

China Solid-State Drive Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 120 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

Report description:

The Chinese solid-state drive market is expected to register a CAGR of approximately 12.3% during the forecast period. Solid-state drives use flash memory chips for storing information. SSD is made of several memory chips installed on a circuit board.

Key Highlights

In China, the data storage demand has been on a massive rise over the past few years. In order to fulfill the enormous demand for data storage, solid-state drives (SSDs) and hard disk drives (HDD) emerged as the two main storage solutions, each with its particular benefits.?

SSDs are like HDDs in terms of being non-volatile storage mediums. However, instead of spinning disks, data is stored in a series of interconnected microchips, making memory access much faster, which causes the boot time to reduce drastically in SSDs. Such factors are increasing the greater adoption of SSD in the computing process.?

Solid-state drives (SSDs) are nearly ubiquitous in desktop and laptop computers, but the introduction of SSDs in data centers has taken much longer. However, data center SSDs have distinct performance requirements compared to consumer PCs. A data center must be able to match this requirement, unlike a conventional client PC whose usage unlikely ever requires constant 24/7 performance. The demand for SSDs will increase depending on the application.

The production by China-based NAND vendors was not severely affected by the outbreak of novel COVID-19. This was because the plants were highly automated, had relatively low demands for manpower, and the operators stocked raw materials before the Chinese Lunar New Year.

Foundry output was delivered to customers in China because semiconductor fabrication plants hold special national licenses. These allowed them to ship products throughout domestic China, even with cities under quarantine. ?

Further, according to Semiconductor Equipment and Materials International (SEMI), silicon wafer sales were anticipated to witness

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

a dip amid the looming uncertainty surrounding the impact of COVID-19. However, in China, industry experts believed that the demand could climb on the strength of rebounding chip sales. SEMI also estimated that silicon wafer shipments would witness growth in 2021, and shipments will reach a record high in 2022.?

China Solid-State Drive Market Trends

Enterprise SSDs Expected To Grow Significantly

The Chinese solid-state drive market continued its rapid pace of growth, driven primarily by enterprise and data center demand, as well as PC demand. Many enterprise applications need constant uptime, high-performance storage devices, high reliability, and power efficiency. SSDs fulfill all these requirements in the enterprise.

Due to the NAND flash shortage in 2017, the enterprise channel SSD market grew at a more modest rate. The demand was fueled by hyper-scale data centers, such as Baidu, Alibaba, Tencent, and OEMs, including Huawei and Inspur.

NAND flash is certain to become the core technology in the development of storage and memory industries in the future as the number of consumer electronic products that include solid-state drives (SSDs) and embedded MultiMediaCards (eMMCs) increases. Chinese domestic DRAM and NAND flash consumption is dramatically increasing with the rise in popularity of Chinese PCs in enterprises. With the increase in the production of PCs in the region, the demand for SSDs has been increasing in the market.

SSDs in enterprises store data persistently or cache data in the non-volatile semiconductor memory temporarily and are intended for use in servers, storage systems, and direct-attached storage (DAS) devices. Small and Medium Enterprises (SME) uses MLC SSD, which contains a longer life span than TLC SSD and a relatively friendlier price than SLC SSD. Due to its higher capacity and lower cost, users of TLC SSD are general customers.

Further, the fingerprint sensor may be given as a prime feature in portable solid-state drives (SSDs), and players are focused on innovating such technology with SSD. In April 2020 despite the negative impact of pandemic, Chinese firm Hikvision launched its T100F portable SSD in the Chinese market. This SSD comes with biometric security and an embedded fingerprint sensor into the metal casing of the SSD.

Increased Adoption in Data Centers Expected to Boost the Market Growth

The applications of SSD in data centers have been increasing owing to a wide range of factors, such as the rising need for storage facilities, improved efficacy in contrast to conventional HDD storage, and breakthroughs in enterprise-level SSD reliability and performance.

Moreover, SSDs are preferred by businesses as they require less energy, which enables less dispersion, thereby resulting in a reduced environmental imprint.

According to Cloudscene, China had approximately 50 internet users per 100 in 2020, and the connectivity ecosystem comprised 85 colocation data centers, 62 cloud service providers, and one network fabric. The increasing demand for memory devices, buoyed by the requirement of data centers for memory, is expected to drive the demand for SSDs.

The growth in the Chinese data center market is expected to be bolstered by supportive government initiatives and international investments. The government's push for AI in security and intelligence use further strengthens the demand for SSDs in the country.

For instance, Apple started constructing its first Chinese data center to expand its services in China. The project would respond to new Chinese data laws that demand the citizens' data to be hosted on Chinese soil. Thus, the abovementioned factors are expected to bolster the demand for SSDs in the country.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

China Solid-State Drive Market Competitor Analysis

The Chinese Solid State Drive Market is moderately consolidated due to a few major vendors based in the country. As the entry barriers in the market are high, the entry of new players is difficult. The existing market players view product developments and innovations as a lucrative path toward the expansion of market share. Transcend Information Inc., Teclast Electronics Co. Ltd, LITE-ON Technology Corporation, ADATA Technology Co. Ltd, and Huawei Technologies Co. Ltd are the major market players.

In July 2022, ORICO launched its new product, the ORICO USB4 High-Speed Portable SSD Montage 40 Gbps series. The new design used in this product would be manufactured using a durable in-mold labeling technique with an aim to prevent corrosion.

Additional Benefits:

The market estimate (ME) sheet in Excel format

3 months of analyst support

Table of Contents:

1 INTRODUCTION

1.1 Study Assumptions and Market Definition

1.2 Scope of the Study

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

4 MARKET DYNAMICS

4.1 Market Overview

4.2 Market Drivers

4.2.1 Increasing Adoption in Data Centers

4.2.2 Increasing Deployment in High-end Cloud Applications

4.3 Market Restraints

4.3.1 High Cost and Smaller Life-time of Solid State Drives

4.4 Industry Ecosystem Analysis

4.5 Industry Attractiveness - Porter's Five Forces Analysis

4.5.1 Bargaining Power of Suppliers

4.5.2 Bargaining Power of Buyers

4.5.3 Threat of New Entrants

4.5.4 Threat of Substitute Products

4.5.5 Intensity of Competitive Rivalry

4.6 Assessment of the Impact of COVID-19 on the Market

5 MARKET SEGMENTATION

5.1 By Application

5.1.1 Enterprise

5.1.2 Clients

5.2 By Interface

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 5.2.1 Serial Advanced Technology Attachment (SATA)
- 5.2.2 Peripheral Component Interconnect (PCI) Express

6 COMPETITIVE LANDSCAPE

6.1 Company Profiles

- 6.1.1 Huawei Technologies Co. Ltd
- 6.1.2 ADATA Technology Co. Ltd
- 6.1.3 Transcend Information Inc.
- 6.1.4 Teclast Electronics Co. Ltd
- 6.1.5 LITE-ON Technology Corporation
- 6.1.6 Lenovo Group Limited
- 6.1.7 Memblaze Technology Co. Ltd
- 6.1.8 Maxiotek Corporation
- 6.1.9 PHISON ELECTRONICS

7 INVESTMENT ANALYSIS

8 MARKET OPPORTUNITIES AND FUTURE TRENDS

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

China Solid-State Drive Market - Growth, Trends, Covid-19 Impact, and Forecasts (2023 - 2028)

Market Report | 2023-01-23 | 120 pages | Mordor Intelligence

To place an Order with Scotts International:

- ☐ - Print this form
- ☐ - Complete the relevant blank fields and sign
- ☐ - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2026-02-28
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com



Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com
www.scotts-international.com