



SYNOPSYS[®]
Silicon to Software[™]

Corporate Overview for Investors

MAY 2021



SYNOPSYS

Forward-Looking Statements

This presentation contains forward-looking statements including, but not limited to, statements regarding Synopsys' short-term and long-term financial targets, expectations and objectives; business outlook, opportunities and strategies; customer demand and market expansion; strategies related to our products and technology; our planned product releases and capabilities; industry growth rates; software trends; planned acquisitions and buybacks; our expected tax rate; the expected impact of U.S. and foreign government action on our results; and the expected impact of the COVID-19 pandemic. These statements involve risks, uncertainties and other factors that could cause our actual results, time frames or achievements to differ materially from those expressed or implied in our forward-looking statements. Such risks, uncertainties and factors include, but are not limited to: risks from the effect of the COVID-19 pandemic and the associated economic downturn on our business, operations and financial condition; uncertainty in the growth of the semiconductor and electronics industries; consolidation among our customers and our dependence on a relatively small number of large customers; risks and compliance obligations relating to the global nature of our operations as well as actions by the U.S. or foreign governments, such as measures in response to the COVID-19 pandemic or the imposition of additional tariffs or export restrictions; macroeconomic conditions and uncertainty in the global economy; fluctuation of our operating results; increased variability in our revenue due to the adoption of ASC 606, including the resulting increase in recognizing upfront revenue as a percentage of total revenue; and more. Additional information on potential risks, uncertainties and other factors that could affect Synopsys' results is included in filings it makes with the Securities and Exchange Commission from time to time, including in the sections entitled "Risk Factors" in its Annual Report on Form 10-K for the fiscal year ended October 31, 2020, and in its latest Quarterly Report on Form 10-Q. The information provided herein is as of May 19, 2021. Synopsys undertakes no duty, and does not intend, to update any forward-looking statement, whether as a result of new information, future events or otherwise, unless required by law.

Regulation G

In addition to financial results prepared in accordance with Generally Accepted Accounting Principles, or GAAP, this presentation will also contain certain non-GAAP financial measures. Except for certain forward-looking non-GAAP financial measures for which a reconciliation is not possible without unreasonable efforts, reconciliations of the non-GAAP financial measures contained in this presentation or given verbally to their most comparable GAAP measures are included in the table at the end of this presentation, along with the second quarter of fiscal year 2021 earnings release and financial supplement, dated May 19, 2021, and available on Synopsys' website at <https://www.synopsys.com/company/investor-relations/financial-news.html>.

Synopsys: The Market & Technology Leader

Broad Product Portfolio

Electronic Design Automation (EDA)

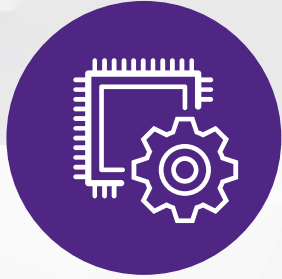
Semiconductor Intellectual Property (IP)

Software Security and Quality

	FY20	FY21 Targets ⁽¹⁾
Revenue:	\$3.685B	\$4.035B - \$4.085B
<i>Growth Rate:</i>	9.7%	9.5% - 11%
Non-GAAP Operating Margin:	28%	29.5% - 30%
Non-GAAP EPS:	\$5.55	\$6.38 - \$6.45
<i>Growth Rate:</i>	21.7%	15% - 16%
Operating Cash Flow:	\$991M	\$1.25B - \$1.30B
Business Model:	Time-based, recurring revenue model 2.5-3 years contract duration in FY21	

(1) These targets were provided by Synopsys as of May 19, 2021, and are not being updated at this time; a GAAP to non-GAAP reconciliation of FY21 Operating Margin targets and FY21 EPS targets are included at the end of this presentation

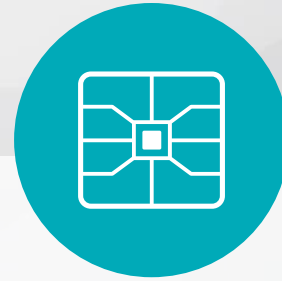
Synopsys: The Market & Technology Leader



Electronic Design Automation

~35 years of investment and execution
~65% of revenue

Market Leader



Semiconductor IP

>20 years
~25% of revenue

#2 IP Vendor



Software Integrity

~7 years
~10% of revenue

**Emerging Leader,
Broadest Portfolio**

Long-Term Financial Objectives¹

- While the results in any given period may vary due to acquisitions or other near-term priorities, our primary long-term objective is to drive **double-digit non-GAAP EPS growth** on a multi-year basis, through a mix of the following elements:
- Grow **total revenue²** generally in the **high single-digit range**:

EDA revenue
generally in the
mid-to-high
single-digits

IP & System
Integration revenue
generally in the
low double-digits

Software Integrity revenue
exceeding market growth,
generally in the **15-20% range**
long-term as market evolves

- Drive non-GAAP operating margin into the **high-twenties by 2021** and **greater than 30% longer-term**
- Utilize our strong **cash flow primarily for M&A and share buybacks**

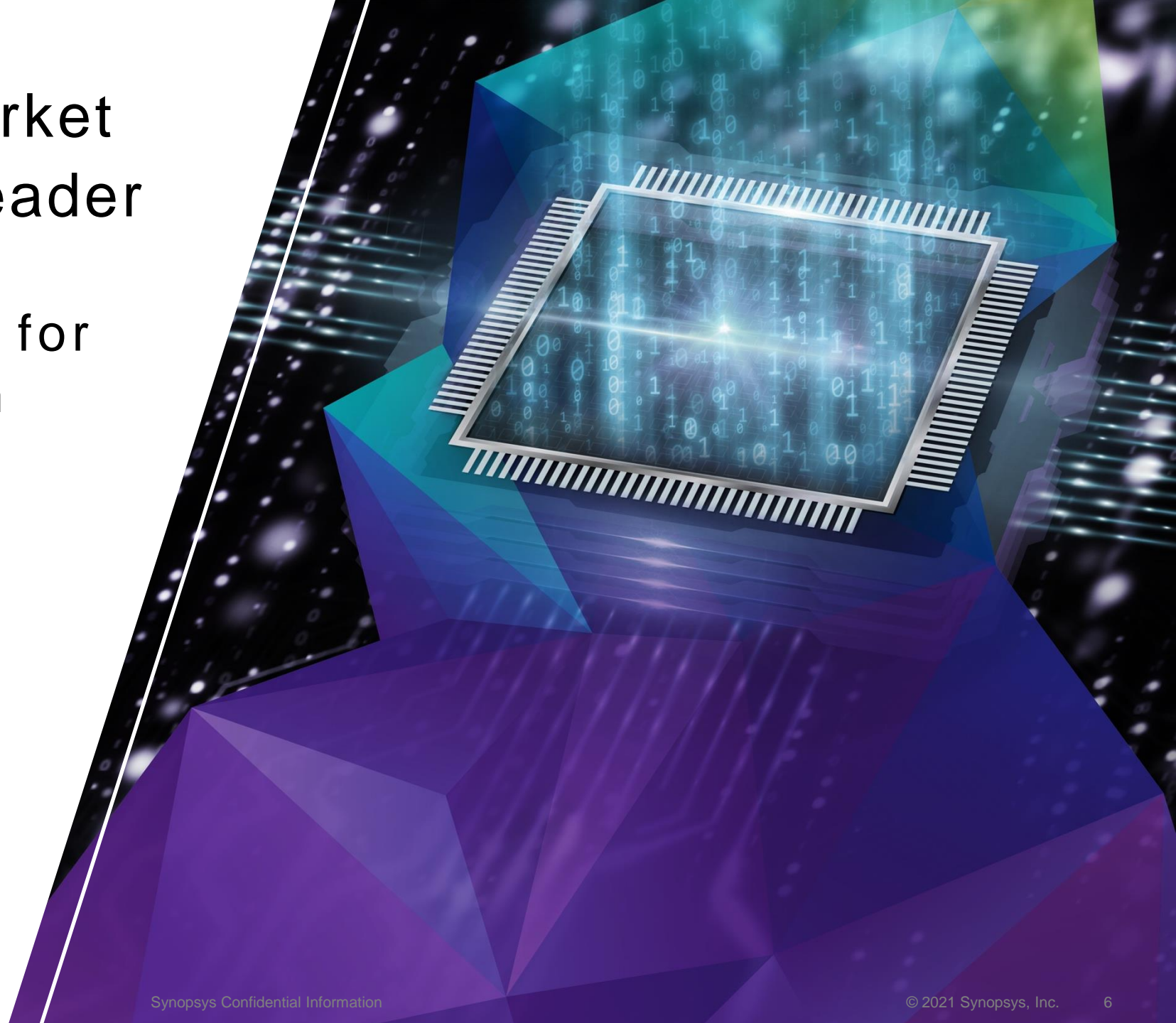
1. These multi-year objectives are provided as of May 19, 2021.

2. Period to period fluctuations are a normal element of our business, driven particularly by timing of hardware and IP deliveries. Variability, which increased as a result of ASC 606 adoption, should be expected.

Synopsys: The Market and Technology Leader

Uniquely Positioned for Stability and Growth

- ▶ Robust End Markets Driving Growth
- Clear Technology Leadership
- Financial Strength and Growth



Global Value Chain – 2020

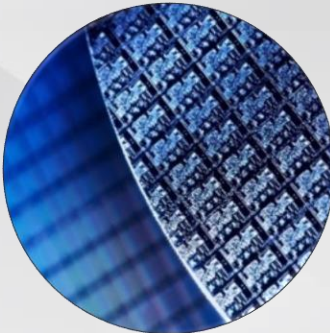
EDA & IP – At the Heart of Accelerating Electronics Innovation



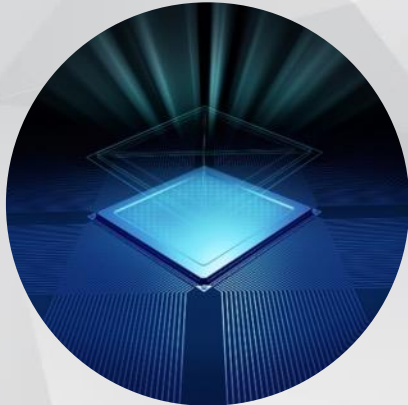
EDA & IP
\$12.2B



Embedded Software
\$11.6B



Foundry
\$85.4B



Semiconductors
\$492.7B

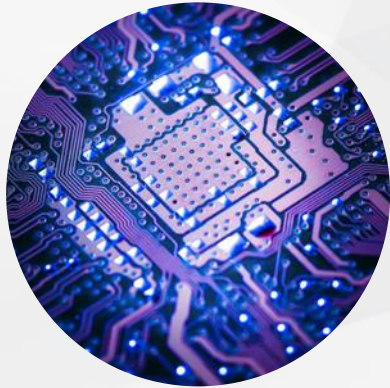


Electronic Systems
\$1.65T

Sources: ESD Alliance, Ipnest (Apr 2021), MarketsandMarkets (Mar 2020), IC Insights (Jan, Mar 2021), Internal estimates (Apr 2021)

Blue Chip, Diversified Customer Base

Semiconductors



- Semi R&D (including EDA) is a top investment priority for semi and system customers in all phases of business cycle
- Consists of virtually all semiconductor companies in the world, including all of the top 20
- One >10% customer in FY20

Systems



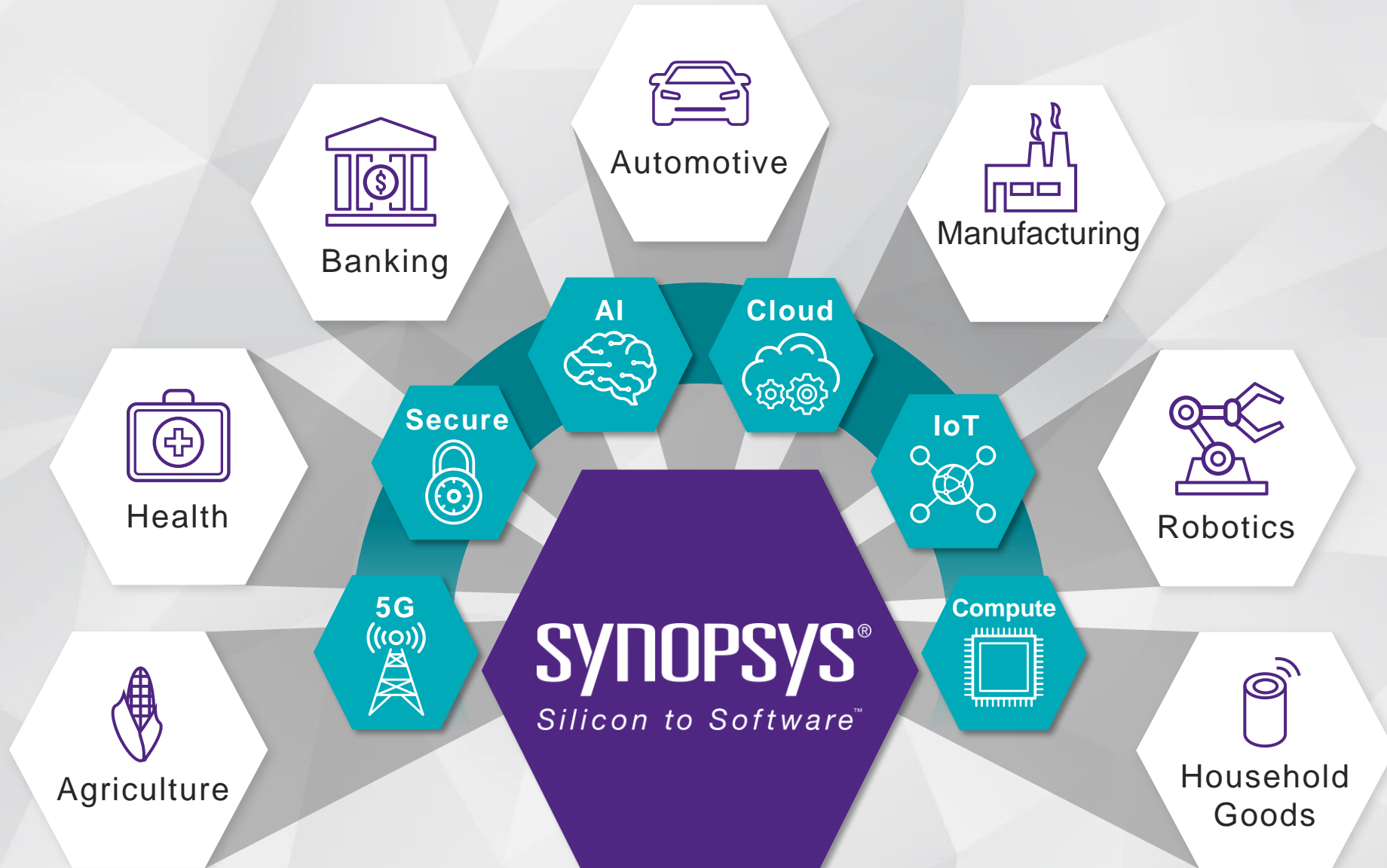
- ~40% of our revenue comes from systems companies
- Systems companies develop chips as an input to an end product, rather than selling the chip itself
- Verification challenges are rapidly growing at the intersection of hardware and software

