

## **ASTON MARTIN: PRODUCT DEVELOPMENT SOLUTION BRIEF**

### **An Obsession With Perfection**

Behind the design and styling of every Aston Martin is a team obsessed. Obsessed with the details and with the digital and physical tools around them. With a focus on hand-built products, designers have creative freedom to perfect each piece.

### **Challenge Everything**

For a design to become reality, the challenge is to understand the customer experience before finalizing the project. By blending the digital and physical workflows, Aston Martin's design team is able to inspect, critique, adjust, and challenge what they are capable of throughout the development and engineering processes. From concept design and styling to complex surfacing, from digital engineering to Product Lifecycle Management and marketing, Aston Martin's designers and engineers rely on Lenovo Solutions to help them achieve perfection. Lenovo™ ThinkStation® and ThinkPad® P Series workstations, powered by NVIDIA® Quadro RTX™ GPUs, are used at every stage to maximize their creativity and run their software applications with stability and reliability.





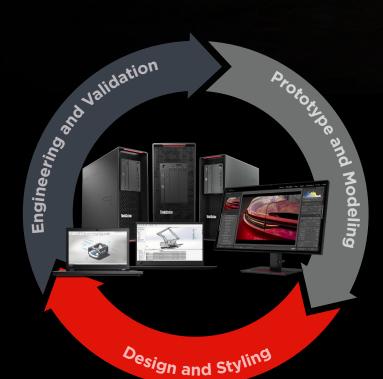




# DIGITAL DESIGNS WITH PHYSICAL ACCURACY

Every Lenovo ThinkStation and ThinkPad P Series workstation is powered by NVIDIA Quadro® GPUs, offering industry-leading performance and enterprise-level reliability for graphically intensive workflows.

The latest NVIDIA Quadro RTX professional graphics technologies, give Aston Martin the pinpoint accuracy they need to render even the most complex graphics with ease. Effortless analysis of highly-detailed datasets is achieved thanks to a large graphics memory. This means that visualizations, rendering, and immersive VR experiences can now be processed in real time, allowing designers, engineers and stakeholders to develop and collaborate with confidence knowing what they see as they work is physically accurate.



From concept design to design iterations, authenticating, and testing, Aston Martin uses the cycle above throughout the product development process, ensuring each part and piece is perfect.



This fluid feedback helps optimize the digital to physical prototyping loop, drastically reducing the time it takes to create perfection.

Workstation and professional graphics horsepower is also required to run complex computer aided engineering (CAE) workflows that simulate the effects of airflow, dynamic stress, and more. These virtual prototypes help ensure every Aston Martin design is engineered to extraordinarily high standards before testing begins with physical prototypes.

Lifelike renderings, motion graphics, immersive VR experiences, and interactive configurators ensure Aston Martin's customers can select and experience their personal automobile in pixel-perfect detail, all prior to production.







Aston Martin is extremely selective in choosing their vendors. They needed a partner that could deliver an unmatched experience—both from a technical hardware and from a relationship standpoint. Having a partner like Lenovo allows Aston Martin to focus on what they do best: achieving perfection in the designing and building of everything they create.

## **RECOMMENDED: PRODUCT DEVELOPMENT CONFIGURATIONS**

## ThinkPad P1



## Product Design and Styling, General CAD

#### **Processor:**

Up to 10<sup>th</sup> Gen Intel® Core™ and Intel H Series

#### **Graphics:**

Up to NVIDIA Quadro T2000

#### Storage:

Up to 4TB NVMe SSD

#### Memory:

Up to 64GB DDR4

## ThinkPad P15



### Product Design, High Performance CAD and Visualization

### Processor:

10<sup>th</sup> Gen Intel Core and Xeon® H Series

#### Graphics:

Up to NVIDIA Quadro RTX 5000

#### Storage:

4TB NVMe SSD

#### Memory:

Up to 128GB DDR4

## ThinkStation P520



## High-Performance Design, Styling, CAD, and Visualization

#### Drocossor

Intel Xeon W Series (up to 18 cores, up to 4.7GHz)

#### **Graphics:**

Up to Dual NVIDIA Quadro RTX 8000

### Storage:

Up to 4TB PCle M.2

#### Memory:

Up to 256GB DDR4, 2933MHz ECC

## ThinkStation P620

### **High Performance CAE**

ThinkStation

#### Processor:

AMD Ryzen™ Threadripper™ PRO (up to 64 cores; up to 4.0GHz)

#### Graphics

Up to Dual NVIDIA Quadro RTX 8000 or Quadro GV100

### Storage:

Up to 20TB

#### Mamary

Up to 512GB DDR4 3200MHz





To find out more about the Aston Martin and Lenovo partnership, please visit:

techtoday.lenovo.com/ww/en/
workstations/aston-martin