rescale

BRING THE CLOUD
TO SEMICONDUCTOR DESIGN

The overall computing resources required for semiconductor development doubles every 2 years. For many companies using on-premise computing resources, this rate of change is unsustainable. Rescale enables R&D teams with a turnkey solution that quickly and easily engages diverse cloud computing resources and unifies them with on-premise resources under a single, secure, and highly-manageable platform.

www.rescale.com

Challenges for EDA

Computing Resources

- Traditional EDA systems run with high utilization making burst workload demands difficult to accommodate
- Specific high memory/high core count systems are only needed for specific workloads and a limited amount of time
- As projects approach tape-out, it is typical for computing demand to surge for verification jobs and additional software license are purchased
- Lack of resources results in delayed time-to-market, long queue times, and engineering inefficiency

Provision and Deployment

- On-premise systems are kept for 3-5 years providing static computing power while newer systems offer up to 10X the performance
- Large capital expenditures are required for in-house systems and usually take over 8 months to deploy
- Limited power and space for expanding the current grid

Administration and Security

- Disparate systems offer limited insight into computing activities and costs
- Controlling cloud-based usage vs budget is difficult to manage
- Implementing a secure cloud solution is expensive and takes months of development

The Rescale Approach

Computing Resources

- Precisely match computing demand by instantly securing on-demand cloud computing resources
- Access diverse, specialized cloud computing and storage resources to use the most optimized computing architectures
- Virtually unlimited computing resources allow teams to request more licenses for a shorter term, expediting the completion of verification jobs
- Accelerate time-to-market, eliminate queue time, and increase engineering productivity by providing the best computing resources

Provision and Deployment

- Always use the latest cloud resources from leading cloud services providers on a pay-per-use model
- Instantly deploy and use Rescale from your computer - there are no infrastructure restrictions for cloud systems
- The Rescale solution can seamlessly integrate with many on-premise operating systems

Administration and Security

- Rescale offers comprehensive budget and resource management tools through the single platform solution
- Allocate funds and resources to budget people, teams, and projects
- SOC 2, CSA, FedRAMP, HIPAA, and ITAR accreditations and end-to-end encryption secure your sensitive information

To get started with Rescale and try the ScaleX Platform, **sign up on www.rescale.com**

Over 60 HPC data centers supported worldwide, including:

aws

Azure

Google Cloud

IBM

ScaleX Enterprise:

- Multi-cloud architecture on one platform
- Incorporate cloud into existing on-premise HPC strategy
- Manage budgets
- Manage licenses & access controls

Independently audited to meet the following Industry Standards:

AICPA SOC
aicpa.org/soc4so
SOC for Service Organizations

HIPAA

Compliant with:

CSA cloud security alliance℠

ITAR — International Traffic in Arms Regulations Compliant

FedRAMP *

Semiconductor
Technical Data Sheet

The Leaders in Cloud-based Engineering Compute

Most cloud solutions are optimized for web servers and web applications. As the leader in bringing engineering big compute to the cloud for the automotive and aerospace markets, Rescale has the IP and experience to deliver an efficient turnkey, engineering-centric solution for EDA workloads in the cloud.

Hybrid Capable Multi-cloud and Multi-vendor Solution

Our multi-cloud solution provides you with the flexibility to run your designs on Amazon AWS, Google Cloud, Microsoft Azure, or IBM clouds. The Rescale solution can also be deployed in a hybrid environment that combines on-premise and clouds resources under a single platform. As a vendor-neutral provider, Rescale can offer tools from different EDA vendors on the same platform to satisfy your multi-vendor demands.

Run Your Workloads Securely in the Cloud

Rescale bridges the gap between semiconductor design and the cloud. With extensive security features and accreditations, the Rescale's ScaleX platform provides the protection needed to keep both your IP and your vendors' IP safe.

- Full administrative management and IT dashboard provide comprehensive controls and visibility
- Software-defined security policy implementation tools to enforce proper IP handling
- All design data is protected using encryption in transfer with high-grade TLS and multi-layered encryption at rest with 256-bit AES

Turnkey Solution

Rather than building a solution from various pieces from multiple vendors, Rescale's ScaleX platform provides everything you need to run your semiconductor projects in the cloud. There is no need to spend months working with multiple vendors to stitch together and test solutions that may or may not work well together. Rescale's ScaleX platform is pre-built, battle-tested, and ready to go.