

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
- 128 GB to 1 TB capacity offering
- Firmware-based Power Loss Protection with Level 3 data-at-rest protection
- Power-efficient DRAM-less design



#### N600Vc

- PCle 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 General Purpose Embedded boot/system/logging

### **READ-INTENSIVE APPLICATIONS**

Kiosk/POS, Booting

# **WRITE-MODERATE APPLICATIONS**

OS Boot drive, Buffer, Data logging

#### **Product Specifications**

	Value								
Product Line	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	mSATA			
Operating Temperature	0°C to 70°C								
Power Loss Protection Options	Firmware Based								
Optional SED Features	-								
Capacity	120 GB to 960 GB		128 GB to 1TB	128 GE	128 GB to 1TB				
	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)¹ up to	1,390 TB		2,792 TB	2,792 TB		2,792 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								

<sup>&</sup>lt;sup>1</sup> Under highest Sequential write value. May vary by density, configuration and applications.

#### **Order Information**

Hot Items Ordering Information									
Product Line	Capacity <sub>1</sub>	Operating Temperature <sub>2</sub>	Power Loss Protection <sub>3</sub>	SED <sub>4</sub>	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)	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				
	128GB	0°C to 70°C	Firmware Based	-	AF128GSTHI-2BAXX				
A600Vc (mSATA)	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				
	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				
A600Vc (2.5")	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				

 $<sup>^{\</sup>mbox{\tiny 1}}$  Amount of actual usable storage that can be utilized.



Product spec and its related information are subject to change without advance notice. Please refer to <a href="https://www.atpinc.com">www.atpinc.com</a> for latest information

v1.1 062023

© Copyright 2023 ATP Electronics, Inc. All rights reserved.

<sup>&</sup>lt;sup>2</sup> Refers to Case Temperature range during device operation, as indicated by SMART temperature attributes.
<sup>3</sup> 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.
<sup>4</sup> 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.