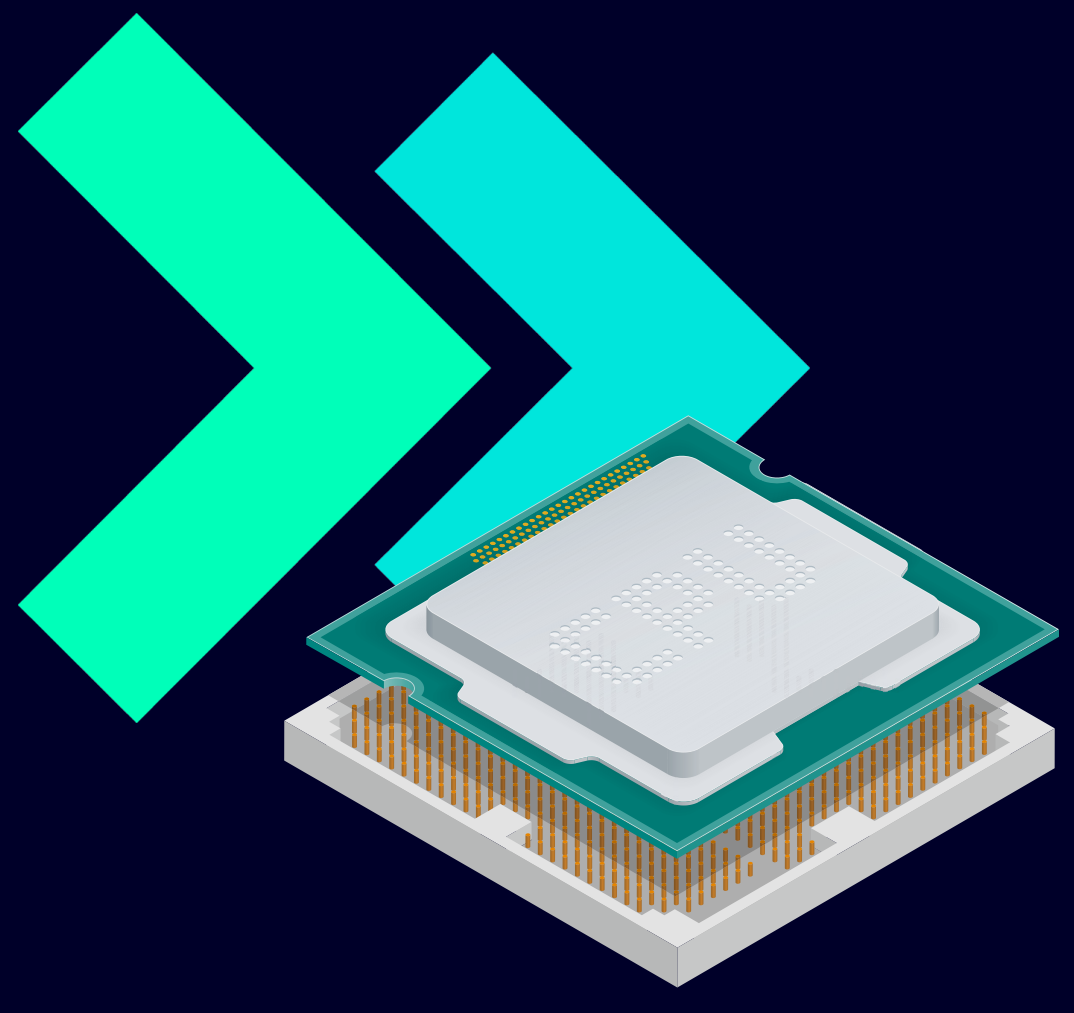


From concept to reality: How simulation accelerates electronics design



Key benefits:



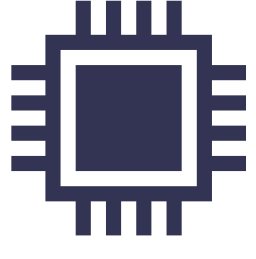
Early issue detection:

Simulation allows engineers to identify and address potential problems early in the design process, reducing the risk of costly redesigns and delays.



Optimized performance:

By leveraging simulation and electronics analysis, engineers can optimize designs for thermal management, structural integrity and electromagnetic compatibility (EMC), ensuring high-quality, reliable products.