Software Developers



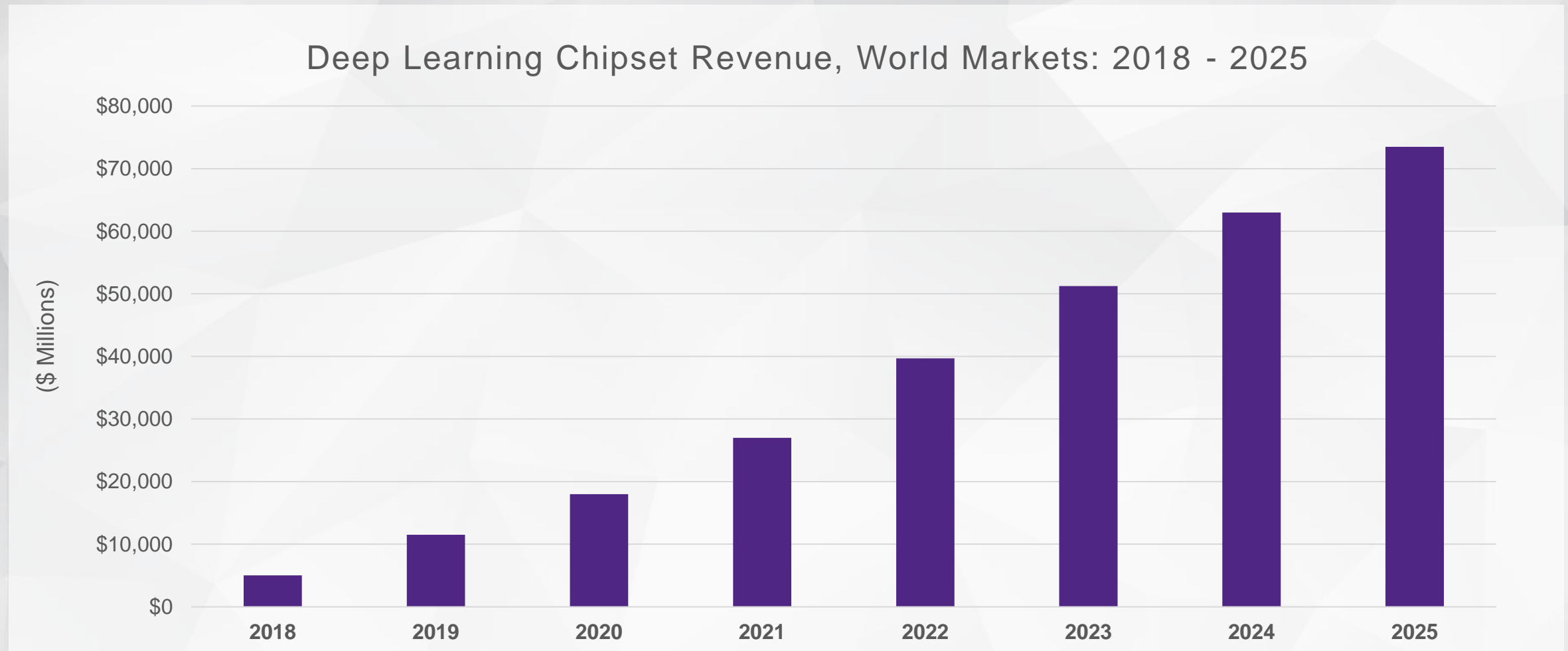
- Key function across all industries: semis and systems, to enterprises in segments such as financial services, medical devices, automotive, and industrial
- Targeting the 20M+ SW developers
- Immense software complexity challenges plus high impact of security vulnerabilities

New Technology is Impacting Every Vertical



Artificial Intelligence Market Growth

Deep Learning Chipset Market to Reach \$72B by 2025



Source: Tractica 2019

Enabling and Leveraging the Potential of AI

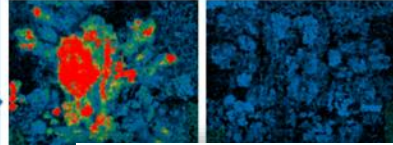
Synopsys tools incorporate AI/ML technologies while enabling AI processor development

Design and Verification Tools for AI Processors

- Multiple years of collaboration alongside AI pioneers – deep understanding of AI design implications and challenges
- Verification solutions from architecture to simulation to emulation and prototyping
- Fusion Design Platform™ significantly enhanced to address AI processor design challenges

AI Processor Key Design Solutions – Data Center










Lessons learnt working with AI technology pioneers

DESIGN CHALLENGE	AUTO RE-ARCHITECTURE, PLACEMENT
<ul style="list-style-type: none">Capacity, turnaround time100s of MIM/MIBs, many power domains, abutted FPs, hierarchy, global clockingSignal routing congestionClock routing through dense PG structuresTransistor-dominated layout, congestion, macro timing path closureEM effects, parasitics, inductanceClock vs. data path power optimizationIR drop issues, need for robust power gridSparse logic, low utilization areas	

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AI Processor Key Design Solutions – Data Center

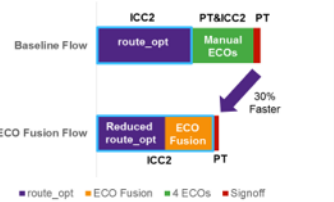
Lessons learnt working with AI technology pioneers

DESIGN CHALLENGE	MAXIMIZATION OF FEED-THROUGH RE-USE									
<ul style="list-style-type: none">Capacity, turnaround time100s of MIM/MIBs, many power domains, abutted FPs, hierarchy, global clockingSignal routing congestionClock routing through dense PG structuresTransistor-dominated layout, congestion, macro timing path closureEM effects, parasitics, inductanceClock vs. data path power optimizationIR drop issues, need for robust power gridSparse logic, low utilization areas	<table border="1"><thead><tr><th>Ensuring Feedthrough Reusability for MIBs</th><th>Maximize Net-Bundle "Togetherness"</th><th>Handling of Complex Star Connections</th></tr></thead><tbody><tr><td></td><td></td><td></td></tr><tr><td>Dealing with Custom Tracks</td><td>Enabling Efficient Clock Station Management</td><td>Clock-Domain-Aware Pin Placement</td></tr></tbody></table> <p>Recent AI Processor Tape-out</p>	Ensuring Feedthrough Reusability for MIBs	Maximize Net-Bundle "Togetherness"	Handling of Complex Star Connections				Dealing with Custom Tracks	Enabling Efficient Clock Station Management	Clock-Domain-Aware Pin Placement
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Dealing with Custom Tracks	Enabling Efficient Clock Station Management	Clock-Domain-Aware Pin Placement								

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AI Processor Key Design Solutions – Edge

Lessons learnt working with AI technology pioneers

DESIGN CHALLENGE	ECO FUSION TECHNOLOGY
<ul style="list-style-type: none">GHz+ timing closure challenges; variabilityFlat and hierarchical implementations, floorplan exploration, channel congestionMacro-dominated layout, congestion, dense routingMemory placement and continuous core area for cell placementAggressive CNN engine power optimizationSwitching power, clock networkDRAM I/O power considerationsI/O pin constraints	<p>Up to 40% Faster TTR to Signoff 97 scen for signoff, 25 scen for implementation</p>  <p>Legend: route_opt, ECO Fusion, ICC2, 4 ECOs, PT, Signoff</p>

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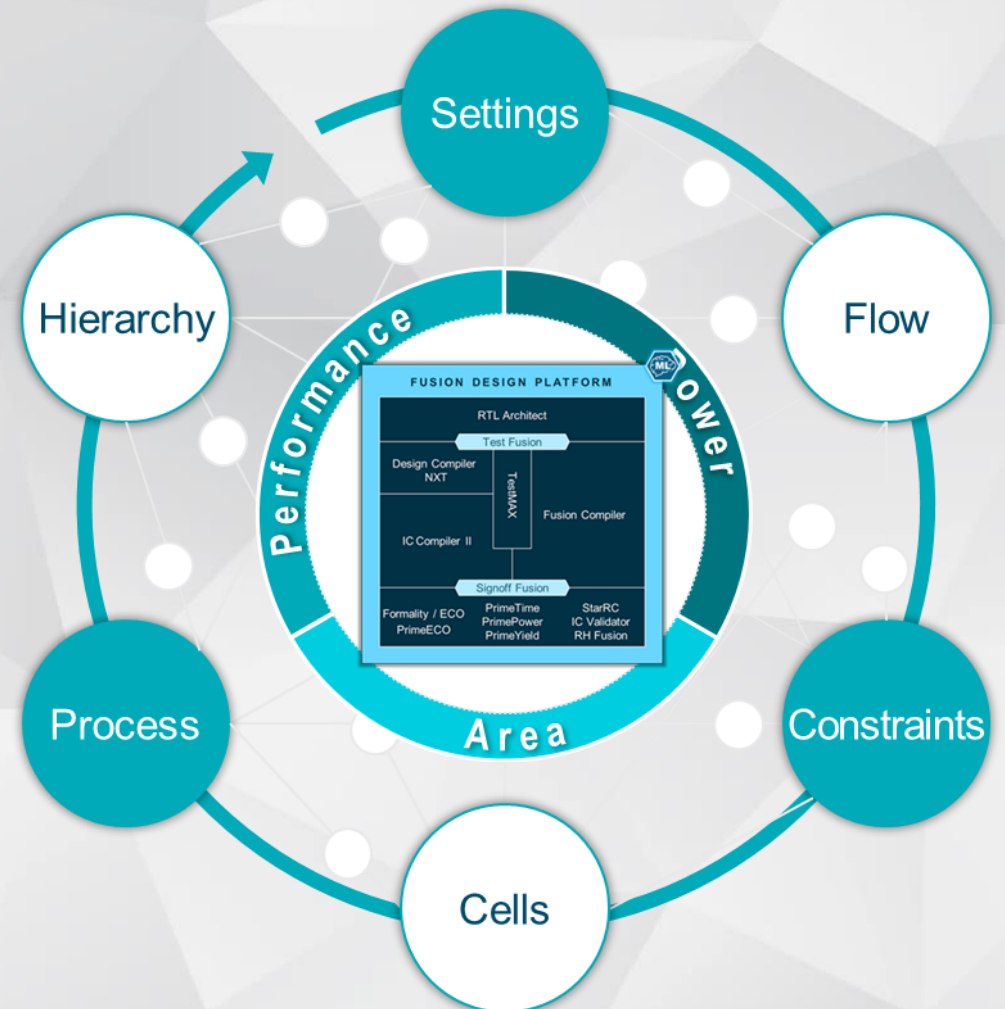
Enabling and Leveraging the Potential of AI

Synopsys tools incorporate AI/ML technologies while enabling AI processor development

Leading AI-based Chip Design Technologies

- DSO.ai (Mar. 2020): The world's first autonomous AI app for design, delivers a leap in designer productivity
- “ML Everywhere” enables continuous improvement for better PPA and faster TTR
- “Synopsys’s PrimeTime with new machine-learning technology allows us to complete ECO runs in hours versus the days it took before, and reuse learnings across blocks, hierarchies, and even design styles.”

