

Mentor, a Siemens business

# Calibre scales to the cloud

Calibre™ software proves it's ready for cloud computing with new benchmarks for EDA software scalability and performance

## Challenge: IC companies face constant conflict between market pressures and resource requirements

<p>Increasing IC design size and complexity requires longer verification runtimes</p>	<p>Companies must meet tighter time-to-market schedules to stay competitive</p>	<p>Insufficient resources to get designs to market on time and maintain quality</p>
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<p><b>Business impact of missing tapeout or market window</b></p>	<p><b>Budget gap</b> New on-site resources require substantial capital investment</p>	<p><b>Schedule gap</b> Extensive lead time required for purchase and installation</p>
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## Solution: Expand your Calibre verification to the cloud

<p>Access to and control of massive compute resources on demand</p>	<p>Only pay for what you use</p>	<p>Assurance of security for proprietary data/IP</p>
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<p>"Calibre has supported distributed computing, highly scalable computing, for many, many years. Moving us to the cloud, it's the same engine, same licensing, and you're going to see the same great performance that you see running Calibre on-premise." <i>Michael White, director of product marketing, Calibre physical verification, Mentor, a Siemens business</i></p>	<p><b>Scalability</b></p> <p>Massive computing power to complete tapeout faster</p>	<p><b>Flexibility</b></p> <p>Pay as you go, no upfront expense or capital investment</p>	<p><b>Agility</b></p> <p>Realtime resource availability on demand</p>
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"Mentor Calibre scales incredibly well."  
*James Robinson, Silicon Design Engineer, AMD*

## Benefits

<p>Significantly reduce time to market</p>	<p>Speed up innovation</p>	<p>Same Calibre quality of results</p>
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## Keys to success

<p><b>Best practices</b></p> <ul style="list-style-type: none"> <li>Cloud provider</li> <li>Cloud server options</li> <li>Rule deck optimization</li> <li>EDA tool setup and optimization</li> </ul>	<p><b>Calibre tools and processes optimized for massive scaling</b></p>	<p><b>Ease of use</b></p> <ul style="list-style-type: none"> <li>Choice of cloud configuration</li> <li>Optimized memory use for cloud</li> <li>Same Calibre engines and licenses</li> </ul>
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## Results: Mentor/AMD/Microsoft Azure collaboration

AMD 7nm Radeon Instinct™ Vega 20 13.2 billion transistors → Calibre nmDRC™ scaled to 4000 cores + optimizations → 6.7 hours

What are you waiting for? Get started with Calibre in the cloud today!

**Resources:** Calibre in the cloud on-demand webinar [bit.ly/35CuW00](https://bit.ly/35CuW00)  
 Innovations in physical verification and cloud computing [go.mentor.com/5bVq2](https://go.mentor.com/5bVq2)  
 Calibre in the cloud: Unlocking massive scaling and cost efficiencies [go.mentor.com/5bVq3](https://go.mentor.com/5bVq3)