

Server SSD: BT-Series

BTS-50P: A High-Quality SATA Boot Drive for Legacy Systems and System Upgrades

Key Product Features

- Self-Encrypting Drive option
 - TCG Opal 2.0 Support
 - AES-XTS 256-bit Encryption
- End-to-End Data Path Protection
- Power Loss Protection (PLP)

Key Product Metrics

<i>Sequential Read</i>	Up to 530 MB/s
<i>Sequential Write</i>	Up to 500 MB/s
<i>Random Read</i>	Up to 98K IOPS
<i>Random Write</i>	Up to 30K IOPS
<i>Interface</i>	SATA III
<i>Capacity</i>	Up to 960GB
<i>Form Factor</i>	2.5" and M.2 2280
<i>Drive Write Per Day</i>	1

BTS-50P

M.2 2280				
Capacity ⁽¹⁾		240GB	480GB	960GB
Performance ^(2,3)	Sequential Read	530 MB/s	530 MB/s	530 MB/s
	Sequential Write	290 MB/s	480 MB/s	500 MB/s
	4K Random Read	60K IOPS	90K IOPS	98K IOPS
	4K Random Write	10K IOPS	15K IOPS	30K IOPS
Power Consumption ⁽⁴⁾	Max	2.3 W	2.8 W	2.8 W
	Idle	1.2 W	1.3 W	1.3 W
Latency	4K Random Read	120 us	120 us	120 us
	4K Random Write	80 us	50 us	30 us
2.5"				
Capacity ⁽¹⁾		240GB	480GB	960GB
Performance ^(2,3)	Sequential Read	530 MB/s	530 MB/s	530 MB/s
	Sequential Write	290 MB/s	480 MB/s	500 MB/s
	4K Random Read	60K IOPS	90K IOPS	98K IOPS
	4K Random Write	10K IOPS	15K IOPS	30K IOPS
Power Consumption ⁽⁴⁾	Max	2.2	2.7	2.7
	Idle	1.1	1.1	1.2
Latency	4K Random Read	120	120	120
	4K Random Write	80	50	30
Features				
Interface			SATA III	
NAND Flash			3D TLC	
DWPD ⁽⁵⁾			1	
UBER			1 in 10 ¹⁷	
Operating Temperature			0°C - 70°C	
Non-Operating Temperature			-40°C - 85°C	
Key Features				
LDPC Power Loss Data Protection End-to-End Data Protection				

(1) 1 GB = 1,000,000,000 bytes.

(2) Sequential Performance is based on FIO on Linux, 128K, with QD=32, 1 worker, and test drive set as secondary.

(3) Random Performance is based on FIO on Linux, 4K data size, QD=32, 1 worker, 4K aligned.

(4) Power consumption is measured during the sequential read/write and random read/write operations performed by iometer with the conditions described in (2)(3).

(5) The results of DWPD are obtained in compliance with JESD219A Standards.

Product Configurations

For more information on available configurations, please contact us at: inquiries@rpics.com.

Copyright © 2025 RPI-CS, Inc. All rights reserved.

RPI-CS provides this documentation without warranty, term or condition of any kind, either expressed or implied, including, but not limited to, expressed and implied warranties of merchantability, fitness for a particular purpose, and non-infringement. While the information contained herein is believed to be accurate, such information is preliminary and should not be relied upon for accuracy or completeness, and no representations or warranties of accuracy or completeness are made. In no event will RPI-CS be liable for damages arising directly or indirectly from any use of or reliance upon the information contained in this document. RPI may make improvements or changes in the product(s) and/or the program(s) described in this documentation at any time.

Powered by Phison are wordmark of Phison Electronics Corp. Other company, product or service names mentioned herein may be trademarks or service marks of their respective owners.

RedData, an RPI-CS, Inc. division
(866) 938-7775
6747 Katella Avenue, Cypress, CA 90630
<https://reddata.us>

