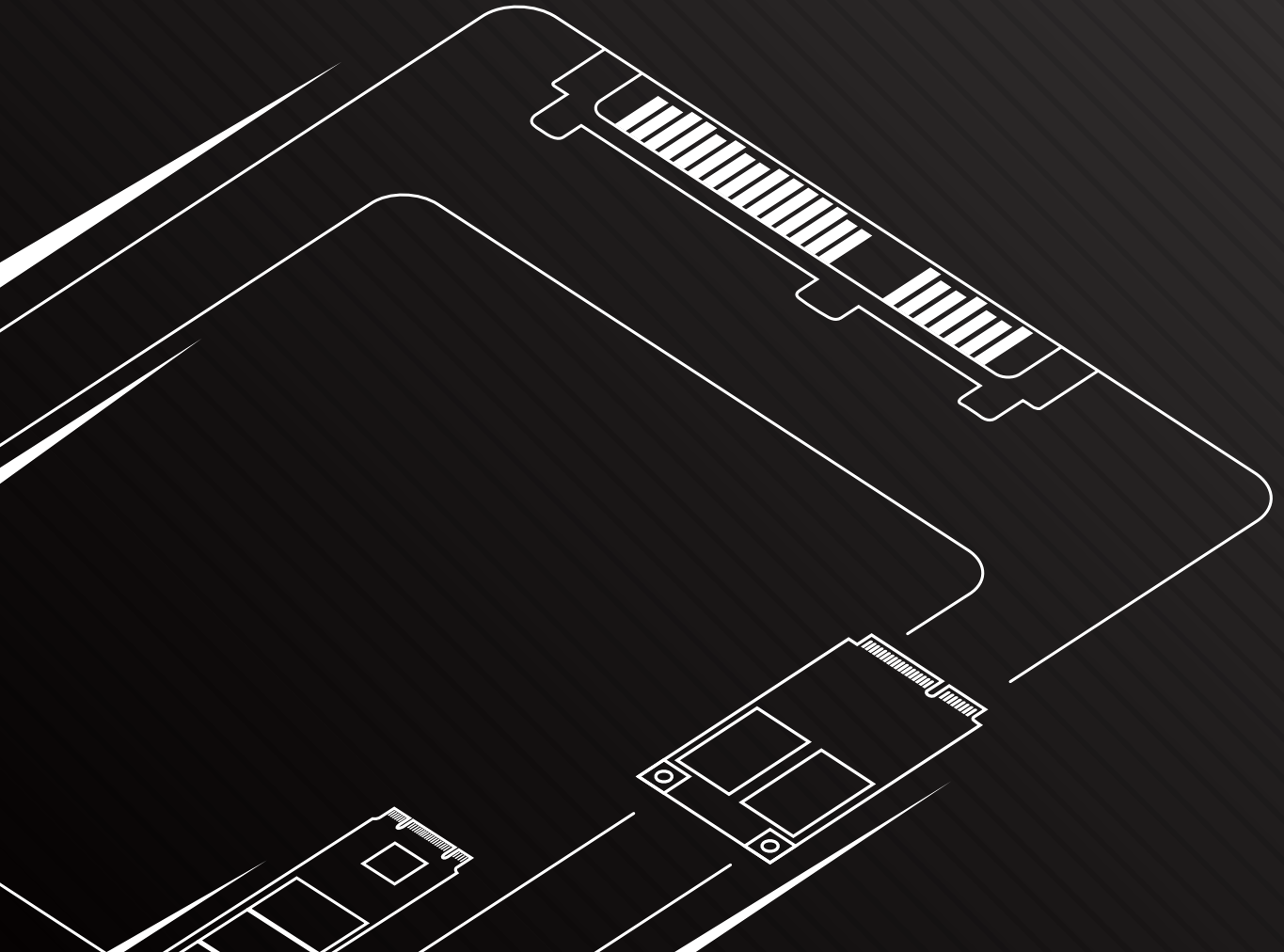


# Solid State Disk

## PRODUCT CATALOGUE

**FORESEE<sup>®</sup>**



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# Introduction to SSD Product Line

Four types of SSD products exist at present: 2.5inch SSD, mSATA SSD, M.2 SSD, and BGA SSD, which support two kinds of mainstream interfaces (SATA and PCIe).

FORESEE SSD products utilize quality Flash resources from Samsung, Micron, and other equivalents.

When equipped with customized high-performance control and in-house firmware, FORESEE SSD products are capable of meeting various customized requirements with guaranteed compatibility and stability.

