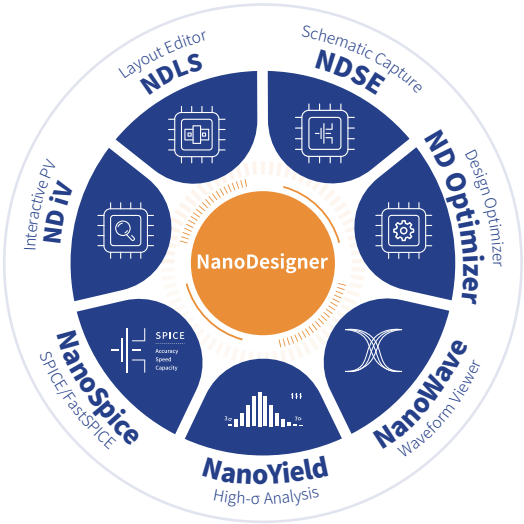
NanoDesigner

PRIMARIUS

Full Custom Design Platform

Introduction

NanoDesigner provides a flexible, scalable, and fully customized platform with intuitive and easy-to-use GUI for memory and analog/ mixed signal IC design, supporting schematic capture, intelligent layout editing, interactive physical verification, and circuit design optimization. It can be seamlessly integrated with industry-leading circuit simulator-NanoSpice series, yield oriented design platform-NanoYield, high-capacity waveform viewer-NanoWave and other SPICE simulators. Fully compatible with database like Open Access, NanoDesigner enables links between internal modules and 3rd-party industry-standard tools, performs well in circuit viewing/editing, and supports automatic connection indicated by flyline. With all these features, NanoDesigner is capable of fully integrating schematic/layout design, circuit simulation/analysis, physical verification, and design automation, providing efficient EDA design solutions for various customized circuit design such as memory circuit and analog circuit.



Key Advantages

Integrated circuit analysis environment

- Seamless integration of schematic editor (NDSE), layout suite (NDLS) and waveform viewer (NDNW)
- Powered by Primarius' leading SPICE simulators and other industry-proven simulators
- Supports interactive physical verification

Intuitive and efficient operations

- Easy GUI operations and various commands for experienced users
- Supports user-defined short-cut keys

Flexible design environment

- Allows in-depth customization using either proprietary script or Python language
- Supports Net Driven Layout design, Rule Driven Layout design and Constraint-driven layout design to generate layout from schematic efficiently

Systematic simulation environment

- Supports PVT and Testbenches in batch mode

Leading performance in viewing and editing

- Handles 100 GB+ GDS file large scale data with convenient functions including flyline, push-aside wiring, etc

Flexible automatic connection

- Intelligent pattern routing in both interactive and full-automatic modes

Intelligent analysis and learning

- Analyzes designer's workflow, predicts the following key steps, and allows users to select from them

In-Design physical verification

- Allows easy customization of DRC and LVS rules in a graphical way and runs swiftly in analog circuit verification

Intuitive waveform viewer

- High-speed and capable of handling gigabyte sized data files
- Rich measurement functions allow for flexible simulation analysis
- An integral part of NanoDesigner platform supports cross- probing to schematic and layout

Powerful advanced algorithm

- Incorporates various algorithms and introduces a new AI-based algorithm for circuit optimization and design automation

Specifications

Consolidated circuit design acceleration platform

- Schematic & layout design, circuit simulation and analysis, physical verification and design automation in one platform.

Industry-standard database and data format support

- Fully compatible with Open Access database, EDIF file, GDS file, Netlist file, etc.

Comprehensive interface support

- Enables link between internal modules and 3rd-party industry-standard tools.

Applications

- Full custom circuit design
- Flat panel display design
- Analog and Mixed-Signal circuit design