



Q2 2022

Management Report

August 11, 2022

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The following commentary is provided by management and should be referenced in conjunction with PDF Solutions' second 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 Second Quarter 2022 Results

Q2 2022 Key Metrics

Revenue: \$34.7M

GAAP Gross Margin: 65%

Non-GAAP Gross Margin: 69%

GAAP Diluted EPS: (\$0.03)

Non-GAAP Diluted EPS: \$0.11

Operating Cash Flow: \$3.6M

Cash Used for Capital Expenditures: \$2.8M

FINANCIAL RESULTS SUMMARY

- Q2 2022 Total revenues of \$34.7M, up 3% over Q1 2022, and up 26% over Q2 2021.
- Q2 2022 Analytics revenue of \$31.1M, up 2% over Q1 2022, and up 59% over Q2 2021.
- Q2 2022 Integrated yield ramp revenue of \$3.6M, up 16% over Q1 2022 and down 55% over Q2 2021.

Key Financial & Operating Metrics – Quarterly

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

	Q2'22	Q1'22	Q4'21	Q3'21	Q2'21
Revenues	\$ 34,668	\$ 33,498	\$ 29,886	\$ 29,555	\$ 27,419
GAAP Gross Margin	65%	66%	61%	63%	61%
Non-GAAP Gross Margin	69%	69%	65%	66%	65%
Outstanding Debt	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Operating Cash Flow	\$ 3,624	\$ 2,996	\$ 416	\$ 4,022	\$ 8,130
Cash Used for Capital Expenditures (CAPEX)	\$ 2,822	\$ 1,765	\$ 1,340	\$ 1,592	\$ 535
\$ Shares Repurchased	\$ 16,693	\$ 5,778	\$ 0	\$ 0	\$ 0
Weighted Average Common Shares Outstanding	37.0	37.6	37.3	37.2	37.0
Effective Tax Rate Expense	(821)%	(40)%	(30)%	(27)%	(2)%

Key Financial & Operating Metrics – Year to Date

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

	Six Months Ended June 30,		
	2022	2021	2020
Revenues	\$ 68,166	\$ 51,619	\$ 42,567
GAAP Gross Margin	65%	58%	59%
Non-GAAP Gross Margin	69%	63%	64%
Outstanding Debt	\$ 0	\$ 0	\$ 0
Operating Cash Flow	\$ 6,620	(\$ 195)	\$ 10,630
Cash Used for CAPEX	\$ 4,587	\$ 1,121	\$ 3,940
\$ Shares Repurchased	\$ 22,471	\$ 4,523	\$ -
Weighted Average Common Shares Outstanding	37.3	37.0	32.8
Effective Tax Rate Benefit (Expense)	(89)%	(9)%	43%

Revenue by Geographic Area – Quarterly

(Dollars in thousands)

	Q2'22	Q1'22	Q4'21	Q3'21	Q2'21
United States	\$ 17,086	\$ 17,491	\$ 15,739	\$ 13,983	\$ 12,095
% of Total	49%	52%	53%	47%	44%
China	\$ 4,539	\$ 4,120	\$ 4,202	\$ 4,038	\$ 4,289
% of Total	13%	12%	14%	14%	16%
Japan	\$ 2,794	\$ 2,607	\$ 2,554	\$ 2,515	\$ 2,450
% of Total	8%	8%	8%	9%	9%
Rest of the world	\$ 10,249	\$ 9,280	\$ 7,391	\$ 9,019	\$ 8,585
% of Total	30%	28%	25%	30%	31%
Total revenues	\$ 34,668	\$ 33,498	\$ 29,886	\$ 29,555	\$ 27,419

Revenue by Geographic Area – Year to Date

(Dollars in thousands)

	Six Months Ended June 30,		
	2022	2021	2020
United States	\$ 34,577	\$ 20,651	\$ 18,532
% of Total	51%	40%	44%
China	\$ 8,659	\$ 6,028	\$ 3,454
% of Total	13%	12%	8%
Japan	\$ 5,401	\$ 6,028	\$ 2,301
% of Total	8%	12%	5%
Rest of the world	\$ 19,529	\$ 18,912	\$ 18,280
% of Total	28%	36%	43%
Total revenues	\$ 68,166	\$ 51,619	\$ 42,567

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 margin excludes stock-based compensation expense and the amortization of acquired technology. Non-GAAP net income (loss) 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 to Non-GAAP Net Income (Loss)

Quarterly

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

	Q2'22	Q1'22	Q4'21	Q3'21	Q2'21
GAAP net loss	(\$ 1,147)	(\$ 4,150)	(\$ 7,000)	(\$ 2,407)	(\$ 4,484)
Adjustments to reconcile GAAP net loss to non-GAAP net income (loss):					
Stock-based compensation expense	3,872	5,553	3,457	3,363	2,742
Amortization of acquired technology	553	553	554	454	536
Amortization of other acquired intangible assets	314	314	313	314	314
Expenses of arbitration (1)	36	451	757	341	558
Write-down in value of property and equipment (2)	—	—	3,183	—	—
Tax impact of valuation allowance for deferred tax assets (3)	664	937	1,539	334	52
Non-GAAP net income (loss)	\$ 4,292	\$ 3,658	\$ 2,803	\$ 2,399	(\$ 282)
GAAP net loss per diluted share	(\$ 0.03)	(\$ 0.11)	(\$ 0.19)	(\$ 0.06)	(\$ 0.12)
Non-GAAP net income (loss) per diluted share	\$ 0.11	\$ 0.09	\$ 0.07	\$ 0.06	(\$ 0.01)
Shares used in net income (loss) per diluted share calculation	37,615	38,580	38,430	37,916	37,004

