# ThinkAgile HX Certified Nodes

Rapidly and confidently deploy HCI clusters



#### **Optimize Your HCI Deployment**

When it comes to hyperconverged deployments, Lenovo offers flexibility so that customers can choose the model that best suits their business needs.

Since 2014, Lenovo has collaborated with Nutanix to offer ThinkAgile HX Series, a best-in-class turnkey hyperconverged system that integrates, validates, and optimizes Nutanix's industry-leading software with Lenovo's highly reliable platforms — including whiteglove Lenovo deployment services.

ThinkAgile HX appliances include a bundled Life of Device license, which remains with the appliance for its lifetime. For customers who prefer to provide their own Nutanix software licenses, Lenovo offers another choice: the ThinkAgile HX Certified Node, which includes:

- Fully validated and integrated hardware and firmware, certified with Nutanix software
- Preloaded Nutanix software for ready deployment, Nutanix term license obtained separately
- Flexibility to bring your own Nutanix termbased license, transferable to other HX certified nodes
- Flexibility to provide your own deployment services or optionally use Lenovo Deployment Services

#### **Increase Simplicity and Uptime**

ThinkAgile HX consolidates compute, storage, and virtualization software into simple building blocks, easily managed in scale-out clusters through a single interface. Achieve even simpler IT operations by using Nutanix Prism for one-click provisioning, insights, and firmware updates. Lenovo XClarity, a fast and intuitive resource management tool, can be used in concert with Prism.

A successful hyperconverged deployment depends on reliable servers that ensure your business-critical workloads run without interruption. For 7 years running, Lenovo servers have ranked as the industry's most reliable x86 platforms.<sup>†</sup> Enhanced with faster processors and memory, Lenovo platforms hold more than 240 current performance world records, so you can run your workloads with blazing-fast speed.\*



# 2 | ThinkAgile HX Certified Nodes

With ThinkAgile HX Certified Nodes, you have the freedom to bring your own Nutanix term-based licenses while leveraging outstanding Lenovo reliability and performance plus Nutanix simplicity. Deploy your HCI clusters rapidly and confidently with Lenovo.

#### ThinkAgile HX 1001 Series Certified Nodes - Intel

The 1U 1-node ThinkAgile HX 1001 Series Certified Node is engineered for light-to-medium workloads (business applications and VDI), and optimized for remote office/branch office (ROBO) environments.

	Remote Office/Branch Office (ROBO)	
Model Name	HX1321 Certified Node, 1U form factor	
Processor	1x Intel® Xeon® Silver, Gold or Platinum processor, up to 205W	
Memory	64GB, 96GB, 128GB, 192GB, 256GB, 384GB	
Drive Bays	4x 3.5"	
SSD Options (Hybrid Config)	2x 480GB, 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB	
HDD Options (Hybrid Config)	2x 4TB, 6TB, 8TB, 10TB, 12TB, 16TB	
SSD Options (All-Flash Config)	2x or 4x 480GB, 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB	
10GBASE-T/10GbE SFP+ Ports	s 2-6	
25GbE SFP28 Ports	SFP28 Ports 0-4	
ypervisors Preloaded Nutanix Acropolis Hypervisor (preloaded), VMware ESXi (optional preload), Microsoft I 2016		
Hypervisors Supported	Nutanix Acropolis Hypervisor, VMware ESXi, Microsoft Hyper-V 2016	
Systems Management	Hardware management via Lenovo XClarity and software management via Nutanix Prism	
Warranty Support	Lenovo 3-year, 4-year, or 5-year limited hardware warranty	

# ThinkAgile HX 2001 Series Certified Nodes - Intel

ThinkAgile HX2001 Certified Nodes are optimized for small and mid-sized businesses (SMB). Available in a 1U form factor, they are ideal for virtualized file, print, email, and other office applications.

