



Investor Presentation

March 2025

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Certain statements in this presentation, and statements that may be made when discussing it, regarding the Company's future expected business performance and financial results are forward looking and are subject to future events and circumstances. Actual results could differ materially from those expressed in these forward-looking statements. Risks and uncertainties that could cause results to differ materially include risks associated with: expectations about the effectiveness of our business and technology strategies; expectations regarding global economic trends; expectations regarding recent and future acquisitions; current semiconductor industry trends; expectations of continued adoption of the Company's solutions by new and existing customers; project milestones or delays and performance criteria achieved; cost and schedule of new product development; the provision of technology and services prior to the execution of a final contract; the impact of global inflation and changing interest rates; the continuing impact of macroeconomic conditions and other trends on the semiconductor industry, our customers, our operations, and supply and demand for our products; supply chain disruptions; the success of the Company's strategic growth opportunities and partnerships; the Company's ability to successfully integrate acquired businesses and technologies; whether the Company can successfully convert backlog into revenue; customers' production volumes under contracts that provide Gainshare; possible impacts from the evolving trade regulatory environment and geopolitical tensions; our assessment of the sufficiency of our cash resources and anticipated funds from operations; our ability to obtain additional financing if needed; our ability to use support and updates for certain open-source software, and other risks set forth in PDF Solutions' periodic public filings with the Securities and Exchange Commission, including, without limitation, its Annual Report on Form 10-K for the year ended December 31, 2024, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K and amendments to such reports. The forward-looking statements made herein or about this presentation are made as of the date hereof, and PDF Solutions does not assume any obligation to update such statements nor the reasons why actual results could differ materially from those projected in such statements.

PDF Solutions overview

- PDF Solutions provides advanced AI, data analytics and equipment connectivity solutions for the semiconductor industry
- PDF Solutions improves Process Efficiency and Reliability
 1. Differentiated data from manufacturing, test and in-field use
 2. Analytics platform for the end-to-end needs of the semiconductor value chain
 3. Connectivity and control software for factory equipment