- Renesas

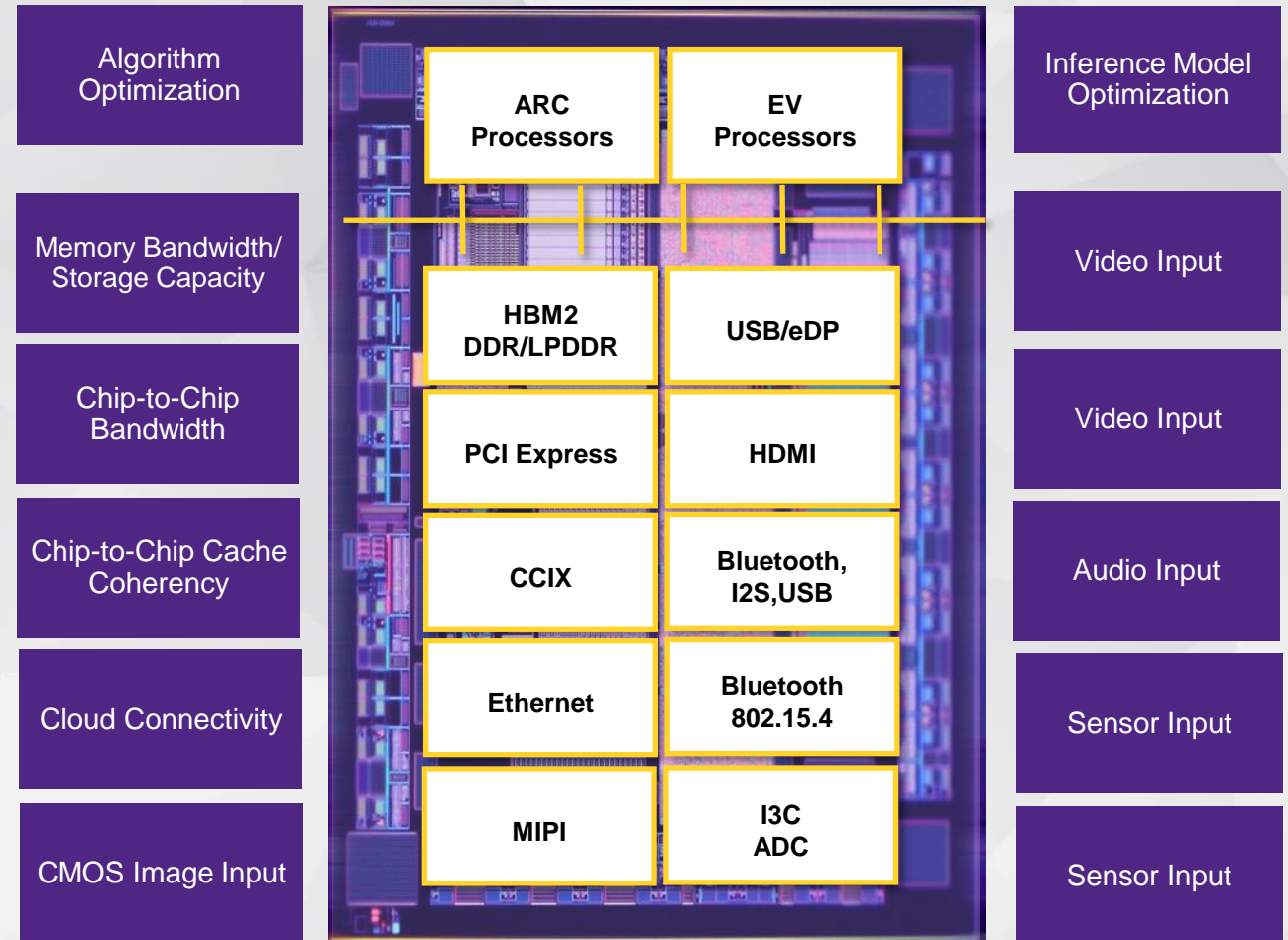


Enabling and Leveraging the Potential of AI

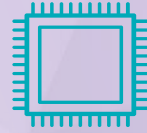
Synopsys tools incorporate AI/ML technologies while enabling AI processor development

IP Solutions Designed for AI Applications

- Proven IP solutions accelerate time-to-market
- Memory/interface/analog IP designed to handle the uniquely intensive AI demands of memory capacity, bandwidth and coherency
- ABI Research forecasts AI chipset sales to exceed \$10B in 2024 with SoCs across all markets containing AI capabilities



Automotive – A Case Study



CHIPS

4 Billion transistors



SYSTEMS

Infotainment, GPS, Drivetrain, Sensors



SOFTWARE

>150M Lines of Code per vehicle



ARTIFICIAL INTELLIGENCE

Big Data, Capture, Analyze, Decision Making



AUTONOMOUS DRIVING

Systems of Systems

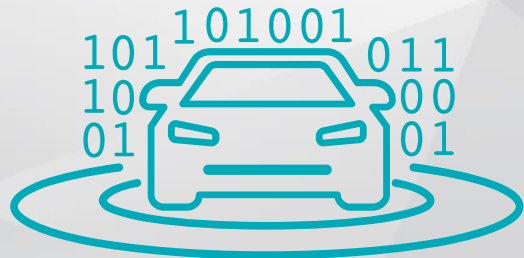


OWNERSHIP & INFRASTRUCTURE

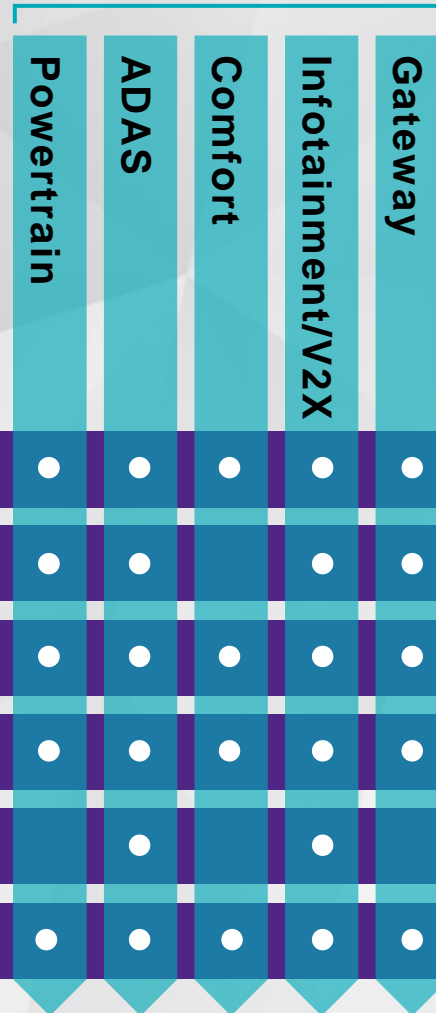
Entire Ecosystem

New Electronics Architecture Required

Integrated Compute and Smart Sensor Architecture Requires Redesign



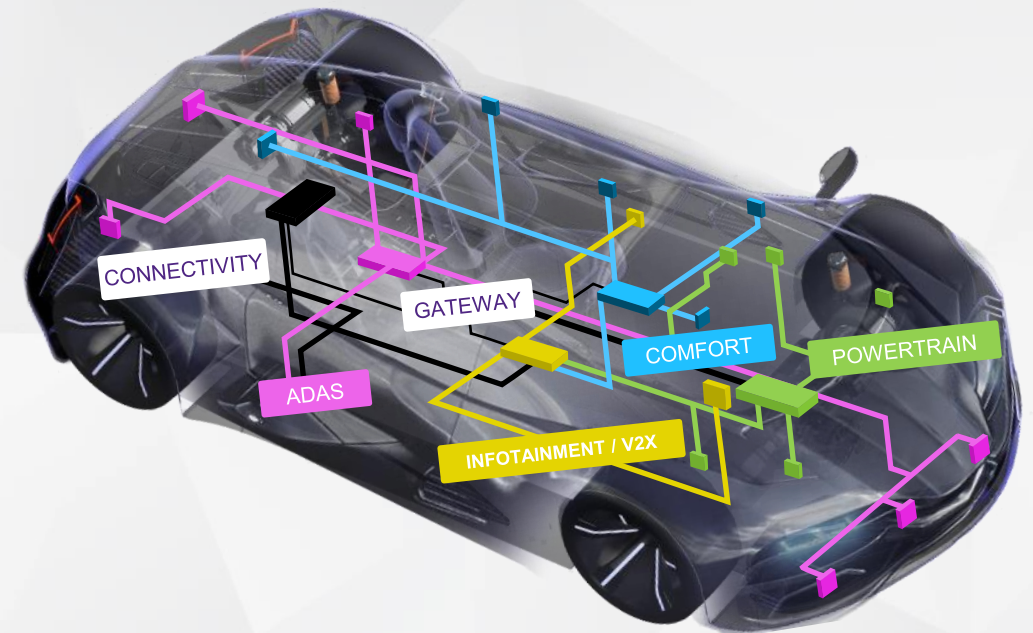
DOMAINS



REQUIREMENTS

REQUIREMENTS	Powertrain	ADAS	Comfort	Infotainment/V2X	Gateway
FUNCTIONAL SAFETY	•	•	•	•	•
SECURITY	•	•	•	•	•
RELIABILITY (Silicon Aging)	•	•	•	•	•
SW DEVELOPMENT (Early SW, Secure, OTA validation)	•	•	•	•	•
AI/ DEEP LEARNING	•	•	•	•	•
LOW POWER	•	•	•	•	•

- Integrated Controllers per Domain
- Sensor Fusion
- Connectivity and upgradeability
- Highest reliability, security and safety



Automotive Opportunity: Quality, Safety, & Security



11 of the Top 15

Automotive OEMs use Synopsys Software Integrity



QUALITY

Find critical defects and vulnerabilities in code

Gap analysis / remediation planning

Protocol Robustness with fuzzing



SAFETY

Functional Safety Compliance (MISRA, ISO26262)

Supply chain total health with Software BoM

HARA/TARA analysis for connected systems



SECURITY

Find known vulnerabilities in open-source & 3rd party code

BSIMM / Map to assess cyber security standards readiness

Remediation plan execution

Advanced Process Development Continues



Samsung's Aggressive EUV Plans: 6nm Production in H2, 5nm & 4nm On Track

All 2020 iPhones To Reportedly House 5nm Chips With X55 5G Modem

TSMC starts constructing facilities to turn out 3nm chips by 2023

ARM lays out plans for 5nm "Hercules" core design by 2020

Tesla's In-House SoC Is Built On 14nm, Has A 260mm² Area & 2100FPS

Intel Will Launch 7nm Chips in 2021, Ice Lake Ships in June

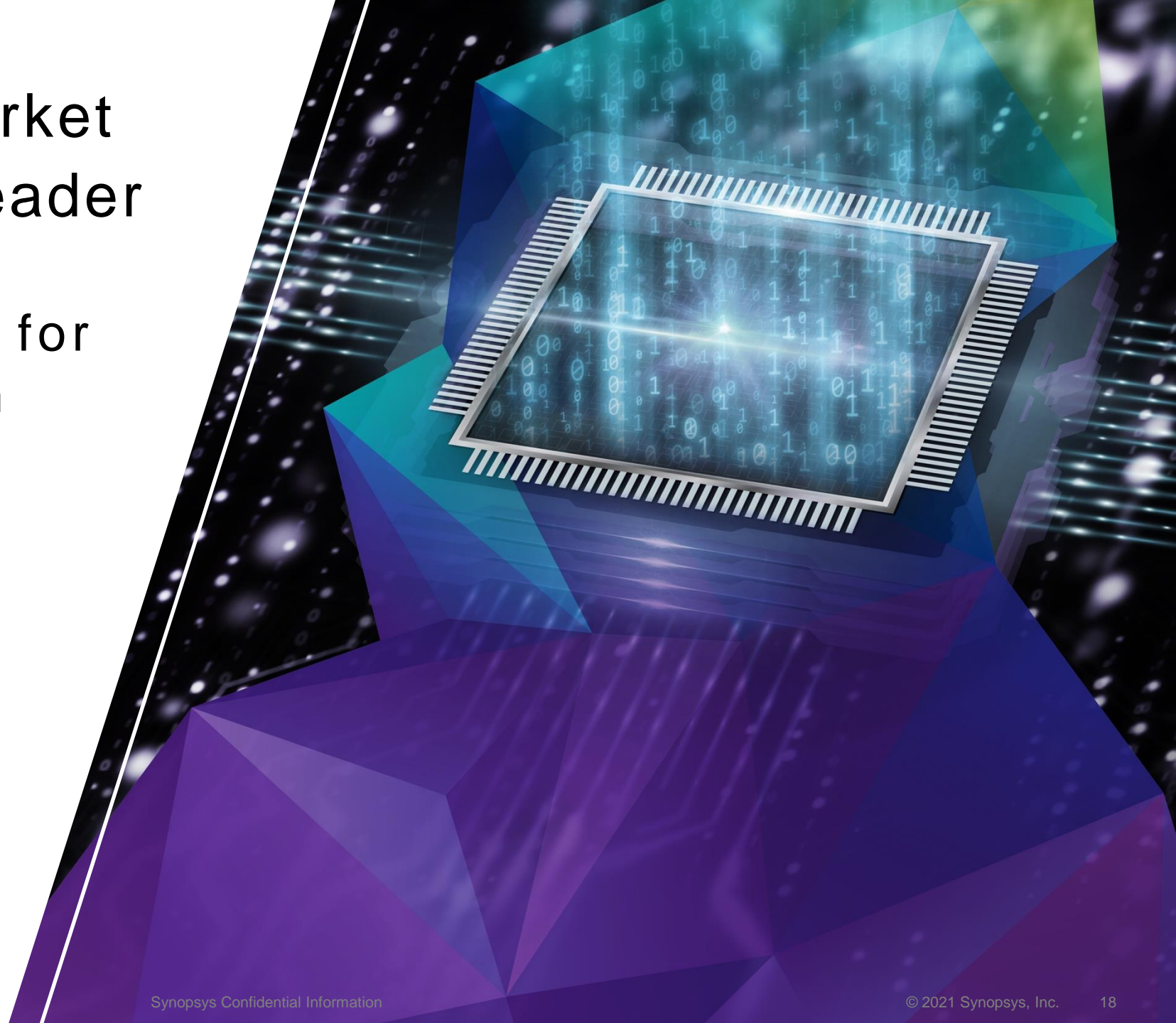
Samsung Unveils The World's First 10-nm FinFET Semiconductor Technology

AMD Zen+ 7nm "Gray Hawk" APU To Be Out In 2019 | 4 Cores, 8 Threads & 10W, Reports say

