

SOLUTION BRIEF

StorMagic SvSAN

AND THE LENOVO THINKSYSTEM SE350 EDGE SERVER

INTRODUCTION

Computing and storage resources are moving ever closer to where data is generated, a trend that is being driven by demands for faster, more flexible processing of data. Organizations are discovering that traditional solutions weren't designed for these new demands and are therefore seeking out more suitable alternatives. Solutions built for the edge need to be powerful and reliable, yet as small and as simple as possible. Lenovo has captured these requirements in its SE350 Edge Server.

THE LENOVO THINKSYSTEM SE350 EDGE SERVER

The Lenovo ThinkSystem SE350 edge server's small footprint and power efficiency allow for reliable server-class performance at many edge locations. The rugged SE350 can handle temperatures from 0° to 55°C, as well as tolerate locations with high-dust and vibration—such as construction site trailers and

manufacturing floors. It can be deployed equally well in a traditional office or branch location due to its office-friendly acoustics. The half-width, short-depth, 1U SE350 can be installed almost anywhere: hung on a wall, stacked on a shelf, or mounted in a rack. It delivers the processing power, storage, accelerator, and networking capabilities needed for consolidation of traditional workloads, general-purpose applications, and edge inferencing.



ADDING HIGH AVAILABILITY WITH STORMAGIC SvSAN

The lightweight flexibility of the SE350 delivers compute and storage to edge locations, but these sites will often be remote, won't have local IT staff and may be running business-critical applications. As a result, it is important to consider how any downtime might affect the organization and how it can be reduced, or eliminated entirely. StorMagic SvSAN, installed on a pair of Lenovo SE350 servers at each location, ensures high availability by sharing the internal storage between the servers. SvSAN is designed specifically for edge environments, making it the obvious choice for avoiding downtime and disruption, preventing the need for costly, datacenter-class solutions at every site.

THE SWEET SPOT FOR THE SE350 AND SvSAN

SvSAN's low system requirements and the lightweight architecture of the SE350 lend themselves perfectly to most edge use cases. From nationwide retailers with thousands of stores, each needing highly available compute and storage, to remote wind farms hundreds of miles from IT support, to small businesses needing a solution that will fit into a closet or under a desk. All are examples of the space in which the SE350 and SvSAN have both been designed to excel in. If the need is for a simple, lightweight solution using minimal resources that can provide bulletproof reliability and resiliency, while delivering the performance and capacity necessary to run business-critical applications, then Lenovo's SE350, running StorMagic SvSAN, is the ideal choice.

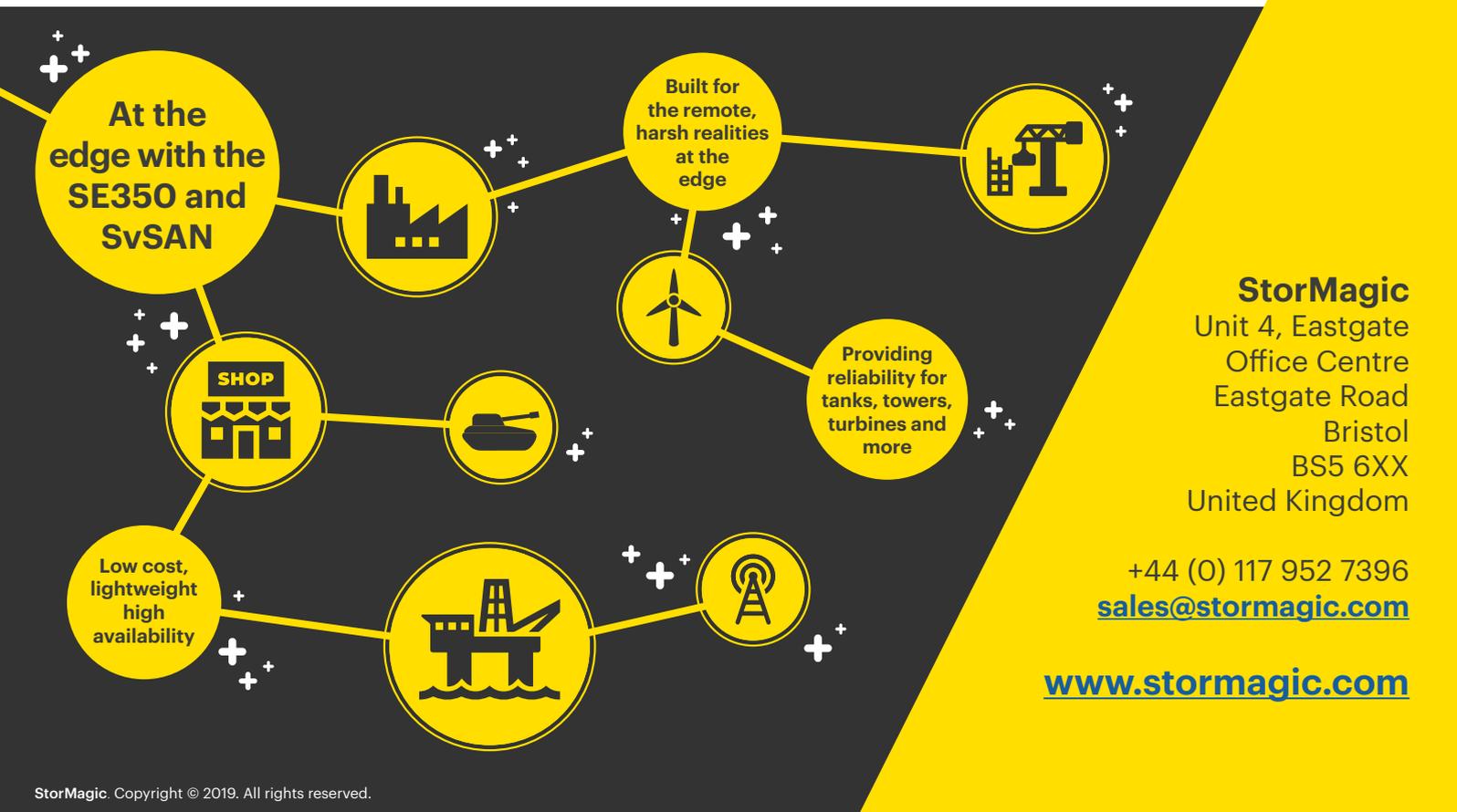
MORE INFORMATION ON LENOVO AND STORMAGIC

