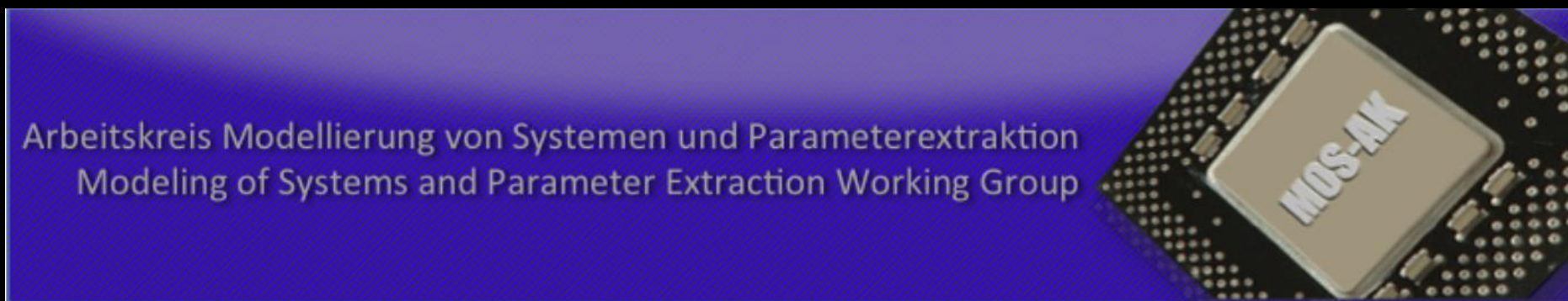


# Welcome MOS-AK



Nilesh Kamdar  
Keysight EDA  
Dec.13, 2023

## About Nilesh



- Nilesh Kamdar is Senior Director and Portfolio Manager for all the Keysight EDA businesses and segments.
- Nilesh joined Hewlett-Packard in 1999 as a post-sales technical support engineer in the EEsof EDA division. Over his 24+ year career, he worked in various leadership roles including leading the Circuit Simulation and Architecture team, Application Engineering team, Customer Success team, and Software Business & Operations team.
- Nilesh holds a Master's in Electrical Engineering from Utah State University and a Bachelor's in Electronics Engineering from Mumbai University, India. He is based in Santa Clara, California

# A Brief History of Keysight



**1939–1998:**  
**Hewlett-Packard years**

A company founded on electronic measurement innovation

**1999–2013:**  
**Agilent Technologies years**

Spun off from HP, Agilent became the world's premier measurement company

In September 2013, it announced the spinoff of its electronic measurement business

**2014+:**  
**Keysight years**

Keysight became an independent company focused on electronic measurement solutions



# Stevens Creek site

5301 Stevens Creek Blvd

- Built in the 1970s. One of the original HP Silicon Valley sites
- Today - Joint occupancy by Agilent and Keysight
- It is Agilent WW Headquarters
- One of the key Keysight locations in California.  
Keysight has teams in:
  - R&D
  - Sales
  - Marketing
  - Semiconductor manufacturing