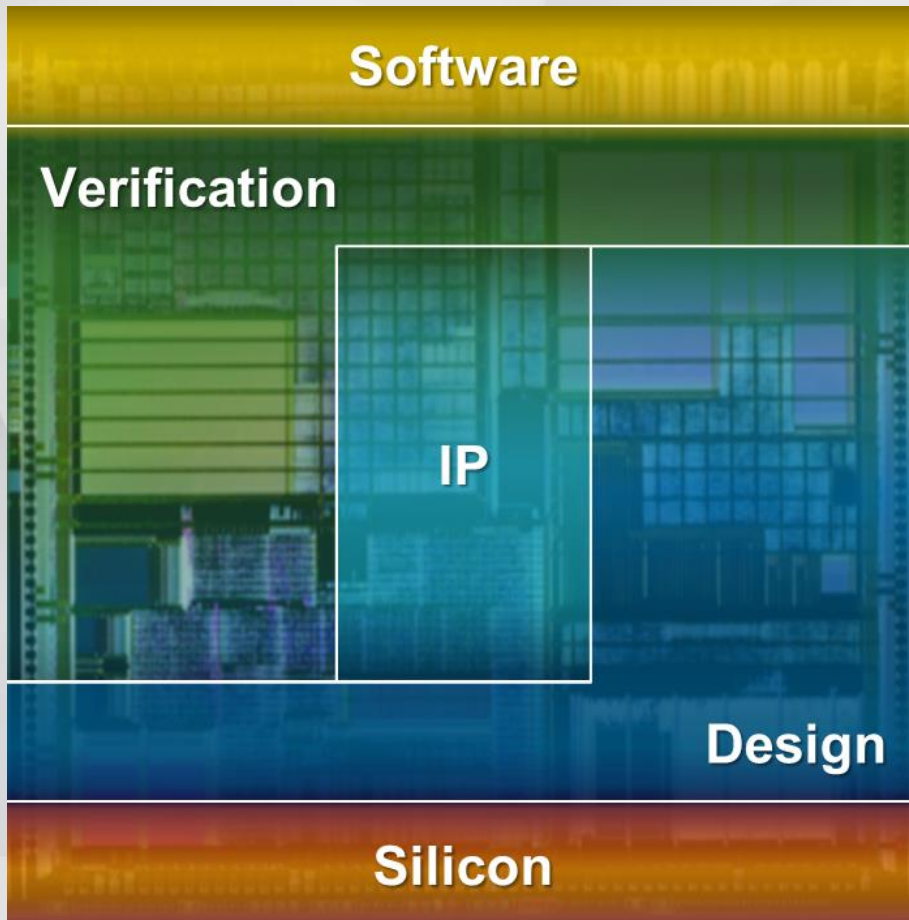
Synopsys: The Market and Technology Leader

Uniquely Positioned for Stability and Growth

- Robust End Markets Driving Growth
- ▶ Clear Technology Leadership
- Financial Strength and Growth



Synopsys: Silicon to Software



Software

- Application security & quality testing
- Leader in Gartner's Magic Quadrant

Verification

- Fastest engines & unified platform
- HW/SW verification & early SW bring-up

IP

- Broadest portfolio of silicon-proven IP
- #1 interface, embedded mem. & physical IP

Design

- Digital & custom AMS platforms
- Long-standing market leader
- Best quality of results & highest productivity

Silicon

- TCAD, lithography tools & yield optimization
- Down to 5nm & below

LEADER IN EDA

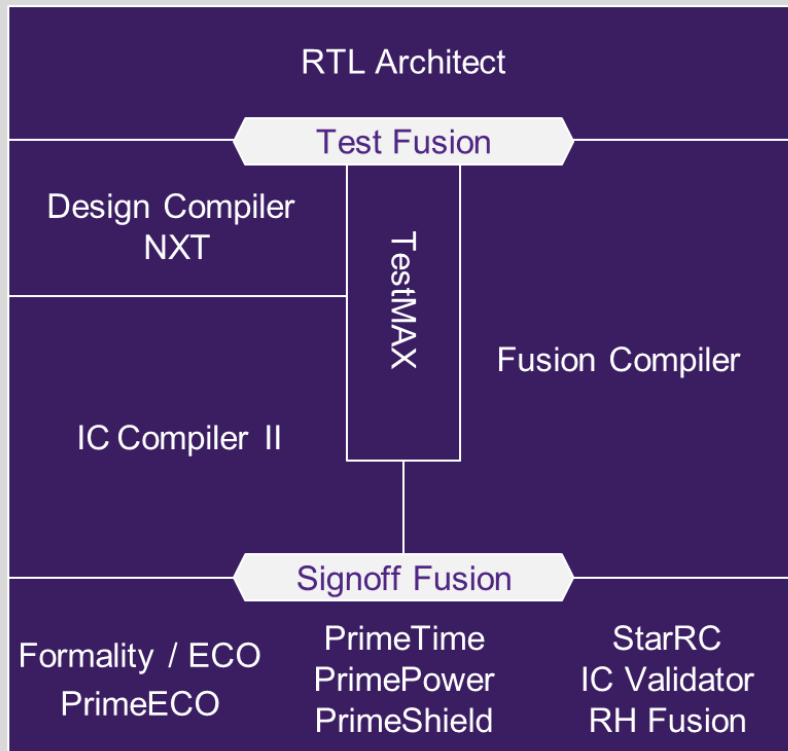
- Market and technology leader in EDA, the tools and technologies used to design semiconductor chips and systems
 - ~\$7.6 billion market*; generally tracks semiconductor R&D spend over time
- Growth drivers: all aspects of chip & system complexity
- All leading semiconductor companies in the world use Synopsys technology
- State-of-the-art design and verification platforms with unmatched global support

* Source: ESD Alliance, Internal estimates (Apr 2021)

#1 in Digital Design: Synopsys Fusion Design Platform™



FUSION DESIGN PLATFORM



Fusion Architecture

#1 Anchors: Synthesis, P&R, Signoff
Fusion of algorithms, engines, data model

Innovative Products

Industry Unique Fusion Compiler
DC NXT, TestMAX, IC Validator NXT

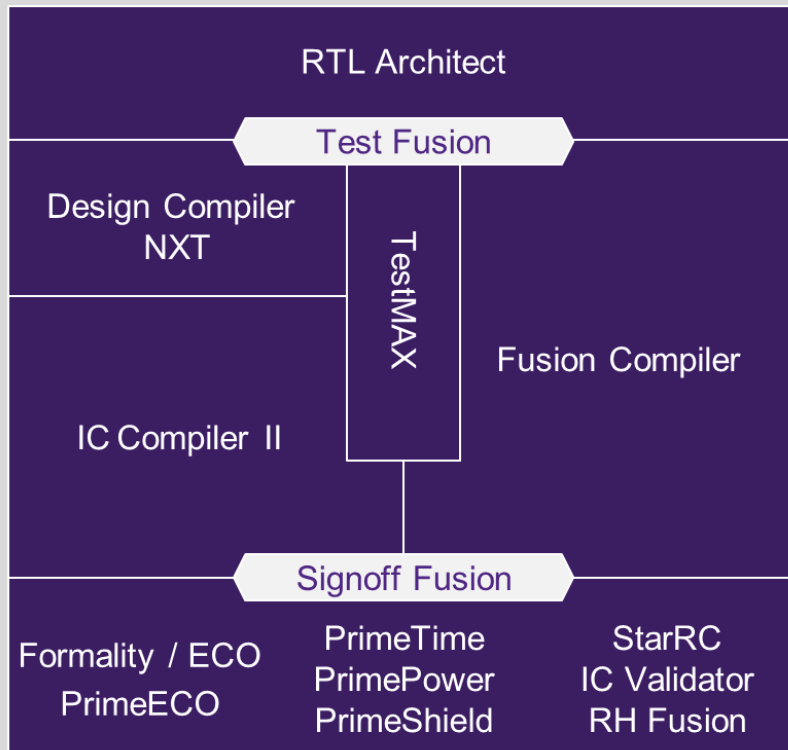
Market Leadership

AI-enhanced tools, AI-driven apps
Cloud-ready

Synopsys Fusion Compiler™



FUSION DESIGN PLATFORM

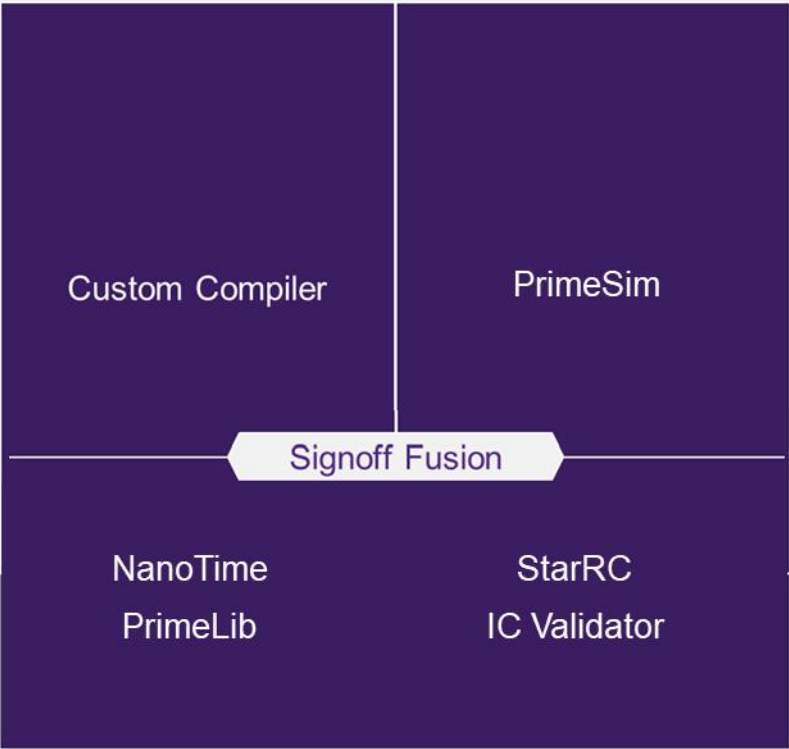


- Only single product on market with innovative next-generation integration of synthesis, place & route and key signoff technologies
- Built with market-leading products
- Redefines conventional product boundaries; sharing of algorithms, code and data model
- New synthesis engine, developed from ground up for significantly higher capacity & performance
- Strong momentum with considerable benchmark wins and competitive displacements, driving accelerating digital design revenue growth

Custom Design Platform



CUSTOM DESIGN PLATFORM

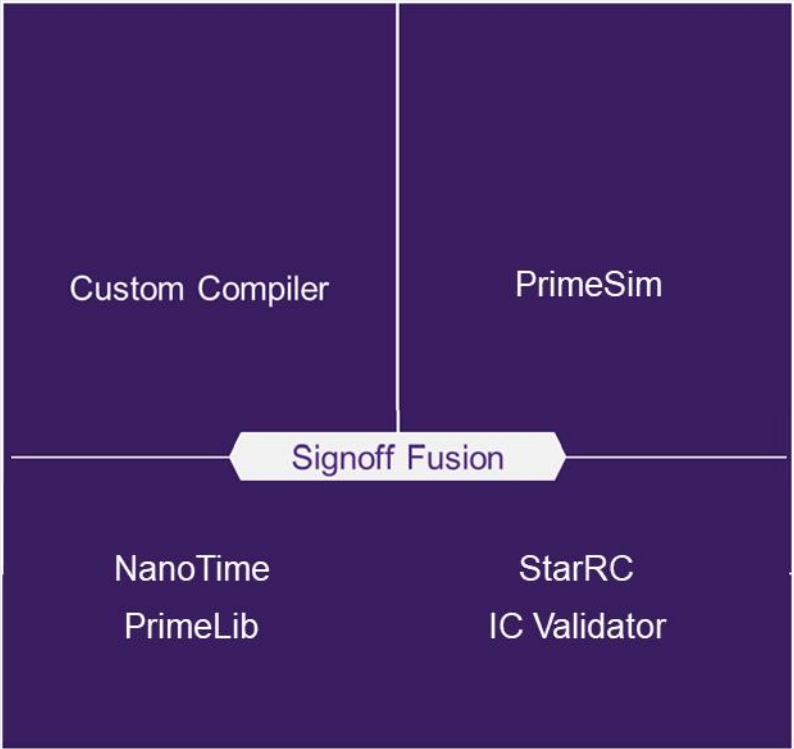


- Innovative Products**
 - Industry anchors HSPICE, CustomSim, FineSim
 - Custom Compiler Next-generation custom layout
- Competitive Differentiation**
 - Flexible, open environment
 - Faster custom design closure
- Market Momentum**
 - PrimeSim launched in March 2021
 - Multiple full flow competitive displacements

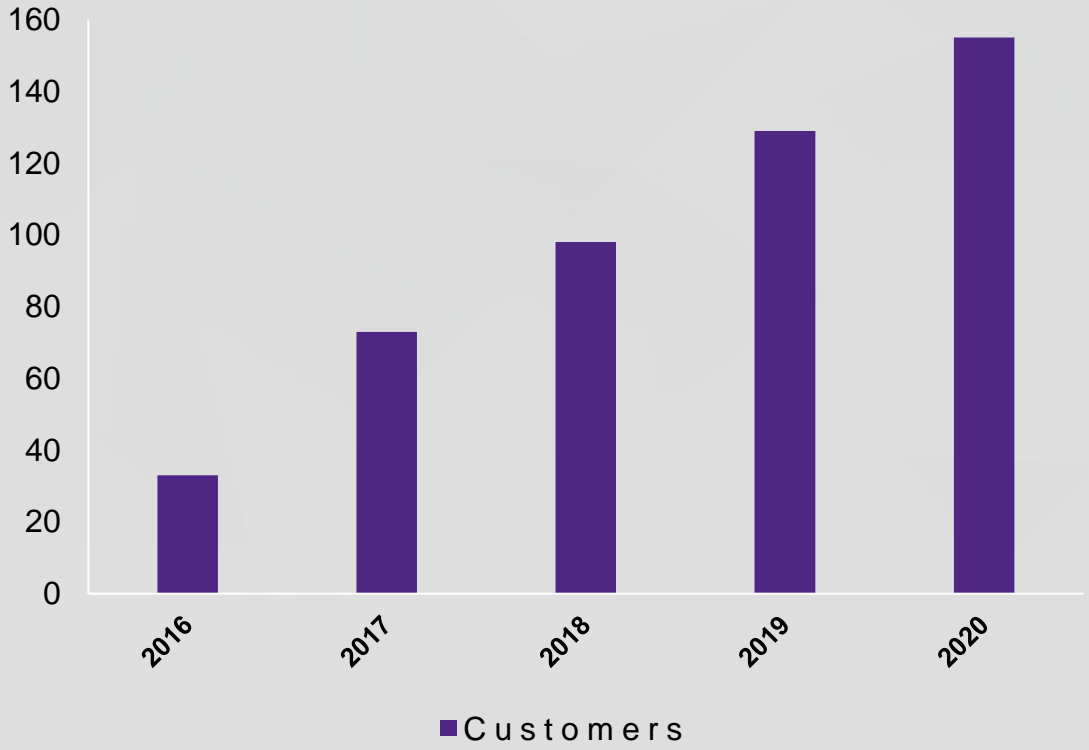
Synopsys Custom Compiler™ Adoption Growing



