UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2023

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission File Number: 001-35480

Enphase Energy, Inc.
(Exact name of registrant as specified in its charter)

Delaware	20-4645388
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

47281 Bayside Parkway
Fremont, CA 94538
(Address of principal executive offices, including zip code)

(707) 774-7000
(Registrant's telephone number, including area code)

Not Applicable
(Former name, former address and former fiscal year, if changed since last report)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.00001 par value per share	**ENPH**	**Nasdaq Global Market**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an "emerging growth company." See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of July 21, 2023, there were 136,355,373 shares of the registrant's common stock outstanding, $0.00001 par value per share.

ENPHASE ENERGY, INC.

FORM 10-Q FOR THE QUARTERLY PERIOD ENDED JUNE 30, 2023

TABLE OF CONTENTS

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

ENPHASE ENERGY, INC.

CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except par value)
(Unaudited)

	As of	
	June 30, 2023	December 31, 2022
ASSETS		
Current assets:		
Cash and cash equivalents	$ 278,676	$ 473,244
Marketable securities	1,521,816	1,139,599
Accounts receivable, net of allowances of $1,322 and $979 at June 30, 2023 and December 31, 2022, respectively	520,306	440,896
Inventory	166,111	149,708
Prepaid expenses and other assets	73,880	60,824
Total current assets	2,560,789	2,264,271
Property and equipment, net	151,657	111,367
Operating lease, right of use asset, net	22,954	21,379
Intangible assets, net	85,960	99,541
Goodwill	214,290	213,559
Other assets	195,283	169,291
Deferred tax assets, net	234,949	204,872
Total assets	$ 3,465,882	$ 3,084,280
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 79,075	$ 125,085
Accrued liabilities	425,285	295,939
Deferred revenues, current	109,176	90,747
Warranty obligations, current	36,686	35,556
Debt, current	93,383	90,892
Total current liabilities	743,605	638,219
Long-term liabilities:		
Deferred revenues, non-current	354,296	281,613
Warranty obligations, non-current	144,029	95,890
Other liabilities	50,251	43,520
Debt, non-current	1,201,114	1,199,465
Total liabilities	2,493,295	2,258,707
Commitments and contingencies (Note 9)		
Stockholders' equity:		
Common stock, $0.00001 par value, 300,000 shares authorized; and 136,006 shares and 136,441 shares issued and outstanding at June 30, 2023 and December 31, 2022, respectively	1	1
Additional paid-in capital	858,039	819,119
Accumulated earnings	189,539	17,335
Accumulated other comprehensive loss	(6,852)	(10,882)
Treasury stock, at cost	(68,140)	—
Total stockholders' equity	972,587	825,573
Total liabilities and stockholders' equity	$ 3,465,882	$ 3,084,280

See Notes to Condensed Consolidated Financial Statements.

ENPHASE ENERGY, INC.

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share data)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Net revenues	$ 711,118	$ 530,196	$ 1,437,134	$ 971,488
Cost of revenues	387,776	311,191	787,421	575,510
Gross profit	323,342	219,005	649,713	395,978
Operating expenses:				
Research and development	60,043	39,256	117,172	74,975
Sales and marketing	58,405	53,588	123,026	94,932
General and administrative	34,397	32,125	70,662	70,211
Restructuring charges	177	—	870	—
Total operating expenses	153,022	124,969	311,730	240,118
Income from operations	170,320	94,036	337,983	155,860
Other income (expense), net				
Interest income	16,526	796	29,566	1,256
Interest expense	(2,219)	(2,168)	(4,375)	(4,904)
Other income (expense), net	(33)	(456)	393	(2,597)
Total other income (expense), net	14,274	(1,828)	25,584	(6,245)
Income before income taxes	184,594	92,208	363,567	149,615
Income tax provision	(27,403)	(15,232)	(59,503)	(20,818)
Net income	$ 157,191	$ 76,976	$ 304,064	$ 128,797
Net income per share:				
Basic	$ 1.15	$ 0.57	$ 2.23	$ 0.96
Diluted	$ 1.09	$ 0.54	$ 2.11	$ 0.91
Shares used in per share calculation:				
Basic	136,607	135,196	136,650	134,768
Diluted	145,098	143,725	145,608	143,602

See Notes to Condensed Consolidated Financial Statements.

ENPHASE ENERGY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In thousands)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Net income	$ 157,191	$ 76,976	$ 304,064	$ 128,797
Other comprehensive income (loss):				
Foreign currency translation adjustments	431	(2,570)	1,508	(2,306)
Marketable securities				
Change in net unrealized gain (loss), net of income tax provision (benefit) of $(193) and $(475) for the three and six months ended June 30, 2023, respectively, and $886 and $(2,431) for the three and six months ended June 30, 2022, respectively.	(549)	(1,351)	2,522	(6,919)
Comprehensive income	$ 157,073	$ 73,055	$ 308,094	$ 119,572

See Notes to Condensed Consolidated Financial Statements.

ENPHASE ENERGY, INC.
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands)
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
Common stock and paid-in capital				
Balance, beginning of period	$ 812,619	$ 666,512	$ 819,120	$ 837,925
Cumulative-effect adjustment to Additional paid-in capital related to the adoption of ASU 2020-06	—	—	—	(207,967)
Issuance of common stock from exercise of equity awards	556	4,183	596	4,587
Issuance of common stock related to 365 Pronto, Inc. post combination expense	4,000	—	10,307	—
Payment of withholding taxes related to net share settlement of equity awards	(12,790)	(5,463)	(84,635)	(14,807)
Stock-based compensation expense	53,655	48,242	112,652	93,736
Balance, end of period	$ 858,040	$ 713,474	$ 858,040	$ 713,474
Treasury stock, at cost				
Balance, beginning of period	$ —	$ —	$ —	$ —
Purchases of treasury stock, at cost	(68,140)	—	(68,140)	—
Balance, end of period	$ (68,140)	$ —	$ (68,140)	$ —
Accumulated earnings (deficit)				
Balance, beginning of period	$ 164,208	$ (328,206)	$ 17,335	$ (405,737)
Cumulative-effect adjustment to accumulated deficit related to the adoption of ASU 2020-06	—	—	—	25,710
Repurchase of common stock	(131,860)	—	(131,860)	—
Net income	157,191	76,976	304,064	128,797
Balance, end of period	$ 189,539	$ (251,230)	$ 189,539	$ (251,230)
Accumulated other comprehensive loss				
Balance, beginning of period	$ (6,734)	$ (7,324)	$ (10,882)	$ (2,020)
Foreign currency translation adjustments	431	(2,570)	1,508	(2,306)
Change in net unrealized gain (loss) on marketable securities, net of tax	(549)	(1,351)	2,522	(6,919)
Balance, end of period	$ (6,852)	$ (11,245)	$ (6,852)	$ (11,245)
Total stockholders' equity, ending balance	$ 972,587	$ 450,999	$ 972,587	$ 450,999

See Notes to Condensed Consolidated Financial Statements.