IC Design



Fab



Sort



Assembly

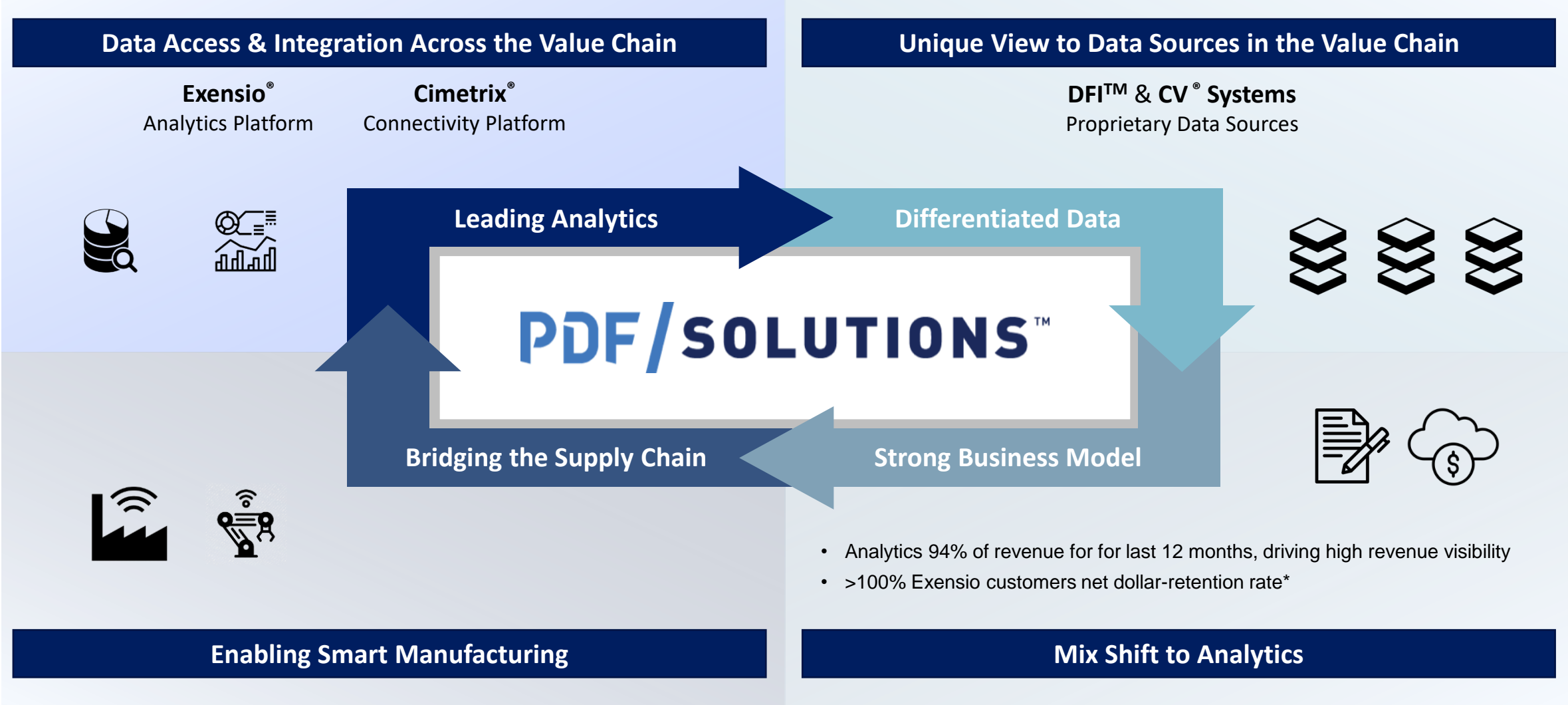


Test



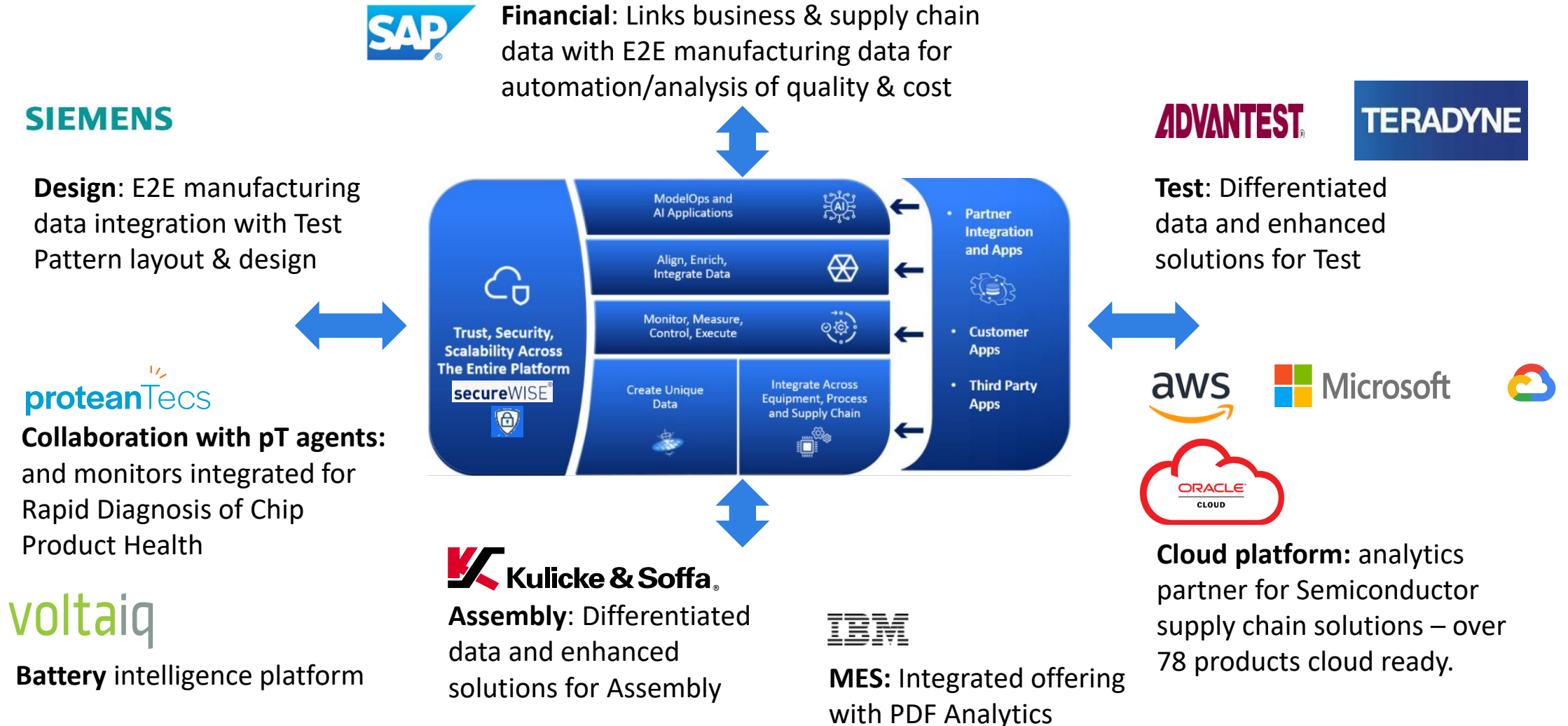
System

PDF Solutions Platform Overview

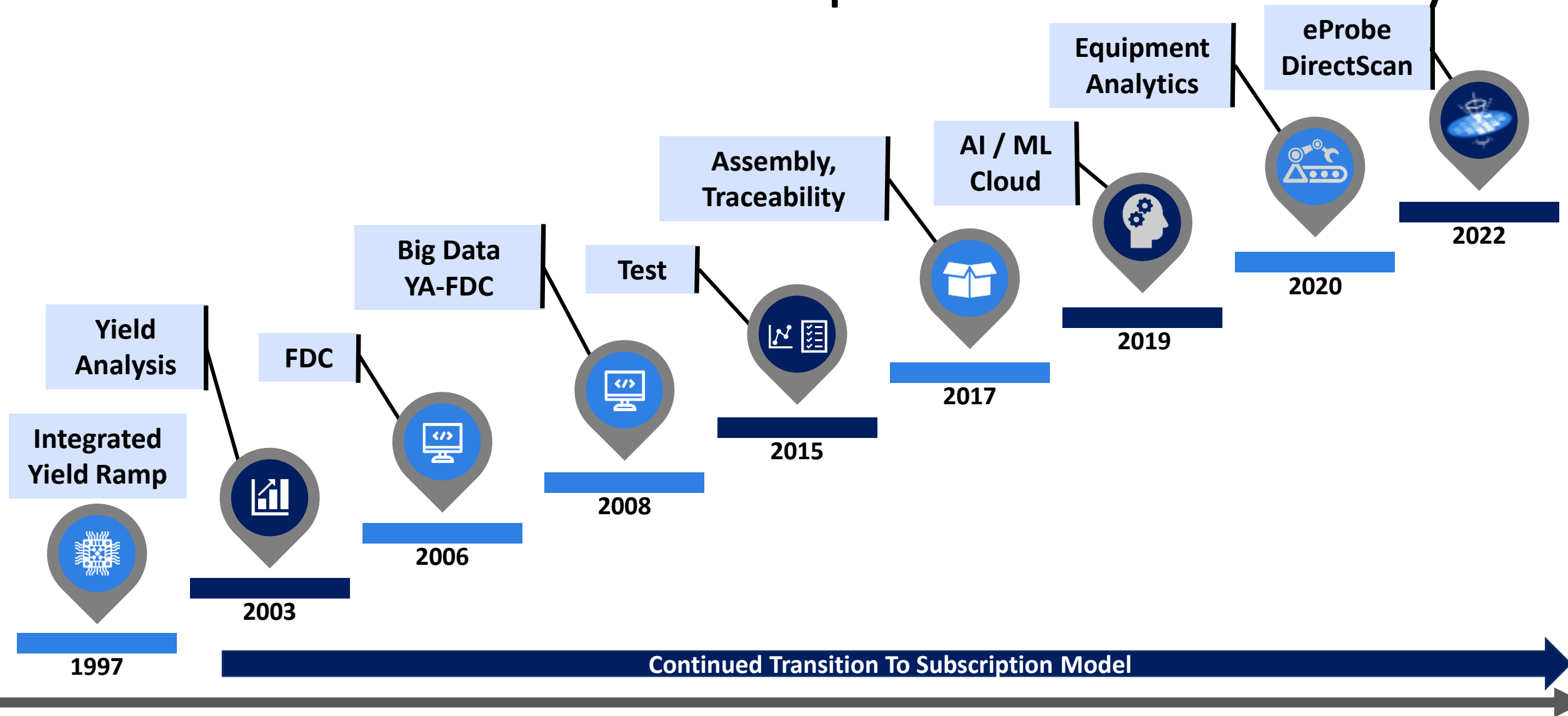


*TTM Q4'24 vs TTM Q4'23

An open platform based on industry standards and integrated with leading solutions providers



PDF Solutions Platform Continues to Expand Over Time for Data Analytics



Building a Platform for Success

GROWTH

- Analytics revenue grew 11% Y/Y from TTM Q4'23 to TTM Q4'24
- Analytics at 94% of total revenues in TTM Q4'24

PROFITABILITY

- GAAP gross margin of 68% for Q4'24
- Non-GAAP gross margin of 72% for Q4'24
- 75%+ Non-GAAP gross margin target model

VISIBILITY

- Greater than 100% Exensio® customers net dollar-retention rate*
- Strong ending backlog of \$221.4M as of Q4'24

DIVERSIFICATION

- No country outside the United States accounts for more than ~21% of revenue in TTM Q4'24
- APAC Region grew by double-digit percentages on a Y/Y TTM basis

STRENGTH

- \$114.9M in cash and short-term investment as of Q4'24
- \$6.9M of share buyback completed in 2024

COLLABORATIONS

- Expanding strategic collaboration across various sectors
- Partnering with industry-leaders, including Advantest, AWS, IBM, K&S, proteanTecs, SAP, Siemens, and Teradyne
- PDF Solutions Acquired secureWISE to Expand the Reach of its Semiconductor Manufacturing Data Platform

*TTM Q4'24 vs TTM Q4'23

PDF Solutions® acquired secureWISE® to expand the reach of its semiconductor manufacturing data platform

■ Industry Context

- The semiconductor industry becomes more globally distributed
- Advanced devices rely on the integration of multiple chiplets into a single package
- As a result, more collaboration and integration are required across the semiconductor industry
- Data infrastructure and analytics are critical enabling technologies for improved integration and collaboration

■ PDF Solutions Leadership

- For over 30 years, PDF Solutions has provided advanced analytics, unique data and secured data infrastructure to the semiconductor ecosystem
- Its data platform empowers companies in the semiconductor ecosystem to break down data silos within their supply chains, enabling them to leverage all their manufacturing and test data, resulting in key performance indicator (KPI) improvements
- With its DEX™ network PDF Solutions provides the execution backbone for the outsourced semiconductor supply chain

With the acquisition of secureWISE, PDF Solutions expects to dramatically expand manufacturing equipment providers' and fab operators' remote access to securely exchange data with, optimize and control their equipment and processes.



