Micron® 1300 SATA TLC SSD

SATA | M.2 | 2.5”



Cost-Effective Flash for Client Computing

As spinning media for client computers is winding down, the demand for solid performing SATA client solid state drives (SSDs) continues strong. The Micron® 1300 SATA client SSD is an expansion of our SATA portfolio, the broadest in the industry. From mainstream desktops to corporate road-warrior tablets, the 1300 SSD provides exceptional price-to-performance ratios and extremely low power consumption for client computing. It’s an economical flash option in the changeover from legacy hard drives.

Based on the successful Micron 1100 SSD, the Micron 1300 SATA SSD is built with advanced features, such as device sleep (DEVSLP) low-power modes to further extend battery life. To protect your valuable data, multiple features do the job: asynchronous power-loss protection for data at rest, adaptive thermal monitoring and optional Opal 2.0 self-encryption.

Using revolutionary 3D NAND technology, Micron’s state of the art process – CMOS under the array (CUA) – allows for reduced cost and increased density in a 96-layer, vertically tiered compact die. This advancement keeps the price competitive and allows the Micron 1300 to be offered in 1TB M.2 and 2TB 2.5” capacities.

Key Benefits

Better NAND Means Better Products

Reliability you can get only from a trusted NAND manufacturer. The 1300 SSD features triple-layer cell (TLC) technology, for more data storage in the same footprint. More cost control comes from the state-of-the-art stackable 96-Tier 3D NAND die that allows for up to 2TB in a 2.5” and 1TB in a M.2 form factor.

Get Solid SATA Performance

Many organizations are still looking for strong SATA performance. As a follow-on to our well-accepted Micron 1100 SSD client drive, the 1300 draws on the same trusted platform architecture, proven controller and firmware.

Go Mobile for Longer

Class-leading power efficiency satisfies customers’ ever-increasing expectations for longer battery life. Consuming less than 5mW in low power mode, the Micron 1300 uses significantly less power than that required by hard disk drives (HDDs). Over 20X less than HDDs in active mode. That’s more employee uptime!

Which Applications Are the Best Fit?

- MEDIA ENTERTAINMENT
- GOVERNMENT
- RETAIL/POS
- HIGHER EDUCATION

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More Key Benefits

Keep It Cool

Increase reliability in space-constrained designs with our adaptive thermal monitoring feature that limits heat generated by the SSD with the small footprint M.2 form factor.

Depend on Our Endurance

The optimization of 3D TLC NAND component and Micron SSD architecture enables the 1300 SSD to deliver strong performance and solid endurance without compromise.

Speed Time to Market

As the 1300 SSD is highly leveraged from the Micron 1100 SSD, qualification processes for our OEM customers are reduced, saving time and money.

Protect Your Data

Optional Opal self-encryption drive (SED) technology offers rock-solid encryption for data-at-rest for your valued mobile data without performance degradation. All encryption/decryption utilizes a XTS-AES-256-bit hardware engine that complies with the TCG™ Opal 2.0 standards, the IEEE 1667 protocol and Microsoft® eDrive, without impacting performance.

Sanitize and Reuse

In just a few seconds, the SANITIZE CRYPTO SCRAMBLE command allows the end-user to erase, repurpose, and retire the SSD with a click of a button, ensuring no residual data is left behind to be compromised.

Make It Easier to Manage

With our downloadable Storage Executive tool, Micron client drives have built-in troubleshooting, diagnostics and health check intelligence for hassle-free manageability.



Micron 1300 SSD 2.5-inch and Micron 1300 SSD M.2

Key Specifications

	1300 SSD – OEM, SI, VAR			
Category	Corporate and Consumer PCs and Notebooks			
Model	Micron 1300 SATA TLC SSD			
Interface	SATA 6 Gb/s			
Capacities[1]	256GB	512GB	1TB	2TB
Seq Read (MB/s)[2]	530	530	530	530
Seq Write (MB/s)[2]	520	520	520	520
Random Read (kIOPS)[3]	58	90	90	90
Random Write (kIOPS)[3]	87	87	87	87
Endurance (TBW)	180	300	400	400
MTTF (Million Hours)	1.5			
DEVSLP (mW)	5	5	5	10
Advanced Features[4]	Power-loss protection (data at rest)			
	Adaptive thermal monitoring			
	Optional TCG Opal encryption			
	Garbage collection, S.M.A.R.T.			

1. Capacities: Unformatted. 1GB = 1 billion bytes. Formatted capacity is less.
2. Sequential Read/Write: 128KB transfer size, fresh-out-of-box (FOB).
3. Random Read/Write: 4KB transfer size, fresh-out-of-box (FOB).
4. Advanced Features: 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

Base Part Numbers

Standard Part SED	Capacity	Form Factor
MTFDDAK256TDL-1AW12ABYY	256GB	2.5"
MTFDDAK512TDL-1AW12ABYY	512GB	2.5"
MTFDDAK1T0TDL-1AW12ABYY	1TB/1024GB	2.5"
MTFDDAK2T0TDL-1AW12ABYY	2TB/2048GB	2.5"
MTFDDAV256TDL-1AW12ABYY	256GB	M.2
MTFDDAV512TDL-1AW12ABYY	512GB	M.2
MTFDDAV1T0TDL-1AW12ABYY	1TB/1024GB	M.2

Standard Part Non-SED	Capacity	Form Factor
MTFDDAK256TDL-1AW1ZABYY	256GB	2.5"
MTFDDAK512TDL-1AW1ZABYY	512GB	2.5"
MTFDDAK1T0TDL-1AW1ZABYY	1TB/1024GB	2.5"
MTFDDAK2T0TDL-1AW1ZABYY	2TB/2048GB	2.5"
MTFDDAV256TDL-1AW1ZABYY	256GB	M.2
MTFDDAV512TDL-1AW1ZABYY	512GB	M.2
MTFDDAV1T0TDL-1AW1ZABYY	1TB/1024GB	M.2

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