

# Micron® P410m SAS SSD



## High-Quality, Reliable Solid State Storage

Micron's P410m solid state drive (SSD) is a high-quality drive that delivers reliability, endurance, and performance to mission-critical storage applications. The P410m enhances our already broad product portfolio by providing a SAS SSD for enterprises looking to reduce power and increase the reliability of their data.

Built from the ground up using our 25nm MLC NAND with extended performance and enhanced reliability technology (XPERT), the P410m provides an optimal balance of endurance and

speed at a broadly accessible price point. ARM/OR read management, data path protection, and physical power-loss protection are built in to protect against data loss. (See the [Micron XPERT technical brief](#) for more information.)

All of these features are provided by a trusted NAND manufacturer, ensuring a high-quality product with reliable customer support.

	P410m
Capacity <sup>1</sup>	100GB, 200GB, 400GB
Interface	SAS 6 Gb/s
Sequential Read/Write Performance	100GB: 410/235 MB/s 200GB: 410/345 MB/s 400GB: 410/345 MB/s
Random Read/Write Performance	100GB: 50,000/20,000 IOPS 200GB: 50,000/30,000 IOPS 400GB: 50,000/30,000 IOPS
Active Average Power Consumption <sup>2</sup>	<9W
Operating Shock	1000G/0.5ms
Operating Vibration	10–500Hz at 3.1G
MTTF	2 million device hours
Endurance	Up to 7PB total bytes written
Operating Temp	Commercial (0°C to 70°C)
Form Factor	2.5in drive
Dimensions	100.5 x 69.85 x 7.0mm

1. Unformatted. 1GB = 1 billion bytes. Formatted capacity is less. 2. Data taken at 25°C using a SAS 6 Gb/s interface.

## Key Benefits

### High Reliability and Quality

Made from start to finish—with stringent quality and reliability testing—by a trusted NAND manufacturer.

### High Endurance

Extends drive life (10 drive fills per day for 5 years) with enterprise-focused endurance specifications.

### Superior Data Protection

Protects data with ARM/OR read management, RAIN NAND configuration, DataSAFE data path protection, and physical power-loss protection—all in one device.

### Low Power

Consumes significantly less power than HDDs and requires almost zero cooling.

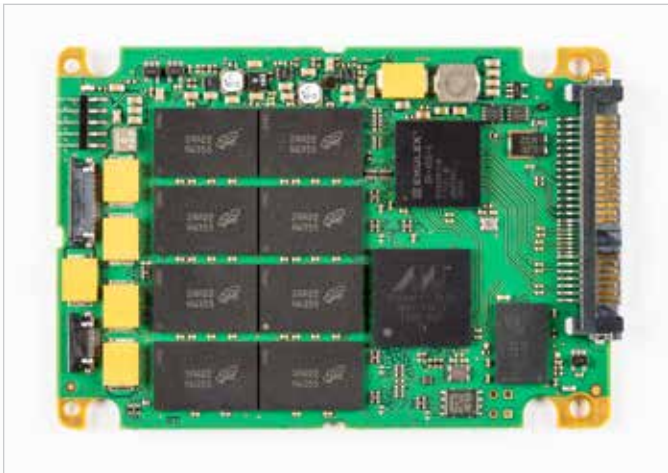
### XPERT Enterprise-Focused Design

Delivers enterprise-level reliability and performance on a cost-effective MLC drive.



## Why Micron for SSDs?

- **Worldwide NAND Flash leadership** – Micron’s SSD customers have the assurance of working with the world’s leader in NAND Flash design. Our expertise in NAND technology sets us apart as a vertically integrated supplier with the unique ability to ensure end-to-end quality and optimize our SSDs to work with our NAND components.
- **Extensive testing** – Our rigorous product testing translates to predictably reliable, high-quality drives.
- **Proven start-to-finish quality** – From component design to fabrication to the finished package device, our stringent quality requirements, significant investments in SSD test equipment, and advanced NAND-management algorithms mean that reliability is literally built into every SSD drive.



**Mission-Critical SAS Storage:** The P410m meets 24/7 data access demands with high endurance and reliability.

## Ideal Applications

### Blade Servers

The highly reliable, high-performance, low-power, MLC-based P410m SSD helps blade servers deliver on their promise of saving space and minimizing power consumption.

### Enterprise Servers

The P410m drive’s high-endurance, advanced data protection features, and high reliability are critical to the enterprise server environment where long drive life and superior data protection are paramount.

### Video-on-Demand (VOD) Systems

Providing up to 350 MB/s of sequential read bandwidth and high sustained writes, the P410m provides a reliable, cost-effective solution for VOD deployments.

### Financial Applications

The P410m moves data quickly and reliably, providing consistent online transaction processing (OLTP) numbers for financial platforms. The drive can also be designed into the tiered applications of today’s high-speed systems.

### Virtualization Appliances

The mixed read/write workload capabilities of the P410m meet the versatile requirements of virtualization systems.

### Data Warehouses

With high MLC capacity and low latency, the P410m is an ideal solution for data warehouses that require both capacity and quick search capabilities.

Part	Density	Size	Voltage	Sequential Read/Write (MAX)	Random Read/Write (MAX)
MTFDEAK100MAS-1S1AA	100GB	2.5in drive; 100.5 x 69.85 x 7.0mm	12V ±10%	410/235 MB/s	50,000/20,000 IOPS
MTFDEAK200MAS-1S1AA	200GB	2.5in drive; 100.5 x 69.85 x 7.0mm	12V ±10%	410/345 MB/s	50,000/30,000 IOPS
MTFDEAK400MAS-1S1AA	400GB	2.5in drive; 100.5 x 69.85 x 7.0mm	12V ±10%	410/345 MB/s	50,000/30,000 IOPS

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

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