



## PROJECT RECS

### Description

The Resource Efficient Cluster Server provides high-performance server configurations for a wide range of applications. The architecture was jointly developed together with the university of Paderborn, to transfer the growing demand for complex server configurations to affordable hardware.

RECS for High Performance Computing (HPC): An RECS cabinet when fully loaded holds up to 2300 cores and reaches a total computing power of more than 21000 gigaflops. A current supercomputer with a similar level of performance from the top 500 list would require approximately 10 completely equipped cabinets in a cluster. Therefore, companies and institutes are given the opportunity to realise HPC with their own affordable hardware.

RECS for data centers: The architecture allows the cost efficient operation of up to 600 dedicated servers in one cabinet. Voluminous server structures will no longer be necessary and at the same time the power consumption for normal operation and cooling will be greatly reduced.

RECS has an extremely high packing density. This is an enormous challenge for the design of the cooling system. With RECS it's possible to run 18 servers on one rack unit. Meaning that the server density is four to five times higher as in blades.

An intelligent management software turns the RECS into the Resource Efficient Cloud System. The RECS interface layer (RIL) and the resource management solution ensure optimal performance exactly where it's needed. This turn-key cloud computing solution can be used both in-house as well as being a basis for IT service providers.

### Basic information

- Resource Efficient Cluster Server
- Modular design applicable as full or special solution
- High Performance Cluster possible
- Up to 18 in one Rack Unit
- 4.5 x higher packing density than Blade
- approx. 400 Gigaflops computing power per Rack Unit