Overview of secureWISE and Transaction Rationale

secureWISE Company Overview

- secureWISE provides a secure remote connectivity and critical infrastructure platform for semiconductor manufacturing
- The Company's technology allows for:
 - Secure end-to-end connectivity, remote equipment monitoring, high bandwidth data transfer, real-time reporting and collaboration
- Global customer base and presence with several of the world's leading semiconductor equipment manufacturers
- ~40 employees

>200

300mm Fabs
Connected

>100

Unique OEMs
Connected

>10K

Connected Equipment
(<20% penetration)

Petabytes

Data Transmitted

Transaction Strategic Rationale

- Complementary to PDF's connectivity product portfolio
- Opportunity to expand and cross-sell portfolio offerings with key customers
- Opportunity to extend PDF's data and analytics platform
- Allows PDF to better provide access solutions to semiconductor and electronics customers

Transaction Highlights

Purchase Price

- Cash purchase price of \$130 million, subject to customary purchase price adjustments

Transaction Timing

- Transaction closed on March 7, 2025

Expected Financial Impact

- We expect full year 2025 impact to be:
 - Revenue growth rate of 21-23% on year-over-year basis
 - In-line with PDF Solutions corporate gross margins
 - Operating margins of 20%, in-line with our target model
 - EPS to be slightly accretive, with more profound impact in 2026 and beyond

Transaction Financing

- Purchase price was funded with a combination of cash on hand and \$70.0 million of new bank debt

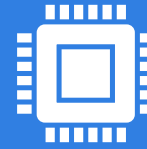
secureWISE adds to PDF Solutions' Analytics Platform



Acceleration of equipment makers' ability to derive value from equipment data



Expansion of PDF Solutions' secure DEX OSAT network



Creation of a data analytics and execution platform



Positions PDF Solutions to address increasing semiconductor ecosystem complexity

With secureWISE, the PDF Solutions platform will help members of the semiconductor ecosystem collaborate through a secure, direct connection and control manufacturing process down to the production equipment.

Recent events where PDF Solutions participated

SEMI Industry Strategy Symposium - 2025

Jan 12-15th, 2025 | Half Moon Bay, CA

Panel discussion “Advanced packaging: meeting the limits of scaling: is hybrid bonding the answer?”



IMAPS – DPC - 2025

March 3rd to 6th, 2025 | Phoenix, AZ

Keynote: "AI for AI... Meet the growth opportunity of AI by increasing overall effectiveness across the industry"



TestConX - 2025

March 2nd to 5th, 2025 | Phoenix, AZ

Keynote: “AI for Test: The New Frontier”



Volta Foundation Battery Webinars

Feb 6th, 2025

“Solving cell manufacturing challenges with advanced analytics and inspection”



PDF Solutions AI Executive Conference – Dec 2024

- 140 external attendees from more than 75 organizations
- Presentations from executives Analog Devices, Cerebras, Intel, Qualcomm, Tokyo Electron
- And from partners: Advantest, SAP, Siemens, and Teradyne, Yurts, Voltai
- Key topics included:
 - Transformation with Analytics and AI at Intel
 - Getting ready for AI at ADI
 - AI trust and Security with Yurts & PDF
 - AI to use design information to drive diagnostic with Siemens & PDF
 - AI for Test at Intel, Cerebras, Qualcomm
 - Solutions for AI for Test with Teradyne, Siemens, Advantest & PDF
 - AI Enabled Digital Twin with TEL & PDF
 - GenAI solutions for Semiconductor with SAP, Yurts & Voltai
 - ModelOps platform to enable AI in semiconductor
 - Accelerating AI skills development



Presentations and Videos available on [PDF.com](https://www.pdf.com)

The Opportunity For PDF Is Expanding



Representative industry participants; not indicative of actual customers. Logos are the property of the respective trademark owners.

Established strong presence:

- >140k equipment factory connections with over >40k process tools
- 350+ revenue generating customers in 32 countries in TTM Q4'24

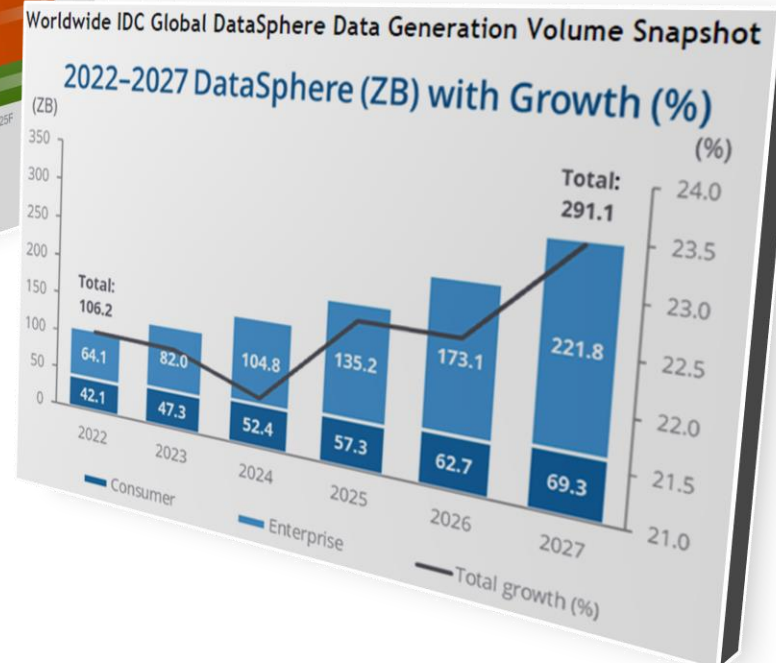
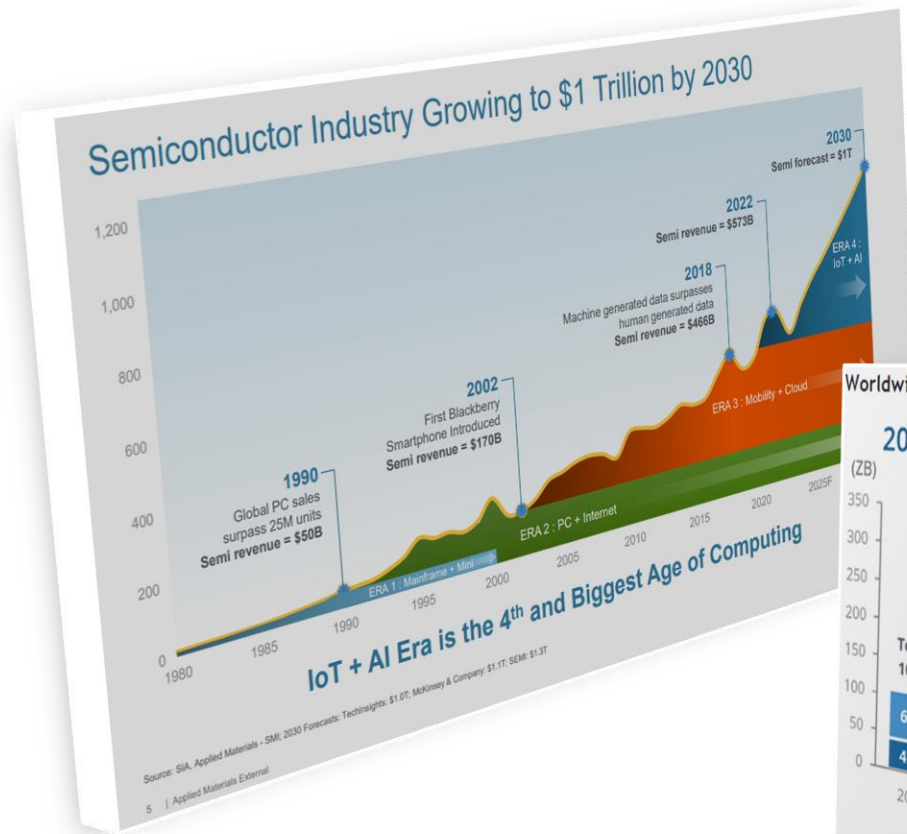
Strong product suite:

- Leading commercial provider of Lab to Fab optimization solutions: yield, test, OEE
- Leading commercial manufacturing Analytics and AI platform for the semiconductor industry
- Long history as an integration provider of semiconductor equipment