Reduced physical testing:

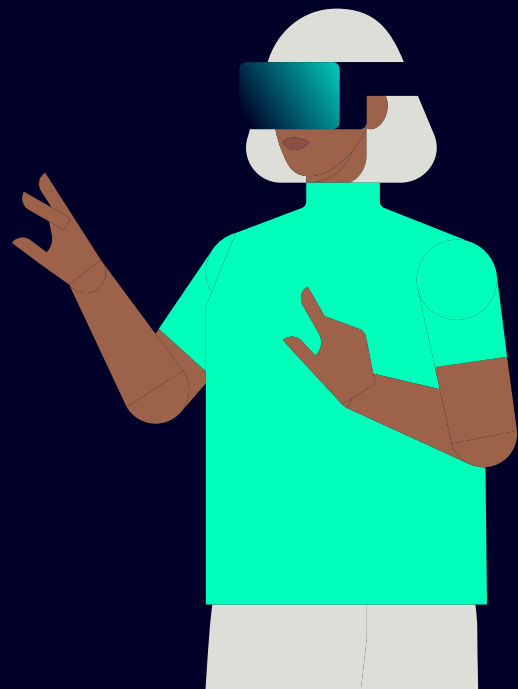
Simulation enables virtual testing and validation, reducing the need for time-consuming and expensive physical prototypes.



Faster time-to-market:

Companies that use simulation early and often can explore more design alternatives, make informed decisions and bring innovative products to market faster.

Statistics:

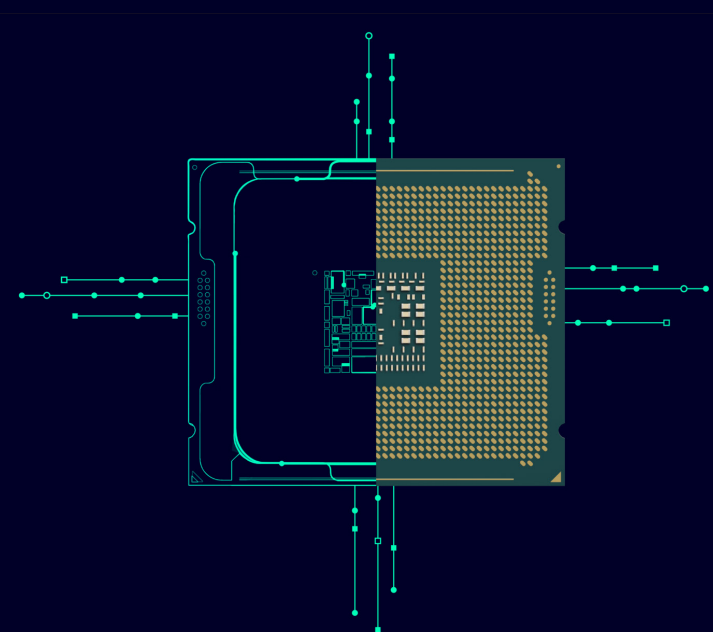


Companies using simulation to explore design ideas report:

74% better products

50% faster innovation

Source: Tech-Clarity, "How Simulation Drives Innovation," 2021



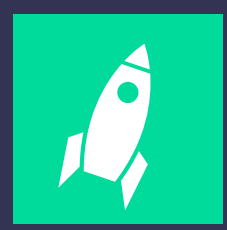
Adopting a comprehensive digital twin approach, which includes simulation, can reduce development time by

30%

Source: Siemens Blog, "The digital twin: A game-changer for aerospace and defense," 2019

Accelerate innovation with simulation

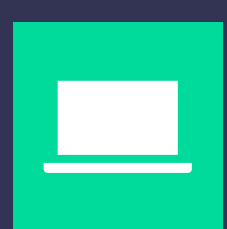
Companies leveraging advanced simulation tools throughout their product development process have reported significant improvements in design efficiency, product quality and time-to-market. Here's how simulation can transform your product development:



Identify and resolve **85%** of design issues before the first physical prototype¹



