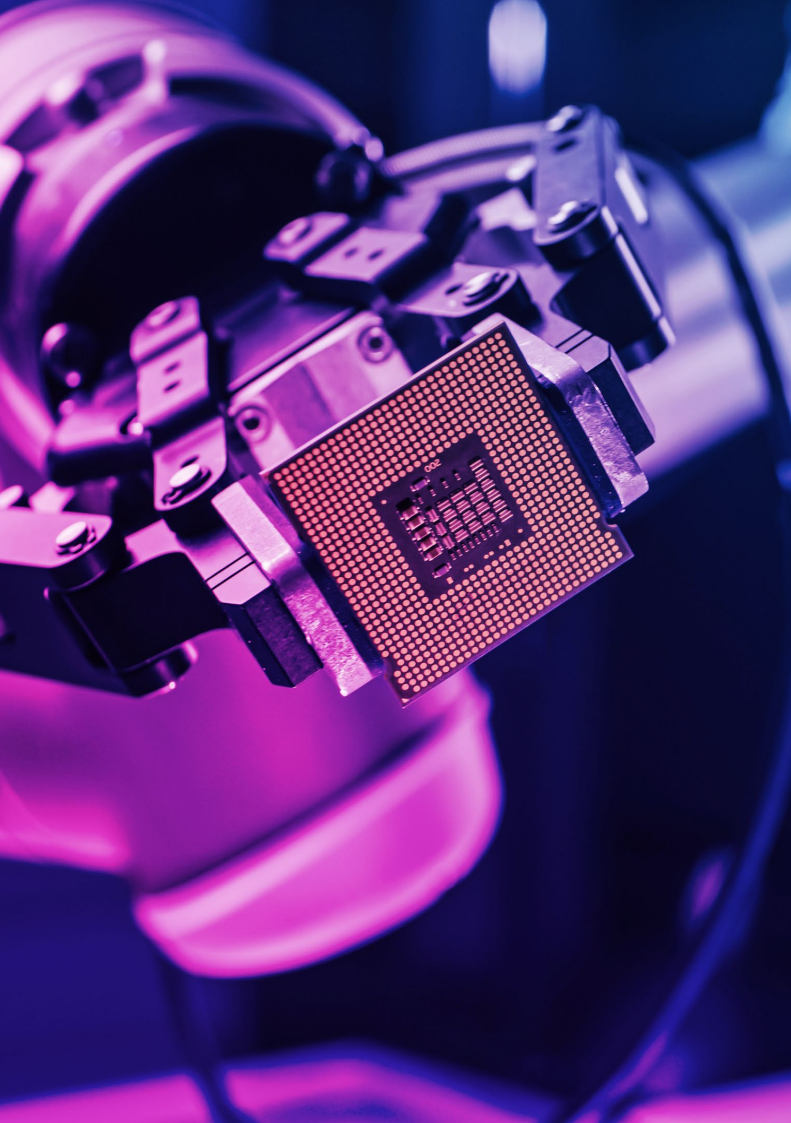**OCF**
BRILLIANCE. TOGETHER.

intel

Lenovo

SHAPING THE FUTURE OF ENGINEERING

POWERFUL, SCALABLE HPC SOLUTIONS

Design | Install | Support | Manage

Finance | Trustcale

If you're suffering from bottlenecks relating to IT infrastructure and processing, it could be time to assess your compute facilities and see what compute solutions could do for your business.

Are you in the majority? Only 17% of the High Tech Manufacturing sector uses HPC. Is it time to speed up your activity?

High-tech manufacturing and advanced engineering teams conduct complex simulations and data analysis that require massive amounts of compute power. Whilst it can be complex to understand and set up, compute solutions using a specialist HPC supplier can support scaling engineering workloads and identifying where data analysis could be improved using HPC.

OCF, Lenovo & Intel® are true problem solvers delivering smart, fast HPC solutions to keep high-priority projects and people running seamlessly. These end-to-end solutions support digital transformation in manufacturing providing solutions from the edge, the data centre and at the desk, that help:

Accelerate time to market
Complete jobs faster, reduce cycle times and speed up release dates.

Gain Deeper insights
Support larger more complex models to improve designs and eliminate defects.