Expansion opportunities increasing:

- Strong position within equipment, IP, Factory and Product companies, while expanding to additional Product and System companies

Strong Semiconductor End-Market Drivers



- AI is driving increasing data generation and data availability, which in turn is driving semiconductor revenue
- Driven by AI, semi revenue expected to reach \$1T+ by 2030

Semiconductor Growth Inflection Points



<https://semiwiki.com/semiconductor-services/techinsights/316095-semicon-west-2022-and-the-imec-roadmap/>



<https://www.intel.com/content/dam/www/central-libraries/us/en/documents/2022-intel-investor-meeting-ifs.pdf>



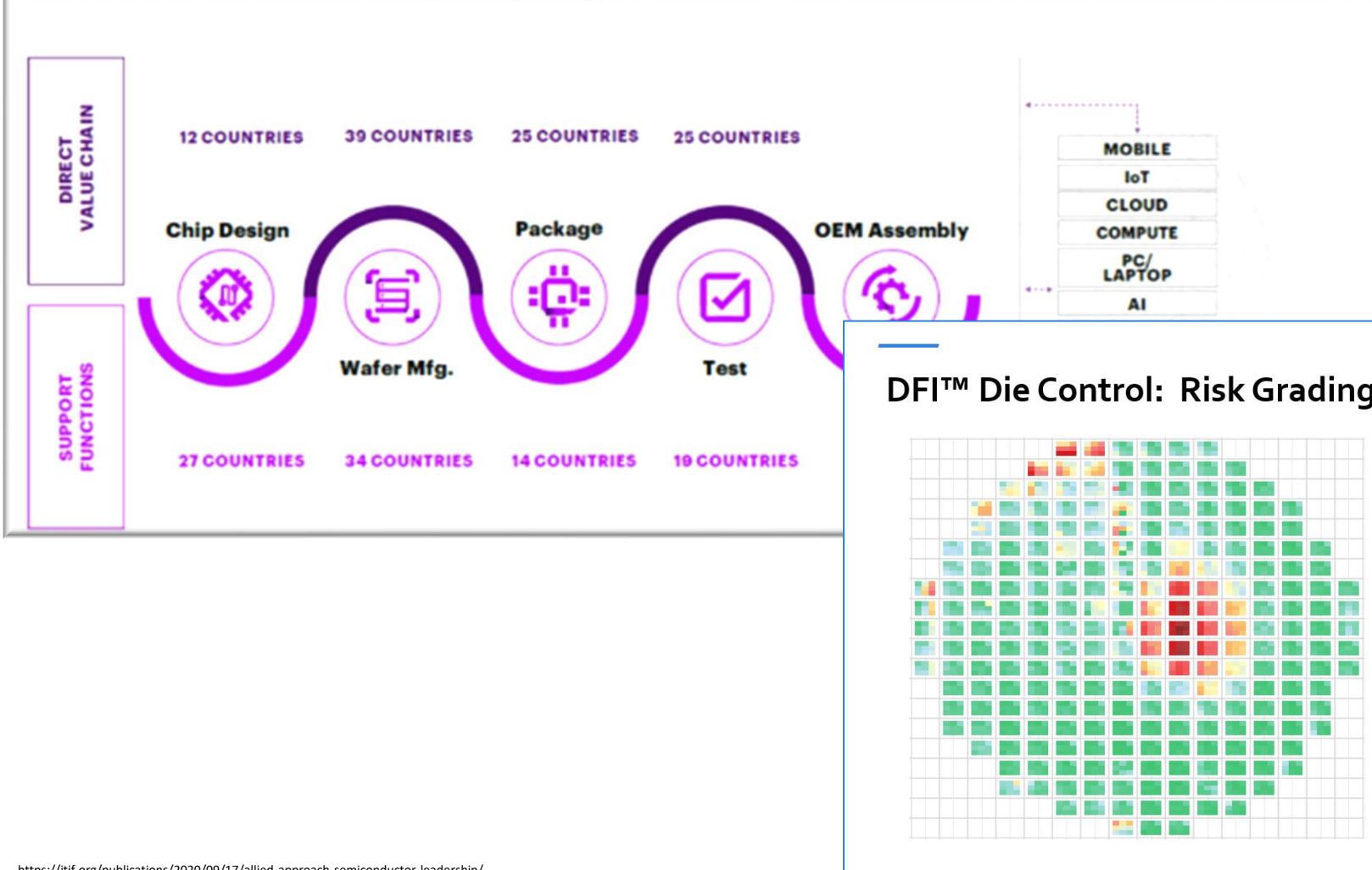
https://www.semiconductors.org/wp-content/uploads/2022/02/Global-Semiconductor-Incentives_2-4-2022.pdf

Achieving the necessary semi growth requires overcoming new inflection points

- New architectures & materials
- Chiplets
- Geographic disaggregation

AI Is Enabler For Rapid Growth

Figure 9: Number of countries participating in various phases of semiconductor manufacturing activity

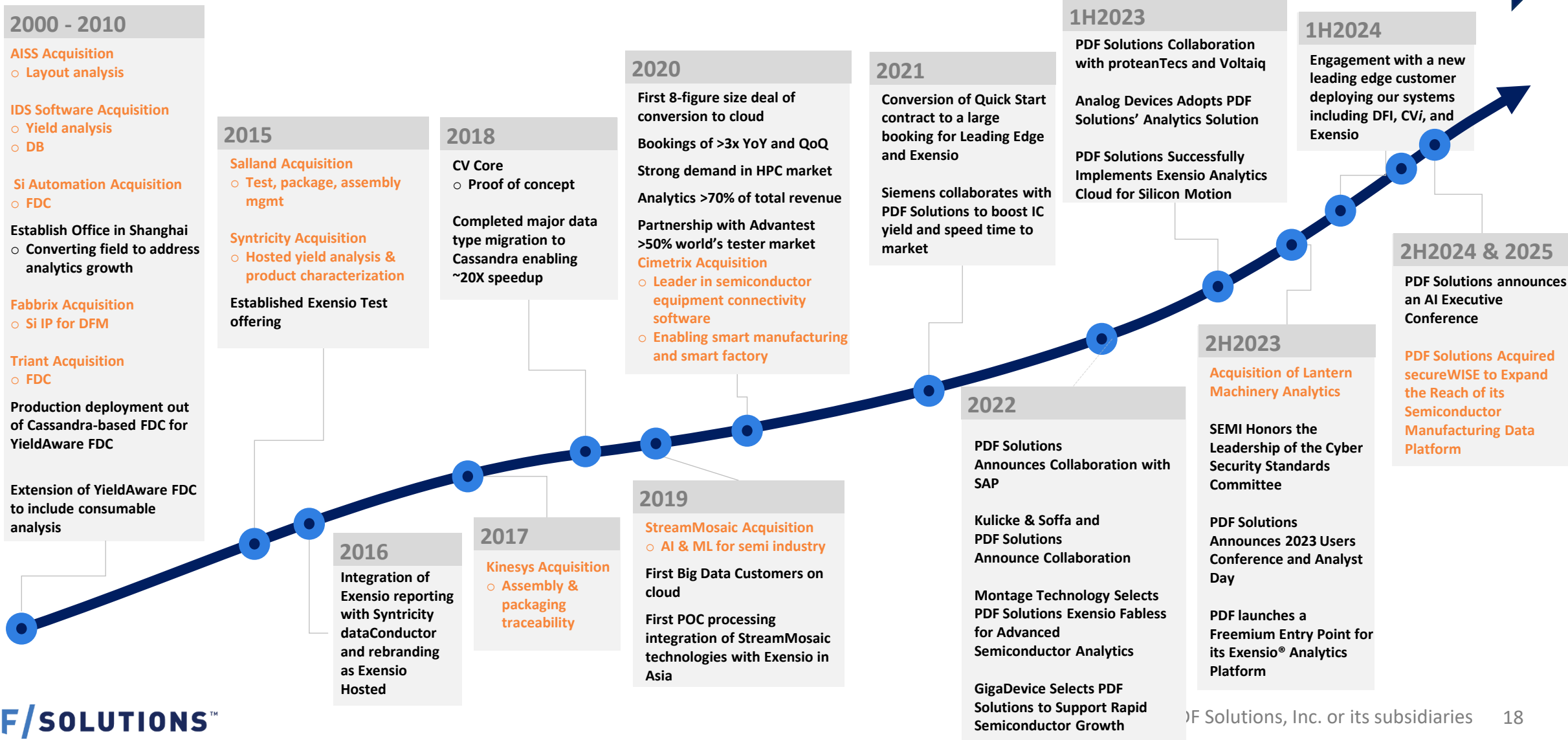


- AI adoption across the semiconductor supply chain is a key component to efficiently achieving semi growth

