



# Synopsys Overview

Q3 FY2025





# SOLVING ENGINEERING CHALLENGES

Across Many Industries



# Empowering Our Customers' INNOVATION

## PURPOSE

To power innovation today  
that ignites the ingenuity  
of tomorrow

## MISSION

Empower innovators  
to drive human  
advancement

## VALUE PROPOSITION

Maximize customers'  
R&D capabilities and multiply  
their productivity

# SYNOPSYS®

Our Technology, **Your Innovation™**

# CREATING THE LEADER in Engineering Solutions from Silicon to Systems

**SYNOPSYS®**

Leader in Silicon Design



**Ansys**

Leader in Simulation & Analysis

## PROVIDES

comprehensive solutions  
for the entire silicon design process  
including multi-die simulation & analysis

## EXTENDS

AI leadership in EDA  
and simulation to accelerate  
customers' innovation

## ACCELERATES

creation of intelligent products by  
bringing silicon expertise across  
systems verticals



# THE LEADER in Engineering Solutions from Silicon to Systems

**#1**

in EDA

**LEADER**

in advanced node designs

**PIONEER**

in AI-powered EDA

**#2**

in silicon IP

**LEADER**

in interface & foundation IP

**PIONEER**

in IP nodes & standards

**#1**

in simulation & analysis

**LEADER**

in multiphysics

**PIONEER**

in simulation-related AI & digital twin

**~\$9B**

Revenue (TTM)

**~28K**

Employees

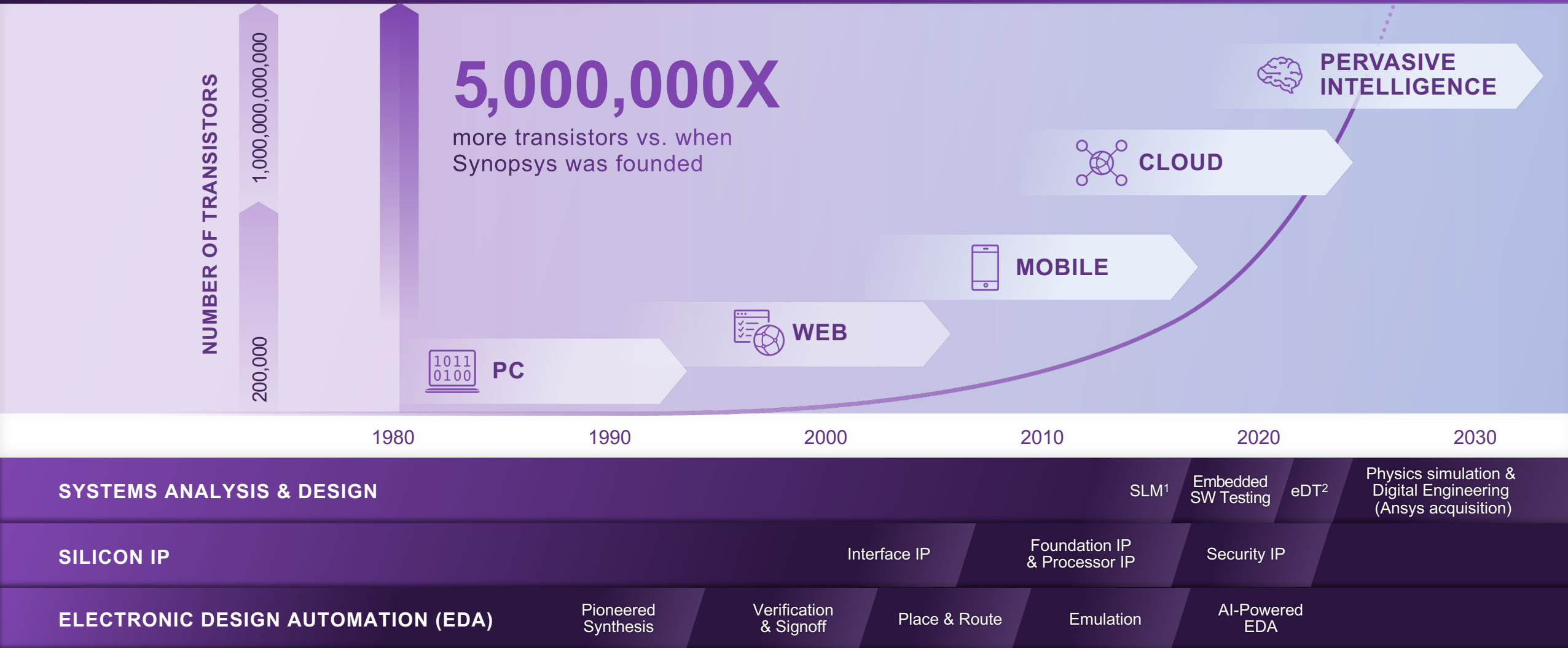
**>25%**

R&D Investment

**38**

Countries

# THE DRIVING FORCE of Transformative Technology



1. "SLM" stands for "Silicon Lifecycle Management" 2. "eDT" stands for "Electronics Digital Twin"



