



**Q4 2022 and Full Year 2022
Management Report*
February 16, 2023**

* Corrected for Geographical Detail on page 7 and 8.

Contents

■ Q4 2022 and Full Year 2022 Results

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

■ Q4 2022 and Full Year 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' Fourth Quarter and Full Year 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 Fourth Quarter 2022 Results

Q4 2022 Key Metrics

Revenue: \$40.5M

GAAP Gross Margin: 71%

Non-GAAP Gross Margin: 74%

GAAP Diluted EPS: \$0.01

Non-GAAP Diluted EPS: \$0.19

Operating Cash Flow: \$24.3M

Cash Used for Capital Expenditures: \$1.7M

FINANCIAL RESULTS SUMMARY

- Q4 2022 Total revenues of \$40.5M, up 2% over Q3 2022, and up 36% over Q4 2021.
- Q4 2022 Analytics revenue of \$36.1M, up 10% over Q3 2022, and up 32% over Q4 2021.
- Q4 2022 Integrated yield ramp revenue of \$4.5M, down 36% over Q3 2022 and up 69% over Q4 2021.

PDF Solutions Reports Full Year 2022 Results

Full Year 2022 Key Metrics

Revenue: \$148.5M

GAAP Gross Margin: 68%

Non-GAAP Gross Margin: 71%

GAAP Diluted loss per share: \$0.09

Non-GAAP Diluted EPS: \$0.60

Operating Cash Flow: \$32.3M

Cash Used for Capital Expenditures: \$8.4M

FINANCIAL RESULTS SUMMARY

- 2022 Total revenues of \$148.5M, up 34% over 2021.
- 2022 Analytics revenue of \$130.5M, up 40% over 2021.
- 2022 Integrated yield ramp revenue of \$18.1M, up 2% over 2021.

Key Financial & Operating Metrics – Quarterly

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

	Q4'22	Q3'22	Q2'22	Q1'22	Q4'21
Revenues	\$ 40,523	\$ 39,860	\$ 34,668	\$ 33,498	\$ 29,886
GAAP Gross Margin	71%	69%	65%	66%	61%
Non-GAAP Gross Margin	74%	72%	69%	69%	65%
Outstanding Debt	\$ -	\$ -	\$ -	\$ -	\$ -
Operating Cash Flow	\$ 24,275	\$ 1,403	\$ 3,624	\$ 2,996	\$ 416
Cash Used for Capital Expenditures (CAPEX)	\$ 1,725	\$ 2,118	\$ 2,822	\$ 1,765	\$ 1,340
\$ Shares Repurchased	\$ -	\$ -	\$ 16,693	\$ 5,778	\$ -
Weighted Average Common Shares Outstanding	37.4	37.2	37.0	37.6	37.3
Effective Tax Rate Expense	55%	37%	821%	40%	30%

Key Financial & Operating Metrics – Yearly

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

	Year Ended December 31,		
	2022	2021	2020
Revenues	\$ 148,549	\$ 111,060	\$ 88,046
GAAP Gross Margin	68%	60%	58%
Non-GAAP Gross Margin	71%	64%	63%
Outstanding Debt	\$ -	\$ -	\$ -
Operating Cash Flow	\$ 32,298	\$ 4,243	\$ 21,783
Cash Used for CAPEX	\$ 8,430	\$ 4,053	\$ 6,968
\$ Shares Repurchased	\$ 22,471	\$ 4,523	\$ -
Weighted Average Common Shares Outstanding	37.3	37.1	34.5
Effective Tax Rate Expense	830%	17%	123%

Revenue by Geographic Area – Quarterly

(Dollars in thousands)