ENPHASE ENERGY, INC.

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Six Months Ended June 30,	
	2023	**2022**
Cash flows from operating activities:		
Net income	$ 304,064	$ 128,797
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	34,419	28,102
Net amortization (accretion) of premium (discount) on marketable securities	(17,705)	2,703
Provision for doubtful accounts	629	131
Asset impairment	—	1,200
Non-cash interest expense	4,140	4,025
Net (gain) loss from change in fair value of debt securities	(3,498)	129
Stock-based compensation	113,821	100,861
Deferred income taxes	(26,796)	15,617
Changes in operating assets and liabilities:		
Accounts receivable	(83,497)	27,546
Inventory	(16,403)	(55,866)
Prepaid expenses and other assets	(41,993)	(21,352)
Accounts payable, accrued and other liabilities	107,225	10,228
Warranty obligations	49,269	22,878
Deferred revenues	91,800	38,094
Net cash provided by operating activities	515,475	303,093
Cash flows from investing activities:		
Purchases of property and equipment	(66,478)	(21,066)
Business acquisitions, net of cash acquired	—	(27,680)
Purchases of marketable securities	(1,272,908)	(60,061)
Maturities and sale of marketable securities	911,804	193,033
Net cash provided by (used in) investing activities	(427,582)	84,226
Cash flows from financing activities:		
Proceeds from exercise of equity awards and employee stock purchase plan	596	4,587
Payment of withholding taxes related to net share settlement of equity awards	(84,635)	(14,807)
Repurchase of common stock	(200,000)	—
Net cash used in financing activities	(284,039)	(10,220)
Effect of exchange rate changes on cash and cash equivalents	1,578	(942)
Net increase (decrease) in cash and cash equivalents	(194,568)	376,157
Cash and cash equivalents—Beginning of period	473,244	119,316
Cash and cash equivalents—End of period	$ 278,676	$ 495,473
Supplemental cash flow disclosure:		
Supplemental disclosures of non-cash investing and financing activities:		
Purchases of property and equipment included in accounts payable	$ 8,310	$ 2,783
Purchases of property and equipment through tenant improvement allowance	$ —	$ 748

See Notes to Condensed Consolidated Financial Statements.

1. DESCRIPTION OF BUSINESS AND BASIS OF PRESENTATION

Description of Business

Enphase Energy, Inc. (the “Company”) is a global energy technology company. The Company delivers smart, easy-to-use solutions that manage solar generation, storage and communication on one platform. The Company revolutionized the solar industry with its microinverter technology and produces a fully integrated solar-plus-storage solution.

Basis of Presentation and Consolidation

The accompanying condensed consolidated financial statements are presented in accordance with accounting principles generally accepted in the United States (“GAAP”). The condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Unaudited Interim Financial Information

These accompanying unaudited condensed consolidated financial statements have been prepared pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (“SEC”) for interim financial reporting. In the opinion of management, these unaudited condensed consolidated financial statements reflect all adjustments, consisting of normal recurring items, considered necessary to present fairly the Company’s financial condition, results of operations, comprehensive income, stockholders’ equity and cash flows for the interim periods indicated. The results of operations for the three and six months ended June 30, 2023 are not necessarily indicative of the operating results for the full year.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of income and expenses during the reporting period. Significant estimates and assumptions reflected in the financial statements include revenue recognition, allowance for doubtful accounts, stock-based compensation, deferred compensation arrangements, inventory valuation, accrued warranty obligations, fair value of investments, debt derivatives, convertible notes and contingent consideration, fair value of acquired intangible assets and goodwill, useful lives of acquired intangible assets and property and equipment, incremental borrowing rate for right-of-use assets and lease liability. These estimates are based on information available as of the date of the financial statements; therefore, actual results could differ materially from those estimates due to risks and uncertainties, including uncertainty in the ongoing semiconductor supply and logistics constraints.

The year-end condensed consolidated balance sheet data was derived from audited financial statements but does not include all disclosures required by accounting principles generally accepted in the United States. The Company filed audited consolidated financial statements, which included all information and notes necessary for such a complete presentation in conjunction with its Annual Report on Form 10-K for the fiscal year ended December 31, 2022 filed with the SEC on February 13, 2023 (the “Form 10-K”).

Summary of Significant Accounting Policies

Except for the accounting policy for treasury stock added as a result of the common stock repurchased but not yet retired by the Company during the three months ended June 30, 2023, and government grants benefits recognized following the enactment of the Inflation Reduction Act of 2022 (“IRA”), there have been no changes to the Company’s significant accounting policies as described in Note 2, “Summary of Significant Accounting Policies” of the notes to consolidated financial statements included in Part II, Item 8 of the Form 10-K.

Treasury Stock, at Cost

The Company accounts for treasury stock at cost per Accounting Standards Codification (“ASC”) 505. This results in a reduction of stockholders’ equity on the Company’s condensed consolidated balance sheet and on the

Company's condensed consolidated statement of stockholders' equity. Upon the retirement of treasury stock, the Company reclasses the value of treasury shares to accumulated earnings (deficit). As of June 30, 2023, the Company recorded the repurchase of 420,957 shares not retired as treasury stock.

Government Grants

Government grants represent benefits provided by federal, state, or local governments that are not subject to the scope of ASC 740. The Company recognizes a grant when it has reasonable assurance that it will comply with the grant's conditions and that the grant will be received. Government grants that are not related to long-lived assets are considered income-based grants, which are recognized as a reduction to the related cost of activities that generated the benefit.

