

Huawei eKitStor Xtreme 116P		
Basic Specifications		
Model Number	HSSD-E1215TP5A9N	HSSD-E1230TP5A9N
Form Factor	U.2	
Weight (g)	< 300 g	
NAND Flash	QLC	
Interfac Protocol	PCIe 5.0 1*4, NVMe 2.0	
Capacity¹	15.36 TB	30.72TB
Performance		
128 KB (GB/s) Sequential Write Bandwidth	13.5	12
128 KB (GB/s) Sequential Read Bandwidth	3.2	3.2
4KB Random Read IOPS (k IOPS)	2,500	2,200
Random Write IOPS (k IOPS)²	160k	40k
Average Read Latency (µs)	105	107
Average Write Latency (µs)	8	23
Reliability		
Endurance³	0.55 DWPD, 5years	
Reliability	MTBF: 2.5 million hours; AFR: ≤ 0.35%; UBER: 10 ⁻¹⁷	
Temperature	Non-operational: -40°C to 85°C (-40°F to 185°F); operational: 0°C to 83°C (32°F to 181.4°F)	
TRIM	Supported	
Power Failure Protection	Supported	
Media Failure Protection	Supported	
Power Consumption		
Average Power Consumption	5 W (idle) , 25 W (Active)	
Certification		
China: RoHS; Europe: WEEE, RoHS, REACH, and CE; North America: NRTL; UK: UKCA; Japan: VCCI; Canada: IC; Australia: RCM; IEEE Member Countries/Regions: CB		

Notes: Performance results are based on internal testing and use. Results and performance may vary according to configurations and systems, including device capacity, operating system versions, and test tools.

1 Capacity definition: 1 TB = 1,000 GB, 1 GB = 1,000,000,000 bytes.

2 Random write IOPS is based on a fixed I/O block size: 4 KB (for 15.36 TB) / 16 KB (for 30.72/61.44 TB).

3 DWPD represents drive writes per day tested according to the JE5D219 standards. An SSD can be used for five years if the DWPD stays below the specified value; otherwise, the SSD service life will be affected.

Scale-out storage

I/O performance improvement

Content caching

Access speed improvement

CAD/CAM

Data read/write acceleration

Database

TPS performance improvement

Big data

Data Sorting acceleration

HCI

All-SSD acceleration



To learn more about Huawei eKitStor products, please contact your local Huawei office or visit Huawei eKitStor website: <http://ekit.huawei.com>.

Copyright © Huawei Technologies Co., Ltd. 2025. All rights reserved.
No part of this document may be reproduced or transmitted in any form or by any means without the prior written consent of Huawei Technologies Co., Ltd.

Trademarks and Permissions

HUAWEI, HUAWEI , and are trademarks or registered trademarks of Huawei Technologies Co., Ltd. Other trademarks, product, service and company names mentioned are the property of their respective holders.

Disclaimer

THE CONTENTS OF THIS MANUAL ARE PROVIDED "AS IS". EXCEPT AS REQUIRED BY APPLICABLE LAWS, NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE MADE IN RELATION TO THE ACCURACY, RELIABILITY OR CONTENTS OF THIS MANUAL.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO CASE SHALL HUAWEI TECHNOLOGIES CO., LTD BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES, OR LOST PROFITS, BUSINESS, REVENUE, DATA, GOODWILL OR ANTICIPATED SAVINGS ARISING OUT OF, OR IN CONNECTION WITH, THE USE OF THIS MANUAL.

