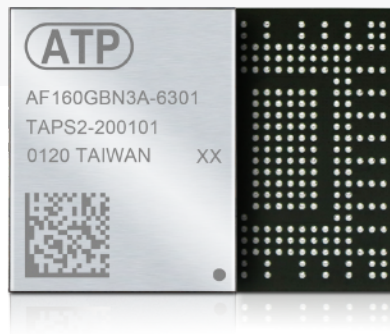




PCIe® Gen 3 NVMe M.2 Type 1620 HSBGA SSD

The Global Leader in Specialized Storage and Memory Solutions



KEY FEATURES

- pSLC mode with 2X-3X of Sustainable Performance*
- High/Stable performance with Optimized Thermal Throttling Firmware/Heatsink (HSBGA)
- Optimized Power Consumption: 5 mW during Power State 4
- DRAM-less configuration supporting Host Memory Buffer (HMB)*
- Optional Security features**

* Under highest Sequential write value. May vary by density, configuration, and applications.

** Customization available on a project basis

Despite their ultra-small form factor, ATP's N700 Series NVMe Heat Sink Ball Grid Array (HSBGA) solid state drives (SSDs) surprisingly pack a mean punch. These SSDs with high-speed PCIe 3.0 interface x4 lanes and NVMe protocol deliver up to 32 Gb/s bandwidth at 8 Gb/s per lane, while dimensions of just 16 (L) x 20 (W) x 1.6 (H) mm, the M.2 Type 1620 form factor, and 291-ball packaging take up minimal space within tightly confined systems.

N700 Series SSDs are configured with pseudo single-level cell (pSLC) NAND flash. By storing only one bit per cell, they increase the reliability and lifetime of the NAND flash memory, while benefiting from the lower cost compared with native SLC, due to the higher cell density.

These diminutive powerhouses store hefty capacities of 40/80/160 GB and 120/240/480/960 GB and are packed with advanced features to meet the ultra-portability and reliability requirements of ultra-compact Internet of Things (IoT) devices and embedded systems. They provide high-speed reliable storage in harsh environments such as in transportation, aerospace, smart factories, mining operations, steel fabrication and more.

Specifications

Product Line	Superior	Premium	Superior
	N601Si ²	N700Pi / N700Pc	N600Si / N600Sc
Interface	PCIe G4 x4	PCIe G3 x4	
Flash Type	3D TLC	3D TLC (pSLC mode)	3D TLC
Form Factor	291-Ball, HSBGA		
Operating Temperature	-40°C to 85°C	-40°C to 85°C / 0°C to 70°C	
Power Loss Protection Options	Firmware Based		
Optional SED Features	AES 256-bit Encryption, TCG Opal 2.0		-
Capacity	240 GB to 960 GB	40 GB to 160 GB	120 GB to 480 GB
Performance			
Sequential Read (MB/s) up to	3,500	2,000	2,050
Sequential Write (MB/s) up to	3,400	1,600	1,550
Random Reads IOPS up to	600,000	135,600	138,000
Random Writes IOPS up to	750,000	112,000	112,600
Endurance and Reliability			
Endurance (TBW) ¹ up to	1,440 TB	4,280 TB	768 TB
Reliability MTBF @ 25°C	>3,000,000 hours	>2,000,000 hours	
Others			
Dimensions (mm)	16.0 x 20.0 x 1.6		
Certifications	RoHS, REACH		
Warranty	1 year		

1. Under highest Sequential write value. May vary by density, configuration and applications.
2. Product specifications may be subject to change.

Technologies	S.M.A.R.T/ Life Monitor	Industrial Temperature	SIP	Vibration-Proof BGA Package	Firmware-Based Power Loss Protection	Advanced Wear Leveling	AutoRefresh	Dynamic Data Refresh	Auto-Read Calibration	ETEDP	SED	Software Secure Erase	Hardware Secure Erase	Hardware Write Protect
Superior N601Si	○	○	○	○	○	○	○	○		○	▲	○	▲	▲
Premium N700Pi / N700Pc	○	○	○	○	○	○	○	○	○	○	○	○		
Superior N600Si / N600Sc	○	○	○	○	○	○	○	○	○	○		○		

▲: Customization option available on a project basis.



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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
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