	Q4'22*	Q3'22	Q2'22	Q1'22	Q4'21
United States	\$ 20,756	\$ 18,292	\$ 17,086	\$ 17,491	\$ 15,739
% of Total	51%	46%	49%	52%	53%
China	\$ 6,280	\$ 9,555	\$ 4,539	\$ 4,120	\$ 4,202
% of Total	16%	24%	13%	12%	14%
Japan	\$5,697	\$ 2,818	\$ 2,794	\$ 2,607	\$ 2,554
% of Total	14%	7%	8%	8%	8%
Rest of the world	\$ 7,790	\$ 9,195	\$ 10,249	\$ 9,280	\$ 7,391
% of Total	19%	23%	30%	28%	25%
Total revenues	\$ 40,523	\$ 39,860	\$ 34,668	\$ 33,498	\$ 29,886

* Above table was corrected for:

- United States from \$19,639 to \$20,756 and from 48% to 51%
- Japan from \$6,814 to \$5,697 and from 17% to 14%

Revenue by Geographic Area – Yearly

(Dollars in thousands)

	Year Ended December 31,		
	2022*	2021	2020
United States	\$ 73,625	\$ 50,374	\$ 36,723
% of Total	50%	45%	42%
China	\$ 24,494	\$ 14,267	\$ 13,776
% of Total	16%	13%	16%
Japan	\$ 13,916	\$ 11,097	\$ 4,762
% of Total	9%	10%	5%
Rest of the world	\$ 36,514	\$ 35,322	\$ 32,785
% of Total	25%	32%	37%
Total revenues	\$ 148,549	\$ 111,060	\$ 88,046

* Above table was corrected for:

- United States from \$72,508 to \$73,625 and 49% to 50%
- Japan from \$15,033 to \$13,916 and from 10% to 9%

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 (loss) excludes the effects of certain non-recurring items, expenses related to an arbitration proceeding for a disputed customer contract, acquisition related costs, write-downs in value of property and equipment, stock-based compensation expense, 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, 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 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)

	Q4'22	Q3'22	Q2'22	Q1'22	Q4'21
GAAP net income (loss)	\$ 483	\$ 1,385	(\$ 1,147)	(\$ 4,150)	(\$ 7,000)
Adjustments to reconcile GAAP net income (loss) to non-GAAP net income:					
Stock-based compensation expense	5,088	5,136	3,872	5,553	3,457
Amortization of acquired technology	553	553	553	553	554
Amortization of other acquired intangible assets	325	318	314	314	313
Expenses of arbitration (1)	852	556	36	451	757
Write-down in value of property and equipment (2)	—	—	—	—	3,183
Tax impact of valuation allowance for deferred tax assets and reconciling items (3)	98	(373)	664	937	1,539
Non-GAAP net income	\$ 7,399	\$ 7,575	\$ 4,292	\$ 3,658	\$ 2,803
GAAP net income (loss) per diluted share	\$ 0.01	\$ 0.04	(\$ 0.03)	(\$ 0.11)	(\$ 0.19)
Non-GAAP net income per diluted share	\$ 0.19	\$ 0.20	\$ 0.11	\$ 0.09	\$ 0.07
Weighted average common shares used in GAAP net income (loss) per diluted share calculation	38,276	38,054	37,028	37,606	37,348
Weighted average common shares used in Non-GAAP net income per diluted share calculation	38,276	38,054	37,615	38,580	38,430

- (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 (Loss)

Yearly

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

	Year Ended December 31,		
	2022	2021	2020
GAAP net loss	(\$ 3,429)	(\$ 21,488)	(\$ 40,363)
Adjustments to reconcile GAAP net loss to non-GAAP net income:			
Stock-based compensation expense	19,649	12,931	12,463
Amortization of acquired technology	2,213	2,079	705
Amortization of other acquired intangible assets	1,270	1,255	741
Expenses of arbitration (1)	1,895	1,951	1,098
Write-down in value of property and equipment (2)	—	3,183	490
Acquisition-related costs (3)	—	—	752
Tax impact of the CARES Act (4)	—	—	(1,162)
Tax impact of valuation allowance for deferred tax assets and reconciling items (5)	1,326	3,091	24,471
Non-GAAP net income	\$ 22,924	\$ 3,002	(\$ 805)
GAAP net loss per diluted share	(\$ 0.09)	(\$ 0.58)	(\$ 1.17)
Non-GAAP net income per diluted share	\$ 0.60	\$ 0.08	(\$ 0.02)
Weighted average common shares used in GAAP net income (loss) per diluted share calculation	37,309	37,138	34,458
Weighted average common shares used in Non-GAAP net income per diluted share calculation	38,130	37,901	34,458