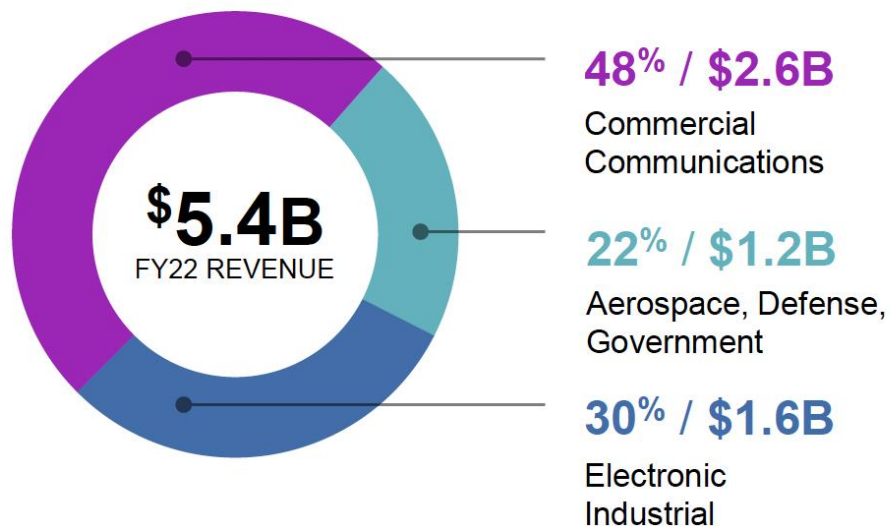


# Keysight at a Glance (NYSE: KEYS)

## Our Purpose:

Accelerate innovation to connect and secure the world

## FY22 Revenue



## #1 Market Position<sup>1</sup>

### FY22 Company Highlights

**30K+**

Total customers<sup>2</sup>

**15K**

Employees<sup>4</sup>

**100+**

Countries served

**21%**

Recurring revenue

**29%**

Operating margin<sup>3</sup>

**22%**

EPS growth<sup>3</sup>

**~\$1B**

Free cash flow<sup>3,5</sup>

**\$31B**

Market capitalization<sup>4</sup>



# Solutions Designed for Key Markets

COMMERCIAL  
COMMUNICATIONS

AEROSPACE  
AND DEFENSE

AUTOMOTIVE  
AND ENERGY

SEMICONDUCTORS

GENERAL  
ELECTRONICS





# Keysight EDA Portfolio

**RF & Microwave  
Circuit Design**

**RF System  
Design**

**High-Speed  
Digital Design**

**Device  
Modeling**

**Quantum  
EDA**

**Power  
Electronics**



**Design Data & IP Management**

# Keysight Recent Market expansion

Press Releases

## Keysight Expands EDA Software Portfolio with the Acquisition of Cliosoft

- Acquisition to digitally transform design-test workflows and meet productivity requirements of next-generation electronic product development lifecycles
- Cliosoft's revision-control and data and IP management capabilities natively integrate with Keysight's PathWave Advanced Design System
- Customers to benefit from broader EDA ecosystem with Keysight and Cliosoft continuing to support all the major EDA vendor environments to facilitate best-in-class tool workflows

SANTA ROSA, Calif. February 23, 2023

Press Releases

## Keysight Advances Software-Centric Solutions Leadership Through the Acquisition of ESI Group

- Expands Keysight's application layer portfolio with simulation capabilities that are critical to accelerate innovation in multiple end markets including automotive
- Enables customers to accelerate time to market and lower operational costs, while reducing their environmental footprint
- Increases Keysight's software revenue and ARR

SANTA ROSA, Calif. and PARIS, France, June 28, 2023

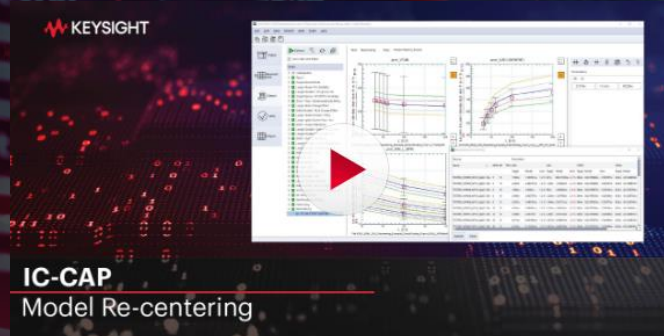
Cliosoft SOS and HUB support a wide variety of EDA and software platforms



