



**SIEMENS**

*Ingenuity for life*

Siemens Digital Industries Software

# Envision the future of smart electronics

Grow into a digital enterprise to boost  
productivity and innovation with  
smart manufacturing for electronics.

[siemens.com/SME](https://www.siemens.com/SME)

Trend #1

Smart connected products in the IoT era, embracing innovation



Trend #2

Customization and personalization, making a business impact



Trend #3

Complying with regulations, a costly issue



Trend #4

Globalization in manufacturing increases complexity



Trend #5

Knowledge is power: understanding your data



In the challenging and ever-changing digital transformation era, the Internet of Things (IoT) is key to staying ahead. Optimizing manufacturing processes and performance to meet market demand will require smart technology. Today it's possible to connect silos of information, eliminate physical prototypes, and replace all paper-based work instructions.

Resulting in a continuous flow from design to production and beyond, driving more efficient manufacturing processes across individual sites and global enterprises.

The demand for customization and personalization is an opportunity to differentiate from competitors. Companies must evolve from traditional product engineering and embrace the digital approach to meet individual customer needs.

Efficient planning also involves taking regulatory requirements into account: complying with regulations means reducing avoidable costs. And increasing regulatory pressure requires a robust compliance program.

In a globalized world, manufacturing processes in different locations make effective and efficient collaboration a must. This offers great opportunities, but it also increases complexity, meaning more efficient planning and management is required.

Finally, data analysis is key for any business to be able to thrive in this industry. Analyzing large amounts of data is not an easy task, but will allow you to identify issues, predict and solve quality problems.

Smart manufacturing solutions from Siemens address specific manufacturing challenges for electronics companies. With holistic solutions you can connect the real and digital world of manufacturing today. Are you ready to embrace innovation and dramatically improve your new product introduction (NPI) cycle times and costs?

# Smart manufacturing for electronics solutions

Embrace innovation through a seamless, integrated digital system



**Siemens offers a holistic framework to help you cope with the challenges of today's electronics engineering and manufacturing market.**

## Innovation is here, merging the real and digital world

Smart manufacturing for electronics (SME) is an essential part of a holistic digital approach to manufacturing, the digital enterprise. This provides an integrated platform that works by connecting a framework of engineering/manufacturing operations and systems. The results are delivering significant competitive advantages over traditional approaches. It does this by connecting valuable data that's locked inside many siloed systems. The data in those systems is then visible in context to all stakeholders. This results in a single source of truth or a digital thread.

Smart manufacturing provides modern software and digital solutions to improve performance and optimize processes, supporting every aspect of new product introduction. This enables your company to save costs and resources while significantly improving productivity to help you deliver near-perfect quality. You can achieve higher quality at a lower cost.

### Simulation technology

With SME, you simulate real-world conditions before NPI, by using digital twins to provide accurate virtual testing and experimentation with production concepts. The result is the possibility to add high levels of flexibility and agility to your planning.

By eliminating physical prototypes and embracing simulation you reduce NPI cycle times and time to market significantly.

### Smarter solutions mean smarter manufacturing

One of the benefits of an integrated digital platform is its capacity to synchronize data and analytics on a larger scale. Diagnosing the obstacles limiting productivity is easier when you have a full enterprise performance overview. Better management of data allows for smarter decision-making.

