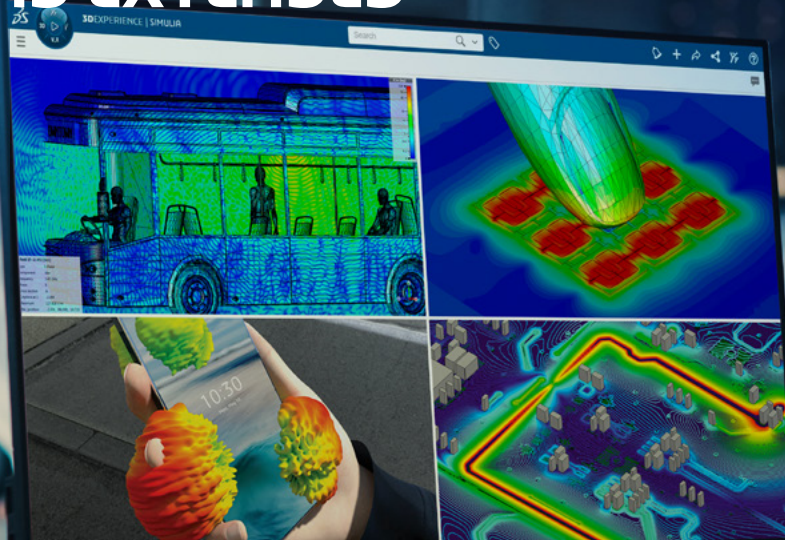


# ELECTROMAGNETIC SIMULATION UNLOCKED THROUGH CST STUDIO SUITE FRONTEND EXTENDED



## Empowering Engineers with Electromagnetic Simulation Software

Electromagnetic simulation software empowers engineers to efficiently analyze electromagnetic properties of components and systems, tackling multiscale challenges with speed and accuracy. It supports the entire design process, from idea to operation, revolutionizing the design cycle with virtual prototypes and driving innovation.

## Unified Interface and Hybrid Simulations in CST Studio Suite

CST Studio Suite offers a unified interface for electromagnetic field solvers, covering a wide range of applications across the electromagnetic spectrum. These solvers can be combined for hybrid simulations, enabling engineers to efficiently analyze complex systems with multiple components. Integration with other Dassault Systèmes products facilitates the inclusion of electromagnetic simulation early in the design process.

## Key Areas of Electromagnetic Analysis

Typical areas of electromagnetic analysis include evaluating the performance and efficiency of antennas and filters, addressing electromagnetic compatibility and interference (EMC/EMI), assessing human exposure to electromagnetic fields, studying electro-mechanical effects in motors and generators, and examining thermal effects in high-power devices.

## THE FRONTEND EXTENDED UNLEASHES THE CST STUDIO SUITE PORTFOLIO

All CST Studio Suite technologies are integrated into the Frontend Extended, which enables you to access tokens and credits within the [SIMULIA Unified Licensing Model \(ULM\)](#). Dive in and quickly uncover what this license form includes and learn how to get it easily and hassle-free!

## WHAT DOES FRONTEND EXTENDED ENABLE?

### 3D Modeling and Schematic



Benefit from this high-performance software package for 3D electromagnetic analysis, designed for the development, analysis, and optimization of electromagnetic components and systems. Key features include:

- An intuitive user interface with a 3D interactive modeling tool.
- Support for various import options from leading CAD formats such as CATIA®, SOLIDWORKS®, ACIS SAT/SAB, Step, Autodesk Inventor®, VDA-FS, PTC Creo®, IGES, NASTRAN, SolidEdge, Parasolid, Siemens NX, JT, STL, DXF, and GDSII.
- Support of various import options from leading ECAD formats such as Cadence (Allegro/APD/SiP), ODB++, IPC-2581 (IPC-DPMX), Zuken CR-5000/8000 ASCII, Siemens HyperLynx.
- An easy-to-use schematic layout tool for electronics circuit and system simulation.
- A pre-processor for electromagnetic solvers and post-processing tools tailored to industry needs, delivering faster solutions.

### High-Frequency Solvers



Experience versatile 3D electromagnetic simulation, perfect for the design and analysis of antennas, MW/RF components and EMC.