FORESEE SSD products can significantly increase the performance of desktops, and personal and business computers. They also excel in the enterprise-level market as well as server system and data center sectors.



# Content of PCIe Series Products

Product Series	P78A	P800	P1000	G700
Interface	PCIe Gen3*4	PCIe Gen3*4	PCIe Gen3*4	PCIe Gen3*4
Form Factor	M.2 2280	M.2 2280	M.2 2280	M.2 2280
Model (XXXX means density)	P78AFX001T	P800FX001T	P1000FX001T	G700FX001T
Density	256GB / 512GB / 1TB	256GB / 512GB / 1TB	256GB / 512GB / 1TB	128GB / 256GB / 512GB / 1TB
NAND Flash	3D TLC	3D TLC	3D TLC	3D TLC
DRAM	DRAM-less	DRAM-base	DRAM-less	DRAM-less
Operating Temperature	0 - 70°C	0 - 70°C	0 - 70°C	0 - 70°C
Seq Read/Write (MB/s)	Up to 2500MB/s / 2000MB/s	Up to 3200MB/s / 1900MB/s	Up to 3400MB/s / 2800MB/s	Up to 2500MB/s / 2000MB/s
IOPS Read/Write (K)	Up to 160K/130K	Up to 200K / 175K	Up to 350K / 275K	Up to 160K/130K
Mean Time Between Failures(Hour)	1500000	1500000	1500000	1500000
Warranty Period	3 years	3 years	3 years	3 years
S.M.A.R.T. Support	Y	Y	Y	Y
TRIM	Y	Y	Y	Y



# P78A SSD



# P78A SSD



## Features:

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- PCIe Gen3x4 standard
- NVMe 1.3 specification
- HMB technology support
- M.2 2280 interface
- 256GB, 512GB, 1TB, and additional capacity options
- Sequential read/write up to 2500MB/s / 2000MB/s, and a random performance/write rate up to 160K / 130K

## Advantages:

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- Longsys' self-developed firmware for flexible solutions.
- L1.2 low power consumption to achieve lower power consumption and longer service life.
- Temperature control algorithm to balance speed and temperature during operation.