# Powering the Era of **PERVASIVE INTELLIGENCE**



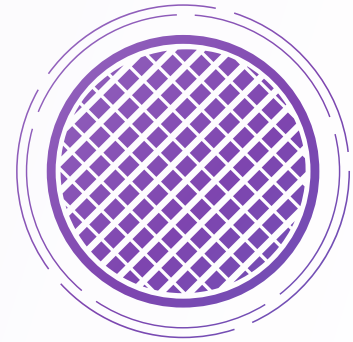
## **ARTIFICIAL INTELLIGENCE**

Exponential productivity and efficiency gains  
Overcoming energy and compute limits



## **SOFTWARE-DEFINED SYSTEMS**

New applications, new methodologies  
Enabling increased complexity & pace of innovation



## **SILICON PROLIFERATION**

More silicon content everywhere  
Boosting R&D productivity

# **ENGINEERING SOLUTIONS FROM SILICON TO SYSTEMS**

# Requiring Holistic ENGINEERING SOLUTIONS FROM SILICON TO SYSTEMS

Electronics

## SYSTEMS SPECTRUM

Electro-Mechanical

### Semiconductor Companies

“Classic”  
Chips

Advanced  
Computing

ELECTRONIC

Silicon

ELECTRONIC

Hardware

Software

Silicon

### Systems Companies

High-Tech

Automotive

Aerospace

Industrial  
Equipment

Others

MECHANICAL

ELECTRIC

ELECTRONIC

Hardware

Software

Silicon

ELECTRIC

ELECTRONIC

Hardware

Software

Silicon

ELECTRIC

ELECTRONIC

Hardware

Software

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ELECTRIC

ELECTRONIC

Hardware

Software

Silicon

MECHANICAL

ELECTRIC

ELECTRONIC

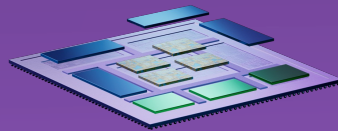
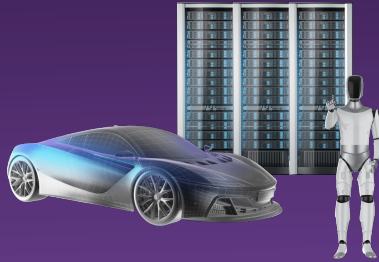
Embedded  
control

SILICON TO SYSTEMS

SYSTEMS TO SILICON



# Systems Design Encompasses **MANY ENGINEERING DOMAINS**



## **FLUIDS**

Aerodynamics for efficiency, cooling

## **THERMAL**

Heating/cooling

## **MECHANICAL**

Stress forces, multi-die interconnect

## **SOFTWARE**

OS, middleware, application

## **ELECTRICAL**

Reliability, PCB, power supply efficiency, ESD, EMAG

## **OPTICAL**

Photonics and lens design for high-speed interconnects

## **SILICON**

Functionality, power, performance, signal integrity, packaging, EMIR



Complexity compounding

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Pace accelerating

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Cost increasing

Silicon and Systems  
**INCREASINGLY NEED  
TO BE CO-DESIGNED**



# ENGINEERING SOLUTIONS FROM SILICON TO SYSTEMS

## ELECTRONIC DESIGN AUTOMATION (EDA)

- Architecture
- Digital design & verification
- Analog design & verification
- Hardware-assisted verification
- Silicon manufacturing
- Silicon lifecycle management
- Methodology services