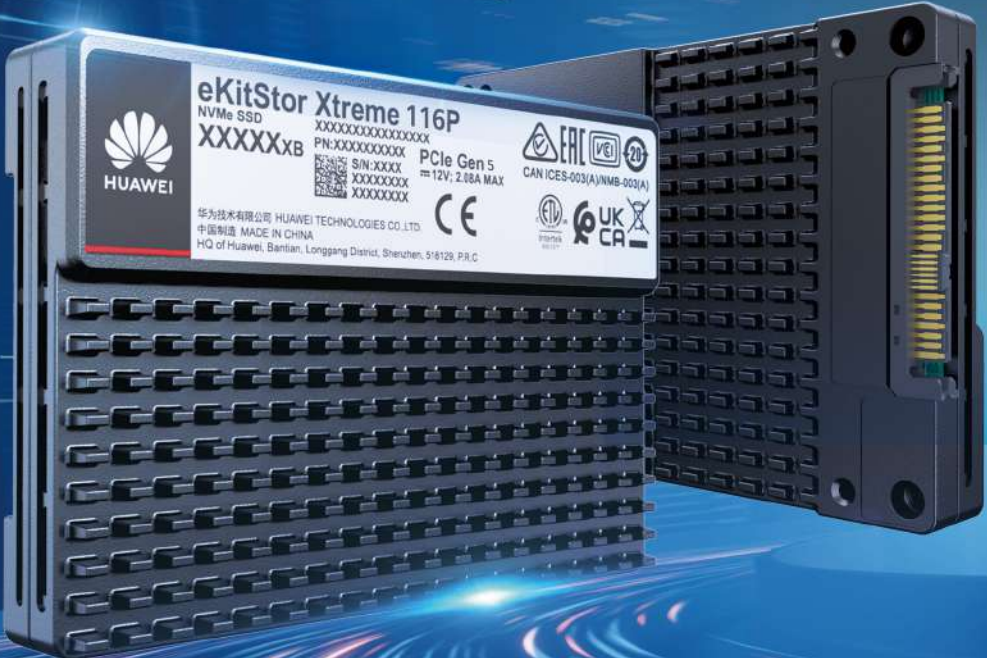
Updated: Dec 2025

HUAWEI TECHNOLOGIES CO., LTD.
Bantian Longgang District
Shenzhen 518129, P.R. China
Tel: +86-755-28780808



Huawei eKitStor Xtreme 116P

High-Capacity Data Center SSD



Beyond the Xtreme for Data Acceleration



Huawei eKitStor Xtreme 116P

eKitStor Xtreme 116P is a Data Center NVMe PCIe SSD. It features high performance, fast response, and high reliability, greatly improving storage I/O performance. The SSD product can seamlessly fit into mainstream operating systems (OSs) and virtualization systems to enhance performance for database, virtualization, and HPC applications, helping reduce system TCO. With enhanced device management, the eKitStor Xtreme 116P supports OS-native drivers. It also supports comprehensive hot swap for easy maintenance.



• Single-disk capacity



Superb Performance



Leveraging the standard NVMe protocol and PCIe 5.0 high-speed interface, combined with a hardware-software integrated technical framework, eKitStor Xtreme 116P provides higher bandwidth and lower latency. It effortlessly handles efficient reads and writes of mass files, concurrent multi-task processing in complex environments, and critical application scenarios with heavy-load, high-performance demands. This product ensures a smooth and efficient user experience.

PCIe 5.0

Efficient four-channel transmission

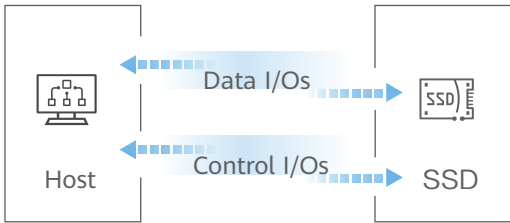
NVMe 2.0

Standard protocol

Optimized SSD performance with hardware and software combination

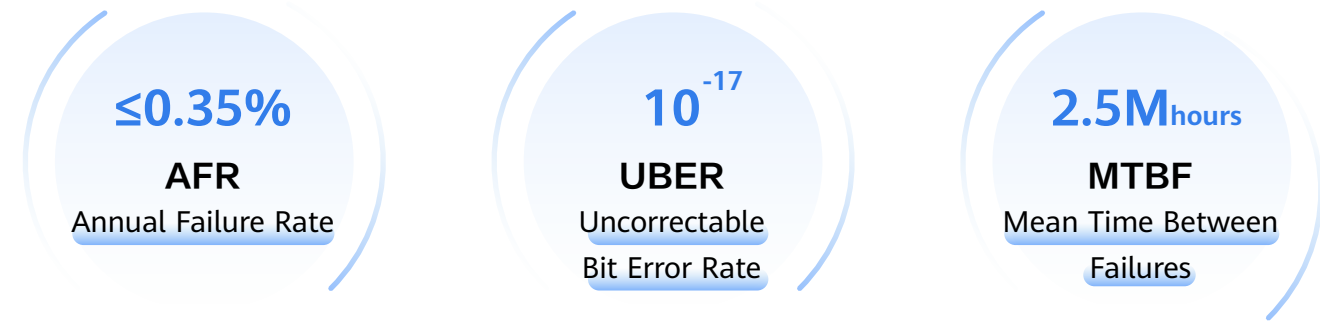
Microcode-based control channel

The data and control I/O paths are decoupled, which reduces loads on each channel and delivers 10% higher energy efficiency under full load compared to similar products.

