

CPU Intel® Xeon® D-2142TT 8-core 1.90 GHz processor (burst up to 3.0 GHz) per controller  CPU Architecture 64-bit x86  Floating Point Unit Yes  Encryption Engine Yes (AES-NI)  System Memory 64 GB RDIMM DDR4 ECC (4 x 16 GB) per controller  Maximum Memory 512 GB (8 x 64GB)  Memory Slot 8 x R-DIMM/LR-DIMM DDR4  Flash Memory 4GB (Dual boot OS protection)  Drive Bay 16 x 3.5-inch bays: 3.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA solid state drives  Hot-swappable Yes  M.2 SSD Slot 2 x M.2 port for each controller Supports SATA 66b/s or NVMe Gen3 x4 2280  SSD Cache Acceleration Support 7 Flash (C2F)  Gigabit Ethernet Port (RJ45)  Jumbo Frame Yes  PCIe Slot 2  Ser Gigabit 3  Ser Gigabit 3  Ser Gigabit 3  Ser Gigabit 3  Ser Gigabit 4  Ser Gigabit 3  Ser Gigabit 3  Ser Gigabit 4  Ser Gigabit 3  Ser Gigabit 4  Ser Gigabit 5  Ser Gigabit 5  Ser Gigabit 5  Ser Gigabit 5  Ser Gigabit 6  Ser Gi	ES1686dc-2142IT-128G		
Floating Point Unit Encryption Engine Yes (AES-NI)  System Memory 64 GB RDIMM DDR4 ECC (4 x 16 GB) per controller  Maximum Memory 512 GB (8 x 64GB)  Memory Slot 8 x R-DIMM/LR-DIMM DDR4  Flash Memory 4GB (Dual boot OS protection)  Drive Bay 16 x 3.5-inch Drive Compatibility 3.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA solid state drives  Hot-swappable Yes  M.2 SSD Slot 2 x M.2 port for each controller Supports SATA 6Gb/s or NVMe Gen3 x 4 2280  SSD Cache Acceleration SSD Cache Acceleration Support M.2 slots: read cache only  Cache for Copy To Flash (C2F)  Gigabit Ethernet Port (RJ45)  1 per each controller (one for remote management)  (RJ45)  10 Gigabit/5 Gigabit Ethernet Port Jumbo Frame Yes  PCIe Slot 2 Slot 1: PCIe Gen 3 x 8 (CPU) Slot 2: PCIe Gen 3 x 8 (CPU) Slot 2: PCIe Gen 3 x 8 (CPU) Slot 2: PCIe Gen 3 x 8 (CPU)	CPU	·	
Encryption Engine Yes (AES-NI)  System Memory 64 GB RDIMM DDR4 ECC (4 x 16 GB) per controller  Maximum Memory 512 GB (8 x 64GB)  Memory Slot 8 x R-DIMM/LR-DIMM DDR4  Flash Memory 4GB (Dual boot OS protection)  Drive Bay 16 x 3.5-inch  Drive Compatibility 3.5-inch bays:	CPU Architecture	64-bit x86	
System Memory 64 GB RDIMM DDR4 ECC (4 x 16 GB) per controller  Maximum Memory 512 GB (8 x 64GB)  Memory Slot 8 x R-DIMM/LR-DIMM DDR4  Flash Memory 4GB (Dual boot OS protection)  Drive Bay 16 x 3.5-inch  Drive Compatibility 3.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA solid state drives  Hot-swappable Yes  M.2 SSD Slot 2 x M.2 port for each controller Supports SATA 6Gb/s or NVMe Gen3 x4 2280  SSD Cache Acceleration Yes M.2 slots: read cache only  Cache for Copy To Flash (C2F)  Gigabit Ethernet Port (RJ45)  10 Gigabit/5 Gigabit Ethernet Port Yes  PCIe Slot 2 Slot 1: PCIe Gen 3 x8 (CPU) Slot 2: PCIe Gen 3 x8 (CPU)  Slot 2: PCIe Gen 3 x8 (CPU)  USB 3.0 port 2 per each controller	Floating Point Unit	Yes	
Maximum Memory       512 GB (8 x 64GB)         Memory Slot       8 x R-DIMM/LR-DIMM DDR4         Flash Memory       4GB (Dual boot OS protection)         Drive Bay       16 x 3.5-inch         Drive Compatibility       3.5-inch bays: 3.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA solid state drives         Hot-swappable       Yes         M.2 SSD Slot       2 x M.2 port for each controller Supports SATA 6Gb/s or NVMe Gen3 x4 2280         SSD Cache Acceleration Support       Yes M.2 slots: read cache only         Cache for Copy To Flash (C2F)       1 per each controller (64GB)         Gigabit Ethernet Port (RJ45)       3 for each controller (one for remote management)         Jumbo Frame       Yes         PCIe Slot       2 Slot 1: PCIe Gen 3 x8 (CPU) Slot 2: PCIe Gen 3 x8 (CPU)         USB 3.0 port       2 per each controller	Encryption Engine	Yes (AES-NI)	
Memory Slot   8 x R-DIMM/LR-DIMM DDR4	System Memory	64 GB RDIMM DDR4 ECC (4 x 16 GB) per controller	
