

EDGE SSD Server Solutions

We understand that every server environment is different, and each company has custom needs and objectives. We don't simply offer a "canned SSD solution", we create a custom resolution guaranteed to *BOOST* performance and provide the ROI you need.

FAQs to Determine the Best Server SSD Solution

1. *What will be the SSDs main purpose in the server environment?*

Example: cache drive, database, storage, etc.

2. *What model server is this going into? Do you know the form factor needed?*

Examples: 2.5", 3.5", and PCIe. Do you need 15mm or 9.5mm height?

3. *What interface is best suited for the application?*

Example: SATA III, PCIe, SAS? Not sure? See more details on pg. 2.

4. *Is there a target for read/write and IOPS speed?*

5. *What level of endurance does the SSD application require- MLC, MLC 10k, eMLC or SLC.*

Heavier write volumes require greater flash endurance. MLC = 3k P/E cycles, MLC 10k = 10k P/E cycles, eMLC = 30k P/E cycles, SLC = 100k P/E cycles

6. *What type of data will be written to the drive? Are reads or writes more important?*

Example: Compressible or non-compressible data, 90% reads etc.

7. *Are power fail capabilities critical?*

In the event of a power loss event, the SSD will flush the bits in the buffer to the flash to protect from data loss.

8. *Are there any power limitations?*

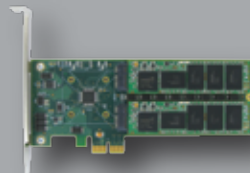
SSD Fact:

Today's performance demanding applications generate large I/O demand, creating queue depths in the hundreds. SSDs vs. spinning disk hard drives, have virtually no latency and respond almost instantly to I/O requests. In some cases, a single SSD can eliminate a queue depth that would take hundreds of hard disk drives to service. Imagine the savings in space alone!

Based on answers to the above questions, please see the chart on Pg. 2 to determine the best SSD server solution.

EDGE SSD

Server Solutions



PRODUCTS	2.5" Boost Pro Plus 7mm	1.8" Boost Pro Micro	Boost Express 2.0 (x2) Boost Express 3.0 (x8)	2.5" Boost Server 7mm eMLC	2.5" Boost Server 7mm
Interface	SATA III (6Gb/s)	SATA III (6Gb/s)	PCIe 2.0 (x2/x3) PCIe 3.0 (x8)	SATA III (6Gb/s)	SATA III (6Gb/s)
Available Flash Types	MLC	MLC	MLC / eMLC / SLC	eMLC	MLC / MLC 10k / eMLC / SLC
Sync/Async Type	Sync	Sync	Async	Sync	Sync
Powerfail (Capacitive Backup)		Optional	Optional	✓	✓
Capacities	60GB - 480GB	120GB - 480GB	120GB - 1920GB	50GB - 400GB	50GB - 480GB
IOPS @4K	Up to 80,000	Up to 80,000	Up to 100,000	Up to 80,000	Up to 80,000
Max Read/Write	560MB/s / 530MB/s	560MB/s / 525MB/s	825MB/s / 810MB/ (x2) 2150MB/s / 2000MB/s (x8)	560MB/s / 530MB/s	560MB/s / 530MB/s
AES Hardware Encryption	✓	✓	✓ (PCIe 2.0 x2 only)	✓	✓
P/E Cycles	3k	3k	MLC = 3k, eMLC = 30k SLC = 100k	30k	MLC = 3k, MLC 10k = 10k eMLC = 30k, SLC = 100k
MTBF	2 Million Hours	2 Million Hours	2M hrs(x2) / 1M(x8)	2 Million Hours	2 Million Hours
Active Power Consumption	3W	3W	7W (x2) / 35W (x8)	3W	3W
Additional Features	<ul style="list-style-type: none"> • ECC • TRIM Support • Wear Leveling • RAISE w/ Durawrite • S.M.A.R.T. 	<ul style="list-style-type: none"> • ECC • TRIM Support • Wear Leveling • RAISE w/ Durawrite • S.M.A.R.T. 	<ul style="list-style-type: none"> • Bootable • ECC • Wear Leveling • Durawrite • Garbage Collection 	<ul style="list-style-type: none"> • ECC • TRIM Support • Wear Leveling • RAISE w/ Durawrite • S.M.A.R.T. 	<ul style="list-style-type: none"> • ECC • TRIM Support • Wear Leveling • RAISE w/ Durawrite • S.M.A.R.T.
Works w/ Custom 3.5" Server Bracket	✓			✓	✓
Ideal For	<ul style="list-style-type: none"> • Higher read/write needs (Sync Flash) • Moderate write volume • Comfortable hardware refresh plan 	<ul style="list-style-type: none"> • Higher read/write needs (Sync Flash) • Moderate write volume • Comfortable hardware refresh plan 	<ul style="list-style-type: none"> • High Queue Depths / Heavy IOPS demand • Greater flash endurance — heavy write volume 	<ul style="list-style-type: none"> • Datacenters • Need Powerfail • Greater flash endurance — heavy write volume 	<ul style="list-style-type: none"> • Datacenters • Virtualization / Cloud environments • Need Powerfail • Higher capacity needs

★ Boost SSDs come with 3 or 5-year warranties and expert technical support.

(800) 259-8989

EDGE
MEMORY