- Successful AI application requires:
 - Cross-supply chain data integration
 - The right data, not just more data
 - AI/ML model operations

Corporate Timeline of Key Milestones and Acquisitions

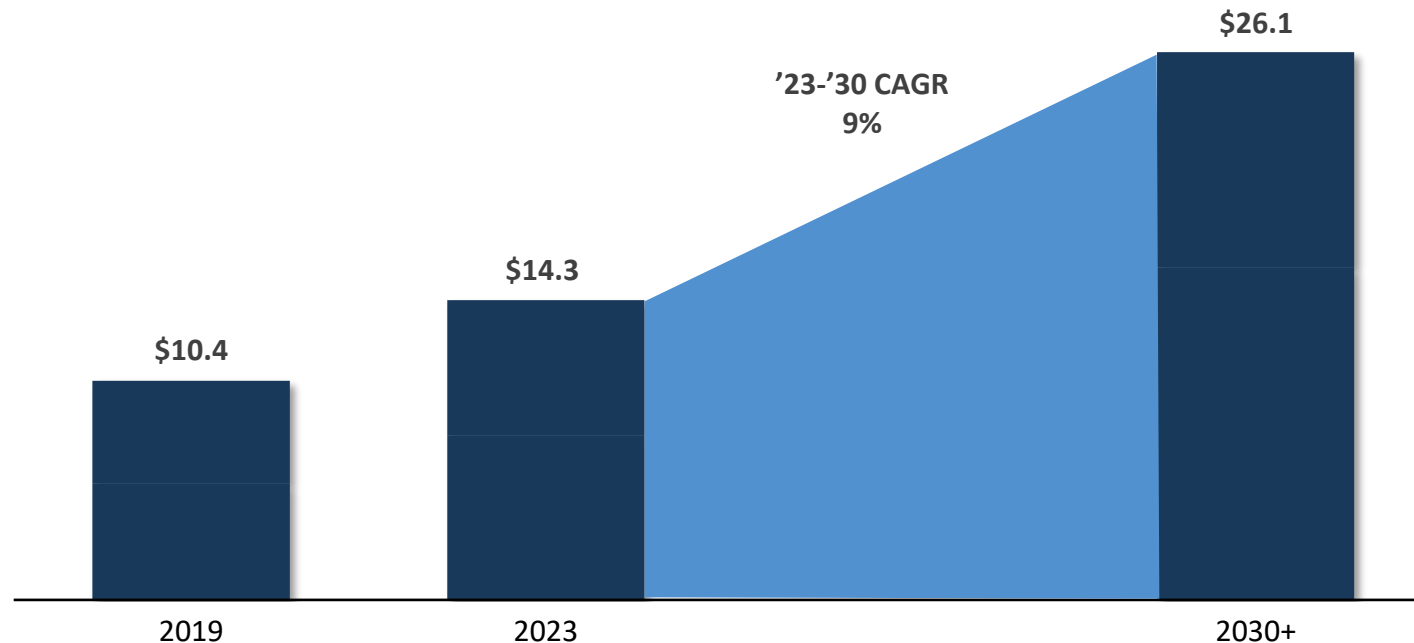
Continued Transition To Subscription Model



Total Semiconductor Analytics TAM

Potential value capture of analytics in Semiconductors

(\$ in billions)

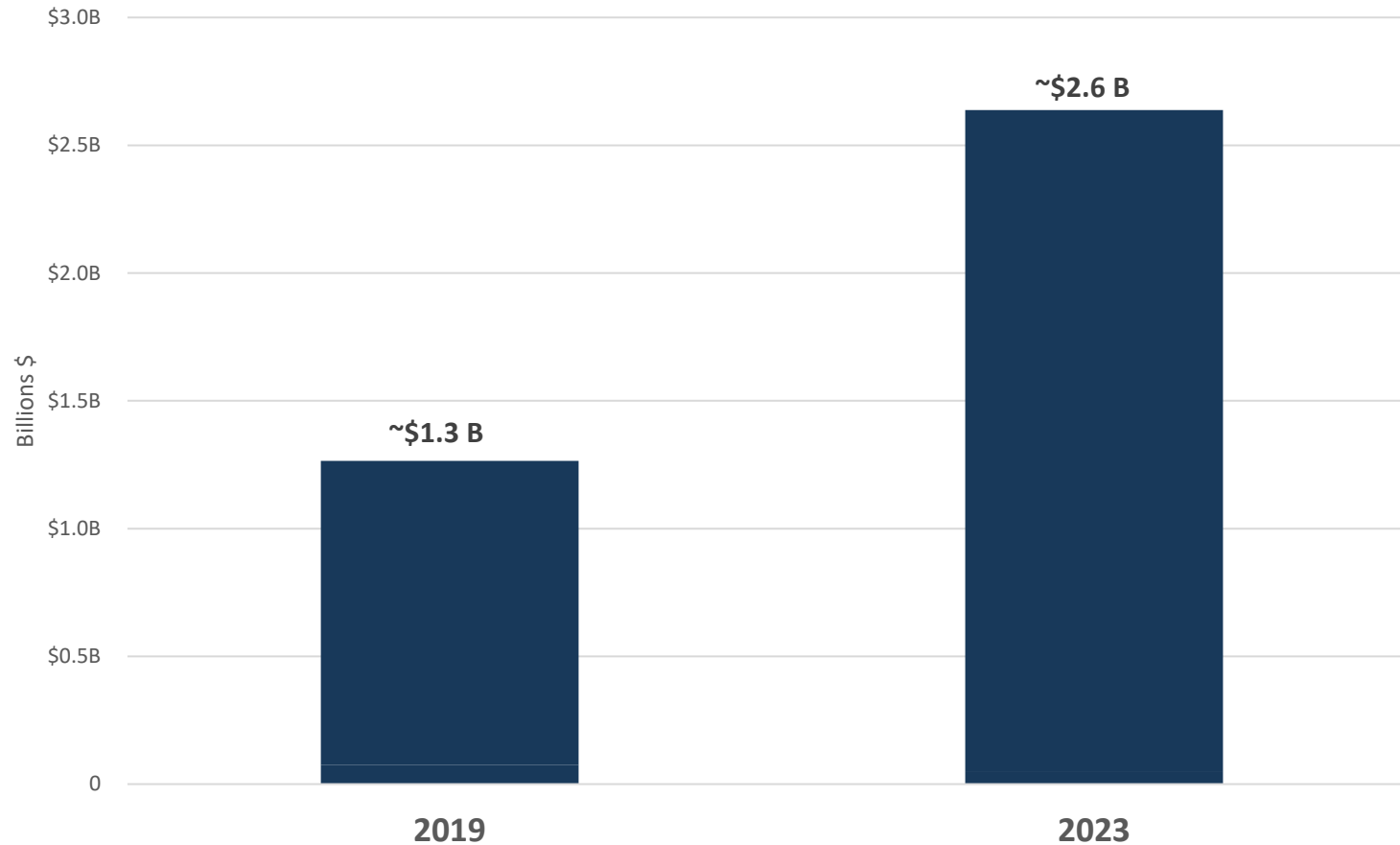


Source: FactSet and Wall Street estimates.