## SILICON IP

- Interface IP
- Foundation IP
- Processor IP
- Security IP
- Design services

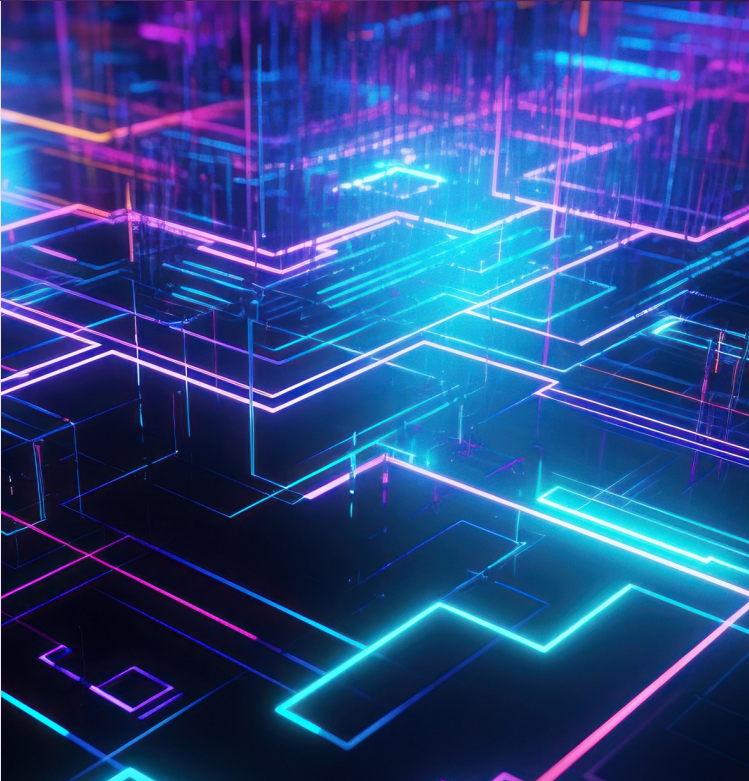
## SIMULATION & ANALYSIS

- Multiphysics
  - Structures
  - Fluids
  - Electronics
  - Optical
- Systems
  - Model-based engineering
  - Materials & optimization
  - Safety & security
  - Digital twin
  - Mission engineering

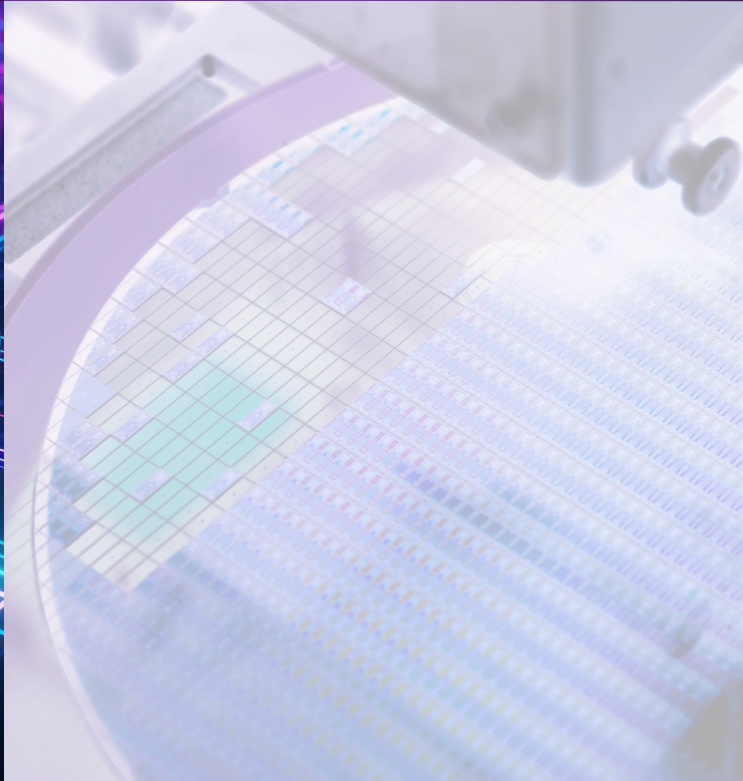


# ENGINEERING SOLUTIONS FROM SILICON TO SYSTEMS

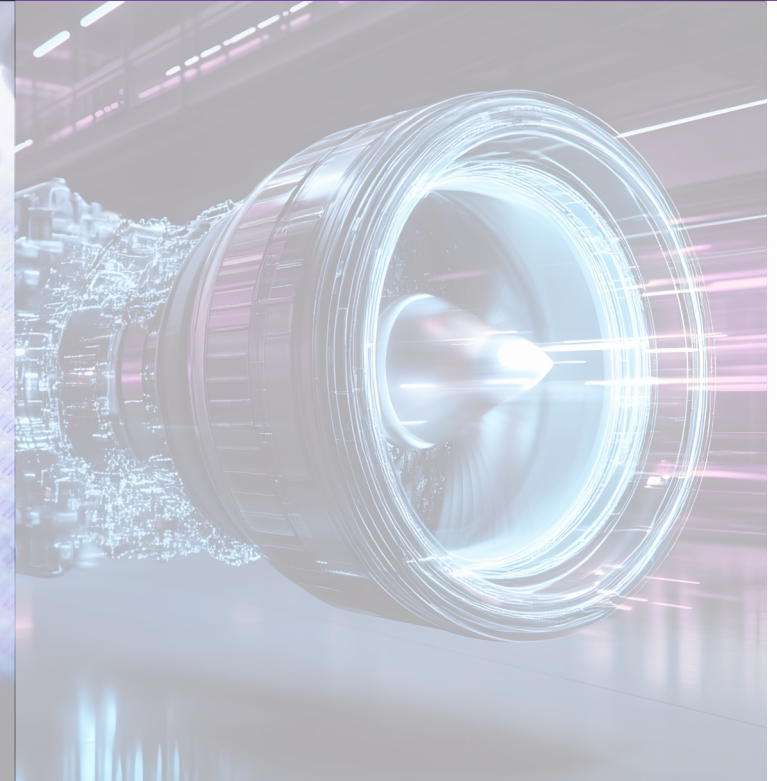
ELECTRONIC DESIGN  
AUTOMATION (EDA)