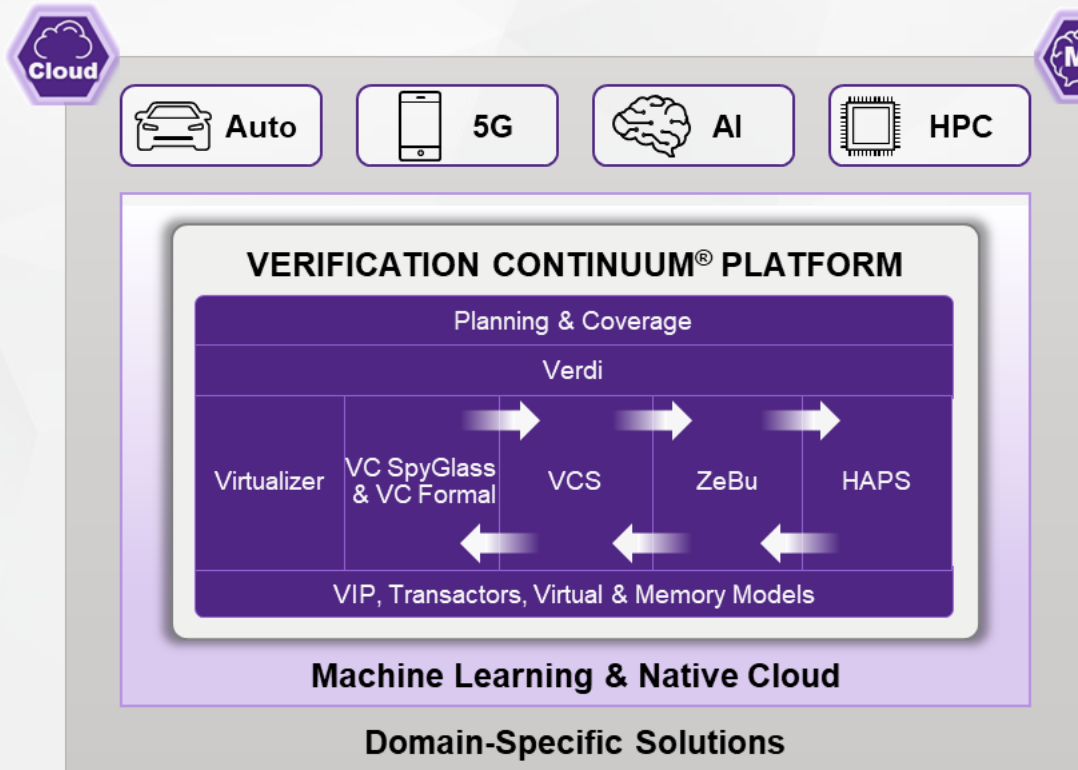
CUSTOM DESIGN PLATFORM



Custom Compiler Adoption



Verification Continuum[®] Platform



Best-in-Class Verification

Complete platform with #1 products in all categories, hardware-based and software-based

Fastest Engines

Highest-performance engines speed time-to-market

Accelerating Innovation

Investing in domain-specific, AI and cloud technology to improve verification efficiency

Verification Hardware: ZeBu[®] Server 4 Emulation System

Leading System for Software Bring-up

Only modern system to allow software-on-hardware validation

Industry's Fastest Emulation System

2X higher performance

Industry's Largest Capacity

Scalable to 19B+ gates

Industry's Lowest Total Cost of Ownership

1/10th lower power consumption, half data center footprint



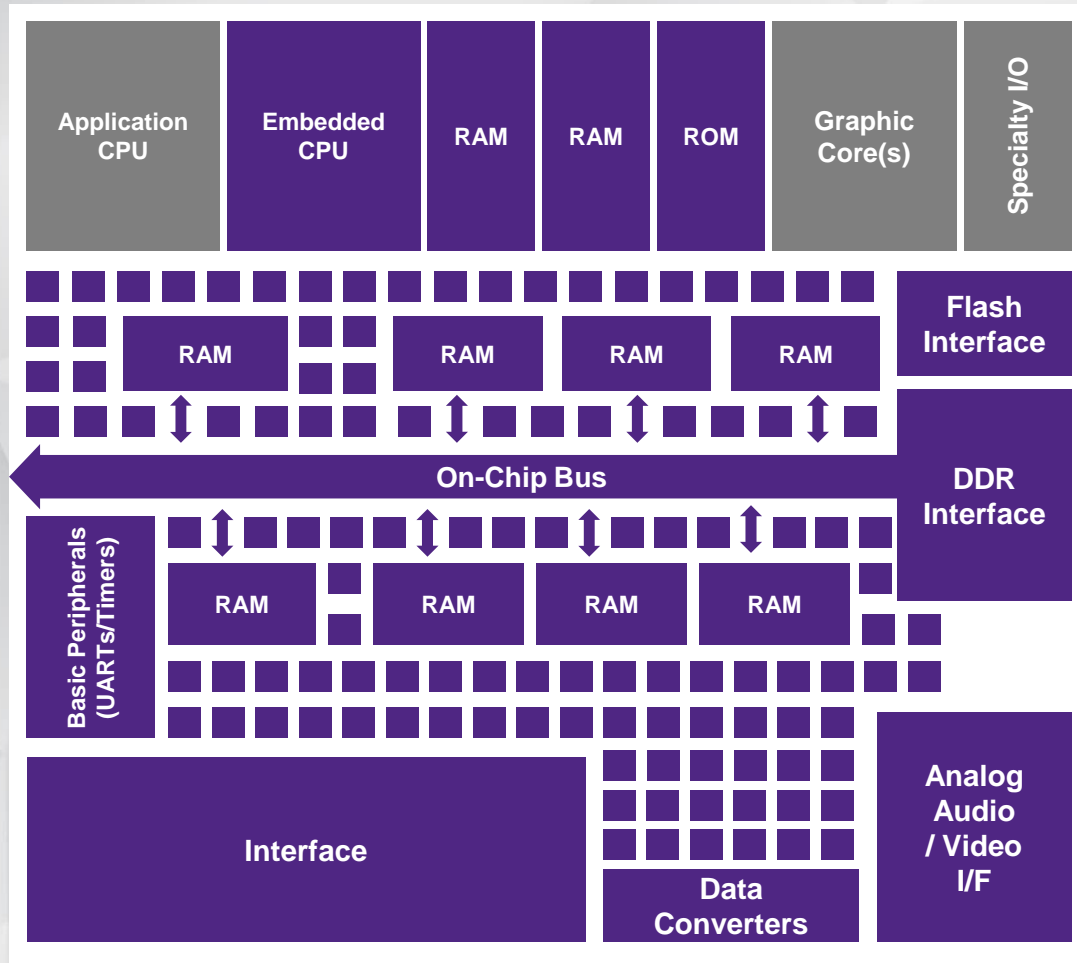
ZeBu Server 4

Leader in Semi IP

- #2 market share in IP, the reusable building blocks that are used for chip designs
 - Leading supplier of interface, memory, analog and physical IP
 - ~\$4.6 billion market*, benefitting from our customers' move to outsourcing more and more complex IP
- IP reuse reduces our customers' chip design costs, lowers risk and speeds time-to-market
- Serving high-impact, growing markets (IoT, Automotive, Security, Cloud Computing) & latest processes and protocols
- ~20 years of investment and commitment resulting in unmatched portfolio breadth, quality and reliability

* Source: Ipnest (Apr 2021); Internal estimates (Apr 2021)

Broadest and Most Comprehensive IP Platform



■ Synopsys Portfolio

* Small boxes are standard cell library elements.

- Broadest portfolio available in the market; FY20 revenue >\$900M
- Covers vast majority of chip
- Growing demand for more integrated subsystems
- New markets drive new opportunities
- Customers count on us for the long haul to accelerating time-to-market and reduce risk

High-Impact Markets: Increasing Technology Complexity

Driving Growth in Third-Party IP Demand



AI

Machine Learning,
Deep Neural
Networks



AUTOMOTIVE

ADAS,
Infotainment,
Connected Vehicle



CLOUD

Networking,
Servers AI
Accelerators



IoT

Smart Home,
Industrial,
Wearables

Comprehensive IP Solutions for Cloud Computing SoCs

Servers



- Improved power efficiency for high-density and edge environments

Networking



- Increasing data volume driven from rich media and high-speed devices

Storage



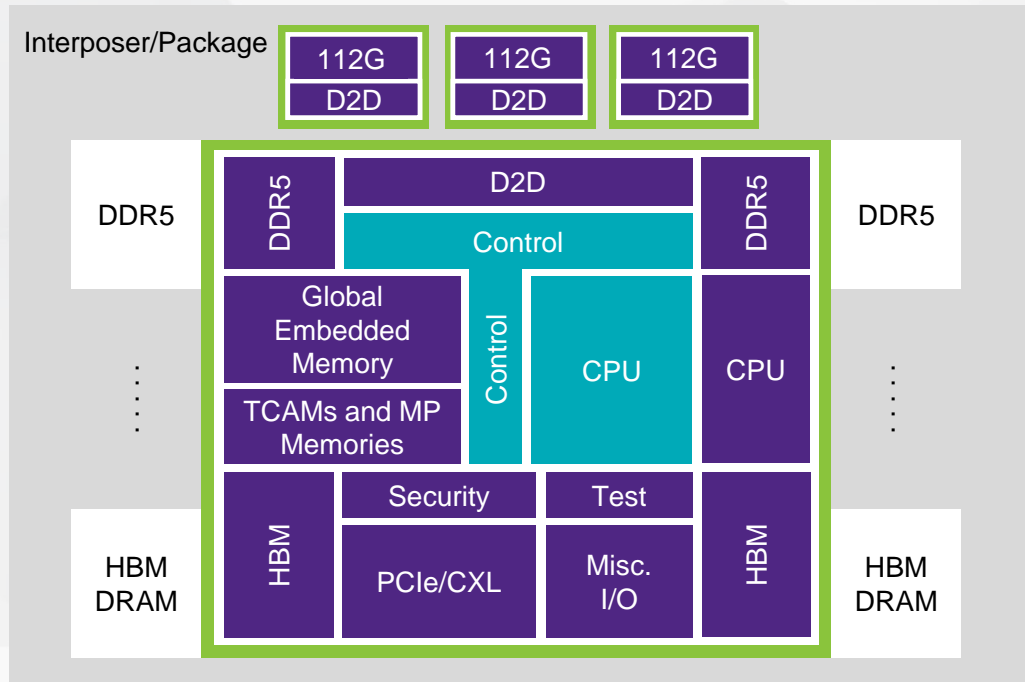
- Rapid data growth requires faster data access & local processing

Artificial Intelligence



- AI accelerators in cloud servers extract insights from large data sets

DesignWare® Interface, Foundation and Processor IP for Cloud Applications

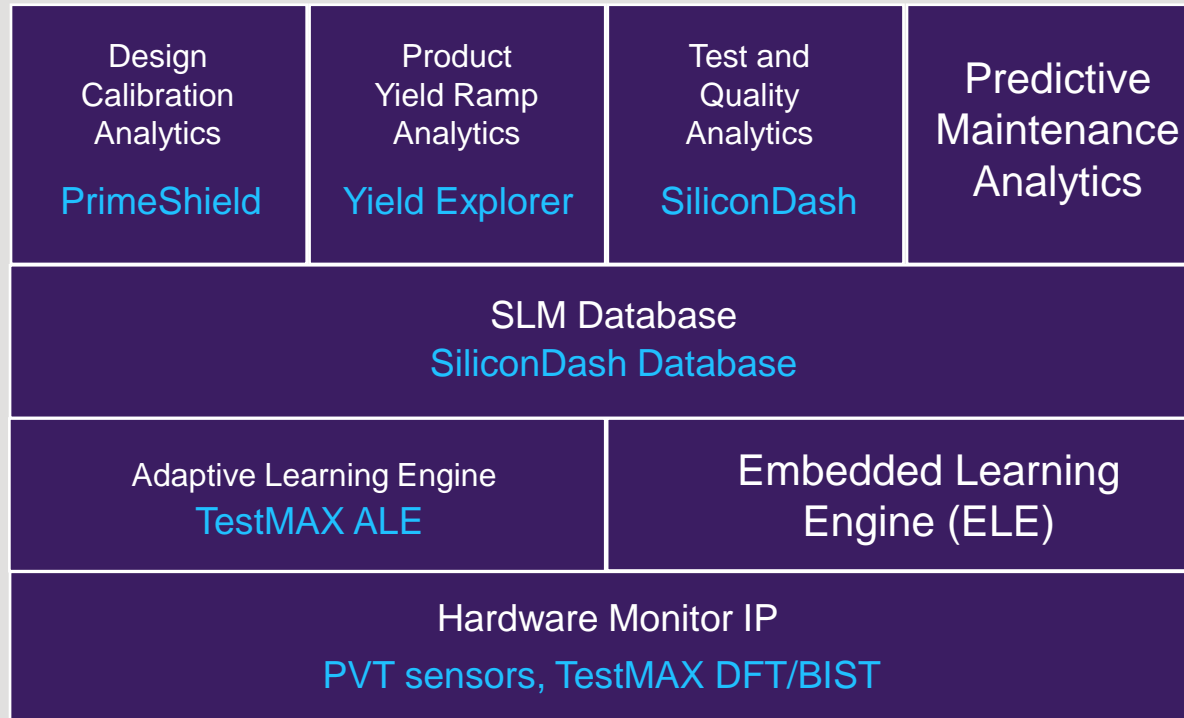


- **Interface IP:** PCIe 5.0, CXL, HBM2/2E, DDR5, 112G Ethernet, Die-to-Die
- **Foundation IP:** specialty memories & logic libraries
- **Processor IP:** ARC HS Processors