Methodology

- Analytics as a portion of total R&D and COGS spending by Semiconductor Companies across three categories:
 - Fabless-Logic
 - IDM
 - Memory/Storage
- Estimated % of spending attributable to analytics based on each company type – Fabless-Logic, IDM, Memory/Storage
- Based on FactSet consensus spending estimates for 2023 for individual companies and industry experts projecting a \$1T market for semiconductor revenue by 2030+

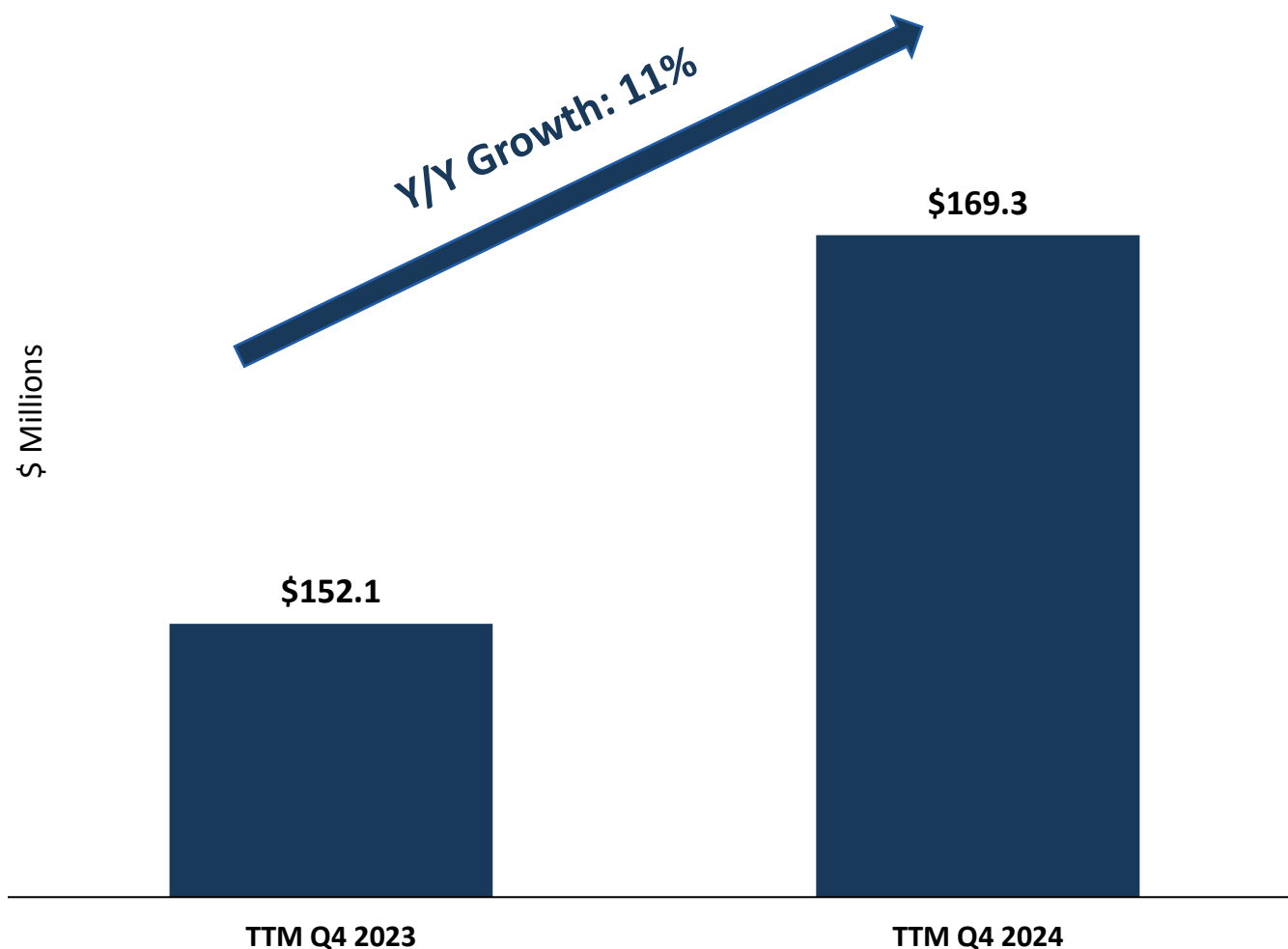
Market Opportunity – PDF SAM



Source: PDF Solutions estimates

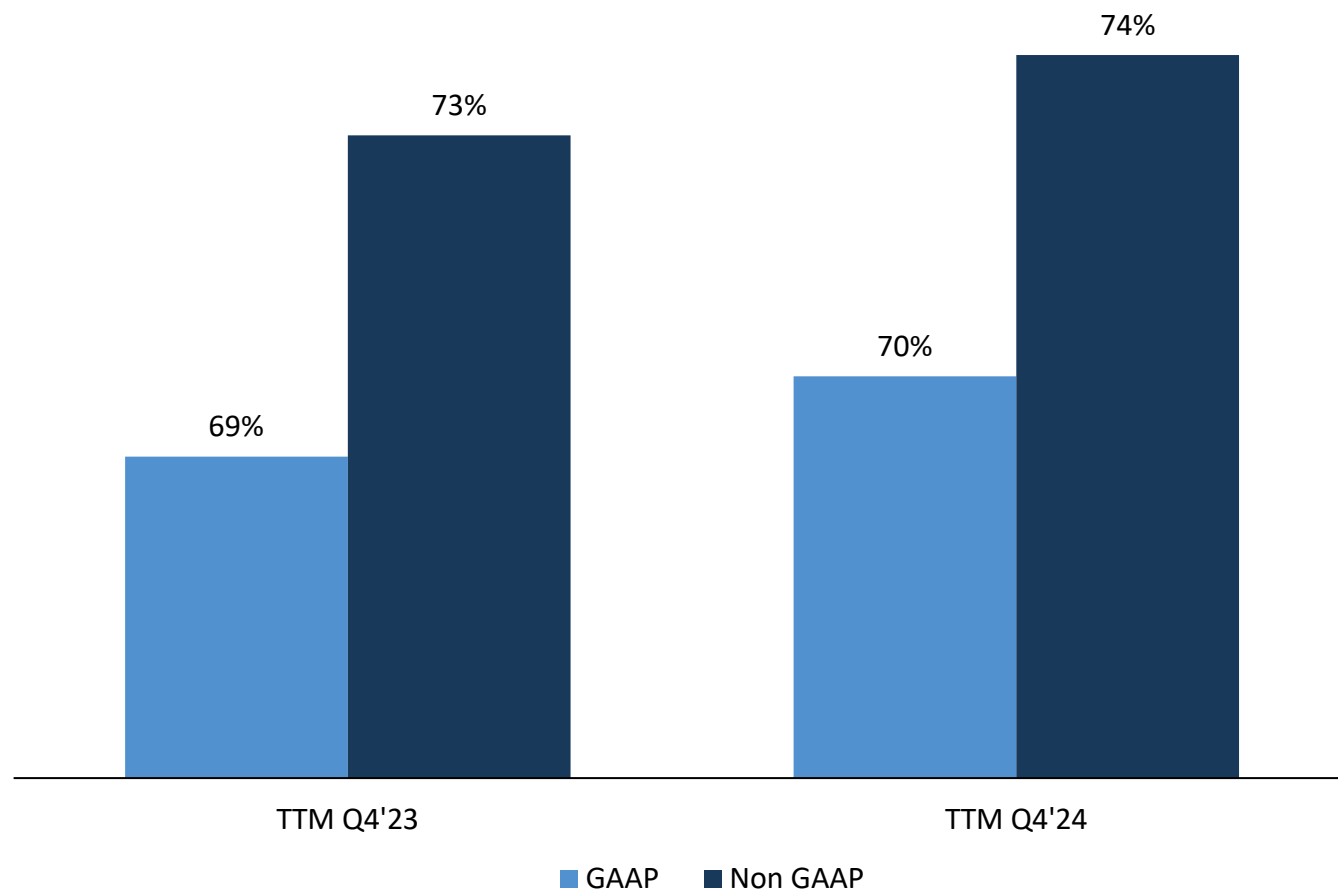
- SAM of more than \$2B (based on 2023 data)
- Growth drivers:
 - Adoption across supply chain
 - ML & advanced solutions
 - DFI for quality & reliability
 - Transition to cloud