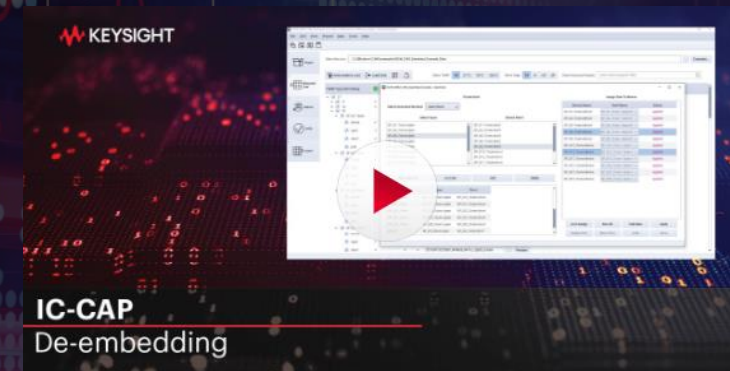


# Keysight EDA 2024

## What's New

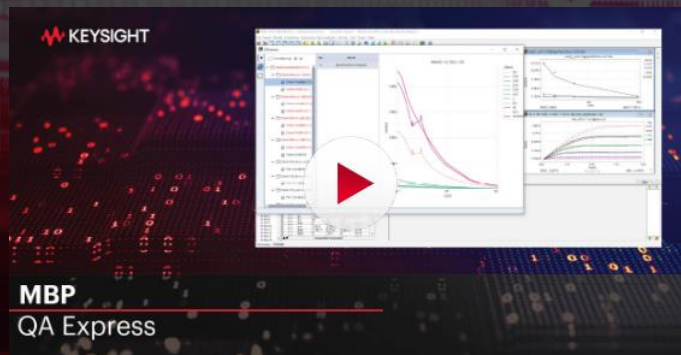
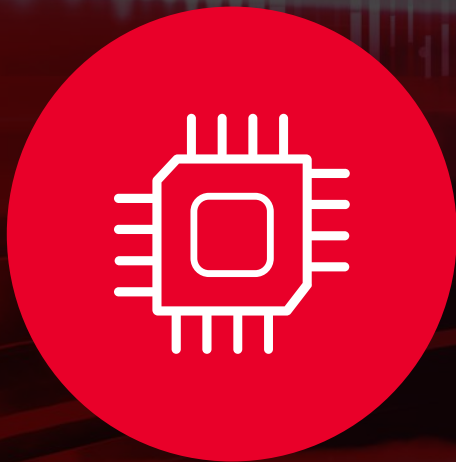


Quickly adapt model libraries based on new targets



Automate de-embedding for multiple devices simultaneously

## Device Modeling



Enable early detection of model issues during model parameter tuning



Streamline the binning modeling workflow



**AI / ML**

**Your Innovation  
Unbounded**

**IC-CAP**

ANN training is built into IC-CAP to model complex GaN device physics

**ADS**

Python APIs connect simulators and data with *your* AI/ML workflows to enable innovation

**Open Platforms**



**TensorFlow**

**PyTorch**

**RF System Design**

Pre-6G Channel Estimation Models utilize AI/ML workflows for fast execution





# Consistent Software-Centric Solution Strategy

Accelerating Innovation of Long-term technology trends

**First-to-Market Design  
and Test Solutions**

to create

**Sustainable  
Lifecycle Value**

**Strengthening Customer Value Proposition**

Time to market • Productivity

**Stronger Keysight Business Outcomes**

Accelerating profitable growth • Improving resiliency • Expanding margins



# Deep, Long-Term Global Customer Relationships

Strengthening market-leading positions with 30,000+ customers



**Commercial  
Communications**



**Aerospace, Defense,  
& Government**



**Electronic  
Industrial**

## S E R V I N G   M A R K E T   L E A D E R S

**14/15** Top mobile operators

**5/5** Top cloud companies

**22/25** Top aerospace & defense contractors

**10/10** Top automotive companies

**25/25** Top semiconductor companies

**10/10** Top engineering universities

## S E L E C T   C U S T O M E R S

Alphabet • Amazon • AT&T  
Broadcom • Cisco • Fujitsu • HP • Innolight  
Nvidia • Lenovo • LG • Meta • Microsoft  
Nokia • Qualcomm • Samsung

BAE Systems • Boeing  
Leonardo • Naval Research Lab  
US Government

Daimler • Delphi • Ford  
Infineon • Qorvo • Siemens  
Taiwan Semiconductor • Tesla

**23/25** Top technology companies<sup>1</sup>

**67/100** Fortune 100 served

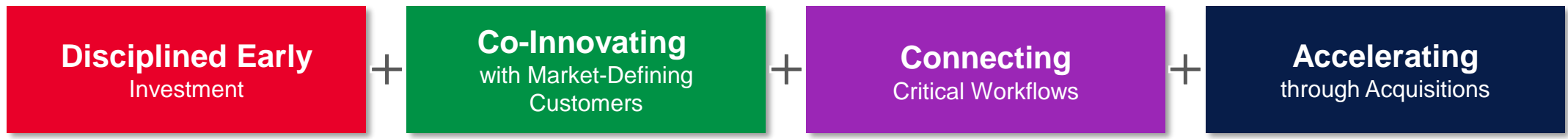
# Digital Transformation Driving New Innovation Paradigm



## Customer Challenges



### Our Innovation Strategy



<sup>1</sup> Per customer feedback.



# Foundry Partnerships



## News Releases

### Keysight, Synopsys Collaborate in TSMC's N6RF Design Reference Flow

PathWave RFPro with Synopsys' Custom Compiler delivers integrated electromagnetic simulation for wireless chip design workflow

SANTA ROSA, Calif. June 16, 2022

## News Releases

### Keysight Joins Intel Foundry Services Accelerator EDA Alliance Program

- Expands PDK support to include IFS advanced RF technology process nodes
- Provides industry-leading electromagnetic modeling and simulation solutions for RFIC design workflows

SANTA ROSA, Calif. December 7, 2022

Keysight is actively working with many of the largest foundries in the world to ensure PDK and EDA interoperability. A complete list of Foundry Partners can be found [HERE](#)