StorMagic SvSAN is available directly from Lenovo and their global network of resellers as part of a full solution with servers and storage. Details on the partnership between StorMagic and Lenovo can be found on the [StorMagic website](#),



alongside an additional [solution brief](#) that outlines other Lenovo servers that are an ideal fit for different SvSAN use cases. More information on the SE350 server can be found on the [Lenovo website](#).

The StorMagic website contains an extensive [library of documentation](#) on SvSAN, including installation guides, white papers and data sheets. Furthermore, the Lenovo team within StorMagic are ready to provide information and assistance on the partnership and its possibilities. Simply email sales@stormagic.com to reach out.



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LENOVO THINKSYSTEM SE350 EDGE SERVER SPECIFICATIONS

Form factor	1U, half width, short depth
Dimensions	1.75" (40mm) high, 8.1" (215mm) wide, 14.9" (376mm) deep
Processor	1-socket Intel Xeon D-2100, up to 16 cores
Memory	Up to 256GB in 4x slots, using 64GB DIMMs
Storage	<ul style="list-style-type: none"> ● 2x M.2 2280 SATA boot drives + 8x M.2 22110 NVMe data storage drives ● 2x M.2 2280 SATA boot drives + 4x M.2 22110 NVMe/SATA data storage drives ● SED, high temperature, high capacity, and high endurance drive options ● Optional encryption key deletion on tamper or theft detection
RAID Support	Software RAID available
Mounting Options	<ul style="list-style-type: none"> ● Single node mounting options for desktop, VESA, DIN, wall, or ceiling ● Multi-node stackable bookend options ● E1 Enclosure for two nodes side-by-side and 4x power supplies. Depth: 735mm, Height: 1U ● E2 Short Depth Enclosure for two nodes sides by side + 4x power supplies: Depth: 440mm, Height: 2U ● Locking bezels and dust filter options
Power	<ul style="list-style-type: none"> ● Dual-redundant external power supplies 100-240V AC ● Single DC supply: -48VDC (-40VDC to -75VDC)
Networking	<ul style="list-style-type: none"> ● 2x10GbE (SFP+), 2x 10/100MB/1GbE, 2x 1GbE management ● 2x10GbE (SFP+), 4x switch 10/100MB/1GbE, 2x 1GbE management ● Four wireless SMA connectors for LTE & Wi-Fi ● Wi-Fi 64/128-bits encrypted WEP, WPA, WPA2, 802.11 a/b/g/n/ac ● 3G/4G Cellular LTE 3GPP Release 12 450Mbps DL/50Mbps UL ● 5G ready
Accelerators and PCIe Expansion	<ul style="list-style-type: none"> ● 1x PCIe 3.0 x16 75W or 4x 22110 / 2280 M.2 PCIe ● Support for 1x NVIDIA® T4 GPU for AI inference ● Support for GPU, FPGA, ASIC accelerators ● Support for operational technology networks ● 1x PCIe network card expansion <ul style="list-style-type: none"> ● 4x 1GbE RJ45 PCIe ● 2x 10GBASE-T PCIe ● 2x 10/25GbE SFP28 PCIe
I/O	<ul style="list-style-type: none"> ● Front: 1x VGA, 2x USB 3.0, 1x XClarity Controller management mini-USB ● Rear: 1x RJ45 Console Serial, 2x USB 2.0 ● USB and Console ports can be disabled
Systems Management	Lenovo XClarity Administrator with mobile option
Environmental	Extended operating temperature of 0-55°C, up to 30G shock, 3G vibration, IEC 60068, MIL-STD-810G, optional dust filter
Security	<ul style="list-style-type: none"> ● ThinkShield Key Vault management with motion and intrusion tamper protection ● Optional SED encrypted storage for boot and data drives ● Lenovo Trusted Supplier Program, Secure boot, and Smart USB Protections, Lenovo Wi-Fi Security, Lenovo LTE Security ● Optional Kensington keyed lock compatible chassis ● Nationz TPM 2.0 for customers in China ● Cable locking bezel
Limited Warranty	1-year, 3-year warranty extendable to 5-year, next business day 9x5; optional service upgrades

