



#### **Highlights**

- **Optimized Cooling Efficiency**
- Diverse disk storage
- ASUS PIKE II Technology for **SAS 12G**
- Additional Storage for OS
- **Dual M.2 Support**
- **OCP 2.0 Mezzanine**
- Comprehensive IT infrastructure management software — ASUS Control Center (ACC) IT management software and ASMB9-iKVM module support

## **ASUS RS540-E9-RS36-E**

## Extremely High-Density 4U Storage Server

















#### Mass storage & flexibility in 4U and additional OS Kernel Disk

RS540-E9-RS36-E is equipped with 36 SAS/SATA 3.5-inch disk drive bays (24 front + 12 rear), and 2.5" hot-swap HDD bays per enclosure. The hot-swappable design provides non-stop high availability, making short work of maintenance. RS540-E9-RS36-E also offers great freedom when it comes to the choice of operating system drive type and placement, with M.2 slot available, and two hot-swappable 2.5-inch SSD bays.

#### Optimized Cooling Efficiency

RS540-E9-RS36-E offers excellent thermal solution, heat dissipation and energy savings. It's even possible to adjust the fan speed manually, so you have flexible choice to meet different working environment.

#### ASUS PIKE II & 12G SAS Integration\*

ASUS PIKE II offers the latest 12Gb/s SAS together with PCI-E 3.0 solution. While ASUS latest 12Gb/s SAS doubles the data rate running at twice the speed of the previous generation, PCI-E 3.0 offers high reliability and faster speed connection. ASUS PIKE II meets user needs with support for 6Gb/s SATA and 12Gb/s SAS storage and integrated RAID data protection. Just placing the PIKE II card can immediately enlarge the capacity, improve the performance, and strengthen the signaling, making it the great upgrade option. Additionally, multiple HBAs allow multi-paths which improve over performance.

\*PIKE II Card by default needed

### Flexibility to grow with your business

RS540-E9-RS36-E comes with a wide range of ports to provide a flexible and cost-effective computing environment with the ability to grow together with your business. RS540-E9-RS36-E features:

- A 4U rack-optimized design
- 36 x 3.5" Hot-swap HDD bays (SATA/SAS Supported)
- 2 x Hot-Swap 2.5" Storage Bays (Rear)
- 6 PCIe + 1 OCP expansion slots in a 4U rack unit
- OCP 2.0 Mezzanine(Gen3 x16 Link)
- Dual M.2 support (SATA 6Gb/s & PCI-E Gen3 x4 link)

# **Specification**

|   |  | 2 x Socket P0 (LGA 3647)  |
|---|--|---|
| Processor Support   |  | 1st Gen Intel® Xeon® Processor Scalable Family  |
|   |  | 2nd Gen Intel® Xeon® Processor Scalable Family (85W)  |
|   |  | UPI 10.4 GT/s   |
| Core Logic  |  | Intel® C621 PCH   |
| Memory  | Total Slots                                  | 16 (4-channel per CPU, 8 DIMM per CPU)  |
|   | Capacity                                     | Maximum up to 512GB RDIMM/Maximum up to 2048GB RDIMM 3DS/Maximum up to 2048GB LRDIMM/Maximum up to 4096GB LR-DIMM 3DS   |
|   | Memory Type                                  | DDR4 2933 (1 DIMM per Channel) DDR4 2666/2400/2133 RDIMM/LRDIMM/LRDIMM 3DS (2DIMM per Channel) *Refer to Asus server AVL for the latest update *if 2DPC, 2933MHz speed will drop to 2666MHz   |
|   | Memory Size                                  | 4GB,8GB, 12GB, 32GB (RDIMM) 64GB,128GB(RDIMM 3DS) 32GB, 64GB,128GB(LRDIMM) 64GB,128GB ,256GB(LRDIMM 3DS) *Refer to Asus server AVL for latest update  |
| Expansion Slots   | Total PCI/PCI-X/PCI-E/PIKE Slots             | 6+1   |
|   | Slot Type                                    | 2 x PCI-E x16 (Gen3 x16 link), LP, HL<br>4 x PCI-E x8 (Gen3 x8 link), LP, HL<br>1 x OCP 2.0 Mezzanine (Gen3 x16 link)   |
|   | Proprietary Slot 1                           | -   |
| Disk Controller   | SATA Controller                              | Intel® 621 PCH - 11 x SATA 6Gb/s ports (8 by 2 mini-SAS Connector) - 2 x M.2 connector(SATA 6Gb/s & PCI-E Gen3 x4 link) Intel® RSTe (Support software RAID 0, 1, 10 & 5)  |
|   | SAS Controller(RAID Card)                    | ASUS PIKE II 3008 8-port SAS 12G/s HBA card or<br>ASUS PIKE II 3108 8-port SAS 12G/s HW RAID card(Default)  |
| Storage Bays  | I = internal<br>A or S will be hot-swappable | 24 x Front Hot-Swap 3.5"/ 2.5" Storage Bays (BP w/Expander)* 12 x Rear Hot-Swap 3.5"/ 2.5" Storage Bays (BP w/Expander)* 2 x Hot-Swap 2.5" Storage Bays (Rear) 2 x M.2 (2280, 2260, 2242) (Support SATA/PCIe M.2,SATA/PCIe RAID) *PIKE II Card needed (Default) |
| Networking  | LAN  | 1 x Dual Port Intel I350-AM2 Gigabit LAN controller<br>1 x Management Port  |
| Graphic   | VGA  | Aspeed AST2500 with 64MB VRAM   |
| Auxiliary Storage Devi  | ice Bay (Floppy / Optical Drive)             | -   |
| Front I/O Ports   |  | 2 x USB 2.0 ports   |
| Rear I/O Ports  |  | 2 x USB 3.1 Gen 1 ports, 1 x VGA port, 2 x RJ-45 GbE LAN ports,<br>1 x RJ-45 Mgmt LAN port  |
| Switch/LED  |  | Front Switch/LED:  1 x Power switch/LED, 1 x Location switch/LED, 1 x Reset switch, 1 x HDD Access LED,  1 x Message LED, LAN 1-4 LED  * LAN3-4 for Mezzanine card use  |
|   |  | Rear Switch/LED:<br>1 x Power switch, 1 x Q-Code/Port 80 LED, 1 x Message LED, 1 x HDD LED,<br>1 x Location LED   |
| OS Support  |  | Please find the latest OS support from http://www.asus.com/   |
| 1000  |  | ASUS Control Center (Classic)   |
|   |  | ASMB9-iKVM for KVM-over-Internet  |
| Regulatory Compliance   |  | CE, FCC (Class A)   |
| Dimension   |  | 615mm x 447mm x 176mm (4U), 24.21" x 17.6" x 6.92"  |
| Net Weight Kg (CPU, DRAM & HDD not included)                  |  | 27.73 Kg  |
| Power Supply<br>(following different configuration by region) |  | 1+1 Redundant 800W 80 PLUS Platinum Power Supply<br>Rating: 100-127Vac/200-240Vac,10A/5A ,50/60Hz, Class I  |
| Environment   |  | Operating temperature: 10°C – 35°C<br>Non operation temperature: -40°C – 70°C<br>Non operation humidity: 20% – 90% (Non condensing)   |