Improve Productivity
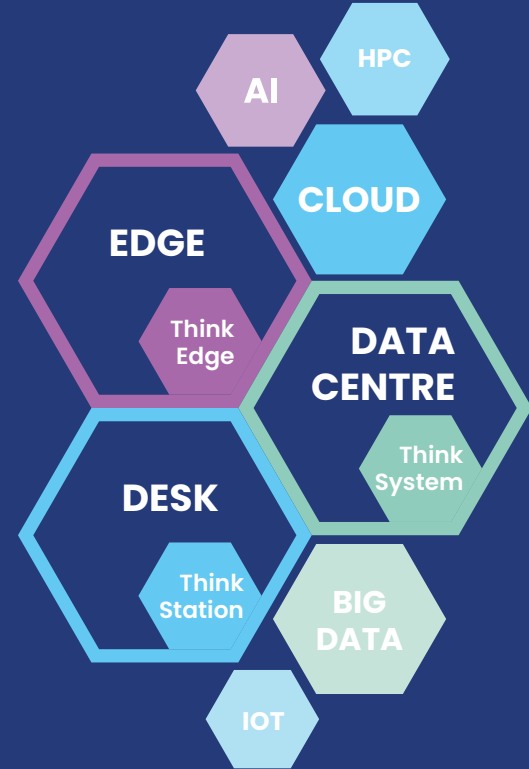Spend more time designing and less time waiting while reducing scrap & waste.

DON'T GET BEHIND THE CURVE

Utilising HPC may currently just be something that gives companies a competitive edge, but it will soon become a must-have if you want to maintain profitability.

Especially in spaces that use Computer Aided Engineering, processes are becoming extremely complex, meaning HPC solutions will eventually be the only way to keep up.
HPC can play a crucial role in addressing the problems associated with manufacturing, as HPC allows you to not only keep up with the demands of evolving technology but also open up a host of opportunities for your business.

From virtual product development, to test simulations and supply chain management, HPC not only speeds up your processes, it allows for massive savings in both resources and costs.

Design | Install | Support | Manage
Finance | TruScale

OCF and Lenovo's solutions can provide:

Complex Simulations and Data Analysis

Our solutions are designed to handle complex simulations and data analysis. An end-to-end solution with Lenovo and powered by Intel can significantly reduce the time required to run simulations, making product development faster and more efficient.

Data Management and Quality Assurance

HPC systems can handle large volumes of simulation data. They can also be used for data quality management, ensuring that the data used for analysis is accurate.

Seamless Integration of Software

An HPC infrastructure can help streamline workflows, making it easier for engineers to integrate multiple software tools seamlessly.

Customisation for Organisation

HPC can be customised to meet the exact requirements and constraints of high-tech manufacturing processes

Scalability and Future-Proofing

All of our systems are designed to be scalable, making them future-proof.
This ensures that as the demands for computational power change, your HPC infrastructure can change with it, without the need for a complete overhaul

Addressing Skills Shortage

OCF can build and manage your HPC systems.
This can bridge the gap caused by the shortage of skilled IT professionals and data architects in your existing workforce and reduce the costs involved in recruitment.

OCF & LENOVO, PROVIDING END-TO-END HPC INFRASTRUCTURE

LOCF considers Lenovo's 'Think' Range, powered by Intel®, the ideal end-to-end ecosystem for connectivity and reliability, from the Edge to the Data Centre, to the Desktop.

ThinkEdge At the EDGE

Lenovo's Edge Servers, including their **ThinkEdge** range, are powered by Intel®, with dual and quad-core processors providing superior computational capabilities. Their rugged service-grade component design allows for 24/7 use.

Powered by an Intel® Xeon® D processor, the **ThinkEdge SE350** is suitable for all sorts of locations and applications. Its lightweight and compact form offers more than double the storage capacity of competitors' edge servers while having the smallest footprint. Incredibly energy efficient with a diverse range of network interfaces, the SE350 is adaptable, reliable and unobtrusive.
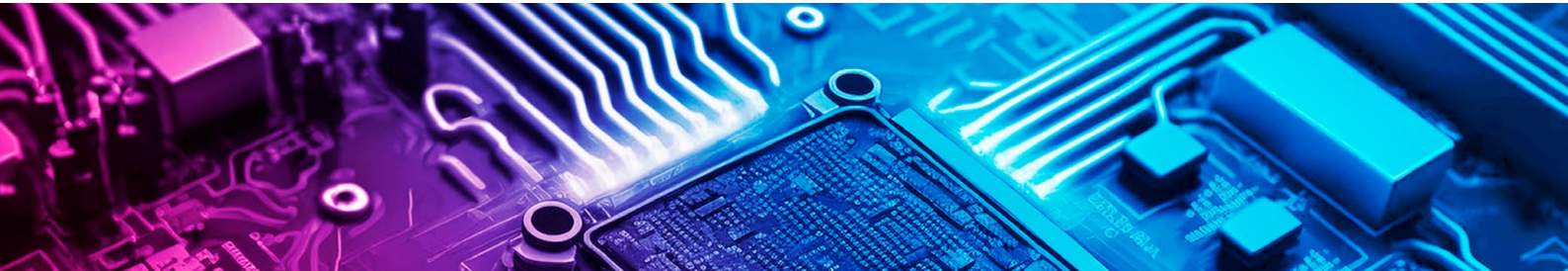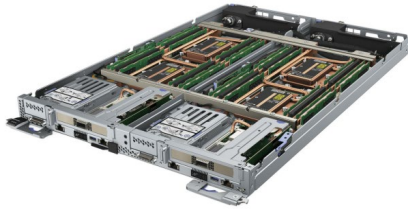
With a focus on smart connectivity and business security, the SE350 provides the processing power, storage, accelerator and networking capabilities required for today's Edge workloads.

