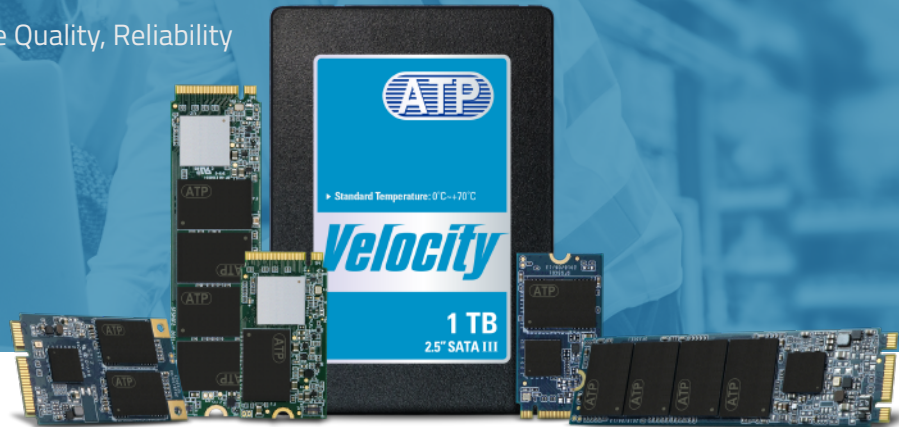# ATP 100+ Layer Prime Die 3D NAND SSD
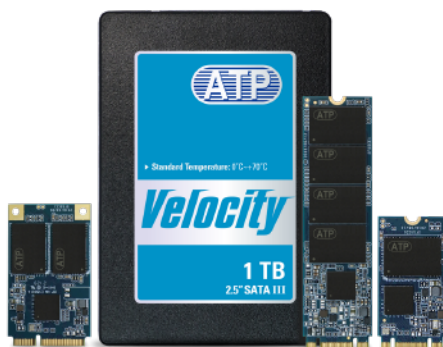## Built for Industrial Applications

Value Line with 3D TLC NAND Offers Prime Quality, Reliability and Endurance at Lower Cost per GB

N600Vc Series M.2 2242/2280 NVMe Gen3 and A600Vc Series SATA 2.5", M.2 2242/2280, and mSATA Value Line solid state drives (SSDs) are built with prime die triple-level cell (TLC) NAND on leading 100-layer plus 3D architecture. The new line is geared toward industrial/embedded applications requiring reliable performance, wide range of capacity options, and long-term supply commitment at friendly price points.

The Value Line is tailored for read-intensive applications, such as web server, box pc, kiosk/point-of-sale systems (POS), and other industrial/embedded boot drive requiring speed and reliability.
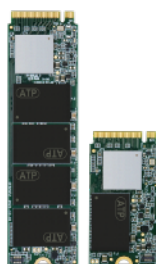
Key Features

A600Vc

- SATA III 6 Gb/s
- Available in M.2 2280/2242, 2.5" & mSATA form factors
- 32 GB to 1 TB capacity offering*
- Firmware-based Power Loss Protection with Level 3 data-at-rest protection
- Power-efficient DRAM-less design

*Different NAND die may be utilized for lower-capacity drives

N600Vc

- PCIe Gen3x4, NVMe 1.3
- Available in M.2 2280/2242 form factors
- 120 GB to 960 GB capacity offering
- Firmware-based Power Loss Protection with Level 3 data-at-rest protection
- Host Memory Buffer (HMB) support
- End-to-end data path protection

Why ATP A600Vc and N600Vc Value Line SSDs?

EXTREME RELIABILITY
with Prime NAND Die + ATP IC Sorting test

DRAM-less design
POWER EFFICIENT

SUPPLY LONGEVITY
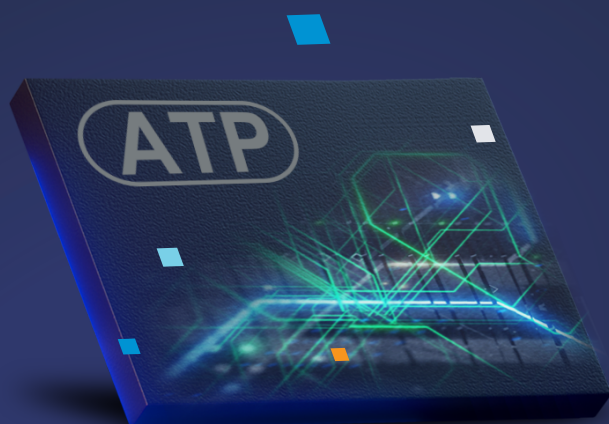with multi-year support

Up to
-20%
Lower cost per GB
than previous gen. NAND die

Built for
READ-INTENSIVE APPLICATIONS
Server/Networking, IPC, kiosk/POS, booting

Product Specifications

Product Line	Value				
	N600Vc	A600Vc	A600Vc	A600Vc	A600Vc
Interface	PCIe G3 x4	SATA III 6 Gb/s			
Flash Type	3D TLC				
Form Factor	M.2 2280 S2-M	M.2 2242 D5-M	2.5"	2280 S2-B-M	2242 D2-B-M	MO-300A
Operating Temperature (Tcase)[1]	0°C to 70°C				
Power Loss Protection Options	Firmware Based				
Optional SED Features	-				
Capacity	120 GB to 960 GB	32 GB to 1 TB	32 GB to 1 TB		32 GB to 1 TB
Performance					
Sequential Read (MB/s) up to	2,600	560	560	560	560
Sequential Write (MB/s) up to	1,870	525	525	525	525
Random Reads IOPS up to	184,300	72,000	72,000	70,500	72,000
Random Writes IOPS up to	145,900	85,000	85,000	81,000	85,000
Endurance and Reliability					
Endurance (TBW)[2] up to	1,520 TB	1,530 TB	1,530 TB		1,530 TB
Reliability MTBF @ 25°C	>2,000,000 hours				
Others					
Dimensions (mm)	80.0 x 22.0 x 2.2	42.0 x 22.0 x 3.6	100 x 69.85 x 7	80 x 22 x 2.2	42 x 22 x 3.5	50.8 x 29.85 x 3.5
Certifications	CE, FCC, BSMI, UKCA, RoHS, REACH				
Warranty	2 years				