SILICON IP



SIMULATION & ANALYSIS





# INDUSTRY-LEADING Full-Stack EDA Solution

AI-powered

Hyperconverged

Systems Architecture

Design Capture

Verification

Implementation

Multiphysics Signoff

Test & SLM

Silicon Manufacturing

**#1 IN EDA**, Leader in digital design and verification

**OVER 1400** tape-outs at 16nm and below\*

**LEADER IN** GPU-accelerated analog verification

**LEADER IN** simulation and IR-drop analysis

**GOLD STANDARD** in Signoff and TCAD

**PIONEER** in AI-powered EDA

**SUPERIOR CUSTOMER OUTCOMES** through PPA, capacity leadership and silicon accuracy

# EDA AI LEADERSHIP - RL to Generative to Agentic

## REINFORCEMENT LEARNING

Optimization of Results



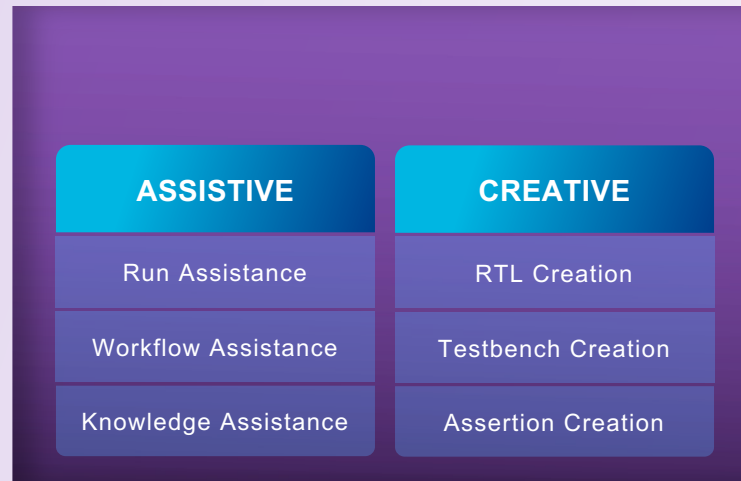
2017-2020

2023

2023

## GENERATIVE AI / LLMS

Assistive and Creative Capabilities



2023

## AGENTIC AI

Autonomous Tasks



**AgentEngineer™ Technology**

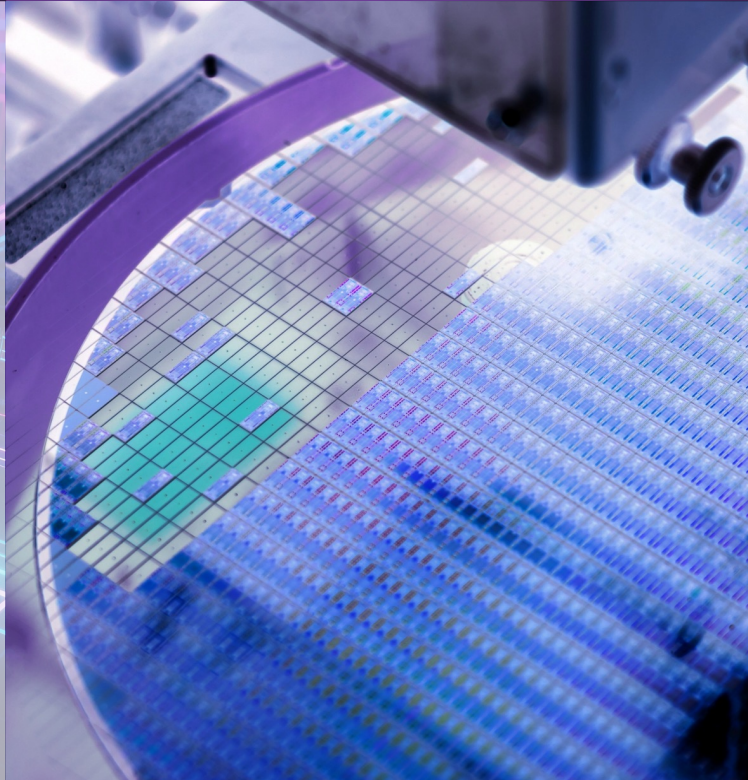
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# ENGINEERING SOLUTIONS FROM SILICON TO SYSTEMS

ELECTRONIC DESIGN  
AUTOMATION (EDA)