### Low-Frequency Solvers and Opera



Simplify your 2D/3D electromagnetic simulations for electrical machines and magnet design.

Explore Opera, a comprehensive Finite Element Analysis suite for low-frequency simulations of electromagnetic and electromechanical systems.

### Charged Particle Dynamics



Dive into specialized 3D simulations for fast and accurate analysis of charged particle dynamics in electromagnetic fields.

### Thermal Simulation



Explore specialized 3D simulations for accurate thermal analysis coupled with electromagnetic fields.

### Cable Simulation



Use specialized 2D/3D simulation tools for signal integrity (SI) and EMC/EMI analysis of wire harnesses.

### Printed Circuit Board and Packaging Analysis



Access specialized 2D/3D simulation tools for signal and power integrity (SI/PI) and EMC/EMI analysis of PCBs.

### System and Circuit Simulation



Enjoy an easy-to-use schematic for circuit simulation and system assembly with seamless integration of 3D EM models.

### Filter Designer



Take advantage of a specialized synthesis tool for designing passive microwave components like filters and diplexers.

### Antenna Magus



Accelerate your antenna design and modeling with a library of over 350 antennas.

### SPARK3D and FEST3D



Perform multipactor and gas discharge breakdown analysis for passive radio frequency and microwave components.

Use advanced tools for microwave waveguide components design.

### IdEM Studio

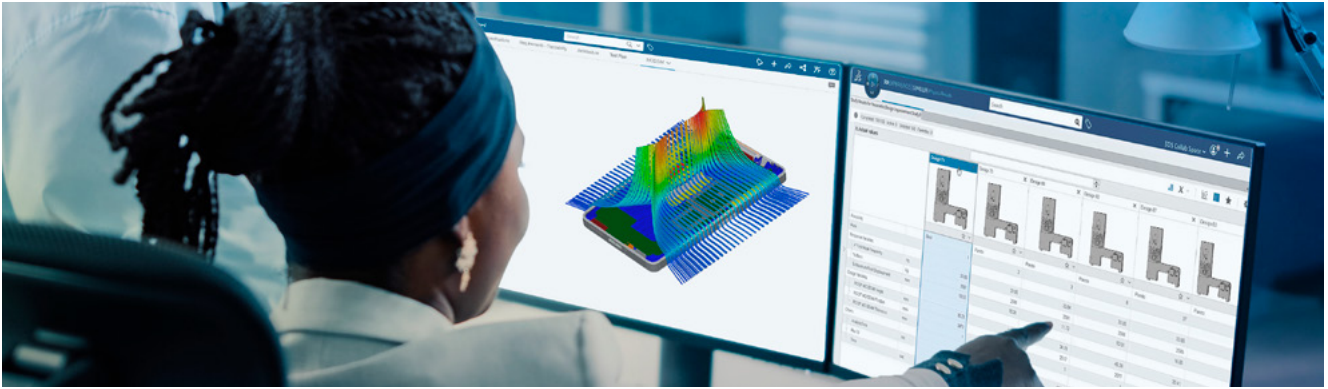


Generate broadband surrogate macromodels with this best-in-class tool.

### WASP-NET



Synthesize antennas, antenna arrays, and passive microwave components using fast hybrid EM analysis.



**Access the SIMULIA Unified Licensing Model today to unlock the full potential of the CST Studio Suite Electromagnetic Simulation Portfolio!**

With the Frontend Extended, your organization gains access to all CST Studio Suite technologies through a dynamic, token-based system. This unified approach eliminates the need for multiple separate licenses, allowing you to take full benefit of SIMULIA's comprehensive suite of advanced simulation tools, including multiphysics capabilities beyond electromagnetics.

This flexible licensing model ensures your teams can run the simulations they need, exactly when they need them—maximizing efficiency and optimizing costs.

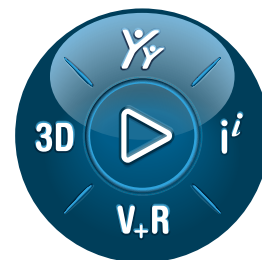
**Experience the power of CST Studio Suite for all your electromagnetic analysis needs!**

**Connect with us today:**  
contact details

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