ThinkSystem Data Centre Solutions & HPC

Lenovo's range of servers (such as the **ThinkSystem** range) power data centres at the heart of the ecosystem. This extensive range of solutions means OCF can meet your requirements at any scale.

They balance simplicity and performance, offering flexibility suitable for HPC, AI, cloud and hyper-converged workloads and are designed to give extreme performance and efficiency to power the world's largest HPC systems.

The **ThinkSystem SD650** can reliably power the world's largest HPC systems, thanks to its density, efficiency and innovative warm-water cooling functionality that allows for maximum performance. This cooling system reduces data centre energy costs by up to 40% and increases performance by up to 10% while creating a quieter data centre. Each node features Intel® Xeon® Scalable processors.

ThinkStation The final piece of the puzzle

ThinkStation desktop solutions are likely to be the most seen and used parts of the overall system. They offer the end user a perfect mix of usability, flexibility and reliability.

The **ThinkStation P5** is an all-around industry workhorse for professionals who demand a scalable, future-proof workstation. Powered by Intel® Xeon® W-2400 Series processor.

The **ThinkStation P7** enables staggering performance output in an Aston Martin-inspired chassis. Effortlessly manage workloads typically reserved for cloud or server resources with this tower of power. Powered by Intel® Xeon® W-Series processor.

The **ThinkStation PX** offers an iconic modular build co-designed with Aston Martin.
It goes beyond the limits of desktop performance to enable even the most extreme workflows. This workstation powerhouse runs the most complex computing workloads seamlessly.

The **ThinkStation P360 Ultra** is in a class of its own and delivers unmatched performance by packing powerful components in an innovative, space-efficient design.
Powered by Intel® Core™ i9 12th Gen processors, its versatility offers architects, designers, engineers, and visualisation specialists the power and configuration flexibility to support demanding workflows.

CASE STUDY: Donchamp

With annual production of more than 40,000 tons and exports to 30 countries, Donchamp is a world-leading supplier of industrial plexiglass. After moving its critical applications, including its SAP HANA environment, to a third-party cloud platform, the company encountered major data security and availability issues, along with escalating costs. To support ongoing expansion, Donchamp worked with Lenovo Design and Deployment Services to migrate the core workloads back to an on-premises infrastructure, comprising Lenovo ThinkSystem SR950 and Lenovo ThinkSystem SR650 servers, and Lenovo ThinkSystem DE4000H storage. Now, the company has achieved an SLA of 99% system uptime, improved data availability for business users, increased control and security over key data assets, and gained the scalability needed to achieve sustainable, long-term business growth.

"Lenovo delivered an excellent service from start to finish, from providing secure, high-availability infrastructure to completing the complex SAP HANA migration on schedule." - Zhang Chi, Head of Information Technology, Jiangsu Material Technology Co. Ltd. (Donchamp)

CASE STUDY: A1 Austria

Leading telecommunications and IT service provider A1 Austria hoped to gain a first-mover advantage when launching new solutions for their customers. A1 planned to invest heavily in emerging technologies, such as 5G. In conjunction with some of their partners, A1 created a 5G test laboratory, fitted with SE350 servers. As the servers can accommodate complex edge cloud workloads, A1 was able to reduce latency for end-user applications by 60%.

Why OCF?

75% of IT executives say the biggest risk factor in deploying technology is talent shortages. Fortunately, OCF are experts in delivering bespoke, end-to-end HPC solutions, and can fill the void created by the lack of skilled professionals.

We can create a bespoke system that provides a smooth transition of data across your workstream.

Our HPC solutions will enable advanced simulations, data analysis and optimisation with seamless connectivity between all elements involved, allowing you to drive innovation, reduce time-to-market and make data-driven decisions that will take manufacturing to new heights of efficiency.

- Effortless Data Management
- Efficient Software Integration
- Expert support system
- Proactive monitoring and management (optional)
- Future-proof, scalable systems to protect your investment

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