Flash Memory 4GB (Dual boot OS protection)  Drive Bay 16 x 3.5-inch  Drive Compatibility 3.5-inch bays: 3.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA solid state drives  Hot-swappable Yes  M.2 SSD Slot 2 x M.2 port for each controller Supports SATA 6Gb/s or NVMe Gen3 x4 2280  SSD Cache Acceleration Yes M.2 slots: read cache only  Cache for Copy To Flash (C2F)  Gigabit Ethernet Port (RJ45)  10 Gigabit/ 5 Gigabit 4 x 10GbE SFP+ for each controller Ethernet Port  Jumbo Frame Yes  PCIe Slot 2  Slot 1: PCIe Gen 3 x8 (CPU)  Slot 2: PCIe Gen 3 x8 (CPU)  USB 3.0 port 2 per each controller	Maximum Memory	512 GB (8 x 64GB)	
Drive Bay  16 x 3.5-inch  Drive Compatibility  3.5-inch bays: 3.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA solid state drives  Hot-swappable  Yes  M.2 SSD Slot  2 x M.2 port for each controller Supports SATA 6Gb/s or NVMe Gen3 x4 2280  SSD Cache Acceleration Support  Yes  M.2 slots: read cache only  Cache for Copy To Flash (C2F)  Gigabit Ethernet Port (RJ45)  1 per each controller (one for remote management)  (RJ45)  10 Gigabit/ 5 Gigabit Ethernet Port  Jumbo Frame  Yes  PCIe Slot  2 Slot 1: PCIe Gen 3 x8 (CPU) Slot 2: PCIe Gen 3 x8 (CPU) Slot 2: PCIe Gen 3 x8 (CPU)  USB 3.0 port  2 per each controller	Memory Slot	8 x R-DIMM/LR-DIMM DDR4	
Drive Compatibility  3.5-inch bays: 3.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA solid state drives  Hot-swappable  Yes  M.2 SSD Slot  2 x M.2 port for each controller Supports SATA 6Gb/s or NVMe Gen3 x4 2280  SSD Cache Acceleration Support  Yes M.2 slots: read cache only  Cache for Copy To Flash (C2F)  Gigabit Ethernet Port (RJ45)  1 per each controller (one for remote management)  1 Gigabit/5 Gigabit Ethernet Port  Jumbo Frame  Yes  PCIe Slot  2 Slot 1: PCIe Gen 3 x8 (CPU) Slot 2: PCIe Gen 3 x8 (CPU) Slot 2: PCIe Gen 3 x8 (CPU)  USB 3.0 port  2 per each controller	Flash Memory	4GB (Dual boot OS protection)	
3.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA solid state drives  Hot-swappable  Yes  M.2 SSD Slot  2 x M.2 port for each controller Supports SATA 6Gb/s or NVMe Gen3 x4 2280  SSD Cache Acceleration Support  M.2 slots: read cache only  Cache for Copy To Flash (C2F)  Gigabit Ethernet Port (RJ45)  1 per each controller (one for remote management)  (RJ45)  3 for each controller (one for remote management)  Usb 3.0 port  2 per each controller  2 per each controller	Drive Bay	16 x 3.5-inch	
M.2 SSD Slot  2 x M.2 port for each controller Supports SATA 6Gb/s or NVMe Gen3 x4 2280  SSD Cache Acceleration Yes M.2 slots: read cache only  Cache for Copy To Flash (C2F)  Gigabit Ethernet Port (RJ45)  1 per each controller (one for remote management)  10 Gigabit/5 Gigabit Ethernet Port  Therefore a very support to the support of t	Drive Compatibility	3.5-inch SAS/SATA hard disk drives 2.5-inch SAS/SATA hard disk drives	
Supports SATA 6Gb/s or NVMe Gen3 x4 2280  SSD Cache Acceleration Yes Support M.2 slots: read cache only  Cache for Copy To Flash (C2F)  Gigabit Ethernet Port (RJ45)  1 per each controller (one for remote management)  10 Gigabit / 5 Gigabit	Hot-swappable	Yes	
Support  M.2 slots: read cache only  Cache for Copy To Flash (C2F)  Gigabit Ethernet Port (RJ45)  1 per each controller (64GB)  3 for each controller (one for remote management)  10 Gigabit/ 5 Gigabit	M.2 SSD Slot		
Gigabit Ethernet Port (RJ45)  3 for each controller (one for remote management)  10 Gigabit/ 5 Gigabit Ethernet Port  4 x 10GbE SFP+ for each controller  4 x 10GbE SFP+ for each controller  5 Jumbo Frame  Yes  PCIe Slot  2 Slot 1: PCIe Gen 3 x8 (CPU)  Slot 2: PCIe Gen 3 x8 (CPU)  USB 3.0 port  2 per each controller			
(RJ45)  10 Gigabit/ 5 Gigabit		1 per each controller (64GB)	
Ethernet Port  Jumbo Frame Yes  PCIe Slot 2 Slot 1: PCIe Gen 3 x8 (CPU) Slot 2: PCIe Gen 3 x8 (CPU)  USB 3.0 port 2 per each controller		3 for each controller (one for remote management)	
PCIe Slot  2 Slot 1: PCIe Gen 3 x8 (CPU) Slot 2: PCIe Gen 3 x8 (CPU)  USB 3.0 port  2 per each controller		4 x 10GbE SFP+ for each controller	
Slot 1: PCIe Gen 3 x8 (CPU) Slot 2: PCIe Gen 3 x8 (CPU)  USB 3.0 port  2 per each controller	Jumbo Frame	Yes	
	PCIe Slot	Slot 1: PCIe Gen 3 x8 (CPU)	
Form Factor 3U Rackmount	USB 3.0 port	2 per each controller	
	Form Factor	3U Rackmount	

