

SATYAMEBA System Configuration

Theoretical peak Floating Point Performance Total (RPeak)	288 TFLOPS
Base Specification	2U * Xeon W9-3495X (56C/112T) • 256 GB DDR5 ECC • 8 TB NVMe (2×4 TB) • INWIN 4U Rack • Dual 2000 W PSU • 25 G NIC ×3 • ASUS W790E
Master/ Service/Log in Nodes	2U * i9-14900K • 32 GB DDR5 • 2 TB NVMe (Samsung) • RTX 5070 12 GB • 32" BenQ • ML360 Cooler • 1250 W PSU • Logitech G515/G502 • Win 11 Pro • UPS 2000 VA 6U * i7-14700K • 32 GB DDR5 • 1 TB NVMe • RTX 5070 12 GB • 32" BenQ • Cooler Master ML360 • 1250 W Gold PSU • Win 11 Pro • QHEAL AV (3 Y) • UPS 2000 VA
CPU Only Compute Nodes (Extension)	7U * Intel Core i5 7th Gen • 8 GB DDR4 • 512 GB NVMe • WiFi • Windows 10/11 Preloaded • Tiny Desktop (Dell)
GPU Only Compute Nodes (Extension)	1U * i7-14700F • B760ME DDR5 (MSI) • 16 GB DDR5 • 1 TB NVMe • RTX 3060 • 20" Acer LED • TVSE Keyboard • HP Mouse • 550 W Cooler Master PSU 1U * AMD Ryzen 9 7950X (16C/32T, 4.5–5.7 GHz) • Asus ROG Crosshair X670E • 32 GB DDR5 (Corsair 6600 MHz) • 2 TB NVMe WD Black SN770X • RTX 4090 24 GB (Gigabyte) • ML360 Liquid Cooler
Total Memory	32.584 TB
Storage	≈ 48.6 TB (including 16 TB NAS Server)
Interconnect	Cisco C9300X 25 G Switch • FortiGate 100F FW • TP-Link ER8411 VPN • SFP Modules + DAC Cables

Base Nodes	Master/ Service/Log in Nodes	CPU Only Compute Nodes (Extension)	GPU Ready Nodes(Extension)
2 Unit Xeon W9-3495X (56C/112T) • 256 GB DDR5 ECC • 8 TB NVMe (2×4 TB) • INWIN 4U Rack • Dual 2000 W PSU • 25 G NIC ×3 • ASUS W790E	2 Unit i9-14900K • 32 GB DDR5 • 2 TB NVMe (Samsung) • RTX 5070 12 GB • 32" BenQ • ML360 Cooler • 1250 W PSU • Logitech G515/G502 • Win 11 Pro 6 Unit i7-14700K • 32 GB DDR5 • 1 TB NVMe • RTX 5070 12 GB • 32" BenQ • Cooler Master ML360 • 1250 W Gold PSU • Win 11 Pro • QHEAL AV (3 Y)	7 Unit Intel Core i5 7th Gen • 8 GB DDR4 • 512 GB NVMe • WiFi • Windows 10/11 Preloaded • Tiny Desktop (Dell)	1 Unit i7-14700F • B760ME DDR5 (MSI) • 16 GB DDR5 • 1 TB NVMe • RTX 3060 • 20" Acer LED • TVSE Keyboard • HP Mouse • 550 W Cooler Master PSU 1 Unit AMD Ryzen 9 7950X (16C/32T, 4.5–5.7 GHz) • Asus ROG Crosshair X670E • 32 GB DDR5 (Corsair 6600 MHz) • 2 TB NVMe WD Black SN770X • RTX 4090 24 GB • ML360 Liquid Cooler