



Q3 2022
Management Report
November 10, 2022

Contents

■ Q3 2022 Results

- Overview
- Key Financial & Operating Metrics
- Revenue by Geographic Area

■ Q3 2022 Non-GAAP Results

- Reconciliation of GAAP Net Income (Loss) to Non-GAAP Net Income
- Reconciliation of GAAP to Non-GAAP Spending by Function

■ Related Information

The following commentary is provided by management and should be referenced in conjunction with PDF Solutions' third quarter of 2022 financial results press release available on its Investor Relations website at <http://www.pdf.com/financial-news>. These remarks represent management's current views of the Company's financial and operational performance and are provided to give investors and analysts further insight into its performance in advance of the earnings call webcast. The Company disclaims any duty to update this information for future events.

PDF Solutions Reports Third Quarter 2022 Results

Q3 2022 Key Metrics

Revenue: \$39.9M

GAAP Gross Margin: 69%

Non-GAAP Gross Margin: 72%

GAAP Diluted EPS: \$0.04

Non-GAAP Diluted EPS: \$0.20

Operating Cash Flow: \$1.4M

Cash Used for Capital Expenditures: \$2.3M

FINANCIAL RESULTS SUMMARY

- Q3 2022 Total revenues of \$39.9M, up 15% over Q2 2022, and up 35% over Q3 2021.
- Q3 2022 Analytics revenue of \$32.9M, up 6% over Q2 2022, and up 21% over Q3 2021.
- Q3 2022 Integrated yield ramp revenue of \$7.0M, up 97% over Q2 2022 and up 196% over Q3 2021.

Key Financial & Operating Metrics – Quarterly

(in thousands, except share data, which is in millions, and percentages)

	Q3'22	Q2'22	Q1'22	Q4'21	Q3'21
Revenues	\$ 39,860	\$ 34,668	\$ 33,498	\$ 29,886	\$ 29,555
GAAP Gross Margin	69%	65%	66%	61%	63%
Non-GAAP Gross Margin	72%	69%	69%	65%	66%
Outstanding Debt	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Cash Flow	\$ 1,403	\$ 3,624	\$ 2,996	\$ 416	\$ 4,022
Cash Used for Capital Expenditures (CAPEX)	\$ 2,118	\$ 2,822	\$ 1,765	\$ 1,340	\$ 1,592
\$ Shares Repurchased	\$ -	\$ 16,693	\$ 5,778	\$ -	\$ -
Weighted Average Common Shares Outstanding	37.2	37.0	37.6	37.3	37.2
Effective Tax Rate Benefit (Expense)	(37)%	(821)%	(40)%	(30)%	(27)%

Key Financial & Operating Metrics – Year to Date

(in thousands, except share data, which is in millions, and percentages)

	Nine Months Ended September 30,		
	2022	2021	2020
Revenues	\$ 108,026	\$ 81,174	\$ 65,679
GAAP Gross Margin	67%	60%	59%
Non-GAAP Gross Margin	70%	64%	64%
Outstanding Debt	\$ -	\$ -	\$ -
Operating Cash Flow	\$ 8,023	\$ 3,827	\$ 10,875
Cash Used for CAPEX	\$ 6,705	\$ 2,713	\$ 5,365
\$ Shares Repurchased	\$ 22,471	\$ 4,523	\$ -
Weighted Average Common Shares Outstanding	37.3	37.1	33.7
Effective Tax Rate Benefit (Expense)	(548)%	(12)%	37%

Revenue by Geographic Area – Quarterly

(Dollars in thousands)

	Q3'22	Q2'22	Q1'22	Q4'21	Q3'21
United States	\$ 18,292	\$ 17,086	\$ 17,491	\$ 15,739	\$ 13,983
% of Total	46%	49%	52%	53%	47%
China	\$ 9,555	\$ 4,539	\$ 4,120	\$ 4,202	\$ 4,038
% of Total	24%	13%	12%	14%	14%
Japan	\$ 2,818	\$ 2,794	\$ 2,607	\$ 2,554	\$ 2,515
% of Total	7%	8%	8%	8%	9%
Rest of the world	\$ 9,195	\$ 10,249	\$ 9,280	\$ 7,391	\$ 9,019
% of Total	23%	30%	28%	25%	30%
Total revenues	\$ 39,860	\$ 34,668	\$ 33,498	\$ 29,886	\$ 29,555

Revenue by Geographic Area – Year to Date

(Dollars in thousands)

	Nine Months Ended September 30,		
	2022	2021	2020
United States	\$ 52,869	\$ 34,634	\$ 26,242
% of Total	49%	43%	40%
China	\$ 18,214	\$ 10,065	\$ 10,200
% of Total	17%	12%	16%
Japan	\$ 8,219	\$ 8,543	\$ 3,414
% of Total	8%	10%	5%
Rest of the world	\$ 28,724	\$ 27,932	\$ 25,822
% of Total	27%	35%	39%
Total revenues	\$ 108,026	\$ 81,174	\$ 65,678

