

4BAYS U2 NVME RAID SUBSYSTEM



Key Features

- Fully RAID functions support and hardware acceleration
- Offload back-up at power fail using ONFI (Supercap required), with bad block management
- Hot replacement without system shutdown when drives failed
- System LEDs in front bezel for enclosure status monitoring
- Present, Activity, Fault LEDs indication in each U.2 slot

SAS3516 Features

- 12Gb/s SAS/SATA/NVMe Tri-mode PCIe RAID controller
- PCIe 3.1 Host Interface PCIe Gen3 x8 lanes at transfer rate up to 8GT/s per lane, full duplex
- Device Interface per U.2 slot PCIe Gen3 x4 at 8GT/s per lanes
- Support RAID level 0,1,5,6 and 10

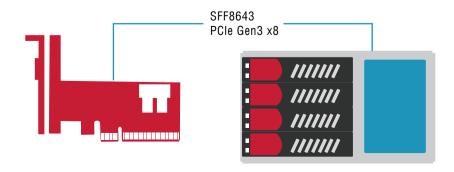
Hardware NVMe RAID Subsystem with 4Bays U.2 drives

UTran NVMe RAID subsystem UT34U2 supports 4bays U.2 drives. There are two SFF8643 connectors in rear of RAID subsystem, utilizing PCle switch host card or passive card connecting host with SFF8643 cables(PCle Gen3 x8). It allows to hot-replace faulty drives without system shutdown.

UT34U2 is revolutionary subsystem providing high bandwidth and IOPS in data protection, and is ideal for high-end server utilizing internal storage.

Adopt Broadcom MegaRAID Tri-mode ROC SAS3516

Build-in Broadcom SAS3516 RAID On Chip (ROC) and 4GB 72-bit DDR4-2133 SDRAM providing hardware RAID assist engine for parity calculations. Hardware-based RAID solution that supports RAID levels 0, 1, 5, 6 and 10. ONFI-4.0 compliant NAND controller channels that support up to 400 MT/s for memory backup while power loss and features battery backup controller to assure data integrity.



Models	UT34U2
Subsystem Dimension	146mm (W) x 85mm (H) x 166mm (D)
RAID-On-Chip	Broadcom SAS3516
Drives support	Support 7mm and 15mm U.2 form factor Support up to 2280 length M.2 drives (U2 to M2 adapter card required)
LEDs indication	U.2 Drive Activity (Green), Present (Blue) and Fault (Red) LEDs System Heartbeat (Green) LED Cache Dirty (Green) LED ROC over-temperature (Amber) LED Globe Failure (Amber) LED ONFI Activity (Green) LED Supercap Fault (Amber) LED
Host Port Interface	PCIe Gen3 x8 lanes, up to 8.0 GT/s per lane, full duplex. SR-IOV (16 virtual functions) Supports End-to-End CRC and Advanced Error Reporting (AER) Supports the PCI Bus Power Management Interface Spec Rev 1.2 Eight-lane aggregate bandwidth of up to 8 GB/s (8000 MB/s)
Device Port Interface	x16 SerDes PHYs Support 4Bays U.2, each with PCIe Gen3 x4 link width Transfer rate is at 8.0 GT/s per lane Separate Reference clock Independent SSC (SRIS) PCIe application layer supports NVMe and AHCI
Power Consumption	Approximately 13 watts (not include power consumption of U.2 drives) The CacheVault Supercap consumes up to an additional 6W during transparent learn cycle from PCle 3.3V rail.
Operating System Support	Microsoft Windows, Linux, VMware. See www.broadcom.com/support/download-search for details on versions.
RAID Functions Support	RAID levels 0, 1, 5, and 6 RAID spans 10 Online Capacity Expansion (OCE) Online RAID Level Migration (RLM) Auto resume after loss of system power during array rebuild or reconstruction (RLM) Single controller Multipathing Load Balancing Configurable stripe size up to 1MB Fast initialization for quick array setup Check Consistency for background data integrity SSD Support with SSD Guard™ technology Patrol read for media scanning and repairing
Cache Protection	CacheVault CVPM05
Temperature conditions	Operating Temperature: 10 ° C TO + 50° C Storage Temperature: -40° C to 85° C Operating Humidity: 10% to 90% relative humidity non-condensing Storage Humidity: 5% to 95% relative humidity non-condensing
Certifications	CE(EN55022/EN55024/EN55032 Class B) FCC(Part 15 Subpart B Class B) ROHS compliant