In August 2022, the U.S. enacted the IRA, which includes extension of the investment tax credit as well as a new advanced manufacturing production tax credit ("AMPTC"), to incentivize clean energy component sourcing and production, including for the production of microinverters. The IRA provides for an AMPTC on microinverters of 11 cents per alternating current watt basis. The AMPTC on microinverters decreases by 25% each year beginning in 2030 and ending after 2032. The Company recognized the benefit of credits from AMPTC as a reduction to cost of revenues in the condensed consolidated statement of operations for the microinverters manufactured in the United States and sold to customers in the three and six months ended June 30, 2023. Such credit is also reflected as a reduction of income tax payable on the Company's condensed consolidated balance sheets within accrued liabilities.

Recently Adopted Accounting Pronouncements

In October 2021, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") 2021-08, "Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers" ("ASU 2021-08"). ASU 2021-08 requires an acquirer to recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with ASC 606, "Revenue from Contracts with Customers," as if it had originated the contracts. This should generally result in an acquirer recognizing and measuring the acquired contract assets and contract liabilities consistent with how they were recognized and measured in the acquiree's financial statements. The Company adopted ASU 2021-08 effective January 1, 2023. The adoption of ASU 2021-08 did not have an impact on the Company's condensed consolidated financial statements.

2. REVENUE RECOGNITION

Disaggregated Revenue

The Company has one major business activity, which is the design, manufacture and sale of solutions for the solar photovoltaic industry. Disaggregated revenue by primary geographical market and timing of revenue recognition for the Company's single product line are as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(In thousands)			
Primary geographical markets:				
U.S.	$ 417,582	$ 422,628	$ 890,543	$ 792,120
International	293,536	107,568	546,591	179,368
Total	$ 711,118	$ 530,196	$ 1,437,134	$ 971,488
Timing of revenue recognition:				
Products delivered at a point in time	$ 684,122	$ 511,865	$ 1,385,774	$ 936,014
Products and services delivered over time	26,996	18,331	51,360	35,474
Total	$ 711,118	$ 530,196	$ 1,437,134	$ 971,488

Contract Balances

Receivables, and contract assets and contract liabilities from contracts with customers, are as follows:

	June 30, 2023	December 31, 2022
	(In thousands)	
Receivables	$ 520,306	$ 440,896
Short-term contract assets (Prepaid expenses and other assets)	38,073	32,130
Long-term contract assets (Other assets)	122,982	100,991
Short-term contract liabilities (Deferred revenues, current)	109,176	90,747
Long-term contract liabilities (Deferred revenues, non-current)	354,296	281,613

The Company receives payments from customers based upon contractual billing schedules. Accounts receivable are recorded when the right to consideration becomes unconditional. Contract assets include deferred product costs and commissions associated with the deferred revenue and will be amortized along with the associated revenue. The Company had no asset impairment charges related to contract assets for the six months ended June 30, 2023.

Significant changes in the balances of contract assets (prepaid expenses and other assets) as of June 30, 2023 are as follows (in thousands):

Contract Assets	
Contract Assets, beginning of period	$ 133,121
Amount recognized	(17,658)
Increased due to shipments	45,592
Contract Assets, end of period	$ 161,055

Contract liabilities are recorded as deferred revenue on the accompanying condensed consolidated balance sheets and include payments received in advance of performance obligations under the contract and are realized when the associated revenue is recognized under the contract.

Significant changes in the balances of contract liabilities (deferred revenues) as of June 30, 2023 are as follows (in thousands):

Contract Liabilities	
Contract Liabilities, beginning of period	$ 372,360
Revenue recognized	(51,360)
Increased due to billings	142,472
Contract Liabilities, end of period	$ 463,472

Remaining Performance Obligations

Estimated revenue expected to be recognized in future periods related to performance obligations that are unsatisfied or partially unsatisfied at the end of the reporting period are as follows:

	June 30, 2023
	(In thousands)
Fiscal year:	
2023 (remaining six months)	$ 55,492
2024	105,360
2025	97,787
2026	81,815
2027	62,174
Thereafter	60,844
Total	$ 463,472

3. OTHER FINANCIAL INFORMATION

Inventory

Inventory consists of the following:

	June 30, 2023	December 31, 2022
	(In thousands)	
Raw materials	$ 30,993	$ 34,978
Finished goods	135,118	114,730
Total inventory	$ 166,111	$ 149,708

Accrued Liabilities

Accrued liabilities consist of the following:

	June 30, 2023	December 31, 2022
	(In thousands)	
Customer rebates and sales incentives	$ 219,814	$ 153,916
Income tax payable	81,271	16,146
VAT payable	35,511	19,852
Liability due to supply agreements	35,368	17,341
Freight	18,653	35,011
Salaries, commissions, incentive compensation and benefits	14,575	18,009
Operating lease liabilities, current	5,773	5,371
Post combination expense accrual	—	9,138
Liabilities related to restructuring activities	186	714
Other	14,134	20,441
Total accrued liabilities	$ 425,285	$ 295,939

4. GOODWILL AND INTANGIBLE ASSETS

The Company’s goodwill as of June 30, 2023 and December 31, 2022 were as follows:

Goodwill	June 30, 2023	December 31, 2022
	(In thousands)	
Goodwill, beginning of period	$ 213,559	$ 181,254
Goodwill acquired	—	33,354
Currency translation adjustment	731	(1,049)
Goodwill, end of period	$ 214,290	$ 213,559

The Company’s purchased intangible assets as of June 30, 2023 and December 31, 2022 were as follows:

	June 30, 2023				December 31, 2022			
	Gross	Additions	Accumulated Amortization	Net	Gross	Additions	Accumulated Amortization	Net
	(In thousands)							
Intangible assets:								
Other indefinite-lived intangibles	$ 286	$ —	$ —	$ 286	$ 286	$ —	$ —	$ 286
Intangible assets with finite lives:								
Developed technology	51,044	—	(22,166)	28,878	38,650	12,394	(17,260)	33,784
Customer relationships	55,106	—	(24,607)	30,499	41,021	14,085	(19,702)	35,404
Trade names	37,700	—	(11,403)	26,297	37,700	—	(7,633)	30,067
Order backlog	600	—	(600)	—	600	—	(600)	—
Total purchased intangible assets	$ 144,736	$ —	$ (58,776)	$ 85,960	$ 118,257	$ 26,479	$ (45,195)	$ 99,541

During the three months ended June 30, 2023, intangible assets acquired increased by less than $0.1 million due to the impact of foreign currency translation.