GAAP / 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. Non-GAAP gross profit excludes stock-based compensation expense and the amortization of acquired technology. Non-GAAP net income excludes the effects of certain non-recurring items, including expenses related to an arbitration proceeding for a disputed customer contract, write-down in value of property and equipment, stock-based compensation expenses, amortization of acquired technology and other acquired intangible assets, and their related income tax effects, as applicable, tax impact of the CARES Act, as well as adjustments for the valuation allowance for deferred tax assets. 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 measures 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 customer contract) 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 be different 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. Management uses these non-GAAP financial measures internally to measure profitability and performance; these non-GAAP measures are presented here to give investors an opportunity to see the Company's financial results as viewed by management. A detailed reconciliation of the adjustments made to comparable GAAP measures is included herein.

Reconciliation of GAAP Net Income (Loss) to Non-GAAP Net Income

Quarterly

(in thousands, except for shares and per share amounts)

	Q3'22	Q2'22	Q1'22	Q4'21	Q3'21
GAAP net income (loss)	\$ 1,385	(\$ 1,147)	(\$ 4,150)	(\$ 7,000)	(\$ 2,407)
Adjustments to reconcile GAAP net income (loss) to non-GAAP net income:					
Stock-based compensation expense	5,136	3,872	5,553	3,457	3,363
Amortization of acquired technology	553	553	553	554	454
Amortization of other acquired intangible assets	318	314	314	313	314
Expenses of arbitration (1)	556	36	451	757	341
Write-down in value of property and equipment (2)	—	—	—	3,183	—
Tax impact of valuation allowance for deferred tax assets and reconciling items (3)	(373)	664	937	1,539	334
Non-GAAP net income	\$ 7,575	\$ 4,292	\$ 3,658	\$ 2,803	\$ 2,399
GAAP net income (loss) per diluted share	\$ 0.04	(\$ 0.03)	(\$ 0.11)	(\$ 0.19)	(\$ 0.06)
Non-GAAP net income per diluted share	\$ 0.20	\$ 0.11	\$ 0.09	\$ 0.07	\$ 0.06
Weighted average common shares used in GAAP net income (loss) per diluted share calculation	38,054	37,028	37,606	37,348	37,221
Weighted average common shares used in Non-GAAP net income per diluted share calculation	38,054	37,615	38,580	38,430	37,916

- (1) Represents expenses related to an arbitration proceeding over a disputed customer contract, which expenses are expected to continue until the arbitration is resolved.
- (2) Pertains to write-down in value of our first-generation of e-beam tools for Design-for-Inspection systems wherein carrying values may not be fully recoverable due to lack of market demand and future needs of our customers for these tools.
- (3) The difference between the GAAP and non-GAAP income tax provisions is primarily due to the valuation allowance on a GAAP basis and non-GAAP adjustments. For example, on a GAAP basis, the Company does not receive a deferred tax benefit for foreign tax credits or R&D credits after valuation allowance. The Company's non-GAAP tax rate and resulting non-GAAP tax expense is not calculated with a full U.S. federal or state valuation allowance due to the Company's cumulative Non-GAAP income and management's conclusion that it is more likely than not to utilize its net deferred tax assets (DTAs). Each reporting period, management evaluates the need for a valuation allowance and may place a valuation allowance against its U.S. net DTA on a non-GAAP basis if it concludes it is more likely than not that it will not be able to utilize some or all of its US DTAs on a non-GAAP basis.

Reconciliation of GAAP Net Loss to Non-GAAP Net Income

Year to Date

(in thousands, except for shares and per share amounts)

	Nine Months Ended September 30,		
	2022	2021	2020
GAAP net loss	(\$ 3,912)	(\$ 14,488)	(\$ 6,914)
Adjustments to reconcile GAAP net loss to non-GAAP net income:			
Stock-based compensation expense	14,561	9,474	9,476
Amortization of acquired technology	1,660	1,525	431
Amortization of other acquired intangible assets	945	942	521
Expenses of arbitration (1)	1,043	1,194	830
Write-down in value of property and equipment	—	—	311
Tax impact of reconciling items	—	—	(1,931)
Tax impact of the CARES Act (2)	—	—	(2,261)
Tax impact of valuation allowance for deferred tax assets and reconciling items (3)	1,228	1,552	—
Non-GAAP net income	\$ 15,525	\$ 199	\$ 463
GAAP net loss per diluted share	(\$ 0.10)	(\$ 0.39)	(\$ 0.21)
Non-GAAP net income per diluted share	\$ 0.41	\$ 0.01	\$ 0.01
Weighted average common shares used in GAAP net income (loss) per diluted share calculation	37,285	37,067	33,696
Weighted average common shares used in Non-GAAP net income per diluted share calculation	38,082	37,723	34,705

