

2016 - Summary Performance Comparison by Storage Class

Storage Class			IOPS FOB T4Q32	IOPS Steady State PTS-C T2Q16; PTS-E T4Q32; NVDIMM T128Q4			Bandwidth TIQ32; NVDIMM T32Q1		Response Time TIQ1		
Category	Device Type	Capacity	RND 4KiB 100% W	RND 4KiB 100% W	RND 4KiB 65:35 RW	RND 4KiB 100% R	SEQ 128KiB 100% W	SEQ 128KiB 100% R	RND 4KiB 100% W Ave	RND 4KiB 100% W Max	
HDD & SSHD - PTS-C v1.2											
1	SSHD	SATA Hybrid 7,200 RPM 2.5"	500 GB	3,398	77	62	113	79 MB/s	76 MB/s	12.55 mSec	163.10 mSec
2	SAS HDD	SAS HDD 15,000 RPM 2.5"	146 GB	652	133	248	514	147 MB/s	174 MB/s	2.24 mSec	24.54 mSec
CLIENT SSDs - PTS-C v1.2											
3	mSATA	mSATA 1.8" MLC	250 GB	63,127	5,927	13,545	79,423	300 MB/s	526 MB/s	0.13 mSec	11.86 mSec
4	M.2 x4 AHCI	M.2 x4 Gen 3 2280 MLC	128 GB	77,757	6,307	17,041	172,881	623 MB/s	1,895 MB/s	0.16 mSec	54.19 mSec
5	SATA	SATA 6Gb/s 2.5" MLC	400 GB	52,723	34,406	50,646	61,178	428 MB/s	475 MB/s	0.082 mSec	3.13 mSec
ENTERPRISE SSDs - PTS-E v1.1											
6	SATA	SATA 6Gb/s 2.5" 3D MLC	960 GB	60,781	19,008	50,610	74,358	481 MB/s	535 MB/s	0.046 mSec	0.83 mSec
7	NVMe	NVMe 2.5" MLC	800 GB	121,987	101,325	223,478	409,309	1,667 MB/s	1,636 MB/s	0.027 mSec	7.11 mSec
8	M.2 x4 NVMe	NVMe M.2 2280 MLC	256 GB	29,210	12,155	31,695	248,929	1,100 MB/s	2,158 MB/s	0.09 mSec	23.21 mSec
9	SAS	SAS 12Gb/s 2.5" MLC	400 GB	149,731	97,167	133,738	187,262	651 MB/s	1,051 MB/s	0.072 mSec	4.72 mSec
10	U.2 NVMe	NVMe U.2 2.5" MLC	2000 GB	412,234	142,670	281,446	825,256	2,025 MB/s	3,315 MB/s	0.014 mSec	0.56 mSec
NVDIMM-N - PTS-E v1.1											
11	NVDIMM-N x4	Memory Channel DDR4 x4 Modules	32 GB	2,384,692	2,792,176	2,789,921	3,002,085	35,453 MB/s	55,111 MB/s	0.0022 mSec	0.48 mSec