Silicon Lifecycle Management Platform

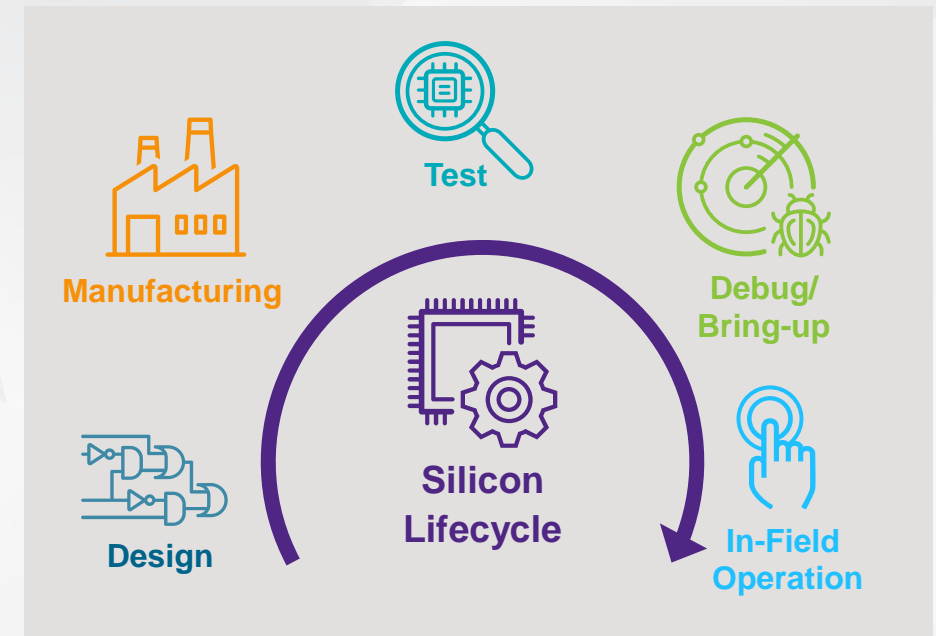


Silicon Lifecycle Management



New Insights

Monitor, manage and optimize the performance, health and security of the chip from initial qualification to end-of-life

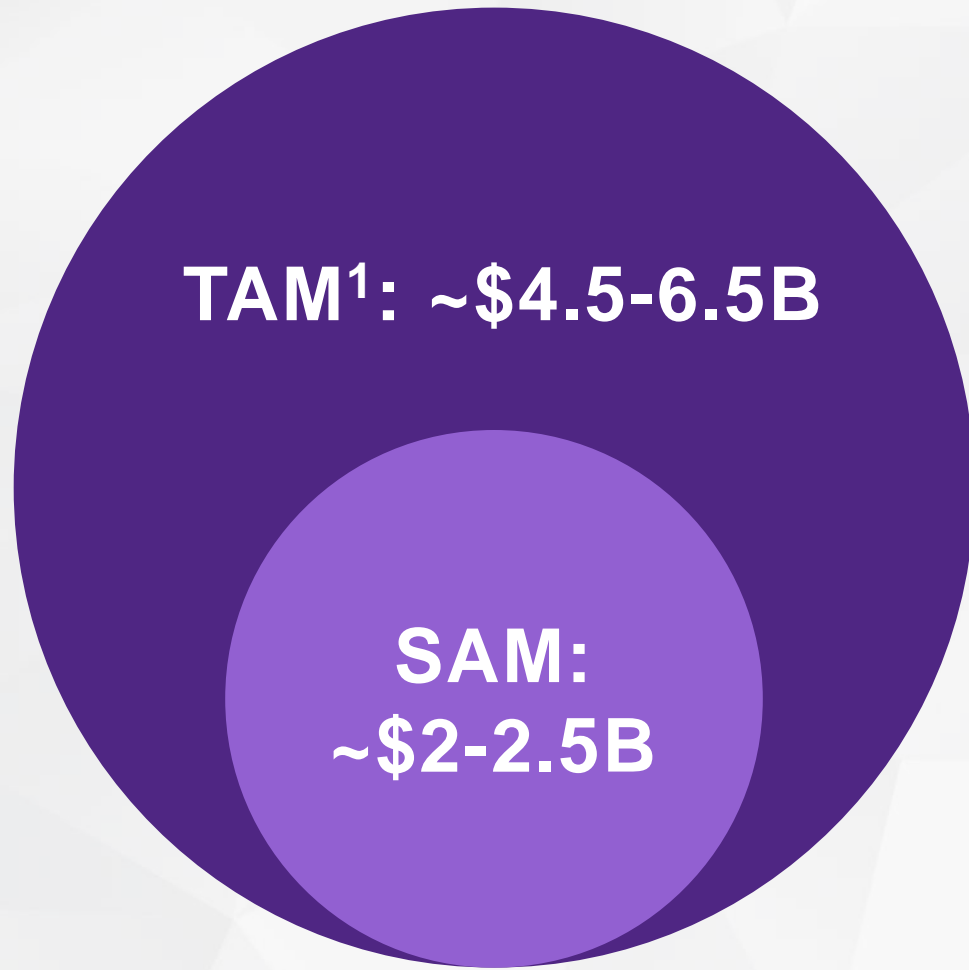


Leader in Software Integrity

Entered the software security & quality space in 2014

- Assembled and developed the broadest portfolio of solutions on the market; \$358 million revenue in FY20
- Solutions allow software code developers to fix security and quality defects early in development
- Approximately \$2-2.5 billion served market: fragmented, with numerous point solutions; recognition of cost of software failure has increased dramatically
- Synopsys Polaris Software Integrity Platform[®] enables customers to fully leverage the strength of the core products and integrate Synopsys into critical development workflows

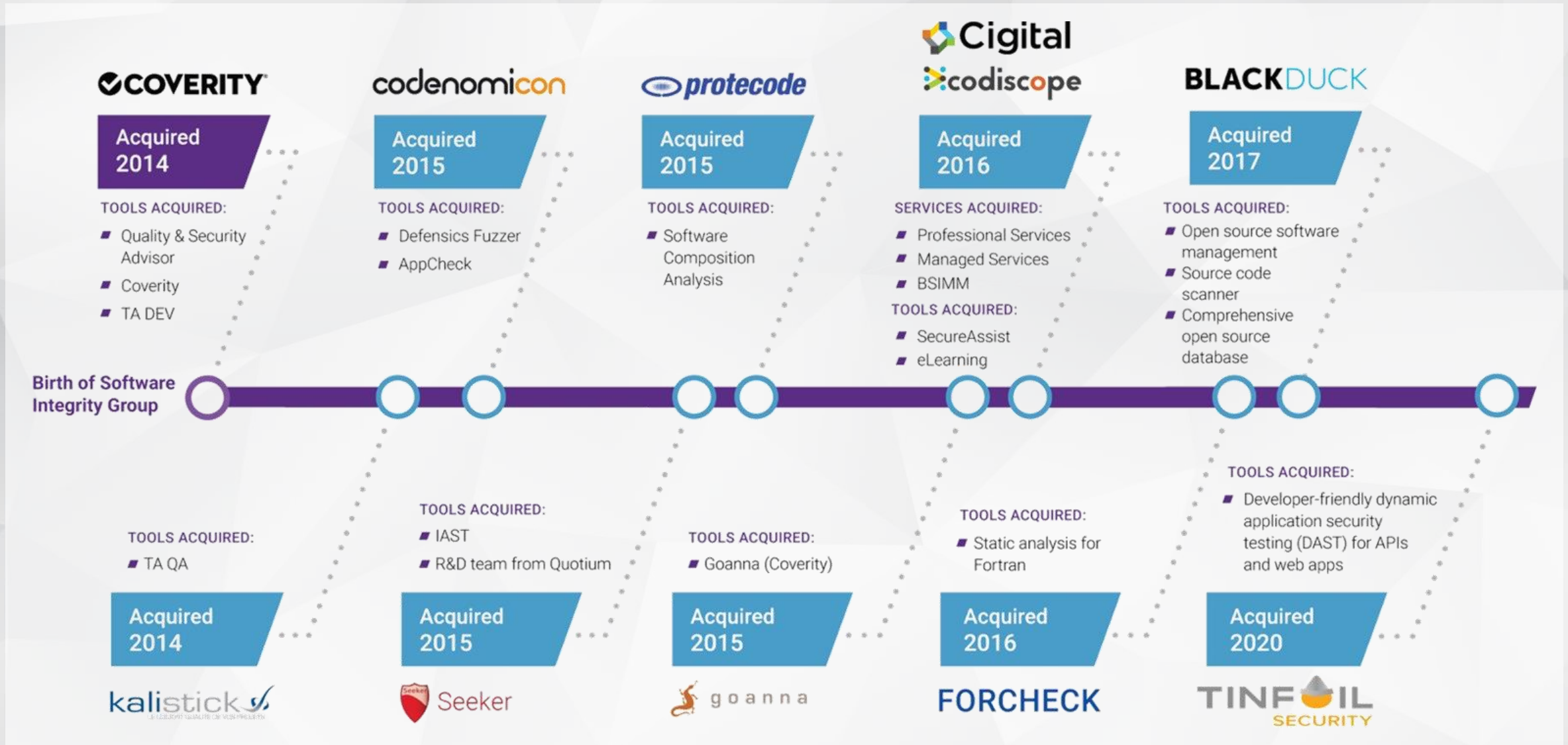
Software Security & Quality Market



1. AST, TVM/VA, cloud security

- Evolving, nascent market
- Growth drivers:
 - Omnipresence of software
 - Widespread connectivity exacerbates security issues
 - Significant business risk from breaches
 - Large development teams
- Market growth rate: mid-teens %
- Synopsys L-T multi-year growth objective: ~15-20% range as the market evolves*

Growing the Software Integrity Platform - Acquisitions



The Most Complete Portfolio in the Industry

Static Analysis



- Find critical defects and vulnerabilities in code
- Runs in the dev environment and DevSecOps workflow
- OWASP Top 10 and CWE Top 25
- Automotive compliance (MISRA, ISO26262)

Software Composition Analysis



- Find known vulnerabilities in open-source & 3rd party code
- Identifies license and compliance risks
- Tests source and binaries in apps and containers
- Supply chain total health with SW BoM

Dynamic Analysis



- Tests running apps for security vulnerabilities
- Enables dev to fix security flaws early in the SDLC
- API Scanner for IoT devices and mobile backend servers
- Fuzzing for automotive protocols and 5G

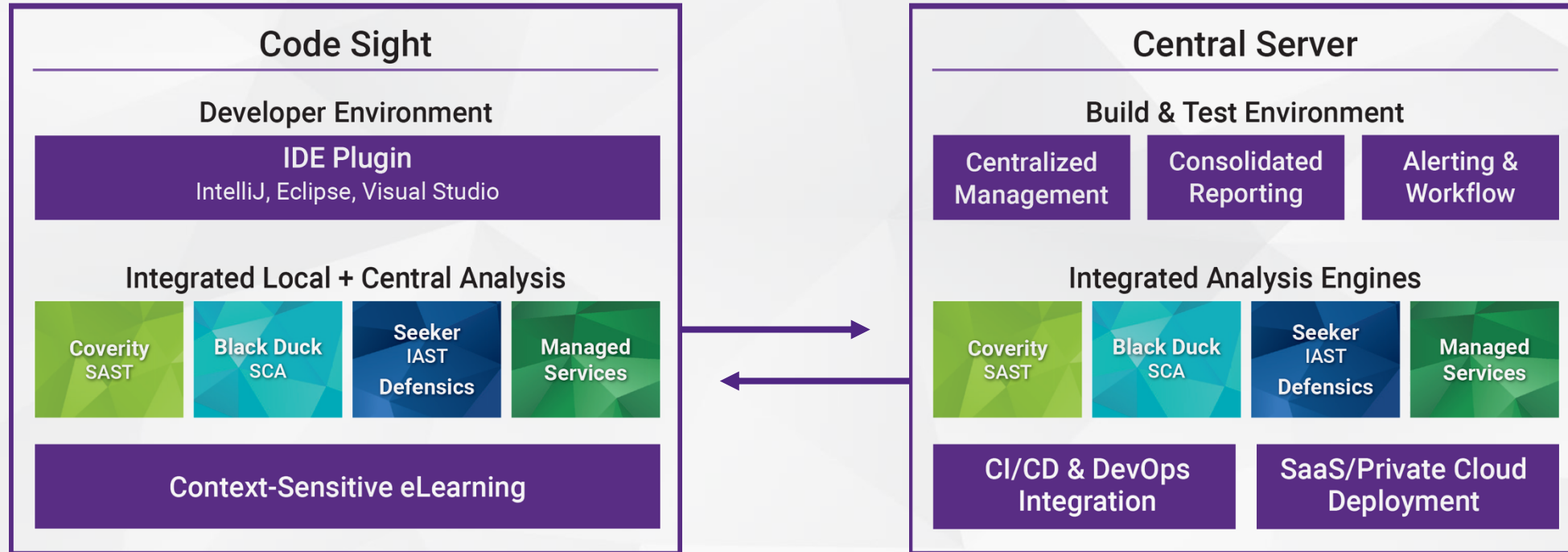
Security Services



- Strategic analysis to build Software Security Initiative
- DevSecOps integration injects security into dev workflow
- Managed services provides full testing capabilities
- Architecture/design modeling eliminates software flaws

Polaris Software Integrity Platform[®]

Build secure, high-quality software faster



Comprehensive	SW security & quality across entire SW development lifecycle	Developer-centric	Automated tools integrate into existing DevOps toolchains	Higher Fidelity	Detect & fix vulnerabilities early
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Recognized Leader in End-to-End Application Security

Synopsys recognized as a leader for the fourth year in a row

2020 Gartner Magic Quadrant for Application Security Testing

Download a free copy of the [2020 Magic Quadrant for Application Security Testing](#).