Amortization expense related to finite-lived intangible assets were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(In thousands)			
Developed technology	$ 2,455	$ 2,010	$ 4,910	$ 3,876
Customer relationships	2,454	2,067	4,908	3,825
Trade names	1,885	1,885	3,770	3,770
Order backlog	—	323	—	600
Total amortization expense	$ 6,794	$ 6,285	$ 13,588	$ 12,071

Amortization of developed technology is recorded to cost of sales, amortization of customer relationships and trade names are recorded to sales and marketing expense, and amortization of certain customer relationships is recorded as a reduction to revenue.

The expected future amortization expense of intangible assets as of June 30, 2023 is presented below (in thousands):

	June 30, 2023
Fiscal year:	
2023 (remaining six months)	$ 13,585
2024	24,538
2025	23,032
2026	19,473
2027	5,046
Total	$ 85,674

5. CASH EQUIVALENTS AND MARKETABLE SECURITIES

The cash equivalents and marketable securities consist of the following:

	As of June 30, 2023					
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Cash Equivalents	Marketable Securities
	(In thousands)					
Money market funds	$ 134,398	$ —	$ —	$ 134,398	$ 134,398	$ —
Certificates of deposit	49,544	3	(76)	49,471	—	49,471
Commercial paper	119,203	—	(306)	118,897	—	118,897
Corporate notes and bonds	339,972	29	(3,148)	336,853	—	336,853
U.S. Treasuries	354,112	35	(398)	353,749	—	353,749
U.S. Government agency securities	666,104	166	(3,424)	662,846	—	662,846
Total	$ 1,663,333	$ 233	$ (7,352)	$ 1,656,214	$ 134,398	$ 1,521,816

	As of December 31, 2022					
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Cash Equivalents	Marketable Securities
	(In thousands)					
Money market funds	$ 165,407	$ —	$ —	$ 165,407	$ 165,407	$ —
Certificates of deposit	31,874	13	(130)	31,757	—	31,757
Commercial paper	148,832	10	(171)	148,671	50,764	97,907
Corporate notes and bonds	168,887	2	(3,313)	165,576	—	165,576
U.S. Treasuries	301,349	8	(132)	301,225	4,094	297,131
U.S. Government agency securities	554,035	—	(6,807)	547,228	—	547,228
Total	$ 1,370,384	$ 33	$ (10,553)	$ 1,359,864	$ 220,265	$ 1,139,599

The following table summarizes the contractual maturities of the Company's cash equivalents and marketable securities as of June 30, 2023:

	Amortized Cost	Fair Value
	(In thousands)	
Due within one year	$ 1,357,928	$ 1,352,679
Due within one to three years	305,405	303,535
Total	$ 1,663,333	$ 1,656,214

All available-for-sale securities have been classified as current, based on management's intent and ability to use the funds in current operations.

6. WARRANTY OBLIGATIONS

The Company's warranty obligation activities were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(In thousands)			
Warranty obligations, beginning of period	$ 146,034	$ 83,579	$ 131,446	$ 73,377
Accruals for warranties issued during period	16,344	11,311	32,515	20,221
Changes in estimates	(10,363)	17,063	(6,635)	21,975
Settlements	(5,092)	(6,590)	(13,986)	(12,471)
Increase due to accretion expense	3,907	1,828	7,452	3,343
Change in discount rate[1]	31,797	(9,609)	31,797	(9,609)
Other	(1,912)	(1,031)	(1,874)	(285)
Warranty obligations, end of period	180,715	96,551	180,715	96,551
Less: warranty obligations, current	(36,686)	(29,197)	(36,686)	(29,197)
Warranty obligations, non-current	$ 144,029	$ 67,354	$ 144,029	$ 67,354

(1) See Note 7, "Fair Value Measurements" for additional information about the monetary impact for change in the discount rate.

Changes in Estimates

During the three months ended June 30, 2023, the Company recorded a $10.4 million decrease in warranty expense from change in estimates, of which $14.4 million related to a decrease in product replacement costs related to Enphase IQ™ Battery systems and $2.1 million related to decrease in product replacement costs for all other products, partially offset by $6.1 million for increasing the warranty period for the Enphase IQ Battery from 10 years to 15 years. During the three months ended June 30, 2022, the Company recorded $17.1 million in warranty expense from change in estimates, of which $13.3 million related to continuing analysis of field performance data and diagnostic root-cause failure analysis primarily for Enphase IQ Battery storage systems and $3.8 million due to an increase in labor reimbursement rates.

During the six months ended June 30, 2023, the Company recorded a $6.6 million decrease in warranty expense from change in estimates, of which $20.5 million related to a decrease in product replacement costs related to Enphase IQ Battery systems and $2.1 million related to decrease in product replacement costs for all other products, partially offset by $6.1 million for increasing the warranty period for the Enphase IQ Battery from 10 years to 15 years, and by $9.9 million related to continuing analysis of field performance data and diagnostic root-cause failure analysis primarily for Enphase IQ Battery storage systems and prior generation products. During the six months ended June 30, 2022, the Company recorded $22.0 million in warranty expense from change in estimates, of which $13.3 million related to continuing analysis of field performance data and diagnostic root-cause failure analysis primarily for Enphase IQ Battery storage systems, $4.9 million is related to an increase in expedited freight costs and replacement costs and $3.8 million due to an increase in labor reimbursement rates.

7. FAIR VALUE MEASUREMENTS

The accounting guidance defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities recorded at fair value, the Company considers the principal or most advantageous market in which it would transact and considers assumptions that market participants would use when pricing the asset or liability, such as inherent risk, transfer restrictions, and risk of nonperformance.

The fair value hierarchy requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. An asset's or liability's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Three levels of inputs may be used to measure fair value:

- Level 1 - Valuations based on quoted prices in active markets for identical assets or liabilities that the Company is able to access. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuation of such assets or liabilities do not entail a significant degree of judgment.
- Level 2 - Valuations based on one or more quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.
- Level 3 - Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

The following table presents assets and liabilities measured at fair value on a recurring basis using the above input categories:

	June 30, 2023			December 31, 2022		
	(In thousands)					
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Assets:						
Cash and cash equivalents:						
Money market funds	$ 134,398	$ —	$ —	$ 165,407	$ —	$ —
Commercial paper	—	—	—	—	50,764	—
U.S. Treasuries	—	—	—	—	4,094	—
Marketable securities:						
Certificates of deposit	—	49,471	—	—	31,757	—
Commercial paper	—	118,897	—	—	97,907	—
Corporate notes and bonds	—	336,853	—	—	165,576	—
U.S. Treasuries	—	353,749	—	—	297,131	—
U.S. Government agency securities	—	662,846	—	—	547,228	—
Other assets						
Investments in debt securities	—	—	60,275	—	—	56,777
Total assets measured at fair value	$ 134,398	$ 1,521,816	$ 60,275	$ 165,407	$ 1,194,457	$ 56,777
Liabilities:						
Warranty obligations						
Current	$ —	$ —	$ 27,282	$ —	$ —	$ 30,740
Non-current	—	—	123,258	—	—	75,749
Total warranty obligations measured at fair value	—	—	150,540	—	—	106,489
Total liabilities measured at fair value	$ —	$ —	$ 150,540	$ —	$ —	$ 106,489

Notes due 2028, Notes due 2026 and Notes due 2025

The Company carries the Notes due 2028 and Notes due 2026 at face value less issuance costs on its condensed consolidated balance sheets. The Company carries the Notes due 2025 at face value less unamortized discount and issuance costs on its condensed consolidated balance sheets. As of June 30, 2023, the fair value of the Notes due 2028, Notes due 2026 and Notes due 2025 was $543.6 million, $594.7 million and $261.6 million, respectively. The fair value as of June 30, 2023 was determined based on the closing trading price per $100 principal amount as of the last day of trading for the period. The Company considers the fair value of the Notes due 2028, Notes due 2026 and Notes due 2025 to be a Level 2 measurement as they are not actively traded. Refer to Note 8, "Debt," for additional information about the Company's outstanding debt.

Investments in debt securities

In January 2021, the Company invested approximately $25.0 million in a privately-held company. The Company concluded the investment qualifies as an investment in a debt security, as it accrues interest and principal plus accrued interest becomes payable back to the Company at certain dates unless it is converted to equity at a pre-determined price. As the investment includes a conversion option, the Company has elected to account for this investment under the fair value option and any change in fair value of the investment is recognized in "Other income (expense), net" in the Company's condensed consolidated statement of operations for that period. Further, the Company has concluded that the Company's investment in a debt security is considered to be a Level 3 measurement due to the use of significant unobservable inputs in the valuation model. The fair value was determined using discounted cash flow methodology and assumptions include implied yield and change in estimated term of investment being held-to-maturity.

In September 2021, the Company invested approximately $13.0 million in secured convertible promissory notes issued by the stockholders of a privately-held company. The investment qualifies as an investment in a debt security and will accrete interest and principal plus accrued interest that becomes payable at certain dates unless it is converted to equity at a pre-determined price. As the investment includes a conversion option, the Company has elected to account for this investment under the fair value option and any change in fair value of the investment is recognized in "Other income (expense), net" in the Company's condensed consolidated statement of operations for that period. Principal plus accrued interest receivable of the investment approximates the fair value.

In December 2022, the Company took a non-voting participating interest of approximately $15.0 million in a loan held by a privately-held company. The debt security qualifies as an investment in a debt security and interest will be payable on a monthly basis. The principal becomes repayable at a certain date when a qualified equity investment or a junior debt is raised, or as long as certain applicable payment conditions are satisfied. The accreted interest is recognized in "Other income (expense), net" in the Company's condensed consolidated statement of operations for that period. Principal plus unpaid accrued interest receivable of the investment approximates the fair value.

Investment in debt securities is recorded in "Other assets" on the accompanying condensed consolidated balance sheet as of June 30, 2023 and December 31, 2022. The changes in the balance in investments in debt securities during the period were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(In thousands)			
Balance at beginning of period	$ 58,521	$ 39,926	$ 56,777	$ 41,042
Fair value adjustments included in other income (expense), net	1,754	987	3,498	(129)
Balance at end of period	$ 60,275	$ 40,913	$ 60,275	$ 40,913

Warranty obligations

Fair Value Option for Warranty Obligations Related to Products Sold Since January 1, 2014

The Company estimates the fair value of warranty obligations by calculating the warranty obligations in the same manner as for sales prior to January 1, 2014 and applying an expected present value technique to that result. The expected present value technique, an income approach, converts future amounts into a single current discounted amount. In addition to the key estimates of return rates and replacement costs, the Company used certain Level 3 inputs which are unobservable and significant to the overall fair value measurement. Such additional assumptions are based on the Company's credit-adjusted risk-free rate ("discount rate") and compensation comprised of a profit element and risk premium required of a market participant to assume the obligation.

The following table provides information regarding changes in nonfinancial liabilities related to the Company's warranty obligations measured at fair value on a recurring basis using significant unobservable inputs designated as Level 3 for the periods indicated:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(In thousands)			
Balance at beginning of period	$ 119,508	$ 61,586	$ 106,489	$ 51,007
Accruals for warranties issued during period	16,344	11,120	32,369	19,890
Changes in estimates	(12,925)	14,692	(11,680)	18,591
Settlements	(6,179)	(4,668)	(14,013)	(8,724)
Increase due to accretion expense	3,907	1,828	7,452	3,343
Change in discount rate	31,797	(9,609)	31,797	(9,609)
Other	(1,912)	(1,026)	(1,874)	(575)
Balance at end of period	$ 150,540	$ 73,923	$ 150,540	$ 73,923

Quantitative and Qualitative Information about Level 3 Fair Value Measurements

As of June 30, 2023 and December 31, 2022, the significant unobservable inputs used in the fair value measurement of the Company's liabilities designated as Level 3 were as follows, of which the monetary impact for change in discount rate is captured in "Change in discount rate" in the table above:

			Percent Used (Weighted Average)	
Item Measured at Fair Value	Valuation Technique	Description of Significant Unobservable Input	June 30, 2023	December 31, 2022
Warranty obligations for products sold since January 1, 2014	Discounted cash flows	Profit element and risk premium	17%	16%
		Credit-adjusted risk-free rate	8%	13%

Sensitivity of Level 3 Inputs - Warranty Obligations

Each of the significant unobservable inputs is independent of the other. The profit element and risk premium are estimated based on the requirements of a third-party participant willing to assume the Company's warranty obligations. The discount rate is determined by reference to the Company's own credit standing at the fair value measurement date, which improved in the three and six months ended June 30, 2023 contributing to the 5% decline in discount rate and associated increase in warranty expense in the same period captured in "Change in discount rate" in the table above. Under the expected present value technique, increasing the profit element and risk premium input by 100 basis points would result in a $1.1 million increase to the liability. Decreasing the profit element and risk premium by 100 basis points would result in a $1.1 million reduction of the liability. Increasing the discount rate by 100 basis points would result in a $9.2 million reduction of the liability. Decreasing the discount rate by 100 basis points would result in a $10.3 million increase to the liability.