SILICON IP

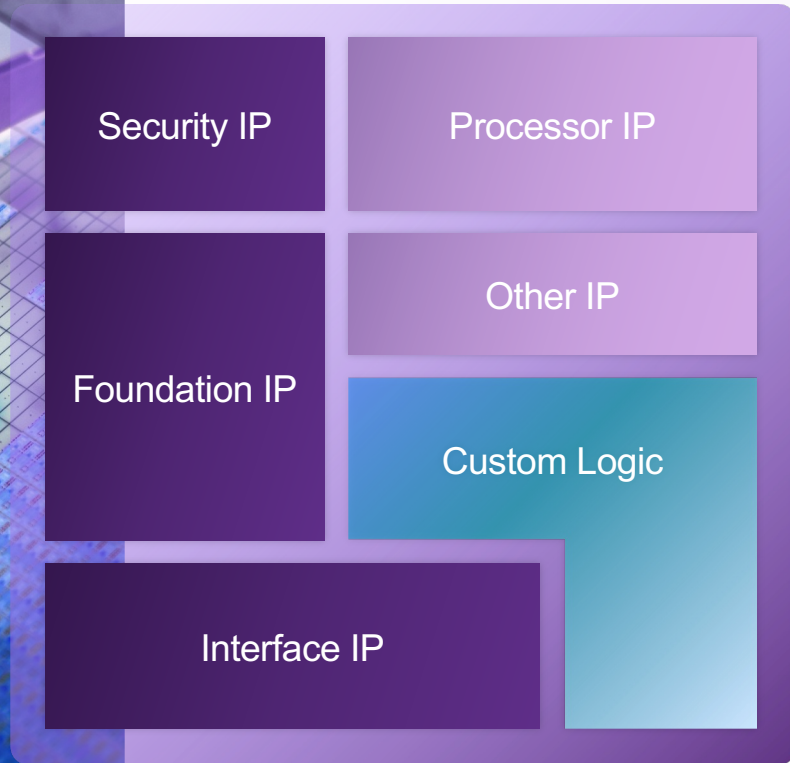


SIMULATION & ANALYSIS





# Broadest & Most Advanced IP PORTFOLIO



**26 YEARS** of investment & commitment

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**#2 IP PROVIDER** worldwide

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**#1 IN** Interface IP

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**#1 IN** Foundation IP

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**GROWING** Processor and Security IP portfolios

**INCREASE PRODUCTIVITY AND REDUCE DESIGN RISK** with high-quality Synopsys IP

# ADVANCED TECHNOLOGY to Accelerate Silicon Productivity

**Broad  
IP Portfolio**

**IP  
Subsystems**

**IP Subsystem  
Hardening**

**Advanced  
Package**

**Silicon  
Bring-up**

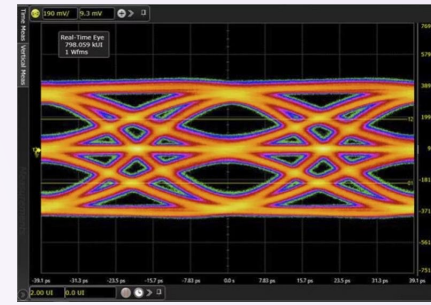
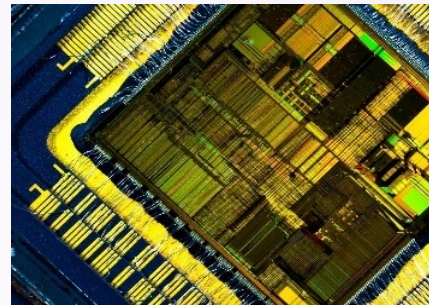
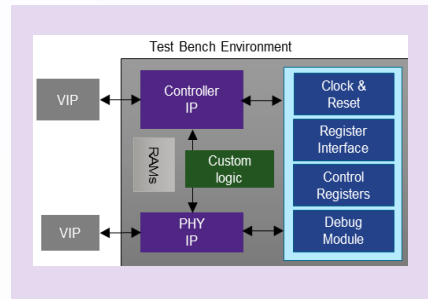
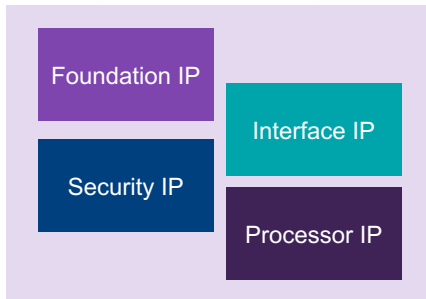
Reduced TTM