- (1) Represents expenses related to an arbitration proceeding over a disputed customer contract, which expenses are expected to continue until the arbitration is resolved.
- (2) The Company recognized a discrete tax benefit recognized from the carryback of net operating losses (NOLs) under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") enacted in March 2020. Due to the full valuation allowance against U.S. DTA recognized in the fourth quarter of 2020, there is no tax benefit from the released tax attributes. The Company does not have any NOLs on a non-GAAP basis and, therefore, it did not recognize this discrete tax benefit in calculating its non-GAAP tax expense and net income (loss).
- (3) The difference between the GAAP and non-GAAP income tax provisions is primarily due to the valuation allowance on a GAAP basis and non-GAAP adjustments. For example, on a GAAP basis, the Company does not receive a deferred tax benefit for foreign tax credits or R&D credits after valuation allowance. The Company's non-GAAP tax rate and resulting non-GAAP tax expense is not calculated with a full U.S. federal or state valuation allowance due to the Company's cumulative Non-GAAP income and management's conclusion that it is more likely than not to utilize its net deferred tax assets (DTAs). Each reporting period, management evaluates the need for a valuation allowance and may place a valuation allowance against its U.S. net DTA on a non-GAAP basis if it concludes it is more likely than not that it will not be able to utilize some or all of its US DTAs on a non-GAAP basis.

Reconciliation of GAAP to Non-GAAP Spending by Function

Quarterly

	<i>(in thousands)</i>				
	Q3'22	Q2'22	Q1'22	Q4'21	Q3'21
Cost of Revenue - GAAP	\$ 12,545	\$ 12,042	\$ 11,529	\$ 11,675	\$ 11,070
Adjustments to reconcile GAAP Cost of Revenue to Non-GAAP Cost of Revenue:					
Stock-based compensation expense	(854)	(655)	(728)	(703)	(670)
Amortization of acquired technology	(553)	(553)	(553)	(554)	(454)
Cost of Revenue - Non-GAAP	\$ 11,138	\$ 10,834	\$ 10,248	\$ 10,418	\$ 9,946
Research & Development - GAAP	\$ 14,303	\$ 13,374	\$ 14,089	\$ 11,218	\$ 10,657
Adjustments to reconcile GAAP R&D to Non-GAAP R&D:					
Stock-based compensation expense	(2,180)	(1,810)	(3,168)	(1,502)	(1,299)
Research & Development - Non-GAAP	\$ 12,123	\$ 11,564	\$ 10,921	\$ 9,716	\$ 9,358
Selling, General, & Administrative - GAAP	\$ 12,005	\$ 9,770	\$ 10,839	\$ 9,167	\$ 9,609
Adjustment to reconcile GAAP SG&A to Non-GAAP SG&A:					
Stock-based compensation expense	(2,102)	(1,407)	(1,657)	(1,252)	(1,394)
Expenses of arbitration (1)	(556)	(36)	(451)	(757)	(341)
Selling, General, & Administrative - Non-GAAP	\$ 9,347	\$ 8,327	\$ 8,731	\$ 7,158	\$ 7,874

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

Reconciliation of GAAP to Non-GAAP Spending by Function

Year to Date

(in thousands)

	Nine Months Ended September 30,		
	2022	2021	2020
Cost of Revenue - GAAP	\$ 36,116	\$ 32,518	\$ 26,926
Adjustments to reconcile GAAP Cost of Revenue to Non-GAAP Cost of Revenue:			
Stock-based compensation expense	(2,237)	(1,860)	(2,582)
Amortization of acquired technology	(1,660)	(1,525)	(431)
Cost of Revenue - Non-GAAP	\$ 32,219	\$ 29,133	\$ 23,913
Research & Development - GAAP	\$ 41,766	\$ 32,562	\$ 24,672
Adjustments to reconcile GAAP R&D to Non-GAAP R&D:			
Stock-based compensation expense	(7,158)	(4,013)	(3,613)
Write-down in value of property and equipment	—	—	(149)
Research & Development - Non-GAAP	\$ 34,608	\$ 28,549	\$ 20,910
Selling, General, & Administrative - GAAP	\$ 32,614	\$ 28,482	\$ 24,052
Adjustment to reconcile GAAP SG&A to Non-GAAP SG&A:			
Stock-based compensation expense	(5,166)	(3,601)	(3,281)
Expenses of arbitration (1)	(1,043)	(1,194)	(830)
Write-down in value of property and equipment	—	—	(162)
Selling, General, & Administrative - Non-GAAP	\$ 26,405	\$ 23,687	\$ 19,779

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