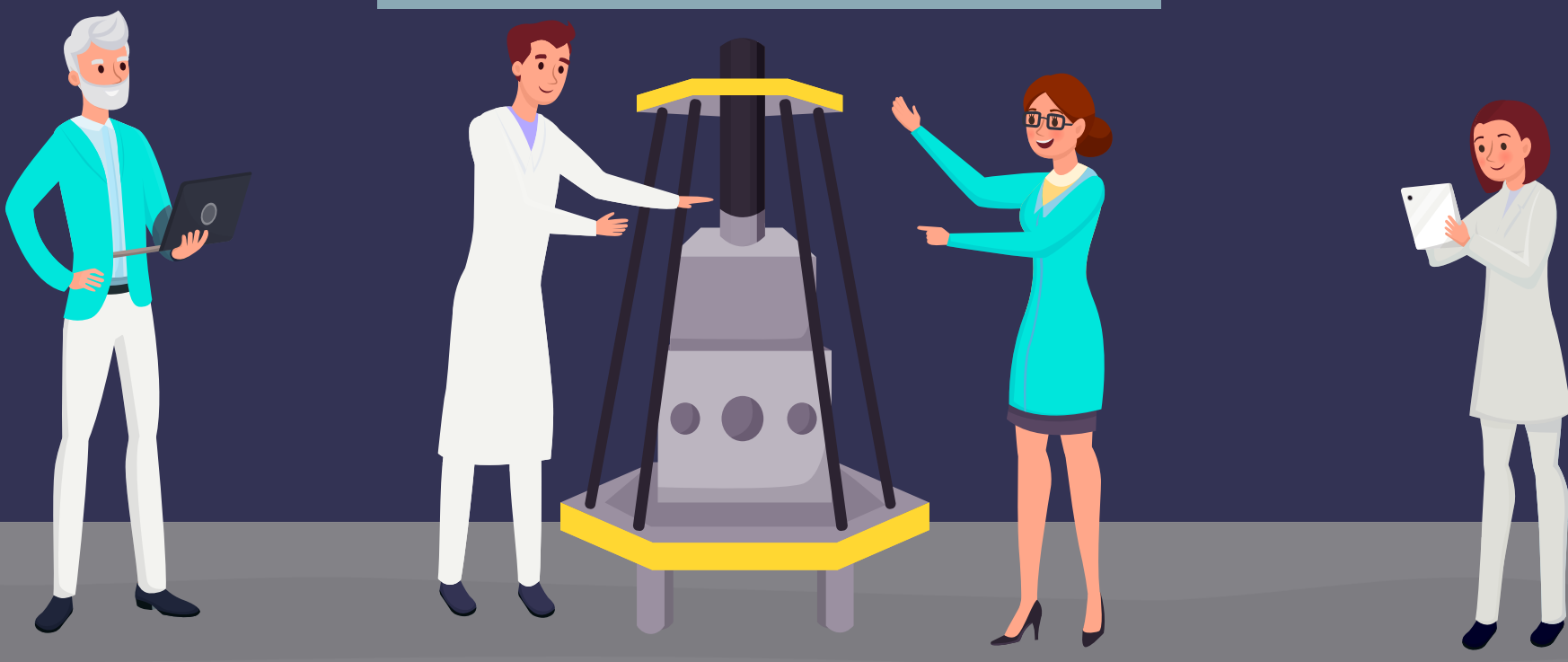
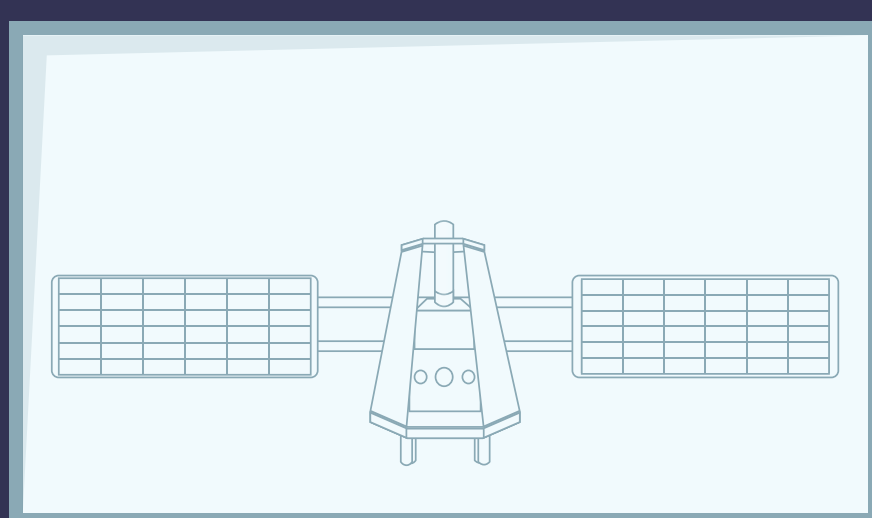
Improve product performance and reliability by **25%**²



Reduce the number of design iterations by **60%**³



Top performers are more likely to use automation in simulation processes, which can speed up the overall product development process⁴



Sources: 1. Flash. 2. Eliminating silos in electronic systems design. 3. Tech-Clarity-Perspective-DDA-2015-07-09. 4. Tech-Clarity Perspective Simulation.

Embrace simulation-driven electronics design:

As the complexity of electronic systems continues to grow, traditional design approaches are no longer sufficient. By embracing simulation early and often, electronics companies can overcome design challenges, drive innovation and deliver high-quality products to market faster.

► **Discover how Siemens Xcelerator, with its powerful Simcenter simulation tools, can help you accelerate your electronics design process and stay ahead of the competition.**