Reduced risk

Improved design  
efficiency

Maximized signal &  
power integrity

Shortened time  
to production



**SYNOPSYS PARTNERSHIP** from IP Core to Silicon Bring-Up

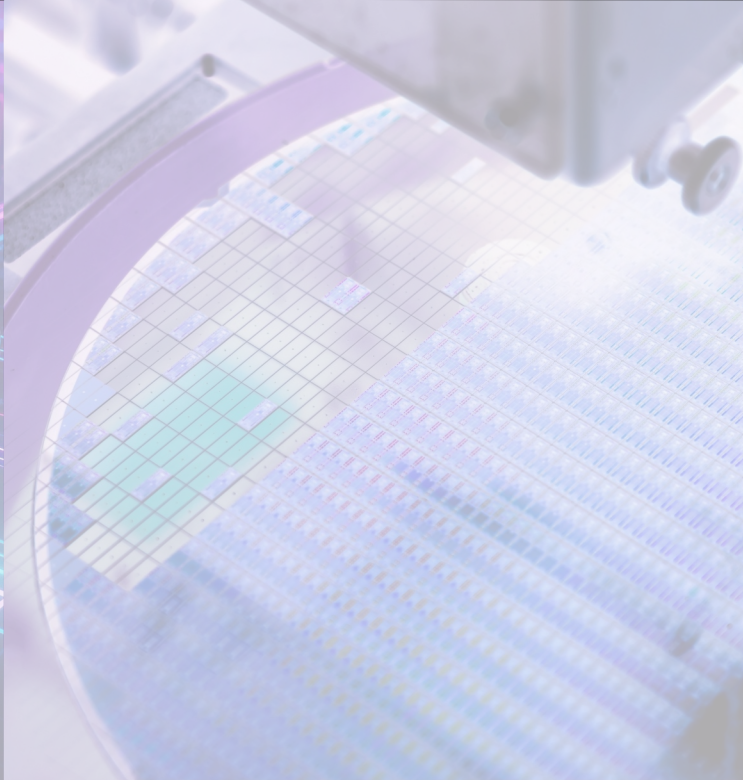


# ENGINEERING SOLUTIONS FROM SILICON TO SYSTEMS

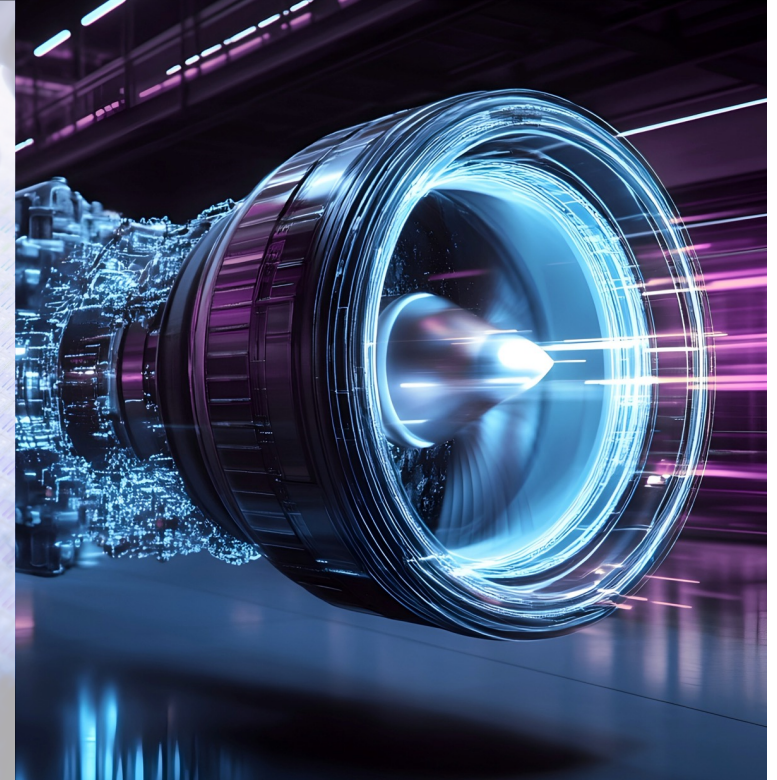
ELECTRONIC DESIGN  
AUTOMATION (EDA)



SILICON IP



SIMULATION & ANALYSIS





# INDUSTRY-LEADING Simulation & Analysis Portfolio

AI-powered



Mission Engineering

System Simulation & Analysis

Materials & Optimization

Multiphysics

**#1 in S&A**, the leader in multiphysics analysis

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**LEADER IN** orbital dynamics & mission operations

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**GOLD STANDARD** in multiphysics & safety

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**PIONEER IN** digital twins & AI physics informed  
neural networks

**SUPERIOR CUSTOMER OUTCOMES** through accurate digital twins and broadest multiphysics portfolio

# ADVANCED TECHNOLOGY to Accelerate Systems Productivity

## Multiphysics Simulation & Analysis

Numerics that provide accurate, reliable and consistent answers



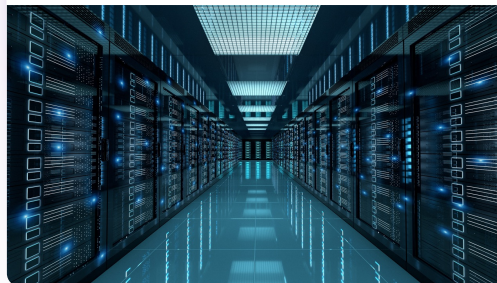
## Systems Simulation & Analysis

Transforming the engineering lifecycle, enabling faster and more efficient product development



