound. This coprocessor is passively cooled and have the lowest thermal design power (TPD) from this coprocessor family. Last but not least the Intel® Xeon Phi™ 7120P coprocessor provides the most features and the highest performance and memory capacity of the product family. Passive and no thermal solution options enable powerful and innovative high performance computing (HPC) solutions.



Main Features

- PRIMERGY Intel® Xeon Phi™ 3120P
- PRIMERGY Intel® Xeon Phi™ 5110P
- PRIMERGY Intel® Xeon Phi™ 7120P
- Up to 1.2 teraflops double-precision performance
- Exceptional performance-per-watt for highly parallel workloads
- Single programming model for all your code

Benefits

- It is an excellent choice for compute-bound workloads.
- Is optimized for high density environments
- For powerful and innovative High-Performance computing (HPC) solutions.
- For Highly parallel applications using over 100 threads
- Offers highly parallel workloads
- Easy compiling Xeon CPU and Xeon Phi with similar instructions set

Technical details

Technical details

Product Model name	PRIMERGY Intel® Xeon Phi™ 3120P / 5110P / 7120P
Card category	Coprocessor
Single Precision	up to 2.021 teraflops
Double Precision	up to 1.011 teraflops
Slot	PCIe 2.0 x16
Formfactor	Full height (double slot density)
Card notes	To be used for CPU acceleration in HPC environments, no graphic output
Max. number per system unit	Xeon Phi 5100P 2x in PRIMERGY RX350 S7 / all Xeon Phi types 2x in PRIMERGY RX350 S8 Xeon Phi 5100P 2x in PRIMERGY TX300 S7 / all Xeon Phi types 2x in PRIMERGY RX350 S8 all Xeon Phi types 1x in PRIMERGY CX270 S2
Operating system pre-installed	RHEL 6.2 RHEL 6.3 RHEL 6.4 SLES 11 SP2
Cooling solution	ordering of dedicated FAN + mounting (300Watt cards) or Airduct + mounting kit required. Best directly when ordering the Server unit

Order code	Brand name	Graphics cores	Graphics memory size	Graphics memory speed	Graphics memory bandwidth
S26361-F4100-E312	Intel® Xeon Phi™ 3120P	57 Cores / 228 Threads	6 GB GDDR5 with ECC	5 GT/s	240 GB/s
S26361-F4100-E712	Intel® Xeon Phi™ 7120P	61 Cores / 244 Threads	16 GB GDDR5 with ECC	5.5 GT/s	352 GB/s

Environment

Power consumption	300W / 245W / 300W
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Compliance

Compliance notes	According to the corresponding system
Compliance link	https://sp.ts.fujitsu.com/sites/certificates

More information

Fujitsu products, solutions & services

In addition to Fujitsu with PRIMERGY Intel® Xeon Phi™ 3120P / 5110P / 7120P, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio

Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products

www.fujitsu.com/global/products/computing/

Software

www.fujitsu.com/software/

More information

Learn more about FUJITSU Server PRIMERGY Intel® Xeon Phi™ 3120P / 5110P / 7120P, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/primergy

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.

Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT. Please find further information at <http://www.fujitsu.com/global/about/environment>



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