

# 5 REASONS

To Deploy the WEKA® Data Platform, the World's Fastest, Most Scalable Parallel File System, in Your EDA Environment

## Improving Profitability and Reducing Time-to-Market in Semiconductor Design

Historically, Electronic Design Automation (EDA) systems have been architected using enterprise NAS. While easy to deploy, these systems were not designed for the performance and scale required by modern circuit and chip designs. The result is longer simulation times that increase the risk of a chip re-spin, which can have a major impact on profitability.

A better approach is needed that delivers dynamic and independent scaling of performance and capacity to handle peak design workloads. The WEKA software storage solution provides unprecedented small and large file performance and metadata lookups at microsecond latencies without the footprint, cost, and complexity of traditional storage solutions.

1

### Reduce tape-out time with storage optimized for the entire design flow

WEKA Radically Simple Storage® is ideal for demanding EDA workloads, such as complex directory queries, metadata heavy I/O, large and small file reads and writes, and random and sequential access. WEKA takes advantage of leading edge technologies to optimize NVMe SSD performance and network traffic to reduce latency, shaving months off the design cycle. Automatic internal load balancing prevents hot spots and performance bottlenecks, meaning that design teams are more productive and spend less time waiting for simulations to complete.



2

### Benefit from flash performance at a fraction of the cost of traditional storage

The WEKA Data Platform was designed for flash technology and can deliver a 10x or more improvement in performance at less than half the cost of traditional network attached storage. Our software architecture features native NVMe support that delivers consistent high performance and low latency at scale. True hardware independence provides the complete freedom to choose a wide range of x86 based servers, solid-state device (SSD), and standard Ethernet or Infiniband components. WEKA is also in the marketplace in all major hyperscalars. This eliminates costly vendor and cloud lock-in and inflated pricing.

3

### Increase designer productivity with instant file access and on-demand scaling

WEKAs' unique capabilities come from a POSIX compliant file system designed from scratch to leverage the power of flash technology. The parallel and distributed file system presents a global namespace so designers can easily access and share design files, libraries, project directories, and scratch space—all from a unified application and storage platform. Independently and dynamically scale up or scale down performance to meet design schedules and SLAs using our intuitive GUI, without costly and disruptive forklift upgrades. Our patented data placement and protection schemes ensure both data and metadata are ultra-high performance while being fully protected and accessible.



4

### Lower design costs and increase utilization of existing infrastructure

With WEKA, dramatically reduce job run-times, get more use out of EDA software licenses, and reduce the need for peak-use tool licenses to meet design schedules. Leverage the cost benefits and scale of your cloud to further reduce design costs by migrating cold data in the background to any S3 or Swift compatible object store—all without sacrificing performance or security. Inactive design files remain instantly accessible, saving valuable time, and eliminating the cost of recalling data from tape. When deployed in converged mode, WEKA requires zero additional footprint or specialized hardware, reducing power, cooling, and floor space requirements by as much as 80 percent. You can also run WEKA on dedicated server infrastructure to decouple storage and compute for improved fault tolerance, scalability and flexibility.

5

### Increase business agility with reduced complexity and simplified management

Integrated and granular policy based tiering dramatically reduces infrastructure complexity by consolidating multiple tiers of storage to a hot tier for active data and a cold tier for inactive data. Automatically and seamlessly migrate directories, files, and portions of a file to cost-optimized storage without special, and portions or disruptive reconfigurations. Never lose access to your data as migrated files appear local to users and applications with near-instantaneous retrieval. An intuitive GUI provides point and click ease of management along with detailed charting for analysis of performance and capacity utilization. Managing exabytes of storage is radically simple whether via GUI, CLI, or a full set of RESTful APIs.

