

# Securing Classified Edge Analytics at Aberdeen Proving Grounds with SupremeRAID™ & KLC Group

CUSTOMER SUCCESS STORY | NOVEMBER 2025



## KLC GROUP LLC

### EXECUTIVE SUMMARY

DoD programs and Army field units at Aberdeen Proving Grounds require fast, secure, and resilient edge server deployments for real-time intelligence and analytics. With mission data growing ever more sensitive and voluminous, Aberdeen partnered with Graid Technology and KLC Group to create a storage platform built for the future; a solution integrating GPU-accelerated SupremeRAID™ with CSfC-certified drive security from CipherDriveOne Plus, engineered and delivered with KLC Group.

### THE CHALLENGE

#### Mission-Critical Edge Analytics:

Edge servers needed to rapidly process sensitive classified data onsite, minimizing latency and maximizing throughput—even in remote or rugged environments.

#### National Security Compliance:

Systems had to meet strict NSA Commercial Solutions for Classified (CSfC) Data-at-Rest (DAR) standards, safeguarding classified and encrypted data with layered, government-certified solutions.

#### Endurance & Expansion:

Deployments required up to five years of continuous uptime, fault tolerance (RAID 6), and easy, non-disruptive expansion when mission needs grew.

### THE SOLUTION

#### Graid SupremeRAID™:

Offloads RAID processing to a GPU, enabling high-throughput NVMe storage with ultra-low latency and robust protection; even through multiple drive failures.

#### KLC Group + CipherDriveOne Plus:

Delivers FIPS 140-2 and CSfC-certified hardware full-disk encryption, pre-boot authentication, and multi-factor access controls atop SupremeRAID™ storage.

#### Integrated Performance & Security:

The joint solution is optimized for NSA CSfC environments, combining high-speed NVMe RAID with certified encryption, key management, and secure authentication across OPAL 2.0 self-encrypting drives.

### CHALLENGE

#### Keeping the “Edge” Sharp

DoD programs and Army field units at Aberdeen Proving Grounds require fast, secure, and resilient edge server deployments for real-time intelligence and analytics.

### SOLUTION

#### GPU-Accelerated; NSA-Certified

SupremeRAID™ offloads RAID processing to a GPU, enabling high-throughput NVMe storage with ultra-low latency and robust protection; even through multiple drive failures.

### RESULT

#### No-Compromise; Security + Performance

Encrypted, classified data is continuously protected at the device and storage level, ensuring zero compromise to operational speed or data security.

## RESULTS AND BENEFITS



### Field-Ready Data Integrity

Encrypted, classified data is continuously protected at the device and storage level, with zero compromise to operational speed or data security.



### Operational Resilience

SupremeRAID™'s offloaded architecture delivers sustained performance, even as KLC's CipherDriveOne Plus hardware handles continuous key management and encryption enforcement.



### Future-Ready Expansion

Modular design and COTS hardware allow for seamless scale-up as surveillance or analytics requirements evolve.

## BOTTOM LINE

SupremeRAID™ and KLC Group's integrated CSfC-certified solution unites the power of GPU-accelerated NVMe storage with stringent, government-approved encryption and authentication; delivering unrivaled security, performance, and flexibility for military and public sector edge deployments.

Learn more about [KLC Group's CipherDriveOne Plus here.](#)

Contact KLC Group at [info@klc-g.com](mailto:info@klc-g.com) or Graid Technology at [info@graidtech.com](mailto:info@graidtech.com) to learn more.

### About KLC Group LLC

At KLC Group, we are your trusted partner in security software development and the creation of secure software products. With expertise honed over years of industry leadership, we specialize in cutting-edge solutions that revolve around authentication, encryption, software full-disk encryption, hardware disk encryption, and data-at-rest security. Our dedicated team of professionals is committed to safeguarding your digital assets and fortifying your defenses against evolving cyber threats. Learn more at [klc-group.com](https://klc-group.com)

### About Graid Technology

Graid Technology is led by a dedicated team of experts with decades of experience in the SDS, ASIC, and storage industries, and continues to push boundaries in data storage innovation by protecting NVMe-based data from the desktop to the cloud. Cutting-edge SupremeRAID™ GPU-based RAID removes the traditional RAID bottleneck to deliver maximum SSD performance without consuming CPU cycles or creating throughput bottlenecks, delivering unmatched flexibility, performance, and value. With headquarters in Silicon Valley supported by a robust R&D center in Taiwan, we are globally committed to spearheading advancements in storage solutions. For detailed product information, visit our [website](#), or connect with us on [LinkedIn](#).



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