

ThinkPad | ThinkStation

Smarter
technology
for all

Lenovo

LENOVO WORKSTATIONS BRING MAXIMUM PRODUCTIVITY TO THE MANUFACTURING INDUSTRY

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intel

vPRO

Built for Business

Powered by
Intel vPro® platform

DIGITIZING THE MANUFACTURING INDUSTRY

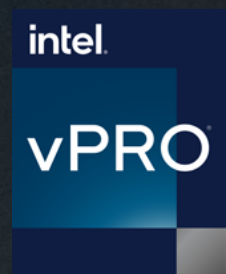
The manufacturing industry has long marched to the digitization drumbeat. Advancements in technology have acted as a catalyst, transforming the shop floor infrastructure to connect R&D to supply chain management. With data collection and analytics, real-time updates are now possible at every stage of production.

Industry 4.0 has converged the physical and digital worlds with technologies such as IoT, AI, Cloud, Big Data, Analytics, and 3D-printing. These are among the emerging technologies that enabled the rise of smart factories. By using Cloud-based automatic data collection and analysis to ensure a transparent supply chain and facilitate informed decision making, organizations have reaped the benefits of increased ROI. Factories are becoming digitally connected and increasingly automated, and one thing is clear – the Fourth Industrial Revolution is all about reinventing the manufacturing industry.

To benefit from the revolution, organizations need to recognize their challenges and strategize accordingly. Some of the biggest challenges manufacturing businesses face are:

- **Harnessing the power of Big Data and Analytics**
- **Data security**
- **Implementing IoT innovation**
- **Improving workforce productivity**

To overcome these modern challenges, organizations need reliable and innovative technology, powered by **Intel® vPro®**, **An Intel® Evo™ design**, that can empower their future-ready manufacturing workforce with peak productivity, enhanced collaboration, and robust security.



An Evo Design

Intel vPro®,
An Intel® Evo™ Design

WHY LENOVO WORKSTATIONS FOR MANUFACTURING

Offering a perfect mix of power and performance, Lenovo workstations are crafted to amplify productivity. Powered by the latest processors, ISV-certified applications, cutting-edge memory, and advanced connectivity and security features, these workstations enable maximum efficiency for manufacturing professionals. Flexible and scalable, these workstations provide users with the power, performance, and usability they need along with the reliability for which Lenovo is renowned.

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ThinkStation P360 TINY

Boost your manufacturing workflows with the ThinkStation P360 Tiny which combines simple and efficient design with the professional power of a workstation. The industry's smallest workstation at less than one-liter total volume, it offers uncompromising performance in a form factor that is 96% smaller than a traditional desktop.

Packed with the latest high-performance **Intel® Xeon® processors** and high-end graphics, this is the ideal professional device to meet the demands of the modern manufacturing professional.

KEY FEATURE

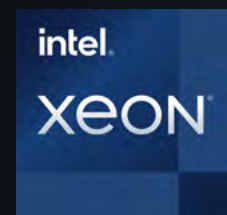
High CPU clock in single thread, entry level multi-core + mainstream GPU

SUITABLE FOR

AI Inference, GIS, Multi-Monitor Power Users

USE CASES

Edge/IoT Device, Digital Signage, Education, Medical



Powered by
Intel® Xeon® processor



ThinkStation P360 TINY

SPECIFICATION

Processor

Intel® Xeon® W-1350 Processor,
6C/12T 3.3GHz

Graphic

T1000 (4GB)

Memory

16GB ECC

Storage

512GB M.2 SSD+1TB HDD

Security

Kensington Lock

RECOMMENDED ADD-ONS



Kensington Lock



ThinkVision T23i-20



3-Year Premier Support +
Onsite Next Business Day
(NDB) Upgrade

ThinkStation P360 Ultra

Redefining the power of small, the ThinkStation P360 Ultra features a revolutionary form factor that packs a punch with the latest **Intel® Core™ i9 processors**, high-end professional graphics, superfast memory, and cutting-edge storage. This workstation breaks new ground by delivering superior performance for your compute-intensive manufacturing workflows, and flexibility in a chassis less than four liters in total volume.