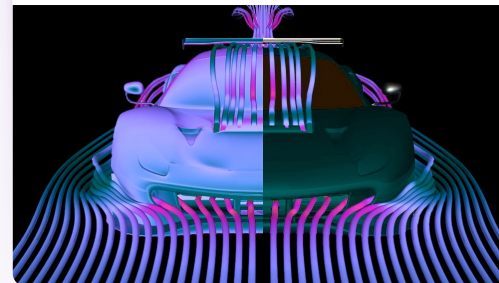
## High-Performance Computing

Scalable deployment with support for both managed and self-service cloud offerings



## Artificial Intelligence

Leveraging AI optimized design configurations while improving efficiency and reducing errors



## Cloud & Experience

Ensuring traceability, security, consistency, and reusability of simulation data



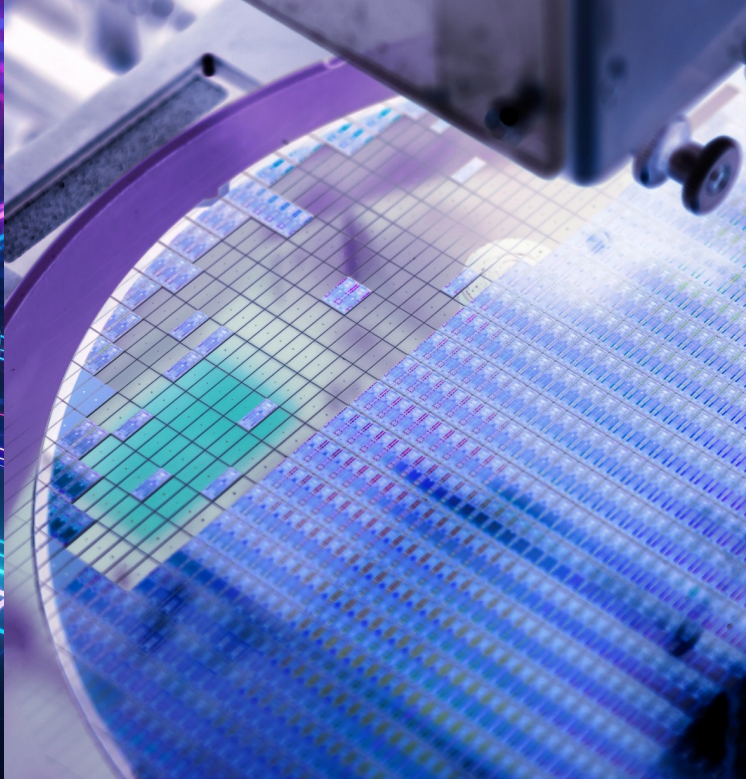


# ENGINEERING SOLUTIONS FROM SILICON TO SYSTEMS

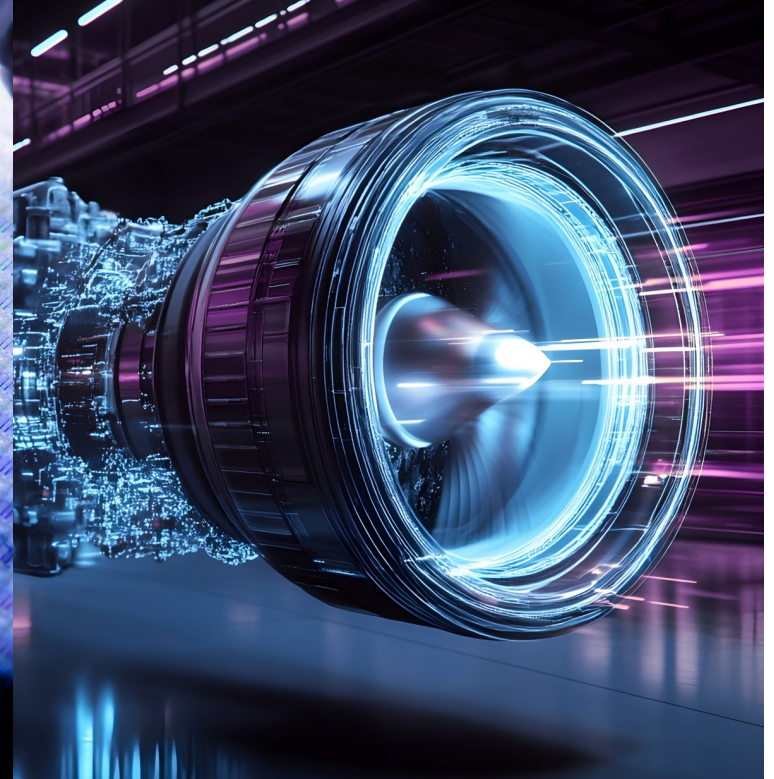
ELECTRONIC DESIGN  
AUTOMATION (EDA)