8. DEBT

The following table provides information regarding the Company's debt:

	June 30, 2023	December 31, 2022
	(In thousands)	
Convertible notes		
Notes due 2028	$ 575,000	$ 575,000
Less: unamortized debt issuance costs	(6,062)	(6,705)
Carrying amount of Notes due 2028	568,938	568,295
Notes due 2026	632,500	632,500
Less: unamortized debt issuance costs	(5,320)	(6,307)
Carrying amount of Notes due 2026	627,180	626,193
Notes due 2025	102,175	102,175
Less: unamortized debt discount	(7,979)	(10,229)
Less: unamortized debt issuance costs	(813)	(1,054)
Carrying amount of Notes due 2025	93,383	90,892
Notes due 2023	5,000	5,000
Less: unamortized issuance costs	(4)	(23)
Carrying amount of Notes due 2023	4,996	4,977
Total carrying amount of debt	1,294,497	1,290,357
Less: debt, current	(93,383)	(90,892)
Debt, non-current	$ 1,201,114	$ 1,199,465

ENPHASE ENERGY, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

The following table presents the total amount of interest cost recognized in the condensed consolidated statement of operations relating to the Notes:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(In thousands)			
Notes due 2028				
Amortization of debt issuance costs	$ 327	$ 327	$ 643	$ 643
Total interest cost recognized	$ 327	$ 327	$ 643	$ 643
Notes due 2026				
Amortization of debt issuance costs	$ 502	$ 502	$ 987	$ 987
Total interest cost recognized	$ 502	$ 502	$ 987	$ 987
Notes due 2025				
Contractual interest expense	$ 64	$ 64	$ 128	$ 128
Amortization of debt discount	1,144	1,088	2,249	2,137
Amortization of debt issuance costs	123	123	241	241
Total interest cost recognized	$ 1,331	$ 1,275	$ 2,618	$ 2,506
Notes due 2023				
Contractual interest expense	$ 50	$ 50	$ 100	$ 100
Amortization of debt issuance costs	10	10	20	20
Total interest costs recognized	$ 60	$ 60	$ 120	$ 120

Convertible Senior Notes due 2028

On March 1, 2021, the Company issued $575.0 million aggregate principal amount of our 0.0% convertible senior notes due 2028 (the "Notes due 2028"). The Notes due 2028 will not bear regular interest, and the principal amount of the Notes due 2028 will not accrete. The Notes due 2028 are general unsecured obligations and are governed by an indenture between the Company and U.S. Bank National Association, as trustee. The Notes due 2028 will mature on March 1, 2028, unless earlier repurchased by the Company or converted at the option of the holders. The Company received approximately $566.4 million in net proceeds, after deducting the initial purchasers' discount, from the issuance of the Notes due 2028.

The initial conversion rate for the Notes due 2028 is 3.5104 shares of common stock per $1,000 principal amount of the Notes due 2028 (which represents an initial conversion price of approximately $284.87 per share). The conversion rate for the Notes due 2028 will be subject to adjustment upon the occurrence of certain specified events but will not be adjusted for any accrued and unpaid special interest, if any. In addition, if a make-whole fundamental change or a redemption with respect to the Notes due 2028 occurs prior to the maturity date, under certain circumstances as specified in the relevant indenture, the Company will increase the conversion rate for the Notes due 2028 by a number of additional shares of the Company's common stock for a holder that elects to convert its notes in connection with such make-whole fundamental change or redemption. Upon conversion, the Company will settle conversions of the Notes due 2028 through payment or delivery, as the case may be, of cash, shares of its common stock or a combination of cash and shares of its common stock, at the Company's election.

ENPHASE ENERGY, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

The Company may not redeem the Notes due 2028 prior to September 6, 2024. The Company may redeem for cash all or any portion of the Notes due 2028, at the Company's election, on or after September 6, 2024, if the last reported sale price of the Company's common stock has been greater than or equal to 130% of the conversion price then in effect for the Notes due 2028 (*i.e.* $370.33, which is 130% of the current conversion price for the Notes due 2028) for at least 20 trading days (whether or not consecutive) during any 30 consecutive trading day period ending on, and including, the trading day immediately preceding the date on which the Company provides notice of redemption. The redemption price will equal 100% of the principal amount of the Notes due 2028 to be redeemed, plus accrued and unpaid special interest, if any to, but excluding, the relevant redemption date. No sinking fund is provided for the Notes due 2028.

The Notes due 2028 may be converted on any day prior to the close of business on the business day immediately preceding September 1, 2027, in multiples of $1,000 principal amount, at the option of the holder only under any of the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on June 30, 2021 (and only during such calendar quarter), if the last reported sale price of the Company's common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price for the Notes due 2028 (*i.e.*, $370.33 which is 130% of the current conversion price for the Notes due 2028) on each applicable trading day; (2) during the five business day period after any five consecutive trading day period (the "Measurement Period") in which the "trading price" (as defined in the relevant indenture) per $1,000 principal amount of notes for each trading day of the Measurement Period was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate for the Notes due 2028 on each such trading day; (3) if the Company calls any or all of the Notes due 2028 for redemption, at any time prior to the close of business on the scheduled trading day immediately preceding the redemption date; or (4) upon the occurrence of specified corporate events. On and after September 1, 2027 until the close of business on the second scheduled trading day immediately preceding the maturity date of March 1, 2028, holders of the Notes due 2028 may convert their notes at any time, regardless of the foregoing circumstances. Upon the occurrence of a fundamental change (as defined in the relevant indenture), holders may require the Company to repurchase all or a portion of their Notes due 2028 for cash at a price equal to 100% of the principal amount of the notes to be repurchased plus any accrued and unpaid special interest, if any, to, but excluding, the fundamental change repurchase date.

In accounting for the issuance of the Notes due 2028 on March 1, 2021, the Company separated the Notes due 2028 into liability and equity components. The carrying amount of the liability component of approximately $415.0 million was calculated by using a discount rate of 4.77%, which was the Company's borrowing rate on the date of the issuance of the Notes due 2028 for a similar debt instrument without the conversion feature. The carrying amount of the equity component of approximately $160.0 million, representing the conversion option, was determined by deducting the fair value of the liability component from the par value of the Notes due 2028. The equity component of the Notes due 2028 was included in additional paid-in capital in the condensed consolidated balance sheet through December 31, 2021 and was not remeasured. The difference between the principal amount of the Notes due 2028 and the liability component (the "debt discount") was amortized to interest expense using the effective interest method over the term of the Notes due 2028 through December 31, 2021.