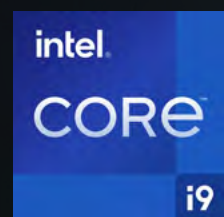
As more of your Smart factory workflows are computed at the edge, this compact powerhouse will be able to meet all your performance needs while being small enough and easy to deploy.

SUITABLE FOR

CAD/3D Users, Finance & Healthcare Imaging, Rendering

USE CASES

Good for embedded OEM & IOT, STEM EDU, CAD/3D, Finance, Medical



Powered by
Intel® Core™ i9 processor



ThinkStation P360 Ultra

SPECIFICATION

Processor

Intel® Core™ i9-12900
16C/24T Processor

Memory

32GB ECC

Storage

512GB M.2 SSD+1TB HDD

Graphic

A2000

Security

Kensington Lock Slot, ThinkShield

RECOMMENDED ADD-ONS



Mini-DisplayPort-to-
DisplayPort Cable



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ThinkPad P15v GEN 3

Built for creators who demand more value, the budget-friendly ThinkPad P15v offers the power you need to supercharge your product design and manufacturing workflow. Packed with the latest **Intel® Core™ processors**, high-end professional graphics, and a 4K UHD1 display, the P15v delivers a fast and visually stunning representation of your work.

MILSPEC-tested and equipped with the comprehensive ThinkShield Security Suite, this workhorse provides a rugged, secure system ideal for your Smart factory transformation.

KEY FEATURE

High CPU clock in single thread, entry level multi-core + mainstream GPU

SUITABLE FOR

CAD Designer (SolidWorks, Inventor)

USE CASES

CAD Modeling & light CAE as CAD add-on



Powered by
Intel® Core™ i7 processor



ThinkPad P15v GEN 3

SPECIFICATION

Processor

Intel® Core™ i7-12800H
6C/20T Processor (2.5GHz)

Memory

16GB

Storage

1TB M.2 SSD

Graphic

T1200 (4GB)

Security

Kensington Lock

RECOMMENDED ADD-ONS



Kensington Lock,
ThinkPad Thunderbolt 3
WorkStation Dock Gen 2



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ThinkPad P1 GEN 5

Powerful, mobile, and visually stunning, the ThinkPad P1 Gen 5 is the perfect combination of form and function. With a powerful system that offers the professional performance of the latest **Intel® Core™ processors** and high-end graphics for compute-intensive simulation work in power your manufacturing workflows.

Boasting a 16-inch panel, narrow bezel and a 16:10 aspect ratio for increased screen real estate, the P1 is a content creator’s dream. Designed with the modern user in mind, this powerhouse delivers power, ultra-premium design, and true mobility to the modern manufacturing worker in one stylish package.

KEY FEATURE

Many C/T CPU + mid-high GPU

SUITABLE FOR

Simulation analyst (ANSYS, Moldflow, CFD, Altair)

USE CASES

CAE w/GPU support



Powered by
Intel® Core™ i9 processor



ThinkPad P1 GEN 5

SPECIFICATION

Processor

Intel® Core™ i9-12900H
14C 2.6GHz

Memory

64GB

Storage

1TB M.2 SSD

Graphic

A5500 (16GB)

Security

Kensington Lock

RECOMMENDED ADD-ONS



Kensington Lock,
ThinkPad Thunderbolt 3
WorkStation Dock Gen 2



ThinkVision T23i-20



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(NDB) Upgrade

ThinkPad P16 GEN 1

The ThinkPad P16 Gen 1 is a power-packed mobile workstation that delivers the highest level of performance and power for the on-the-go manufacturing professional.

Built with the latest **Intel® Core™ processors** and high-end professional graphics, the ISV-certified P16s i is designed to move with its power user as they tackle the most demanding workflows. From product engineers creating sophisticated renderings to developers working on compute-heavy virtual and mixed reality simulations, the ThinkPad P16 Gen 1 removes any compromise.