This graphic was published by Gartner, Inc. as part of a larger research document and should be evaluated in the context of the entire document. The Gartner document is available upon request [here](#).

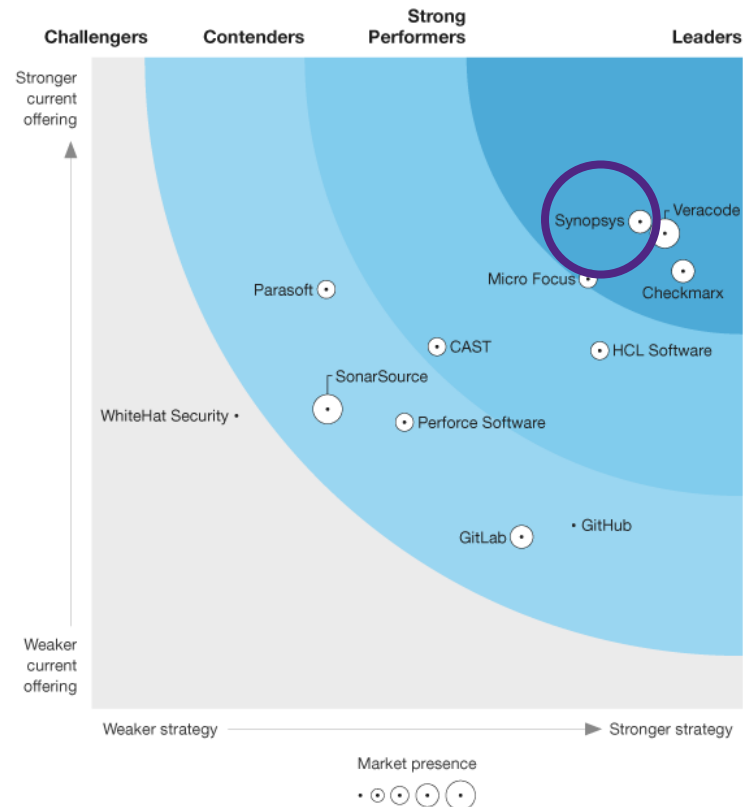
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Gartner, Inc. "Magic Quadrant for Application Security Testing" by Mark Horvath, Dionisio Zumerle, and Dale Gardner, April 29, 2020

Recognized Leader in End-to-End Application Security

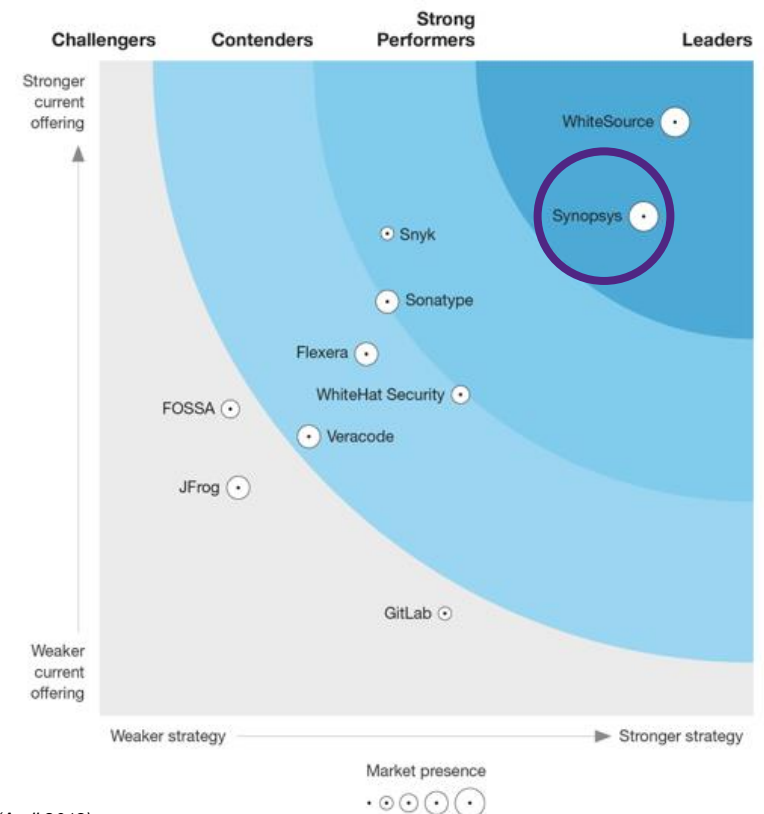
Synopsys is the only vendor recognized as the leader in both SAST & Open Source (SCA)

Forrester Wave Static Application Security Testing



Source: Forrester (January 2021)

Forrester Wave Software Composition Analysis



Source: Forrester (April 2019)

Download a free copy of [The Forrester Wave™: Static Application Security Testing, Q1 2021](#)

Download a free copy of [The Forrester Wave™: Software Composition Analysis, Q2 2019](#)

Trusted Partner



17 of the Top 25
Commercial
Banks



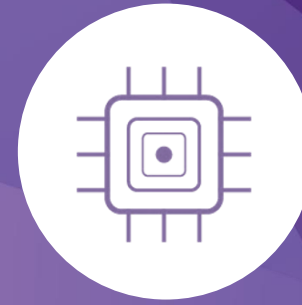
5 of the Top 5
Financial Data
Services Firms



9 of the Top 10
Software
Companies



5 of the Top 5
Aerospace &
Defense Firms



14 of the Top 15
Semiconductor
Manufacturers



3 of the Top 4
U.S. communications
providers

**Our mission is to help build secure,
high-quality software faster**

Growth Strategy

Leverage the Polaris Software Integrity Platform®

- *Polaris, coupled with the strength of the core products, enables selling across the entire portfolio to increase revenue potential and create strategic relationships with customers*

Highlight Differentiating Consulting Services

- *Services for high-level benchmarking, security strategy/transformation, program development guidance and large product deployments*

Refine and Scale Field

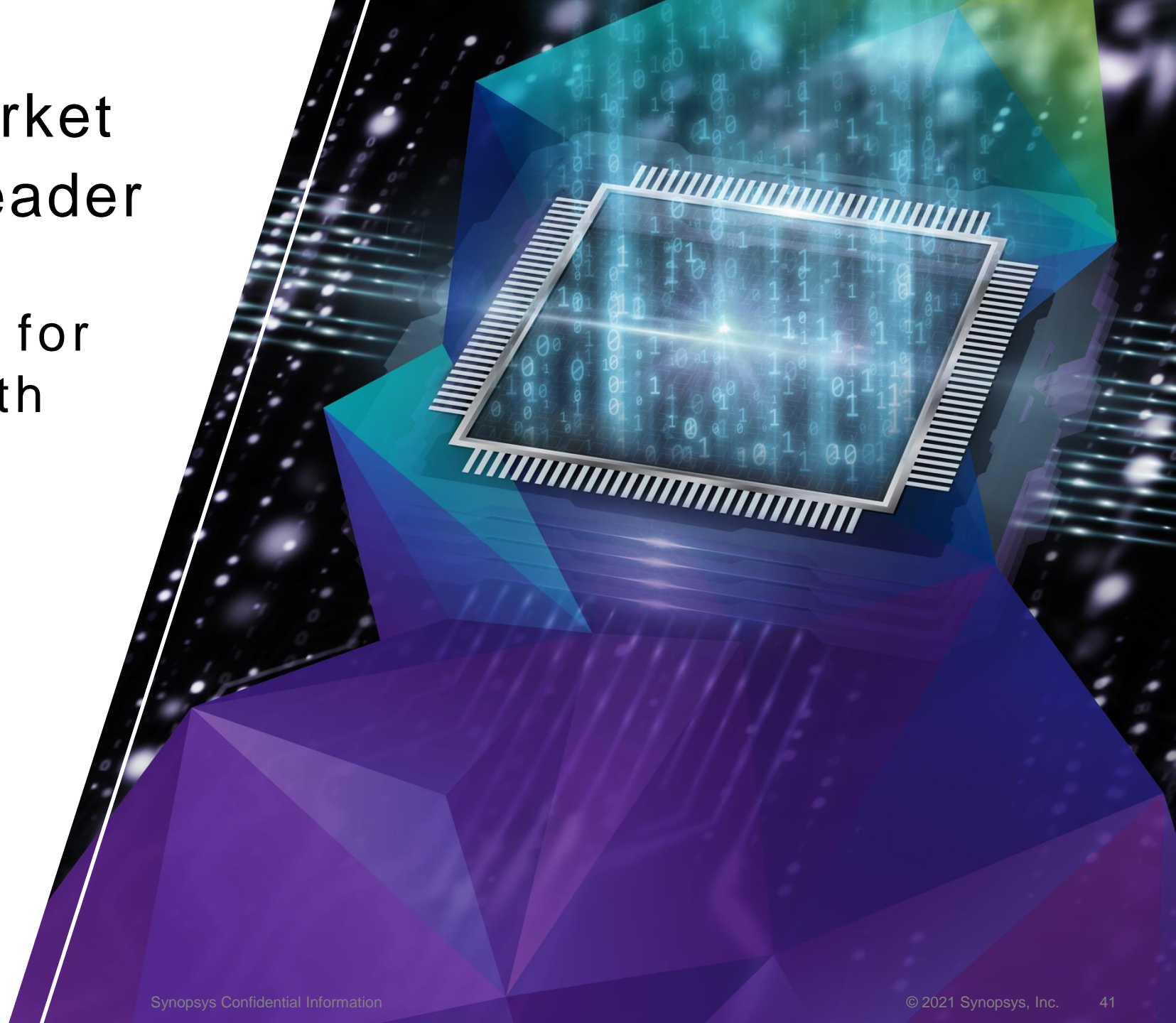
- *Sales channel: leverage international presence; continually enhance capacity and focus on large enterprise customers, key verticals and the growing adoption of DevSecOps and securing the Cloud; indirect channel partner program*
- *Emphasis on customer success to ensure long-term relationships*

Balance near-term growth and profitability with investments to capitalize on long-term opportunity

Synopsys: The Market and Technology Leader

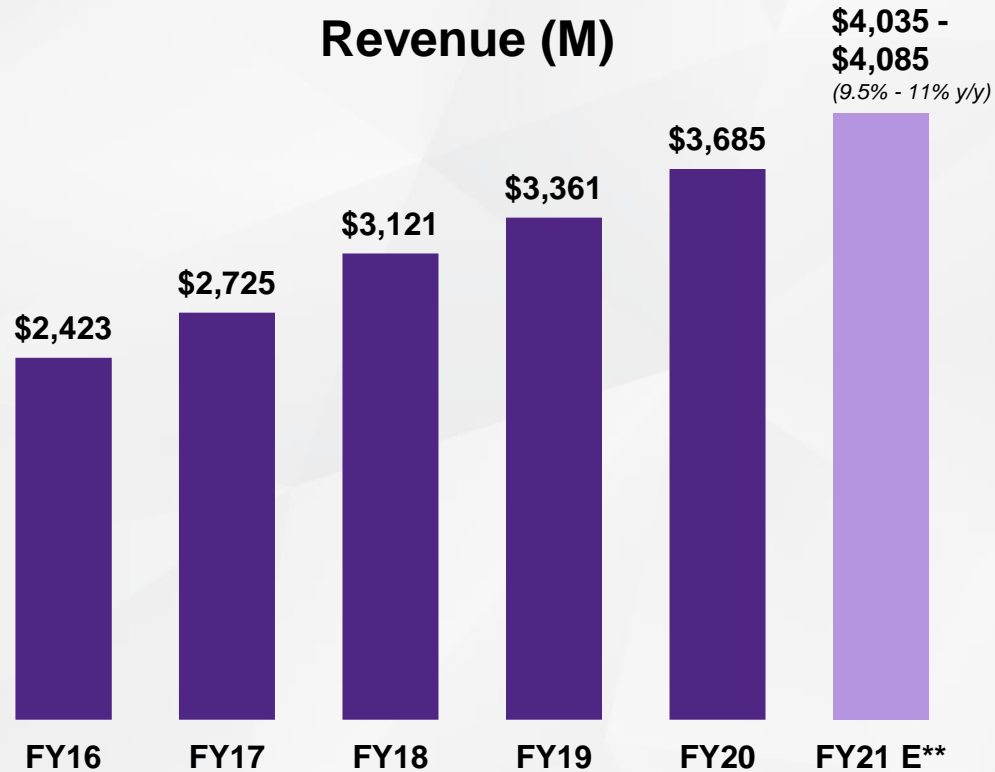
Uniquely Positioned for Stability and Growth

- Robust End Markets Driving Growth
- Clear Technology Leadership
- ▶ Financial Strength and Growth