	Small and Medium Businesses	
Model Name	HX2321 Certified Node, 1U form factor	
Processor	2x Intel Xeon Silver, Gold or Platinum processors, up to 205W	
Memory (TruDDR4 2933MHz)	96GB, 192GB, 256GB, 384GB, 512GB, 576GB, 768GB, 1024GB, 1.5TB	
Drive Bays	4x 3.5" drives	
SSD Options (Hybrid Config)	g) 2x 480GB, 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB	
HDD Options (Hybrid Config)	0-2x 1TB, 2TB, 4TB, 6TB, 8TB, 10TB, 12TB, 16TB	
SSD Options (All-Flash Config)	2x or 4x 480GB, 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB	
10GBASE-T/10GbE SFP+ Ports	s 2-8	
25GbE SFP28 Ports	0-6	
ypervisors Preloaded Nutanix Acropolis Hypervisor (preloaded), VMware ESXi (optional preload), Microsoft F		
Hypervisors Supported	Nutanix Acropolis Hypervisor, VMware ESXi, Microsoft Hyper-V 2016	
Systems Management	Software management via Nutanix Prism and hardware management via Lenovo XClarity	
Warranty Support	Lenovo 3-year, 4-year, or 5-year limited hardware warranty	

# 4 | ThinkAgile HX Certified Nodes

# ThinkAgile HX 3001 Series Certified Nodes - AMD

The ThinkAgile HX 3001 Series Certified Node, featuring the latest AMD EPYC processors, is available in a rack-dense 1U 1-node form-factor. It is packed with high memory and core density, making it perfect for virtual desktop infrastructure (VDI) and general virtualization workloads (business applications).

	General Virtualization and Virtual Desktop Infrastructure (VDI)		
10del Number HX3376			
Form Factor	1U		
Processors	1x or 2x AMD EPYC™ 7002 /7003 Generation Processors, up to 64 cores, 240W		
Memory	32 DDR4 memory slots; Maximum 2TB using 64GB or 128GB RDIMMs; up to 1DPC at 3200MHz 2DPC at 3200MHz		
Drive Bays	<ul> <li>Up to 12x 2.5-inch drives</li> <li>Up to 4x NVMe drives (requires 2 CPUs)</li> </ul>		
SSD Options (Hybrid Config)	2x-4x 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB, 7.68TB		
HDD Options (Hybrid Config)	4x-10x 1TB, 2TB, 2.4TB		
SSD Options (All-Flash Config)	6x-12x 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB, 7.68TB		
NVMe Options (All-Flash Config)	0, 2, or 4x 1.6TB, 3.2TB, 3.84TB, 6.4TB		
GPU Options	0-2x NVIDIA T4		
10/25GbE SFP28 Ports	0-6		
Hypervisors Supported	Nutanix Acropolis Hypervisor (preloaded), VMware ESXi (optional preload)		
Systems Management	Hardware management via Lenovo XClarity and software management via Nutanix Prism		
Warranty Support	Lenovo 3-year, 4-year, or 5-year limited hardware warranty		

#### ThinkAgile HX 3001 Series Certified Nodes - Intel

ThinkAgile HX 3001 Series Certified Nodes featuring the latest Intel Xeon Scalable processors are available in 1U 1-node, 2U 1-node, and 2U 4-node form factors. These Certified Nodes are engineered for compute-heavy workloads (business applications and VDI) and offer rack-dense and multi-GPU-capable (-G) models.

	General Virtualization and Virtual Desktop Infrastructure (VDI)			
Model Name	HX3321 (+ SAP HANA)	HX3521-G	HX3721	
Form Factor	1U	2U	2U 4-node	
Processor	2x Intel Xeon Silver, Gold or Platinum processors, up to 205W	2x Intel Xeon Silver, Gold or Platinum processors, up to 165W	2x Intel Xeon Silver, Gold or Platinum processors, up to 140W	
Memory (TruDDR4 2933MHz)	128GB, 192GB, 256GB, 384GB, 512GB, 768GB, 1.5TB, 3TB	128GB, 192GB, 256GB, 384GB, 512GB, 576GB, 768GB, 1.5TB, 3TB	192GB, 384GB, 512GB, 768GB	
Drive Bays	10x-12x 2.5"	8x-16x 2.5"	6x 2.5"	
SSD Options (Hybrid Config)	2x-4x 480GB, 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB, 7.68TB,	2x-4x 480GB, 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB, 7.68TB,	2x 480GB, 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB, 7.68TB	
HDD Options (Hybrid Config)	4x-10x 1TB, 2TB, 2.4TB	6x-14x 1TB, 2TB, 2.4TB	4x 1TB, 2TB, 2.4TB	
SSD Options (All-Flash Config)	6x-12x 480GB, 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB, 7.68TB, 15.36TB	8x-16x 480GB, 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB, 7.68TB, 15.36TB	4x-6x 480GB, 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB, 7.68TB, 15.36TB	
NVMe Options (All-Flash Config)	O, 2, or 4x 1.6TB, 3.2TB and 3.84TB	None	None	
GPU Options	None	0-2x NVIDIA P40, V100, M60, M10 0-5x NVIDIA T4	None	
10GBASE- T/10GbE SFP+ Ports	2-10	2-10	2-4	
25GbE SFP28 Ports	0-6	0-6	0-2	
Hypervisors Supported	Nutanix Acropolis Hypervisor (preloaded), VMware ESXi (optional preload)			
Systems Management	Hardware management via Lenovo XClarity and software management via Nutanix Prism			
Warranty Support	Lenovo 3-year, 4-year, or 5-year limited hardware warranty			

