

# Maximize NVMe Speeds While Safeguarding Data

The Ultimate Fusion of Performance and Protection:  
CipherDriveOne Plus & SupremeRAID™

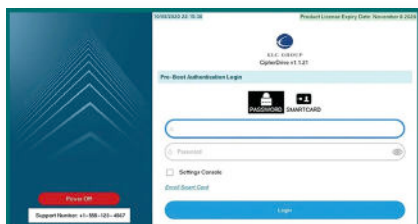


## Achieve Maximum NVMe Performance Plus Cutting-Edge Data Protection

**In today's fast-paced world, organizations require high-performance storage solutions that can keep up with the demands of mission-critical applications.**

However, the need for enterprise-grade data protection and reliability as well as security and encryption can often mean sacrificing storage performance. Consequently, many businesses face a trade-off between data security and system speed. But what if you could have both?

With **CipherDriveOne Plus by KLC Group** and **SupremeRAID™ by Graid Technology**, customers can now enjoy the benefits of lightning-fast NVMe performance while also ensuring maximum protection and NSA CSfC DAR Security for their data. This unbeatable combination provides businesses with the world's fastest NVMe storage, without sacrificing data security.



**CipherDriveOne Plus** is a NSA CSfC listed Hardware Full Disk Encryption solution that provides a multi-disk, two-factor and multi-factor authentication before the SSD is unlocked and any operating system or virtual machine can start up. It's a solution created to meet the US Government's Data-at-Rest (DAR) requirement and adds an additional layer of key encryption and authentication on top of any OPAL 2.0 self-encrypting solid-state drive (SSD) or hard disk drives (HDD). Protection of the hard drive's content is immediate, operating system agnostic, and governed by a certified FIPS-140-2 level key encryption technology with the availability of a managed single, two-factor, and multi-factor authentication.

**SupremeRAID™ by Graid Technology** is the world's fastest NVMe and NVMeoF RAID solution for PCIe Gen 3, 4 and 5 servers. Designed for performance-demanding workloads, a single SupremeRAID™ card blasts performance up to 28M IOPS and 260GB/s and supports up to 32 native NVMe drives, delivering superior NVMe/NVMeoF performance while increasing scalability, improving flexibility, and lowering TCO. SupremeRAID™ stands out by embracing a direct approach: by utilizing a GPU and software-defined storage, it liberates the CPU, bypassing complex configurations to address drives over the PCIe BUS. This direct connection offers unparalleled scalability to deliver the full performance value of NVMe.

**CipherDriveOne Plus is certified with the highest levels of government certification.** CipherDrive 1.2.2 is listed on the National Information Assurance Programs (NIAP) and the NSA's Commercial Solutions for Classified (CSfC) Component List under Hardware Full Drive Encryption.



### CERTIFICATIONS:

- FIPS 140-2
- Common Criteria (CC)

### LISTINGS:

- National Information Assurance Partnership (NIAP)
- NSA Commercial Solutions for Classified (CSfC) Programs
- Hardware Full Disk Encryption (HWFDE - AA)

# Next-Level NVMe Performance Paired with Cutting-Edge Data Protection for Ultimate Security



## CipherDriveOne Plus FEATURES



### Encryption Pre-boot Locking

Protect the server when it is powered off and the data is at rest. The software authenticates a user before the computer can start the operating system. This method of protection protects the entire hard drive's data and not just individual files which may be password protected or encrypted.

### Military Grade Encryption and Certification

CipherDriveOne Plus utilizes military grade AES-256 bit encryption algorithms and is FIPS-140-2 and Common Criteria certified, and NIAP and NSA CSfC Component listed.

### Strong Multi-Factor Authentication

CipherDriveOne Plus allows the management of users to use custom username/passwords, smartcards for 2-factor authentication (PIV, CIV, CAC, and SIPRNET cards) and multi-factor authentication.

### Custom User Roles and Configuration

CipherDriveOne Plus can be configured to allow four unique users roles to unlock the server.

### Audit and Logging

CipherDriveOne Plus allows administrators to review audit logs and authentication reports. These reports can be used to meet privacy compliance laws.

### Self Destruct Erase

CipherDriveOne Plus has a "crypto erase" function to delete the contents of a hard drive permanently.

## SupremeRAID™ FEATURES



SupremeRAID™ next-generation GPU-accelerated RAID removes the traditional RAID bottleneck to deliver the full performance value of NVMe SSDs for PCIe Gen 3, 4 or 5 servers.

### Become Flexible & Future-Ready

SupremeRAID™ employs unique out-of-path technology, so data travels directly from the CPU to storage, delivering maximum SSD performance, comprehensive data protection, and unmatched flexibility.

### Achieve Maximum SSD Performance

Increasingly demanding workloads require faster throughput. SupremeRAID™ delivers the speed you need to power high-performance applications.

### Liberate CPU Resources

Free-up precious CPU resources for high-performance computing applications by offloading your entire RAID computation to the SupremeRAID™ card.

### Scale High-Performance Applications Easily

Easily manage up to 32 direct-attached NVMe SSDs; extend data protection without sacrificing performance with Software Composable Infrastructure (SCI).

### Learn more about the value of SupremeRAID™

Read the white papers and test reports here:

[graidtech.com/category/whitepapers](https://graidtech.com/category/whitepapers)



Learn more about  
CipherDriveOne Plus



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SupremeRAID™