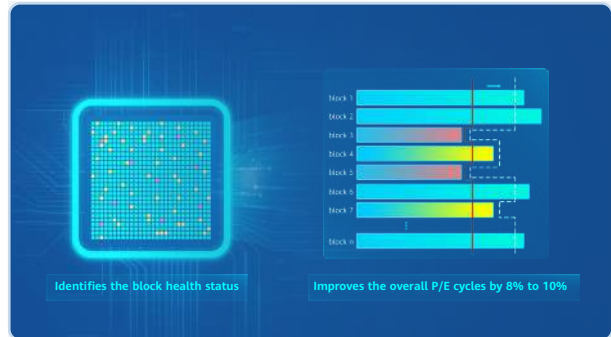


Note: The legend is for demonstration purposes only. The flow has been simplified for clarity.

Ultimate Reliability



With 20 years of expertise in data storage, Huawei has developed advanced technologies that deliver high stability, durability, and reliable data protection for complex environments and demanding workloads. These advanced technologies include the enhanced Low-Density Parity Check (LDPC) algorithm, intelligent wear leveling, intelligent multi-streaming and reclamation, and end-to-end data protection.

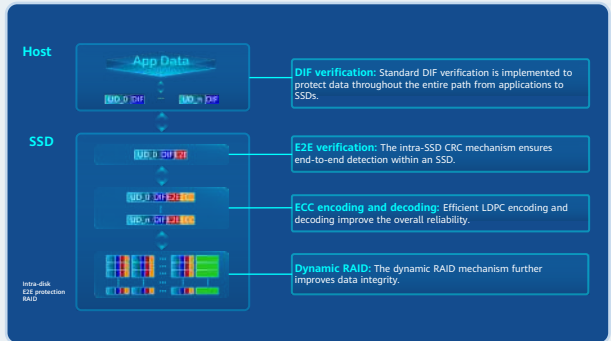
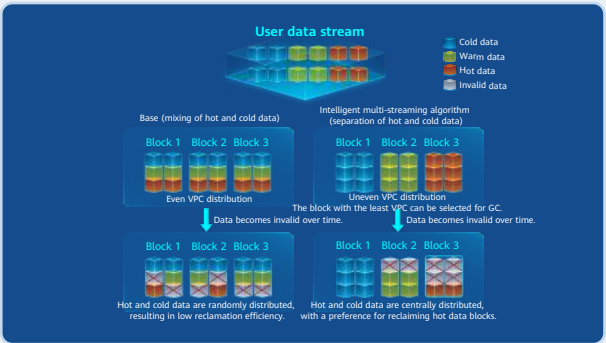


Intelligent wear leveling

This technique identifies block health status and aligns the block Program/Erase (P/E) policy to improve the overall P/E cycles by 10%.

Intelligent multi-streaming and reclamation

Intelligent hot and cold data identification and multi-dimensional judgment for reclamation help reduce write amplification by 20%+.



Four-layer dataprotection mechanism

The four-layer data protection mechanism, including DIF, intra-SSD CRC, ECC encoding and decoding, and dynamic RAID, ensures end-to-end data resilience.

Intelligent Management

Huawei DiskBooster is an AI-powered O&M tool that reliably predicts failures and lifespan of disks. By detecting slow disks, it reminds IT personnel to replace or repair disks or back up data to improve service performance. This reduces the impact of faulty or sub-healthy disks on services, ensuring data resilience and service continuity.

📊 Pre-failure detection

By analyzing over 20 key indicators, including wear degree, UNC threshold-crossing, and die failure, the impact of disk faults on services is halved.

🕒 Disk life prediction

Over 10 disk lifespan indicators and advanced lifespan predication algorithms ensure disk lifespan is accurate to within five days (down from over a month).

📁 Slow disk detection

Over 10 slow disk criteria are collected and analyzed by decision and processing algorithms, delivering a detection accuracy of 99%.

🔧 Disk logical failure repair

The multi-level incremental repair policy reduces the fault return rate by 50%.