## Applications:

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Laptop



Desktop

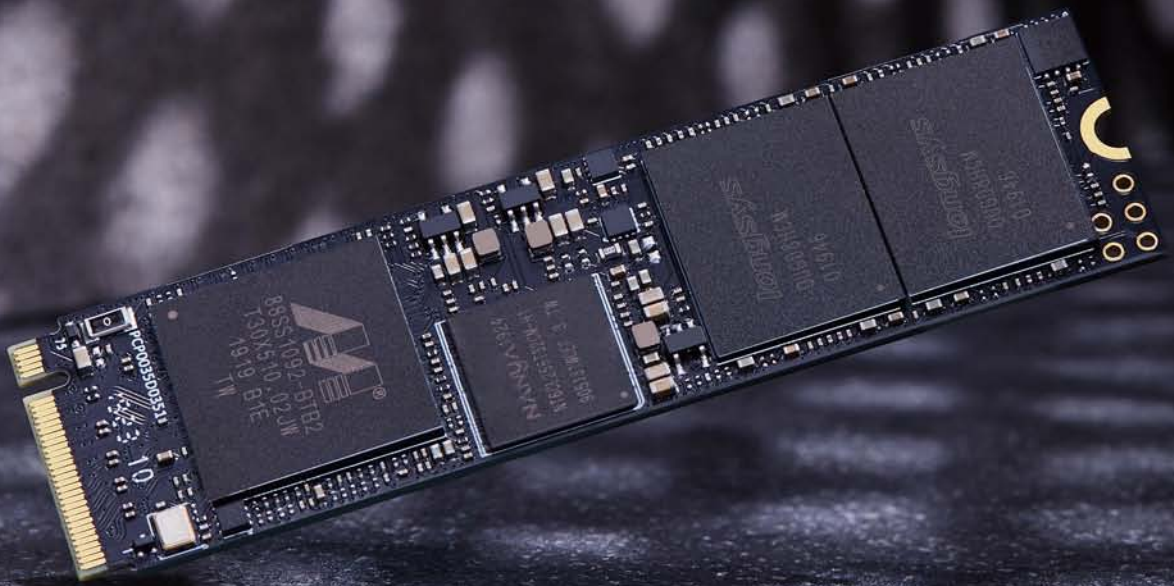


All-In-One

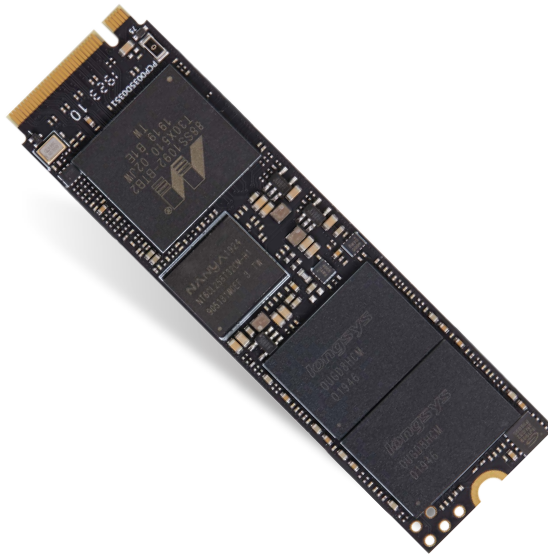


Domestic IPC

# P800 SSD



# P800 SSD



## Features:

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- Flagship product
- PCIe Gen3x4 standard
- Marvell 28nm DRAM-based controller
- Sequential read/write up 3200MB/s / 1900MB/s, and a random performance/write rate up to 200K / 175K
- M.2 2280 interface

## Advantages:

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- L1.2 low power consumption to achieve lower power consumption and longer service life.
- Temperature control algorithm to balance speed and temperature during operation.
- Provided with SSD management software developed by Longsys, which optimizes performances as well as allows for data security and firmware updates.

## Applications:

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Laptop



Desktop



All-In-One



Domestic IPC

# PI000 SSD



# P1000 SSD



## Features:

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- PCIe Gen3x4 standard
- Longsys' customized DRAM-less design
- Quality 3D TLC Flash
- M.2 2280 interface
- 256GB, 512GB, 1TB, and additional capacity options
- Sequential read/write speed up to 3400MB/s / 2800MB/s, and a random read/write rate up to 300K / 275K

## Advantages:

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- A next-generation flagship product. Additional channels and higher Flash FPS bring about high speed performance. Applicable to high-performance PC devices.
- Temperature control algorithm to balance speed and temperature during operation.
- L1.2 low power consumption to achieve lower power consumption and longer service life.

## Applications:

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Laptop



Desktop



All-In-One



Domestic IPC

# Content of SATA Series Products

Product Series	S41C/S426			S58A	
Interface	SATA III			SATA III	
Form Factor	2.5inch	M.2 2280	mSATA	2.5inch	M.2 2280
Model (XXXX means density)	S426SXXXX	S41CFXXXX	S426MXXXX	S58ASXXXX	S58AFXXXX
Density	128GB / 256GB / 512GB			128GB / 256GB / 512GB / 1TB / 2TB	128GB / 256GB / 512GB / 1TB
NAND Flash	3D TLC			3D TLC	
DRAM	DRAM-less			DRAM-less	
Operating Temperature	0 - 70°C			0 - 70°C	
Seq Read/Write (MB/s)	Up to 540MB/s / 480MB/s			Up to 550MB/s / 520MB/s	
IOPS Read/Write (K)	Up to 52K / 57K			Up to 90K / 75K	
Mean Time Between Failures (Hour)	1500000			1500000	
Warranty Period	3 years			3 years	
S.M.A.R.T. Support	Y			Y	
TRIM	Y			Y	
Power Failure Protection	N			N	

Product Series	S801		S802	G500	
Interface	SATA III		SATA III	SATA III	
Form Factor	2.5inch	mSATA	2.5inch	2.5inch	M.2 2280
Model (XXXX means density)	S801SXXXX	S801MXXXX	S802SXXXX	G500SXXXX	G500FXXXX
Density	128GB / 256GB / 512GB / 1TB	128GB / 256GB	240GB / 480GB / 960GB	128GB / 256GB / 512GB / 1TB / 2TB	128GB / 256GB / 512GB / 1TB
NAND Flash	3D TLC		3D TLC	3D TLC	
DRAM	DRAM-base		DRAM-base	DRAM-less	
Operating Temperature	0 - 70°C		0 - 70°C	0 - 70°C	
Seq Read/Write (MB/s)	Up to 550MB/s / 500MB/s		Up to 550MB/s / 500MB/s	Up to 560MB/s / 500MB/s	
IOPS Read/Write (K)	85K / 75K		85K / 75K	Up to 90K / 75K	
Mean Time Between Failures (Hour)	1500000		2000000	1500000	
Warranty Period	3 years		5 years	3 years	
S.M.A.R.T. Support	Y		Y	Y	
TRIM	Y		Y	Y	
Power Failure Protection	N		Y	N	

# S41C / S426 SSD



# S41C / S426 SSD



## Features:

- Equipped with Marvell controller and 96-Layer 3D TLC Flash
- Compatible with SATA III 6Gbps
- Various types such as 2.5inch, mSATA, and M.2
- Sequential read/write speed of 540MB/s / 480MB/s

## Advantages:

- LDPC technique allows for 2 to 3 times the error correction capacity of BCH codes and ensures data security.
- Mature solutions with superior compatibility.