# ThinkAgile HX 5001 and HX 7001 Series Certified Nodes - Intel

The 2U 1-node ThinkAgile HX 5001 Series Certified Nodes are engineered for storage-heavy workloads (Big Data and enterprise applications) and offer a high-capacity model. The 2U 1-node ThinkAgile HX 7001 Series Certified Nodes are engineered for high-performance and mission-critical workloads (enterprise applications and in-memory databases (such as SAP HANA) and optimized for I/O intensive operation.

	Big Data and High Capacity	High Performance and Databases	Mission-Critical Workloads		
Model Name	HX5521	HX7521 (+ SAP HANA)	HX7821 (+ SAP HANA)		
Form Factor	2U	2U	4U		
Processor	2x Intel Xeon Silver, Gold or Platinum processors, up to 165W	2x Intel Xeon Silver, Gold or Platinum processors, up to 205W	4x Intel Xeon Silver, Gold or Platinum processors, up to 205W		
Memory (TruDDR4 2933MHz)	128GB, 192GB, 256GB, 384GB, 512GB, 768GB, 1.5TB, 3TB	192GB, 384GB, 576GB, 768GB, 1.125TB, 1.5TB, 3TB	384GB, 576GB, 768GB, 1.125TB, 1.5TB, 2.25TB, 3TB, 4.5TB, 6TB		
Drive Bays	12x or 14x 3.5"	24x 2.5"	Up to 24x 2.5"		
SSD Options (Hybrid Config)	2x-6x 480GB, 960GB, 1.92TB, 3.84TB	4x-8x 480GB, 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB, 7.68TB	Up to 8x 480GB, 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB, 7.68TB		
HDD Options (Hybrid Config)	6x-12x 4TB, 6TB 6-10x 8TB 4x-8x 10TB, 12TB, 16TB	12x-20x 1TB, 2TB, 2.4TB	Up to 20x 1TB, 2TB, or 2.4TB 2.5"		
SSD Options (All-Flash Config)	6x-14x 480GB, 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB	12x-24x 480GB, 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB, 7.68TB, 15.36TB	Up to 24x 480GB, 800GB, 960GB, 1.6TB, 1.92TB, 3.84TB, 7.68TB, 15.36TB		
NVMe Options (All-Flash Config)	None 0, 2, or 4x 1.6TB, 3.2TB		1.6TB, 3.2TB		
10GBASE- T/10GbE SFP+ Ports	2-10	2-10	2-10		
25GbE SFP28 Ports	0-8	0-8	0-8		
Hypervisors Supported	Nutanix Acropolis Hypervisor (preloaded), VMware ESXi (optional preload), Microsoft Hyper-V 2016				
Systems Management	Hardware management via Lenovo XClarity and software management via Nutanix Prism				
Warranty Support	Lenovo 3-year, 4-year, or 5-year limited hardware warranty				

#### **About Lenovo**

Lenovo (HKSE: 992) (ADR: LNVGY) is a US\$45 billion Fortune 500 company and a global technology leader in driving Intelligent Transformation. Lenovo's data center solutions (ThinkSystem, ThinkAgile) are creating the capacity and computing power that are changing business and society.

#### For More Information

To learn more about Lenovo ThinkAgile HX Certified Nodes, contact your Lenovo representative or Business Partner or visit lenovo.com/thinkagile.



† ITIC Global Reliability Study \* Visit Lenovo Servers Continue to Lead the Industry in Performance and Value for more information.

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