



MonTitan™ High Performance
 PCIe Gen5 Enterprise SSD
 Solution development platform



SM8366 SSD Controller



- PCIe Gen5 x4, Dual Port
- NVMe 2.0
- OCP Data Center NVMe SSD 2.0
- Programmable Standard NVMe, HB-FTL, ZNS FW
- High Performance
 - 14GB/s Sequential I/O
 - Random Read/Write 3.0 / 2.8M 4K IOPS
- PerformaShape™ ASIC based QOS sets
- 16 Channels, 2400 MT/s
- NANDCommand™ maximizing Enterprise NAND performance

Form Factors: E1.S, E3.S, U.2



SM8366

PCIe Gen5 x4 Dual Ported Enterprise SSD Controller
 Supports latest 3D TLC and QLC NAND in Standard Form Factors



Enterprise Storage Solutions

Product Overview

Enterprise SSDs

- Gen4/5 NVMe
- OCS
- ZNS SSD

Silicon Motion FlashGo NVMe AFA Solution

- 2122MWrite Dual-Node; Capacity up to 48MWrite by JBOD
- Smart Flash: STTB/STTB, STTB, STTB
- 4000xQ2 / 12000xQ2 IOPS/QC / Write/Read
- RAID 6 with Smart GC & 70% Usable Capacity / Snapshot / Clone
- Multi-Level Data Reduction: Inline / Background Compression & Deduplication
- Redundant Controller / PSU / Fan & Battery backup Copy-to-Flash
- Ease of Use Management: Web UI & RESTful

The fully redundant hardware design

High Performance Data Center SSD with low latency QOS Control

PCIe NVMe SSD
 Gen4 SP4E/SP4X

Leading High Performance Data Center SSD with PerformaShape™

PCIe NVMe SSD
 Gen5 SP5 E/X

High Performance AFA Solution

VirtualStor® FlashGo
 NVMe All-Flash Array

Single-Chip SSD Solutions for Boot Drives

PCIe NVMe



PCIe Gen4 x4

- PCIe Gen4 x4
- NVMe 1.4a
- Capacities: 2-8TB, Read Intensive & Mixed Work-Load
- Seq. Read/Write: up to 6,300/3,500 MB/s
- Ran. Read/Write IOPS: up to 800/340 K
- 7.3 RW mix IOPS, 500K+
- Enterprise: End to End Data Protection, Reliability, PLP, Thermal Throttling



Shannon Systems

PCIe Gen5 x4

- PCIe Gen5 x4
- NVMe 2.0
- OCP Datasheet NVMe SSD Spec 2.0
- Capacities: 4-32TB, Read Intensive & Mixed Work-Load
- Enterprise: End to End Data Protection, Reliability, PLP, Thermal Throttling
- Seq. Read: up to 14GB/s
- Ran. Read: up to 3M IOPS
- ES-Q1/2023, CS-Q3/2023



Shannon Systems

BIGTERA

- 2U24NVMe Dual-Node: Capacity up to 48NVMe by JBof
- NVMe SSD: Smart Flash 2TB/4TB
- 1.2M IOPS @ 0.5ms latency; 40Gb x2 / 100Gb x2 NIC;
- iSCSI target, FC and NVMeoF
- RAID 6 with smart GC & 70% usable capacity
- Volume Management: Add / Delete / Extend / Thin-provision / Snapshot / Clone
- Inline / Compression & Deduplication
- Redundant Controller / PSU / Fan & Battery backup
- Copy-to-Flash
- Ease of Use Management: Web UI & RESTful



BIGTERA

FerriSSD

- Small BGA form factor for on-board / module design
- Digital signed firmware for added boot security
- Full E2E data-path protection for robust data integrity
- Firmware customization for intended application
- 100% full range screening to achieve zero dPPM
- 3D TLC/MLC/SLC mode: up to 512GB
- Temperature Support
 - Commercial : 0°C to 70°C
 - Industrial : -40°C to 85°C



SiliconMotion

1. 4800 PCIe Gen4 x4 NVMe SSD
 2. 8000 PCIe Gen5 x4 NVMe SSD
 3. 2U24 NVMe Dual-Node Server
 4. Small BGA form factor for on-board / module design

PCIe Gen4 SSD Controllers Optimizes Performance and Power Consumption for PC/Laptop

SM2264 Gen4-8channel	SM2268XT Gen4-4channel	SM2269XT Gen4-4channel	SM2267/XT Gen4-4channel
<ul style="list-style-type: none"> • 8-Channel up to 16TB (1600MT/s) • Seq. Read: 7.5 GB/s • Seq. Write: 7 GB/s • Ran. Read: 1,300K IOPS • Ran. Write: 1,200K IOPS • 3D TLC/QLC supported 	<ul style="list-style-type: none"> • 4-Channel up to 4TB (3200MT/s) • Seq. Read: 7.4 GB/s • Seq. Write: 6.5 GB/s • Ran. Read: 1,200K IOPS • Ran. Write: 1,200K IOPS • 3D TLC/QLC supported 	<ul style="list-style-type: none"> • 4-Channel up to 4TB (1600MT/s) • Seq. Read: 5.1 GB/s • Seq. Write: 4.7 GB/s • Ran. Read: 900K IOPS • Ran. Write: 900K IOPS • 3D TLC/QLC supported 	<ul style="list-style-type: none"> • 4-Channel up to 4TB (1200MT/s) • Seq. Read: 3.9 GB/s • Seq. Write: 3.1 GB/s • Ran. Read: 500K IOPS • Ran. Write: 500K IOPS • 3D TLC supported





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