

# Micron® 7100 PCIe NVMe SSD

PCIe

M.2

U.2



## Lean, Mean and Green Data Center Storage

Welcome to the next big thing in PCIe® SSDs: NVMe™. The Micron® 7100 PCIe NVMe SSD delivers higher performance per watt and lower total cost of ownership compared to SATA and SAS SSDs.<sup>1</sup>

The 7100 comes in enterprise-ready, low-profile M.2 and U.2 form factors with capacities up to 1.92TB. Because of its low profiles, our 7100 PCIe NVMe SSDs give you the opportunity to “feng shui” your server design to optimize and — dare we say — harmonize your overall space.

The Micron 7100 SSD provides the speed and efficiency of NVMe married with the lower cost and lower power of SATA SSDs. Enable dense designs for Open Compute and converged infrastructures that pack a punch with the 7100!

## KEY BENEFITS

### Power Efficient

Use half as many watts as a standard high-performance NVMe drive with the kind of low latencies that SATA drives can only dream of — enabling sequential reads up to 2.5 GB/s.<sup>2</sup>

### Reduce Your Footprint

Good things come in small packages. Save more space with the 7100 SSD's low-profile M.2 and U.2 (7mm) flexible form factors.

### Reliability and Quality

Protect mission-critical data with power-loss protection and data path protection features.<sup>3</sup>

### Optimized Endurance

Choose from endurance options matched to your read-centric or mixed-use workloads.

### XPERT Firmware Features

Provide peace of mind that your data is protected and ready when you need it with eXtended Performance and Enhanced Reliability Technology (XPERT) features including encryption, data and power-loss protection,<sup>3</sup> and adaptive thermal monitoring.

## WHICH APPLICATIONS ARE THE BEST FIT?



BIG DATA



HYPERCONVERGED



OPEN COMPUTE



HYPERSCALE



VIRTUALIZED ENVIRONMENTS



*The 7100 SSD's solid performance and low power consumption lowers your total cost of ownership.*

★ GOOD   ★★ BETTER   ★★★ BEST



# Micron® 7100 PCIe NVMe SSD



## Benefits of NVMe

### Built for Nonvolatile Memory

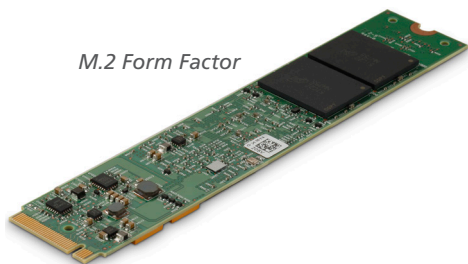
Architected from the ground-up to remove legacy layers of hard drive interfaces, taking full advantage of the speed and parallelism of solid state nonvolatile memory.

### High Performance

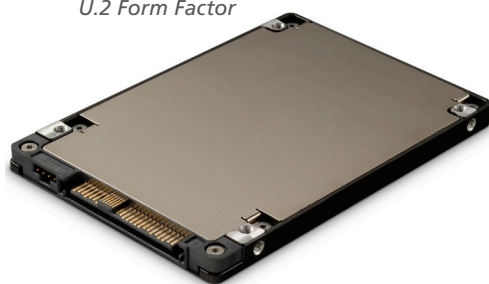
Streamlined efficient queuing protocol combined with an optimized command set register interface enables low latency and high performance. Data is delivered fast and efficiently, with minimal burden on the host CPU.

### Industry Standard

Wide adoption driven by a strong consortium of storage technology providers and a robust ecosystem of drivers across multiple operating systems.



M.2 Form Factor



U.2 Form Factor

Key Specifications		
	M.2	U.2
Capacity <sup>4</sup>	400GB, 480GB, 800GB, 960GB	400GB, 480GB, 800GB, 960GB, 1.6TB, 1.92TB
Interface	PCIe Gen 3 NVMe	
Sequential read/write performance <sup>5</sup>	400GB: 2.4 GB/s/475 MB/s 480GB: 2.4 GB/s/475 MB/s 800GB: 2.5 GB/s/600 MB/s 960GB: 2.5 GB/s/600 MB/s	400GB: 2.4 GB/s/500 MB/s 480GB: 2.4 GB/s/500 MB/s 800GB: 2.5 GB/s/900 MB/s 960GB: 2.5 GB/s/900 MB/s 1.6TB: 2.5 GB/s/900 MB/s 1.92TB: 2.5 GB/s/900 MB/s
Random read/write performance <sup>6</sup>	400GB: 180,000/25,000 IOPS 480GB: 180,000/10,000 IOPS 800GB: 220,000/33,000 IOPS 960GB: 220,000/12,000 IOPS	400GB: 180,000/25,000 IOPS 480GB: 180,000/10,000 IOPS 800GB: 220,000/33,000 IOPS 960GB: 220,000/12,000 IOPS 1.6TB: 235,000/40,000 IOPS 1.92TB: 235,000/15,000 IOPS
READ/WRITE latency	110µs/40µs	
Active power consumption	5-7W (TYP), 8.25W (MAX)	6-9W (TYP), 12.5W (MAX)
Idle power consumption	3.7W	
Operating temp	0°C to 70°C	
Dimensions	110 x 22 x 3.5mm	100.24 x 69.85 x 7mm
Power-loss protection	Yes	
Extended Features	eXtended Performance and Enhanced Reliability Technology (XPERT) suite of enterprise performance and advanced data protection algorithms	

Base Part Numbers		
Standard Part	Capacity	Form Factor
MTFDHBG480MCH-1AN1ZABYY	480GB	M.2
MTFDHBG960MCH-1AN1ZABYY	960GB	M.2
MTFDHAK480MCH-1AN1ZABYY	480GB	U.2
MTFDHAK960MCH-1AN1ZABYY	960GB	U.2
MTFDHAK1T9MCH-1AN1ZABYY	1.92TB	U.2
MTFDHBG400MCG-1AN1ZABYY	400GB	M.2
MTFDHBG800MCG-1AN1ZABYY	800GB	M.2
MTFDHAK400MCG-1AN1ZABYY	400GB	U.2
MTFDHAK800MCG-1AN1ZABYY	800GB	U.2
MTFDHAK1T6MCG-1AN1ZABYY	1.6TB	U.2

[micron.com/ssd](http://micron.com/ssd)

1. Assuming 3-6W (TYP) power draw and 90K random read, 4KB steady-state IOPS for similar endurance SATA SSDs, versus 6-9W (TYP) and 235K IOPS for the Micron 7100.  
 2. Assuming 20-25W MAX for high-performance NVMe products and 8.25-12.5 MAX for the Micron 7100.  
 3. No hardware, software or system can provide absolute security under all conditions. Micron assumes no liability for lost, stolen or corrupted data arising from the use of any Micron products, including those products that incorporate any of the mentioned security features.  
 4. Unformatted. 1GB = 1 billion bytes. Formatted capacity is less.  
 5. 128KB transfer size, steady state.  
 6. 4KB transfer size, steady state.

Products are warranted only to meet Micron's production data sheet specifications. Products, programs and specifications are subject to change without notice. Dates are estimates only.

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