LED Indicators	System Power LED (Green): on/off System Status (Green/ Orange): in operation, system errors, low power, degraded RAID mode, memory failure, fan/power supply failure, system/disk temperature too high, storage pool reaching threshold value, system performing take-over, power supply unit unplugged LCD Status Display (Two-digit number): Status of JBOD connection
Buttons	Power, Reset
Dimensions (HxWxD)	132 × 483.05 × 630.62 mm
Weight (Net)	25.83 kg
Weight (Gross)	32.69 kg
Operating temperature	0 - 40 °C (32°F - 104°F)
Relative Humidity	5~95% RH non-condensing, wet bulb: 27°C (80.6°F)
Power Supply Unit	Redundant/ Hot Swap Power Vin:90~264VAC;770W
Power Consumption: Operating Mode, Typical	500.87 W
Fan	Hot-swappable fan module (60*60*38mm; 16000RPM/12v/2.8A x 3)
Sound Level	55.8 db(A)
Safety Standard	FCC Class A (USA only) CE Mark (EN55022 Class A, EN55024) EN60950 BSMI VCCI CB LVD

Note: Use only QNAP memory modules to maintain system performance and stability. For NAS devices with more than one memory slot, use QNAP modules with identical specifications. Warning: Using unsupported modules may degrade performance, cause errors, or prevent the operating system from starting.

Designs and specifications are subject to change without notice.

<sup>\*</sup> Sound Level Test Environment: Refer to ISO 7779; Maximum HDD loaded; Bystander Position; Average data from 1 meter in front of operating NAS.