## Applications:



Laptop



Desktop



Tablet PC



All-In-One



Drone



Smart Camera



Electronic  
Whiteboard



Educational  
OPS



Display Device



Thin Client



DVR



Robot



AR/VR  
Equipment



Bank Self-help  
Terminal



Financial  
Payment



POS



Telecommunications  
Base Station

# S58A SSD



# S58A SSD



## Features:

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- Equipped with Longsys' customized master controls
- 2.5inch and M.2 interfaces
- 128GB, 256GB, 512GB, 1TB, 2TB, and additional capacity options
- Read/Write speed up to 550MB/s / 520MB/s, and random read/write rate up to 90K / 75K

## Advantages:

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- Modern Standby Support — low-power idle mode for longer battery life.
- Longsys' self-developed firmware for flexible solutions and enhanced product stability.

## Applications:

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Laptop



Desktop



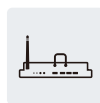
Tablet PC



All-In-One



Electronic  
Whiteboard



Educational  
OPS



Thin Client



Display Device

# S801 SSD

**FORESEE®**

2.5"001T SSD SATA6.0Gbps

S801S001T

P/N:FSCRSEC-001T



S/N:J11000J000718

Manufacturer: Shenzhen Longsys Electronics Co., Ltd.



MADE IN CHINA



04D4C4AB235A

EATXPWR

# S801 SSD



## Features:

- Marvell 28nm DRAM-based controller
- Compatible with SATA III 6Gbps
- 2.5inch and mSATA interfaces
- 128GB, 256GB, 512GB, 1TB, and additional capacity options
- Sequential read/write speed up to 550MB/s / 500MB/s, and a random read/write rate up to 85K / 75K

## Advantages:

- Quality 3D eTLC with longer service life.
- High-speed DDR3 for improved user experience and guaranteed concurrent writing of data.
- Marvell LDPC technology to ensure data reliability.

## Applications:



DVR



Mini PC



Industrial Automatic



Armarium



Hospital Self-help Terminal



Numberal Machine



Smart Lighting Equipment



Bank Self-help Terminal



Financial Payment



POS



Smart Camera



Domestic IPC



Industrial IPC



Face Recognition System

# S802 SSD



# S802 SSD



## Features:

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- Marvell 28nm DRAM-based controller
- Compatible with SATA III 6Gbps
- 2.5inch interface
- 240GB, 480GB, 960GB, and additional capacity options
- Sequential read/write speed up to 550MB/s/500MB/s, and a random read/write rate up to 85K/75K

## Advantages:

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- Low latency and high random performance.
- Quality 3D eTLC with longer service life.
- High-speed DDR3 for improved user experience and guaranteed concurrent writing of data.
- Equipped with a capacitor array providing abnormal power loss protection. Power can still be provided in the event of power failure, helping SSD save cache data and key management data on the flash memory chip and thereby preventing data loss or damage, as well as improving data security and stability.

## Applications:

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Server



Operation Center



DVR



Telecommunications Base Station



Cloud Terminal

# FORESEE Brand Introduction

FORESEE, Longsys' embedded memory brand, has focused on serving the storage market ever since it was founded in 2011. To date, FORESEE has unveiled embedded memory, industrial storage, SSD, and memory module product lines to provide customers in various industries with high-performance and stable storage products and solutions.

FORESEE has made continuous efforts in independent technology R&D, as well as comprehensive quality control, to improve product performance, expand storage capacity, reduce power consumption, and develop new products. In doing this, FORESEE provides professional and instantaneous technical support and services based on both market dynamics and customers' needs. As a brand with industry-oriented values and a strong sense of responsibility, FORESEE will continue to build up its competitiveness within the storage industry. FORESEE will offer cutting-edge and high-quality technologies, and superior services in order to empower both the entire industry as well as various fields of application innovation and future storage development.





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