Analytics Revenue



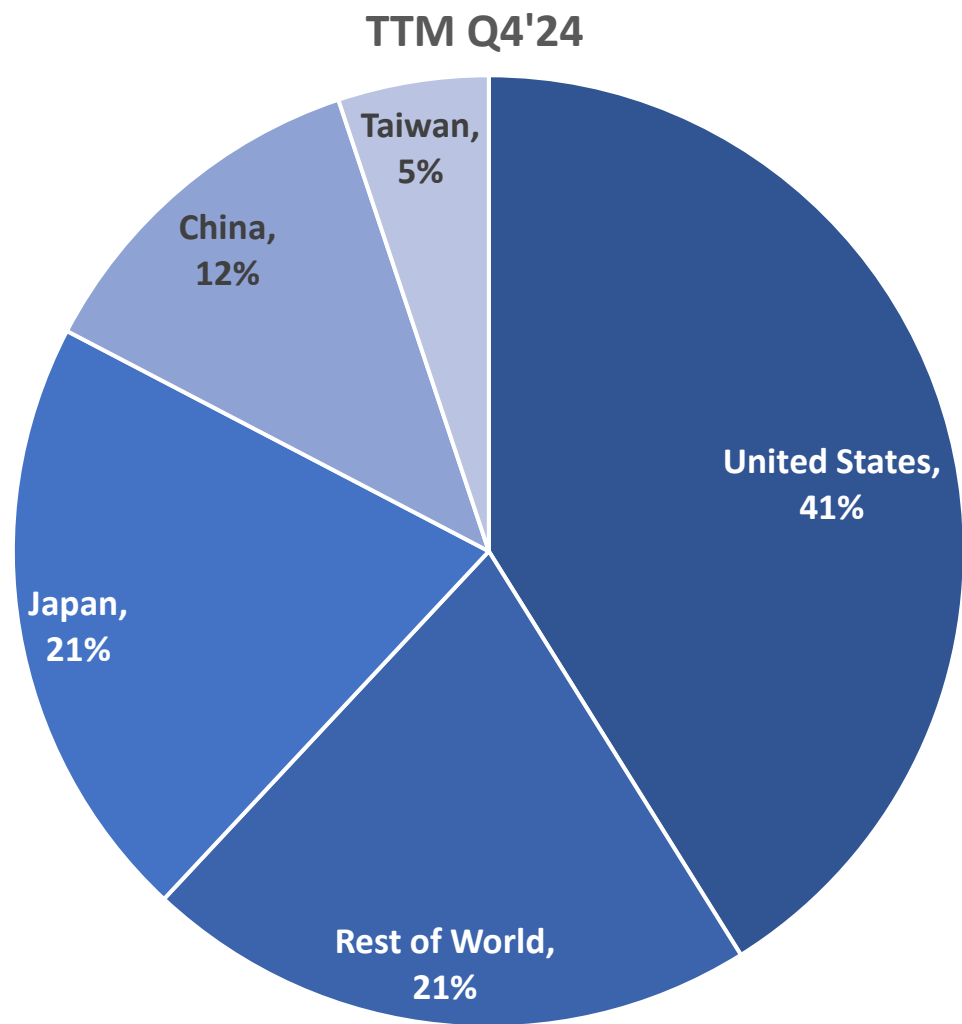
- Y/Y Analytics Growth of 11% from TTM Q4'23 to TTM Q4'24
- Average Analytics revenue per customer, excluding Cimatrix, \$974K in TTM Q4'24, a 7% increase from \$908K in TTM Q4'23

Gross Margin



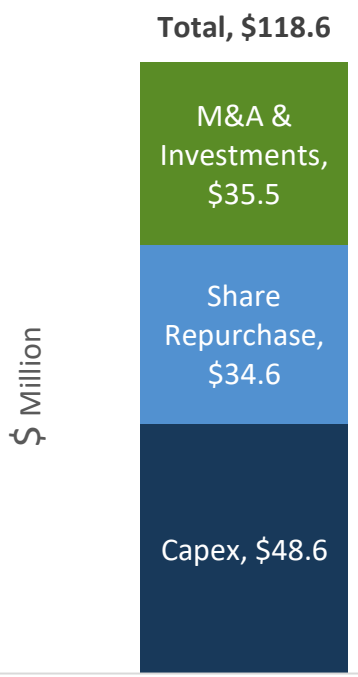
- Analytics customers transitioning to subscription and cloud over time
- First monetization of technology was IYR engagements with associated royalties
- Second wave of monetization consists of growing the Analytics business

Global Geographic Revenue Distribution



- Globally diverse geographic distribution
- No country outside the United States accounts for more than ~21%
- United States largest market at ~41% of revenues

Disciplined Capital Allocation



(\$ Millions)	End of 2019	End of 2020	End of 2021	End of 2022	End of 2023	End of 2024
Cash and ST invt	\$97.6	\$145.3	\$140.2	\$139.2	\$135.5	\$114.9
Debt	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Share Repurchase	\$9.6	\$0.0	\$4.5	\$22.5	\$0.7	\$6.9

- Capex investments include DFI/eProbe, CVi, IP, DEX network, and infrastructure
- Cash balance has increased while PDF:
 - Invested in Capex
 - Returned capital to stockholders through stock buyback
 - Made acquisitions
 - Received strategic investment

Long-Term Target Financial Model

Total Revenue Growth	>20%
Non-GAAP Gross Margin	>75%
Non-GAAP Operating Margin	20%