SILICON IP



SIMULATION & ANALYSIS





# EXPANSIVE ECOSYSTEM to Accelerate Innovation

SYNOPSYS®

## SYSTEMS



## SILICON



## PRODUCTIVITY



# LEADING INNOVATION at all Levels of Engineering

**WORKFLOWS**



**AI-POWERED**

**Synopsys.ai,  
Ansys SimAI,  
AgentEngineer™ Technology**

**ENGINES & SOLVERS**



**BEST IN INDUSTRY,  
MULTIPHYSICS**

**Synopsys PrimeTime  
Ansys Mechanical,  
Ansys Fluent, etc..**

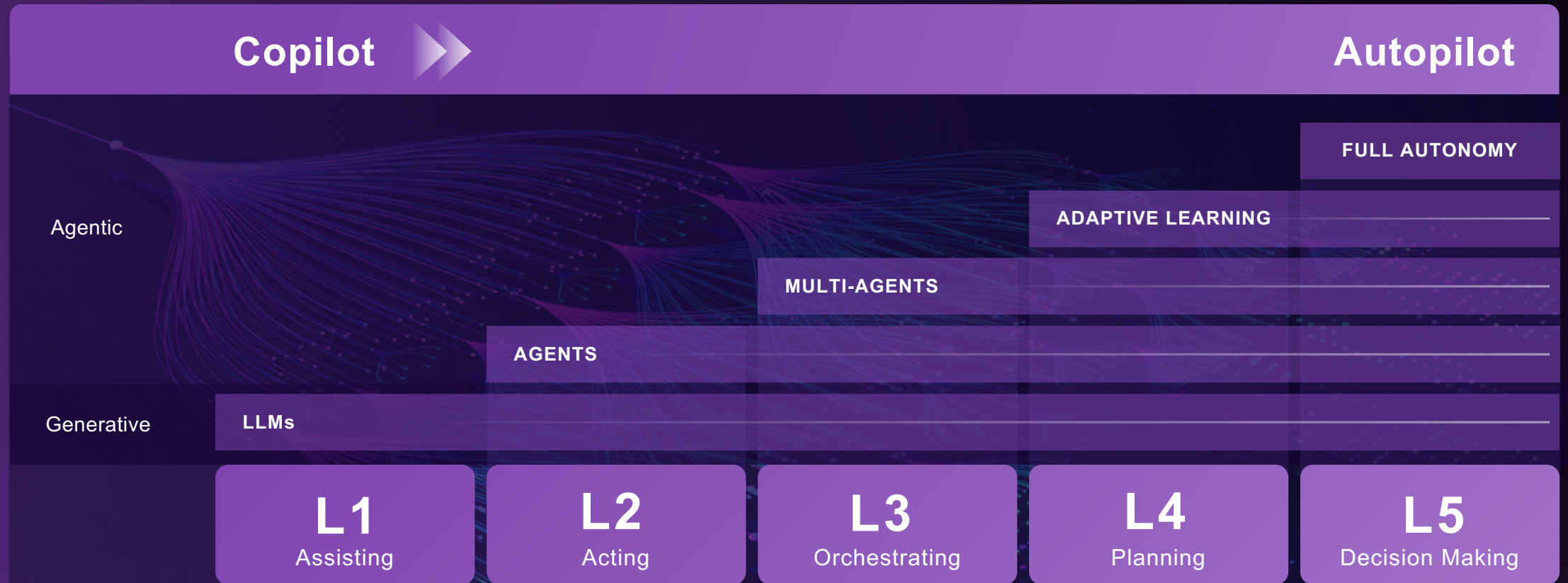
**COMPUTE**



**ACCELERATED**

**GPU  
Distributed computing  
Large-core multi-threading**

# THE FUTURE of AI-Powered Engineering Workflows





# EMPOWERING Our Customers' Innovations

**Synopsys + Ansys  
creates the leader  
in engineering  
solutions from  
silicon to systems**

**Enabling holistic,  
cross-domain  
engineering  
underpinning  
the AI revolution**

**Empowers  
customers to rapidly  
build AI-powered  
products**

The background is a dark purple gradient. On the right side, there are numerous vertical and curved light trails in shades of blue and purple, creating a sense of motion and technology. The trails are more concentrated on the right and fade towards the left.

# SYNOPSYS<sup>®</sup>

Our Technology, **Your Innovation**<sup>™</sup>