KEY FEATURE

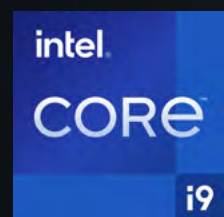
Many C/T CPU + high end GPU

SUITABLE FOR

Product designer who needs rendering and 3D visualization (VRED)

USE CASES

Photoreal design model discussion, virtual prototyping



Powered by
Intel® Core™ i9 processor

ThinkPad P16 GEN 1



Lenovo

SPECIFICATION

Processor

Intel® Core™ 19-12950HX
16C/24T 30MB

Graphic

A5000 (16GB)

Memory

64GB ECC

Storage

2TB M.2 SSD

Security

Kensington Lock

RECOMMENDED ADD-ONS



Kensington Lock,
ThinkPad Thunderbolt 3
WorkStation Dock Gen 2



ThinkVision P27u-20



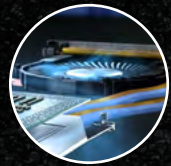
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HIGHLIGHT TECH

With the Fourth Industrial Revolution at its peak, professionals in the manufacturing industry need performance-boosting technologies that stretch the limits of innovation and enable maximum productivity.

LENOVO'S PORTFOLIO OF WORKSTATIONS IMPROVES PRODUCTIVITY WITH TECHNOLOGIES SUCH AS:



Intelligent Thermal Solution (ITS)

The Intelligent Thermal Solution in ThinkPads allows devices to be up to 15% cooler and 10% quieter while running intensive applications. It maintains temperatures at an optimal level for high-performance computing, carefully controlling power consumption at the same time.



M.2 Drives

M.2 storage drive provides greater storage capacities, high bandwidth, and low latency for real-time data access. Based on NVMe technology, these cards enable quicker boot-ups and open files faster, thereby increasing productivity.



DDR4 Memory

DDR4 memory allows users to add more powerful processors to their hardware offering advanced computing capabilities. It also enables hardware manufacturers to boost the battery life on their mobile devices.



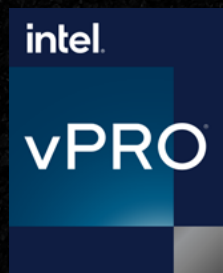
Intel® Optane™ Memory

Intel® Optane™ is a unique combination of a new memory class called Intel® 3D XPoint™ and Intel® Rapid Storage Technology that accelerates system performance and retains HDD capacity at SSD-like speed. Coupled with the latest generation of Intel® processors, Intel® Optane™ facilitates high PC responsiveness and faster completion of tasks.



Intel® Turbo Boost Technology

Intel® Turbo Boost is a part of the latest generation of Intel® processors that accelerates the PC's processor and graphics. It enables the cores to run faster than their rated frequency, maximizing processing power when the workload demands additional performance.



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VR- and MR-ready

Being VR and MR ready enables the mobile workstations to handle CPU and GPU-intensive workloads such as 3D content creation and VR rendering with ease.



Intel® Unite®

Intel® Unite® facilitates quick wireless connections and allows up to four presenters to share screen simultaneously. It also enables side-by-side comparison of data from separate sources and allows real-time annotations.



MIL-STD

ThinkPad devices are proven to survive extreme environmental variables, including temperature, pressure, dust, humidity, and vibration testing. Each ThinkPad passes through around 200 rigorous tests to ensure a reliable system for various real-world usage scenarios.



Error-Correcting Code (ECC) Memory

ECC memory, when installed in workstations, helps detect and correct single-bit memory errors and increases work efficiency.



Intel® Active Management Technology (AMT)

With Intel® AMT, IT teams can resolve interruptions without a desktide visit. They can recover a virus-infected system and install software patches remotely, outside of work hours, without affecting employee productivity.



Intel® vPro™ platform Technology

Lenovo's devices are powered by the latest Intel® vPro™ technology that provides data-driven performance, enhanced security, and allows flexible management of endpoint devices.



ThinkPad Glance

IR camera enables simple and secure log-in with Windows Hello and screen lock with ThinkPad Glance when the end user moves away from the PC. Once logged in, ThinkPad Glance improves user productivity by tracking the user's gaze and automatically placing the cursor and focus on the display.

The image shows a large industrial factory floor with multiple levels of metal walkways and railings. Several orange robotic arms are positioned on the floor, working on machinery. Blue signs with white text are visible on the walls, indicating different sections of the factory: B15, B12, B7, B18, and B17. The ceiling is high with a complex network of steel beams and pipes. The overall atmosphere is industrial and modern.

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B15

B12

B7

B18

B17

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