[1] Case Temperature, the composite temperature as indicated by SMART temperature attributes.
[2] Under highest Sequential write value. May vary by density, configuration and applications.

Order Information

		Hot Items Ordering Information			
Product Line	Capacity$_1$	Operating Temperature$_2$	Power Loss Protection$_3$	SED$_4$	P/N
N600Vc (M.2 NVMe 2280)	120GB	0°C to 70°C	Firmware Based	-	AF120GSTJA-DBCXX
	240GB	0°C to 70°C	Firmware Based	-	AF240GSTJA-DBCXX
	480GB	0°C to 70°C	Firmware Based	-	AF480GSTJA-DBCXX
N600Vc (M.2 NVMe 2242)	120GB	0°C to 70°C	Firmware Based	-	AF120GSTJC-DBBXX
	240GB	0°C to 70°C	Firmware Based	-	AF240GSTJC-DBBXX
	480GB	0°C to 70°C	Firmware Based	-	AF480GSTJC-DBBXX
	960GB	0°C to 70°C	Firmware Based	-	AF960GSTJC-DBBXX
A600Vc (M.2 SATA 2280)	32GB	0°C to 70°C	Firmware Based	-	AF32GSTIC-2BAXX
	64GB	0°C to 70°C	Firmware Based	-	AF64GSTIC-2BAXX
	128GB	0°C to 70°C	Firmware Based	-	AF128GSTIC-2BAXX
	256GB	0°C to 70°C	Firmware Based	-	AF256GSTIC-2BAXX
	512GB	0°C to 70°C	Firmware Based	-	AF512GSTIC-2BAXX
	128GB	0°C to 70°C	Firmware Based	-	AF128GSTIC-2BBXX
	256GB	0°C to 70°C	Firmware Based	-	AF256GSTIC-2BBXX
	512GB	0°C to 70°C	Firmware Based	-	AF512GSTIC-2BBXX
	1TB	0°C to 70°C	Firmware Based	-	AF1TSTIC-2BBXX
A600Vc (M.2 SATA 2242)	128GB	0°C to 70°C	Firmware Based	-	AF128GSTIA-2BBXX
	256GB	0°C to 70°C	Firmware Based	-	AF256GSTIA-2BBXX
	512GB	0°C to 70°C	Firmware Based	-	AF512GSTIA-2BBXX
	1TB	0°C to 70°C	Firmware Based	-	AF1TSTIA-2BBXX
A600Vc (mSATA)	32GB	0°C to 70°C	Firmware Based	-	AF32GSTHI-2BAXX
	64GB	0°C to 70°C	Firmware Based	-	AF64GSTHI-2BAXX
	128GB	0°C to 70°C	Firmware Based	-	AF128GSTHI-2BAXX
	256GB	0°C to 70°C	Firmware Based	-	AF256GSTHI-2BAXX
	512GB	0°C to 70°C	Firmware Based	-	AF512GSTHI-2BAXX
	128GB	0°C to 70°C	Firmware Based	-	AF128GSTHI-2BBXX
	256GB	0°C to 70°C	Firmware Based	-	AF256GSTHI-2BBXX
	512GB	0°C to 70°C	Firmware Based	-	AF512GSTHI-2BBXX
	1TB	0°C to 70°C	Firmware Based	-	AF1TSTHI-2BBXX
A600Vc (2.5")	32GB	0°C to 70°C	Firmware Based	-	AF32GSTCJ-2BAXX
	64GB	0°C to 70°C	Firmware Based	-	AF64GSTCJ-2BAXX
	128GB	0°C to 70°C	Firmware Based	-	AF128GSTCJ-2BAXX
	256GB	0°C to 70°C	Firmware Based	-	AF256GSTCJ-2BAXX
	512GB	0°C to 70°C	Firmware Based	-	AF512GSTCJ-2BAXX
	128GB	0°C to 70°C	Firmware Based	-	AF128GSTCJ-2BBXX
	256GB	0°C to 70°C	Firmware Based	-	AF256GSTCJ-2BBXX
	512GB	0°C to 70°C	Firmware Based	-	AF512GSTCJ-2BBXX
	1TB	0°C to 70°C	Firmware Based	-	AF1TSTCJ-2BBXX

[1] Amount of actual usable storage that can be utilized.
[2] Refers to Case Temperature range during device operation, as indicated by SMART temperature attributes.
[3] Hardware + Firmware-based power loss protection design with Level 4 (data-in-flight) protection; Firmware-based power loss protection design with Level 1 (data-at-rest) protection.
[4] Allows data written to and read from the SSD to be constantly and automatically encrypted and decrypted. Conforms to TCG Opal 2.0 and uses AES 256-bit HW encryption.

ATP

The Global Leader in Specialized Storage and Memory Solutions
WE BUILD WITH YOU

Product spec and its related information are subject to change without advance notice. Please refer to www.atpinc.com for latest information

v1.0 012023