Through December 31, 2021, the Company separated the Notes due 2028 into liability and equity components which resulted in a tax basis difference associated with the liability component that represents a temporary difference. The Company recognized the deferred taxes of $40.1 million for the tax effect of that temporary difference as an adjustment to the equity component included in additional paid-in capital in the condensed consolidated balance sheet.

Debt issuance costs for the issuance of the Notes due 2028 were approximately $9.1 million, consisting of initial purchasers' discount and other issuance costs. In accounting for the transaction costs, the Company allocated the total amount incurred to the liability and equity components using the same proportions as the proceeds from the Notes due 2028. Transaction costs attributable to the liability component were approximately $6.6 million, which were recorded as debt issuance cost (presented as contra debt in the condensed consolidated balance sheet) and are being amortized to interest expense over the term of the Notes due 2028. The transaction costs attributable to the equity component were approximately $2.5 million and were netted with the equity component in stockholders' equity.

Following the adoption ASU 2020-06, “Debt - Debt with Conversion and Other Options (subtopic 470-20)” (“ASU 2020-06”) as of January 1, 2022, the Company no longer records the conversion feature of Notes due 2028 in equity. Instead, the Company combined the previously separated equity component with the liability component, which together is now classified as debt, thereby eliminating the subsequent amortization of the debt discount as interest expense. Similarly, the portion of issuance costs previously allocated to equity was reclassified to the carrying amount of Notes due 2028 and is amortized over the remaining term of the notes. Accordingly, the Company recorded a net decrease to additional paid-in capital by approximately $117.3 million, net of tax to remove the equity component separately recorded for the conversion features associated with the Notes due 2028 and equity component associated with the issuance costs, an increase of approximately $141.3 million in the carrying value of Notes due 2028 to reflect the full principal amount of the Notes due 2028, net of issuance costs, a decrease to deferred tax liability of approximately $36.0 million, and a decrease to accumulated deficit of approximately $12.0 million, net of tax in the Company’s consolidated balance sheet with no impact on the Company’s consolidated statements of operations. As of June 30, 2023, the unamortized deferred issuance cost for the Notes due 2028 was $6.1 million on the condensed consolidated balance sheet.

Notes due 2028 Hedge and Warrant Transactions

In connection with the offering of the Notes due 2028, the Company entered into privately-negotiated convertible note hedge transactions (“Notes due 2028 Hedge”) pursuant to which the Company has the option to purchase a total of approximately 2.0 million shares of its common stock (subject to anti-dilution adjustments), which is the same number of shares initially issuable upon conversion of the Notes due 2028, at a price of $284.87 per share, which is the initial conversion price of the Notes due 2028. The total cost of the convertible note hedge transactions was approximately $161.6 million. The convertible note hedge transactions are expected generally to reduce potential dilution to the Company’s common stock upon any conversion of the Notes due 2028 and/or offset any cash payments the Company is required to make in excess of the principal amount of converted notes, as the case may be.

Additionally, the Company separately entered into privately-negotiated warrant transactions (the “2028 Warrants”) whereby the Company sold warrants to acquire approximately 2.0 million shares of the Company’s common stock (subject to anti-dilution adjustments) at an initial strike price of $397.91 per share. The Company received aggregate proceeds of approximately $123.4 million from the sale of the 2028 Warrants. If the market value per share of the Company’s common stock, as measured under the 2028 Warrants, exceeds the strike price of the 2028 Warrants, the 2028 Warrants will have a dilutive effect on the Company’s earnings per share, unless the Company elects, subject to certain conditions, to settle the 2028 Warrants in cash. Taken together, the purchase of the Notes due 2028 Hedge and the sale of the 2028 Warrants are intended to reduce potential dilution from the conversion of the Notes due 2028 and to effectively increase the overall conversion price from $284.87 to $397.91 per share. The 2028 Warrants are only exercisable on the applicable expiration dates in accordance with the Notes due 2028 Hedge. Subject to the other terms of the 2028 Warrants, the first expiration date applicable to the Notes due 2028 Hedge is June 1, 2028, and the final expiration date applicable to the Notes due 2028 Hedge is July 27, 2028.

Given that the transactions meet certain accounting criteria, the Notes due 2028 Hedge and the 2028 Warrants transactions are recorded in stockholders’ equity, and they are not accounted for as derivatives and are not remeasured each reporting period.

Convertible Senior Notes due 2026

On March 1, 2021, the Company issued $575.0 million aggregate principal amount of 0.0% convertible senior notes due 2026 (the “Notes due 2026”). In addition, on March 12, 2021, the Company issued an additional $57.5 million aggregate principal amount of the Notes due 2026 pursuant to the initial purchasers’ full exercise of the over-allotment option for additional Notes due 2026. The Notes due 2026 will not bear regular interest, and the principal amount of the Notes due 2026 will not accrete. The Notes due 2026 are general unsecured obligations and are governed by an indenture between the Company and U.S. Bank National Association, as trustee. The Notes due 2026 will mature on March 1, 2026, unless repurchased earlier by the Company or converted at the option of the holders. The Company received approximately $623.0 million in net proceeds, after deducting the initial purchasers' discount, from the issuance of the Notes due 2026.

The initial conversion rate for the Notes due 2026 is 3.2523 shares of common stock per $1,000 principal amount of the Notes due 2026 (which represents an initial conversion price of approximately $307.47 per share). The conversion rate for the Notes due 2026 will be subject to adjustment upon the occurrence of certain specified events but will not be adjusted for accrued and unpaid interest. In addition, if a make-whole fundamental change or a redemption with respect to the Notes due 2026 occurs prior to the maturity date, under certain circumstances as specified in the relevant indenture, the Company will increase the conversion rate for the Notes due 2026 by a number of additional shares of the Company's common stock for a holder that elects to convert its notes in connection with such make-whole fundamental change or redemption. Upon conversion, the Company will settle conversions of Notes due 2026 through payment or delivery, as the case may be, of cash, shares of its common stock or a combination of cash and shares of its common stock, at the Company's election.