- (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 Company's GAAP tax expense is higher compared to the non-GAAP tax expense, primarily due to the GAAP full U.S. federal and state valuation allowances. 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 Net Income (Loss)

Year to Date

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

	Six Months Ended June 30,		
	2022	2021	2020
GAAP net loss	(\$ 5,297)	(\$ 12,081)	(\$ 4,180)
Adjustments to reconcile GAAP net loss to non-GAAP net income (loss):			
Stock-based compensation expense	9,425	6,111	6,346
Amortization of acquired technology	1,106	1,071	287
Amortization of other acquired intangible assets	628	628	347
Expenses of arbitration (1)	487	853	464
Write-down in value of property and equipment	—	—	311
Tax impact of reconciling items	—	—	(976)
Tax impact of the CARES Act (2)	—	—	(2,261)
Tax impact of valuation allowance for deferred tax assets (3)	1,601	1,218	—
Non-GAAP net income (loss)	\$ 7,950	(\$ 2,200)	\$ 338
GAAP net loss per diluted share	(\$ 0.14)	(\$ 0.33)	(\$ 0.13)
Non-GAAP net income (loss) per diluted share	\$ 0.21	(\$ 0.06)	\$ 0.01
Shares used in net income (loss) per diluted share calculation	38,096	36,989	33,718

- (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 Company's GAAP tax expense is higher compared to the non-GAAP tax expense, primarily due to the GAAP full U.S. federal and state valuation allowances. 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>				
	Q2'22	Q1'22	Q4'21	Q3'21	Q2'21
Cost of Revenue - GAAP	\$ 12,042	\$ 11,529	\$ 11,675	\$ 11,070	\$ 10,785
Adjustments to reconcile GAAP Cost of Revenue to Non-GAAP Cost of Revenue:					
Stock-based compensation expense	(655)	(728)	(703)	(670)	(538)
Amortization of acquired technology	(553)	(553)	(554)	(454)	(536)
Cost of Revenue - Non-GAAP	\$ 10,834	\$ 10,248	\$ 10,418	\$ 9,946	\$ 9,711
Research & Development - GAAP	\$ 13,374	\$ 14,089	\$ 11,218	\$ 10,657	\$ 11,064
Adjustments to reconcile GAAP R&D to Non-GAAP R&D:					
Stock-based compensation expense	(1,810)	(3,168)	(1,502)	(1,299)	(1,126)
Research & Development - Non-GAAP	\$ 11,564	\$ 10,921	\$ 9,716	\$ 9,358	\$ 9,938
Selling, General, & Administrative - GAAP	\$ 9,770	\$ 10,839	\$ 9,167	\$ 9,609	\$ 9,410
Adjustment to reconcile GAAP SG&A to Non-GAAP SG&A:					
Stock-based compensation expense	(\$ 1,407)	(\$ 1,657)	(\$ 1,252)	(\$ 1,394)	(\$ 1,078)
Expenses of arbitration (1)	(\$ 36)	(\$ 451)	(\$ 757)	(\$ 341)	(\$ 558)
Selling, General, & Administrative - Non-GAAP	\$ 8,327	\$ 8,731	\$ 7,158	\$ 7,874	\$ 7,774

(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)

	Six Months Ended June 30,		
	2022	2021	2020
Cost of Revenue - GAAP	\$ 23,571	\$ 20,848	\$ 17,433
Adjustments to reconcile GAAP Cost of Revenue to Non-GAAP Cost of Revenue:			
Stock-based compensation expense	(1,383)	(1,190)	(1,792)
Amortization of acquired technology	(1,106)	(1,071)	(287)
Cost of Revenue - Non-GAAP	\$ 21,082	\$ 18,587	\$ 15,354
Research & Development - GAAP	\$ 27,463	\$ 21,905	\$ 16,344
Adjustments to reconcile GAAP R&D to Non-GAAP R&D:			
Stock-based compensation expense	(4,978)	(2,714)	(2,465)
Write-down in value of property and equipment	—	—	(149)
Research & Development - Non-GAAP	\$ 22,485	\$ 19,191	\$ 13,730
Selling, General, & Administrative - GAAP	\$ 20,609	\$ 18,874	\$ 15,632
Adjustment to reconcile GAAP SG&A to Non-GAAP SG&A:			
Stock-based compensation expense	(3,064)	(2,207)	(2,089)
Expenses of arbitration (1)	(487)	(853)	(464)
Write-down in value of property and equipment	—	—	(162)
Selling, General, & Administrative - Non-GAAP	\$ 17,058	\$ 15,814	\$ 12,917

(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.