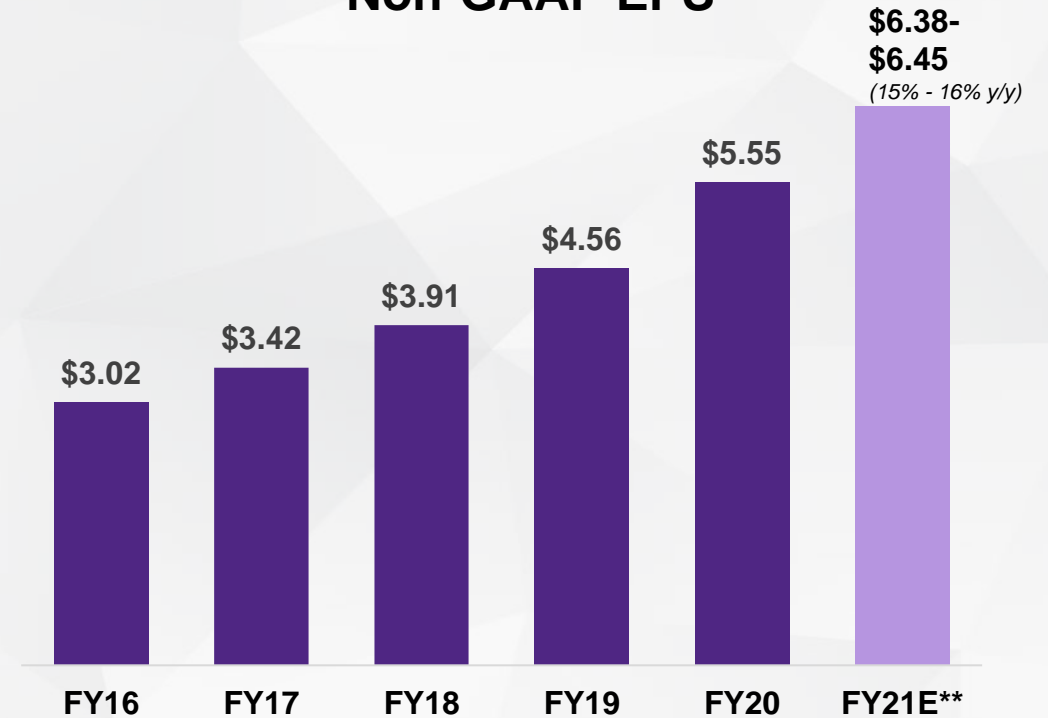
Excellent Financial Execution

Revenue (M)



Nearly 90% recurring revenue model with \$4.8B non-cancellable backlog provides stability throughout the business cycle***

Non-GAAP EPS*



Strong financial execution while investing for long-term growth

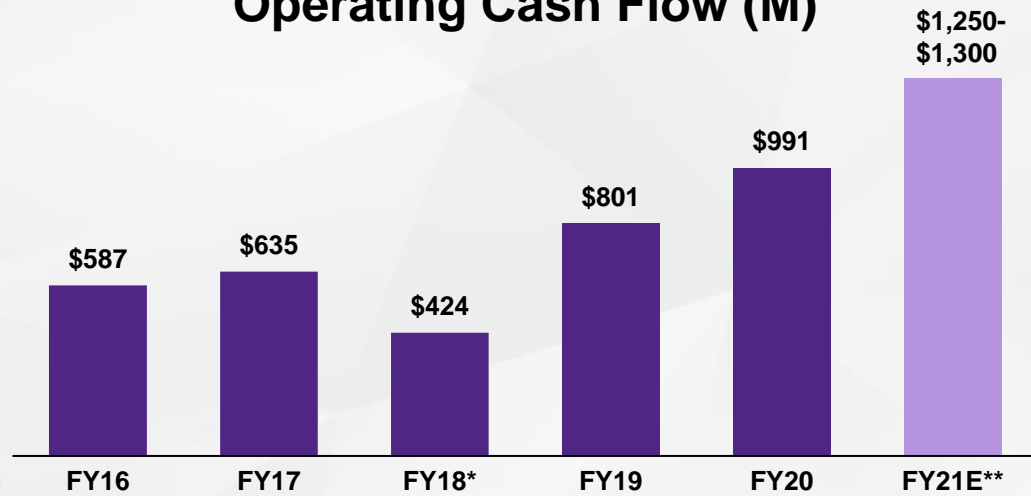
* A GAAP to non-GAAP reconciliation of FY16 to FY21E earnings per share is included at the end of this presentation

** FY21E reflects guidance provided as of May 19, 2021

*** We define recurring revenue as revenue generated from time-based products, multi-period IP contracts, and maintenance and services, for which revenue is recognized over time

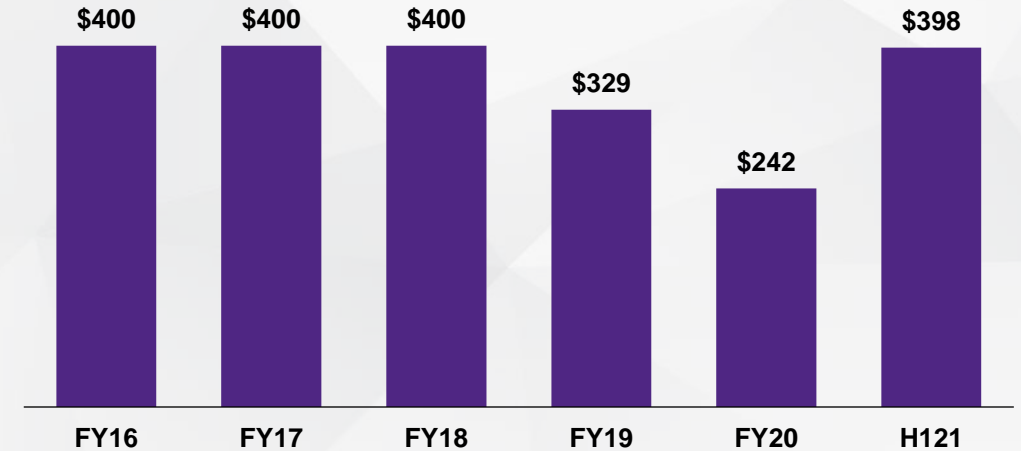
Cash Flow & Capital Allocation

Operating Cash Flow (M)



- Roughly tracks EBITDA less cash taxes on multi-year basis
- Variable from year to year, based mainly on timing of large contracts and payments

Stock Repurchases (M)



- Repurchased more than \$2B in stock since 2016
- Capital allocation priorities:
 - Internal investments
 - Buybacks and acquisitions

* Includes approximately \$230M in one-time payments

** FY21E reflects targets provided by Synopsys as of May 19, 2021

Corporate Social Responsibility

Our strong belief is that in addition to providing high-value, sophisticated technology, we must be responsible citizens and leaders in how we manage our strategy and operations, act as stewards for our environment, and advance positive social impact. We're making good progress. For example:

- ▶ Taking climate action. In 2020, we pledged to reduce our GHG emissions by 25% reduction by 2024 over our 2018 baseline.
- ▶ Ensuring inclusion & diversity throughout our organization. Our I&D efforts have led to notably expanded gender diversity across the company and on our board.
- ▶ Enhancing employee engagement. Our efforts to ensure a highly motivated, productive workforce are frequent, thoughtful, and results-driven.



Responsible Business Alliance

Advancing Sustainability Globally

CSR PRIORITIES

HUMAN CAPITAL



INCLUSION & DIVERSITY



ENVIRONMENT



SUPPLY CHAIN



CYBERSECURITY



CORPORATE GOVERNANCE



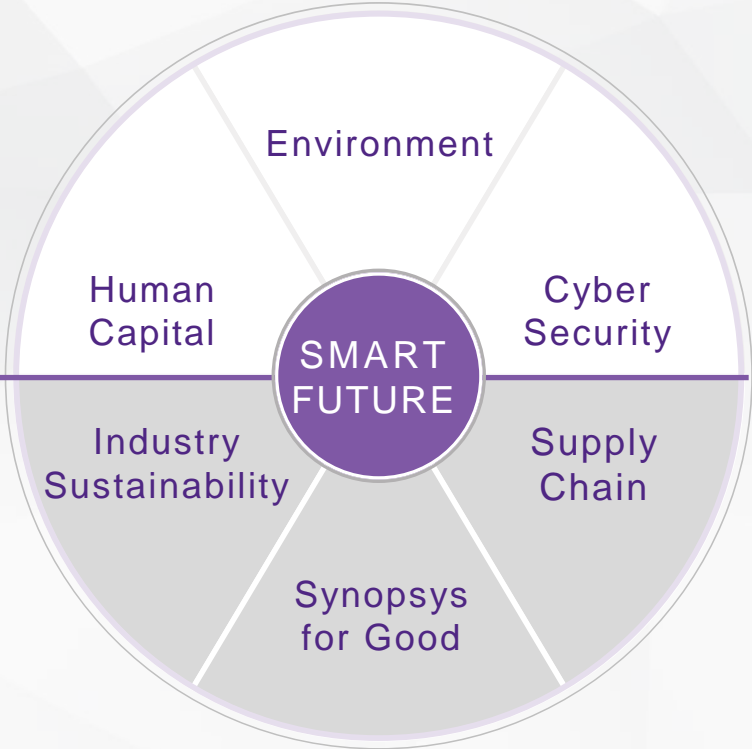
Synopsys Corporate Social Responsibility

Working Together for a **Smart Future**

Our Smart Future CSR program provides a focus and structure for how we address both our own operational impact on the world and our ability to influence others around us.

Synopsys Impact

Synopsys Influence



CSR Advancements 2020



REPORTING

Second [CSR Report](#) published with alignment to GRI standards.



HUMAN CAPITAL

Updated the Compensation and Organizational Development Committee's responsibilities to elevate the importance of human capital.



INCLUSION & DIVERSITY

Rolled out Inclusive Leaders Program for managers.
Board of Directors: 33% women



ENVIRONMENT

Entered into one of the world's largest aggregated Virtual Power Purchase Agreement (VPPA) for the purchase of new renewable energy. Read the [press release](#).

Achieved CarbonNeutral[®] company certification for second consecutive year.



SUPPLY CHAIN

Joined [Renewable Energy Buyers Alliance](#) (REBA) to support our supply chain partners' efforts to decarbonize.



The background features a low-poly geometric pattern in shades of grey and white. Overlaid on this are several thick, curved, multi-layered bands in green, yellow, and blue, creating a sense of motion and depth. The Synopsys logo is centered in the middle of the slide.

SYNOPSYS®

Market and Technology Leader

Electronic
Design Automation

Semiconductor
Intellectual Property

Software Security
& Quality

Solid Financials

Recurring revenue model

Large, non-cancellable backlog

Excellent execution

GAAP to Non-GAAP Reconciliation

Earnings Per Share – Full Fiscal Year 2021 Targets

	Range for Fiscal Year	
	October 31, 2021 ⁽¹⁾	
	Low	High
Target GAAP earnings per share	\$ 4.55	\$ 4.72
Adjustments:		
Estimated impact of amortization of intangible assets	0.51	0.48
Estimated impact of stock compensation	2.13	2.06
Acquisition-related costs	0.04	0.04
Estimated impact of tax adjustments	(0.85)	(0.85)
Target non-GAAP earnings per share	\$ 6.38	\$ 6.45
Shares used in non-GAAP calculation (midpoint of target range)	157,500	157,500

(1) Synopsys' fiscal year will end October 30, 2021. For presentation purposes, we refer to the closest calendar month end.

For additional information about the measures Synopsys uses to evaluate its core business operations, please review the earnings press release and Item 2.02 of the Current Report on Form 8-K filed on May 19, 2021.

GAAP to Non-GAAP Reconciliation

Operating Margin – Full Fiscal Year 2020 and Midpoint of 2021 Targets

	Twelve Months Ended 10/31/2020⁽¹⁾	Twelve Months Ended 10/31/2021⁽¹⁾⁽²⁾
At midpoint of revenue and expense guidance ranges		
GAAP operating margin	16.8%	19.7%
Amortization of intangible assets	2.5%	1.9%
Stock compensation	6.7%	8.1%
Acquisition-related costs	0.4%	0.1%
Restructuring charges	1.0%	0.0%
Change in value of non-qualified deferred compensation	0.6%	0.0%
Target non-GAAP operating margin	<u>28.0%</u>	<u>29.8%</u>

(1) Synopsys' fiscal year 2020 ended on October 31, 2020, and its fiscal year 2021 will end on October 30, 2021. For presentation purposes, we refer to the closest calendar month end.

(2) These numbers represent the midpoint of targets in the prepared remarks provided on February 17, 2021, and do not represent official guidance for fiscal year 2021.

For additional information about the measures Synopsys uses to evaluate its core business operations, please review the earnings press release and Item 2.02 of the Current Report on Form 8-K filed on May 19, 2021.

GAAP to Non-GAAP Reconciliation

Earnings Per Share – Full Fiscal Years 2016 to 2020 Actual Results

	ASC 605		ASC 605		ASC 605		ASC 606		ASC 606	
	FY 2016		FY 2017		FY 2018		FY 2019		FY 2020	
GAAP diluted net income per share	\$	1.73	\$	0.88	\$	2.82	\$	3.45	\$	4.24
Adjustments:										
Amortization of intangible assets		0.84		0.70		0.82		0.65		0.59
Stock compensation		0.63		0.70		0.91		1.01		1.53
Acquisition-related costs		0.07		0.06		0.14		0.04		0.09
Restructuring charges		0.06		0.24		0.08		0.31		0.23
Legal and tax matters		-		0.05		0.17		(0.12)		-
Income tax related to transition tax		-		-		0.41		-		-
Income tax related to tax rate change		-		-		0.33		-		-
Income tax related to tax restructuring		-		-		(1.12)		-		-
Tax Impact of repatriation		-		1.07		-		-		-
Tax settlement		-		-		-		0.11		-
Tax adjustments		(0.31)		(0.28)		(0.65)		(0.89)		(1.13)
Non-GAAP diluted net income per share	\$	3.02	\$	3.42	\$	3.91	\$	4.56	\$	5.55

For additional information about the measures Synopsys uses to evaluate its core business operations, please review the earnings press release and Item 2.02 of the Current Report on Form 8-K filed on May 19, 2021.



SYNOPSYS[®]
Silicon to Software™

THANK YOU