- (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) Represents transaction expenses related to the acquisition of Cimatrix Incorporated in the fourth quarter of 2020.
- (4) 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).
- (5) 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 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>				
	Q4'22	Q3'22	Q2'22	Q1'22	Q4'21
Cost of Revenue - GAAP	\$ 11,791	\$ 12,545	\$ 12,042	\$ 11,529	\$ 11,675
Adjustments to reconcile GAAP Cost of Revenue to Non-GAAP Cost of Revenue:					
Stock-based compensation expense	(737)	(854)	(655)	(728)	(703)
Amortization of acquired technology	(553)	(553)	(553)	(553)	(554)
Cost of Revenue - Non-GAAP	\$ 10,501	\$ 11,138	\$ 10,834	\$ 10,248	\$ 10,418
Research & Development - GAAP	\$ 14,360	\$ 14,303	\$ 13,374	\$ 14,089	\$ 11,218
Adjustments to reconcile GAAP R&D to Non-GAAP R&D:					
Stock-based compensation expense	(2,233)	(2,180)	(1,810)	(3,168)	(1,502)
Research & Development - Non-GAAP	\$ 12,127	\$ 12,123	\$ 11,564	\$ 10,921	\$ 9,716
Selling, General, & Administrative - GAAP	\$ 12,724	\$ 12,005	\$ 9,770	\$ 10,839	\$ 9,167
Adjustment to reconcile GAAP SG&A to Non-GAAP SG&A:					
Stock-based compensation expense	(2,118)	(2,102)	(1,407)	(1,657)	(1,252)
Expenses of arbitration (1)	(852)	(556)	(36)	(451)	(757)
Selling, General, & Administrative - Non-GAAP	\$ 9,754	\$ 9,347	\$ 8,327	\$ 8,731	\$ 7,158

(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

Yearly

(in thousands)

	<u>Year Ended December 31,</u>		
	<u>2022</u>	<u>2021</u>	<u>2020</u>
Cost of Revenue - GAAP	\$ 47,907	\$ 44,193	\$ 36,765
Adjustments to reconcile GAAP Cost of Revenue to Non-GAAP Cost of Revenue:			
Stock-based compensation expense	(2,974)	(2,563)	(3,454)
Amortization of acquired technology	(2,213)	(2,079)	(705)
Cost of Revenue - Non-GAAP	\$ 42,720	\$ 39,551	\$ 32,606
Research & Development - GAAP	\$ 56,126	\$ 43,780	\$ 34,654
Adjustments to reconcile GAAP R&D to Non-GAAP R&D:			
Stock-based compensation expense	(9,391)	(5,515)	(4,800)
Write-down in value of property and equipment	—	—	(328)
Research & Development - Non-GAAP	\$ 46,735	\$ 38,265	\$ 29,526
Selling, General, & Administrative - GAAP	\$ 45,338	\$ 37,649	\$ 32,677
Adjustment to reconcile GAAP SG&A to Non-GAAP SG&A:			
Stock-based compensation expense	(7,284)	(4,853)	(4,209)
Expenses of arbitration (1)	(1,895)	(1,951)	(1,098)
Write-down in value of property and equipment	—	—	(162)
Acquisition-related costs (2)	—	—	(752)
Selling, General, & Administrative - Non-GAAP	\$ 36,159	\$ 30,845	\$ 26,456

- (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.
- (2) Represents transaction expenses related to the acquisition of Cimatrix Incorporated in the fourth quarter of 2020.