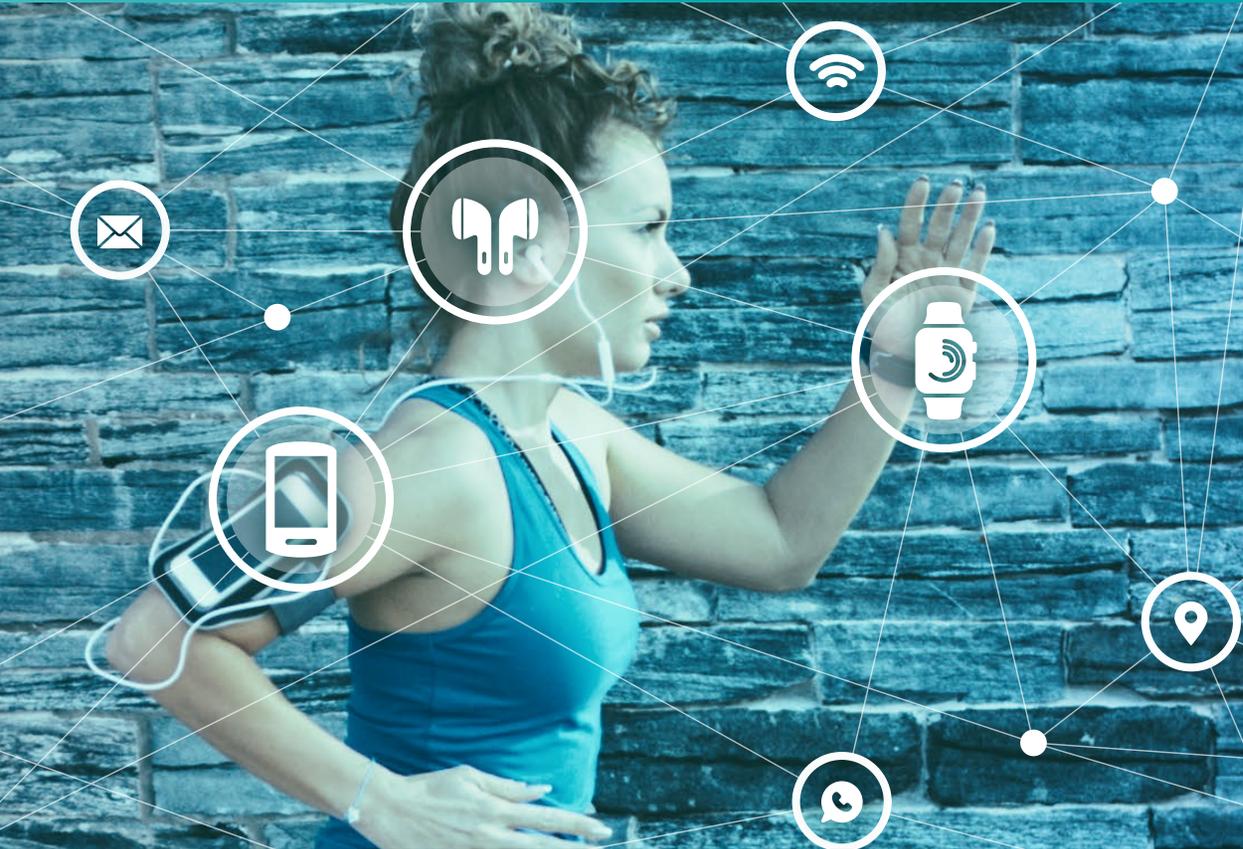
In the digital transformation era, the electronics industry is challenging. It requires smarter software solutions to cope with global competition shrinking margins, rapidly expanding customization and regulatory pressure. In the end, it's all about increasing efficiency in every aspect of your manufacturing ecosystem.

**50%** faster time to market

**25%** reduction in development cost

# Take the leap and address the challenges

## Enter the world of digital twins



The market demands that electronics companies must act fast and be smart. Now is the time to embrace innovation.

Now is the time to take advantage of everything that SME offers you. Powerful information and technology available today to revolutionize the future of your business to boost productivity, reduce costs, and meet all your customer, technical and regulatory requirements.

## This is how

Connect silos within an integrated digital platform to go far beyond the capabilities of individual solutions.

Use digital twins to eliminate errors while optimizing production, helping you deliver near-perfect product quality at a lower cost.

Make use of the latest simulation technologies to meet the demand for customization. You can now test virtually with real-world conditions even before NPI.

Put an end to the loss of market opportunities and stop paying massive amounts in penalties. Use SME solutions to comply with complex regulatory requirements.

Understand and process large amounts of data, solve quality problems quickly and efficiently, and optimize processes.



### What our customers say:

*"The Siemens PLM systems have contributed to lower our development time by around 20 to 30 percent."  
Electrolux, Sweden*

*"Our digital transformation means smart working and a smart factory: good care of the material is the key."  
ROJ S.r.l, Italy*

### About Siemens smart manufacturing solutions:

Siemens' digital twin technology helps electronics companies optimize their returns by leveraging product information across the entire supply chain. And, internally throughout multiple domains and departments, such as manufacturing, quality, cost engineering, compliance, and service. Seamless collaboration and a single source of truth for all stakeholders will result in connected electronics manufacturing processes and data management resources. Having a single source of reliable information enables companies to collaboratively create, validate, and optimize manufacturing plans concurrently with their product design.

Siemens' digital twin technology is especially valuable in fast-moving high-tech markets with emerging technologies like 5G wireless applications.

For more information on Siemens Smart Manufacturing for Electronics, visit [www.siemens.com/plm/electronics](http://www.siemens.com/plm/electronics) or follow us on [LinkedIn](#) and [Twitter](#).

### Siemens Digital Industries Software

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