Summary – PDF Solutions



Thank You

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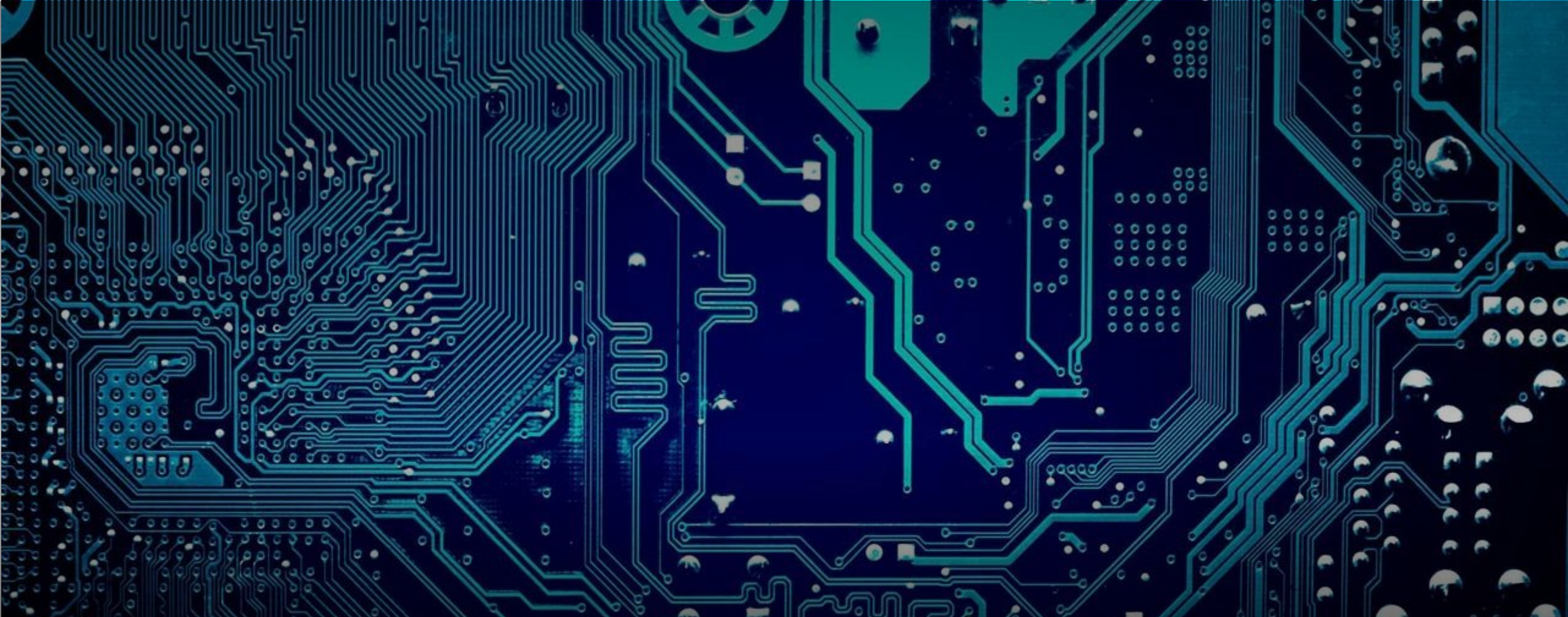
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Financials - Appendix

Non-GAAP Presentation

In addition to providing results that are determined in accordance with Generally Accepted Accounting Principles in the United States of America (GAAP), the Company also provides certain non-GAAP financial measures. NonGAAP gross profit and margin exclude stock-based compensation expense and the amortization of acquired technology under costs of revenues. Non-GAAP net income excludes stock-based compensation expense, amortization of acquired technology under costs of revenues, amortization of other acquired intangible assets and the effects of certain non-recurring items, such as expenses related to an arbitration proceeding for a disputed contract with a customer, acquisition-related costs, proceeds from the sale of previously written-off property and equipment, and their related income tax effects, as applicable, as well as adjustments for the valuation allowance for deferred tax assets and reconciling items. These non-GAAP financial measures are used by management internally to measure the Company's profitability and performance. PDF Solutions' management believes that these non-GAAP measures provide useful supplemental information to investors regarding the Company's ongoing operations in light of the fact that none of these categories of expense has a current effect on the future uses of cash (with the exception of expenses related to an arbitration proceeding for a disputed contract with a customer and acquisition-related costs) nor do they impact the generation of current or future revenues. These non-GAAP results should not be considered an alternative to, or a substitute for, GAAP financial information, and may differ from similarly titled non-GAAP measures used by other companies. In particular, these non-GAAP financial measures are not a substitute for GAAP measures of income or loss as a measure of performance, or to cash flows from operating, investing and financing activities as a measure of liquidity. Since management uses these non-GAAP financial measures internally to measure profitability and performance; PDF Solutions has included these non-GAAP measures to give investors an opportunity to see the Company's financial results as viewed by management. A reconciliation of the comparable GAAP financial measures to the non-GAAP financial measures is included herein.

GAAP to Non-GAAP Income Reconciliation

in thousands (except share amounts, percent of revenue, and EPS)

	2020	2021	2022	2023	2024
GAAP net income (loss)	\$ (40,363)	\$ (21,488)	\$ (3,429)	\$ 3,105	\$ 4,057
Adjustments to reconcile GAAP net income (loss) to non-GAAP net income (loss):					
Stock-based compensation expense	12,463	12,931	19,648	21,484	25,047
Amortization of acquired technology under costs of revenues	705	2,079	2,213	2,266	2,335
Amortization of other acquired intangible assets	741	1,255	1,270	1,285	896
Write-down in value of property and equipment	490	3,183	-	-	-
Acquisition costs & adjustment to contingent consideration related to acquisition	752	-	-	209	940
Legal arbitration/litigation *	1,098	1,951	1,895	2,600	69
Proceeds from sale of previously written-off property and equipment	-	-	-	(105)	608
Tax Impact of Adjustments	23,309	3,091	1,326	(2,374)	(1,335)
Non-GAAP net income (loss)	\$ (805)	\$ 3,002	\$ 22,924	\$ 28,470	\$ 32,617
GAAP net income (loss) per diluted share	(1.17)	(0.58)	(0.09)	0.08	0.10
Non-GAAP net income (loss) per diluted share	(0.02)	0.08	0.60	0.73	0.84
Shares used in diluted shares calculation (in millions)	34.4	37.9	38.1	38.9	39.0

* Represents the expenses related to an arbitration proceeding over a disputed contract with a customer, which expenses are expected to continue until the arbitration is resolved.

GAAP to Non-GAAP Gross Margin Reconciliation

in thousands

GAAP Gross Margin

GAAP Gross Margin %

Adjustments to reconcile GAAP gross margin (loss) to non-GAAP gross margin:

Stock-based compensation expense

Amortization of acquired technology

Non-GAAP gross margin

Non-GAAP gross margin %

	2020	2021	2022	2023	2024
GAAP Gross Margin	\$ 51,281	\$ 66,867	\$ 100,642	\$ 114,086	\$ 125,321
<i>GAAP Gross Margin %</i>	<i>58%</i>	<i>60%</i>	<i>68%</i>	<i>69%</i>	<i>70%</i>
Adjustments to reconcile GAAP gross margin (loss) to non-GAAP gross margin:					
Stock-based compensation expense	3,454	2,563	2,974	4,169	5,087
Amortization of acquired technology	705	2,079	2,213	2,266	2,335
Non-GAAP gross margin	\$ 55,440	\$ 71,509	\$ 105,828	\$ 120,521	\$ 132,743
<i>Non-GAAP gross margin %</i>	<i>63%</i>	<i>64%</i>	<i>71%</i>	<i>73%</i>	<i>74%</i>

Balance Sheet

(\$ '000)	December 31				
	2020	2021	2022	2023	2024
ASSETS					
Current assets:					
Cash and short-term investments	145,296	140,226	139,181	135,522	114,885
Accounts receivable, net	34,140	40,087	42,164	44,904	73,649
Prepays and other current assets	13,944	8,194	12,063	17,422	17,445
Total current assets	193,380	188,507	193,408	197,848	205,979
Property, plant and equipment, net	39,242	35,295	40,174	37,338	48,465
Operating lease right-of-use assets	6,672	5,408	6,002	4,926	4,029
Other assets	48,286	44,558	39,087	50,023	56,816
Total Assets	287,580	273,768	278,671	290,136	315,289
LIABILITIES AND STOCKHOLDERS' EQUITY					
Current liabilities:					
Accounts payable	4,399	5,554	6,388	2,561	8,255
Accrued liabilities	14,648	12,823	22,529	19,433	25,607
Operating lease liabilities - current portion	1,926	1,758	1,412	1,529	1,675
Deferred revenue and billing in excess of revenue	21,232	23,691	27,871	27,320	25,005
Total current liabilities	42,205	43,826	58,200	50,843	60,542
Non-current operating lease liabilities	6,516	5,258	5,932	4,657	3,504
Deferred revenue - noncurrent portion		2,443	1,905	1,802	1,512
Tax and other long-term liabilities	4,353	2,656	2,622	3,888	3,694
Total liabilities	53,074	54,183	68,659	61,190	69,252
 Total stockholders' equity	 234,506	 219,585	 210,012	 228,946	 246,037
Total liabilities and stockholders' equity	287,580	273,768	278,671	290,136	315,289

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