The Company may not redeem the Notes due 2026 prior to the September 6, 2023. The Company may redeem for cash all or any portion of the Notes due 2026, at the Company's election, on or after September 6, 2023, if the last reported sale price of the Company's common stock has been greater than or equal to 130% of the conversion price then in effect for the Notes due 2026 (*i.e.*, $399.71, which is 130% of the current conversion price for the Notes due 2026) for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading day period ending on, and including, the trading day immediately preceding the date on which the Company provides notice of redemption. The redemption price will equal 100% of the principal amount of the Notes due 2026 to be redeemed, plus accrued and unpaid special interest, if any, to, but excluding, the relevant redemption date for the Notes due 2026. The redemption price will be increased as described in the relevant indentures by a number of additional shares of the Company in connection with such optional redemption by the Company. No sinking fund is provided for the Notes due 2026.

The Notes due 2026 may be converted on any day prior to the close of business on the business day immediately preceding September 1, 2025, in multiples of $1,000 principal amount, at the option of the holder only under any of the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on June 30, 2021 (and only during such calendar quarter), if the last reported sale price of the Company's common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price of the Notes due 2026 (*i.e.*, $399.71, which is 130% of the current conversion price for the Notes due 2026) on each applicable trading day; (2) during the five business day period after any five consecutive trading day period (the "measurement period") in which the "trading price" (as defined in the relevant indenture) per $1,000 principal amount of notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate for Notes due 2026 on each such trading day; (3) if the Company calls any or all of the Notes due 2026 for redemption, at any time prior to the close of business on the scheduled trading day immediately preceding the redemption date; or (4) upon the occurrence of specified corporate events. On and after September 1, 2025 until the close of business on the second scheduled trading day immediately preceding the maturity date of March 1, 2026, holders of the Notes due 2026 may convert their notes at any time, regardless of the foregoing circumstances. Upon the occurrence of a fundamental change (as defined in the relevant indenture), holders may require the Company to repurchase all or a portion of their Notes due 2026 for cash at a price equal to 100% of the principal amount of the notes to be repurchased plus any accrued and unpaid special interest, if any, to, but excluding, the fundamental change repurchase date.

In accounting for the issuance of the Notes due 2026 on March 1, 2021, the Company separated the Notes due 2026 into liability and equity components. The carrying amount of the liability component of approximately $509.0 million was calculated by using a discount rate of 4.44%, which was the Company's borrowing rate on the date of the issuance of the Notes due 2026 for a similar debt instrument without the conversion feature. The carrying amount of the equity component of approximately $123.5 million, representing the conversion option, was determined by deducting the fair value of the liability component from the par value of the Notes due 2026. The equity component of the Notes due 2026 was included in additional paid-in capital in the condensed consolidated balance sheet through December 31, 2021 and was not remeasured. The difference between the principal amount of the Notes due 2026 and the liability component (the "debt discount") was amortized to interest expense using the effective interest method over the term of the Notes due 2026 through December 31, 2021.

Through December 31, 2021, the Company separated the Notes due 2026 into liability and equity components which resulted in a tax basis difference associated with the liability component that represents a temporary difference. The Company recognized the deferred taxes of $31.0 million for the tax effect of that temporary difference as an adjustment to the equity component included in additional paid-in capital in the condensed consolidated balance sheet.

Debt issuance costs for the issuance of the Notes due 2026 were approximately $10.0 million, consisting of initial purchasers' discount and other issuance costs. In accounting for the transaction costs, the Company allocated the total amount incurred to the liability and equity components using the same proportions as the proceeds from the Notes due 2026. Transaction costs attributable to the liability component were approximately $8.0 million, which were recorded as debt issuance cost (presented as contra debt in the condensed consolidated balance sheet) and are being amortized to interest expense over the term of the Notes due 2026. The transaction costs attributable to the equity component were approximately $2.0 million and were netted with the equity component in stockholders' equity.

Following the adoption of ASU 2020-06 as of January 1, 2022, the Company no longer records the conversion feature of Notes due 2026 in equity. Instead, the Company combined the previously separated equity component with the liability component, which together is now classified as debt, thereby eliminating the subsequent amortization of the debt discount. Similarly, the portion of issuance costs previously allocated to equity was reclassified to the carrying amount debt and is amortized over the remaining term of the notes. Accordingly, the Company recorded a net decrease to additional paid-in capital by approximately $90.6 million, net of tax to remove the equity component separately recorded for the conversion features associated with the Notes due 2026 and equity component associated with the issuance costs, an increase of approximately $103.2 million in the carrying value of its Notes due 2026 to reflect the full principal amount of the Notes due 2026 outstanding net of issuance costs, a decrease to deferred tax liability of approximately $26.3 million, and a decrease to accumulated deficit of approximately $13.7 million, net of tax in the Company's consolidated balance sheet with no impact on the Company's consolidated statements of operations. As of June 30, 2023, the unamortized deferred issuance cost for the Notes due 2026 was $5.3 million on the condensed consolidated balance sheet.

Notes due 2026 Hedge and Warrant Transactions

In connection with the offering of the Notes due 2026 (including in connection with the issuance of additional Notes due 2026 upon the initial purchasers' exercise of their over-allotment option), the Company entered into privately-negotiated convertible note hedge transactions (the "Notes due 2026 Hedge") pursuant to which the Company has the option to purchase a total of approximately 2.1 million shares of its common stock (subject to anti-dilution adjustments), which is the same number of shares initially issuable upon conversion of the Notes due 2026, at a price of $307.47 per share, which is the initial conversion price of the Notes due 2026. The total cost of the Notes due 2026 Hedge was approximately $124.6 million. The Notes due 2026 Hedge are expected generally to reduce potential dilution to the Company's common stock upon any conversion of the Notes due 2026 and/or offset any cash payments the Company is required to make in excess of the principal amount of converted notes, as the case may be.

Additionally, the Company separately entered into privately-negotiated warrant transactions, including in connection with the issuance of additional Notes due 2026 upon the initial purchasers' exercise of their over-allotment option (the "2026 Warrants"), whereby the Company sold warrants to acquire approximately 2.1 million shares of the Company's common stock (subject to anti-dilution adjustments) at an initial strike price of $397.91 per share. The Company received aggregate proceeds of approximately $97.4 million from the sale of the 2026 Warrants. If the market value per share of the Company's common stock, as measured under the 2026 Warrants, exceeds the strike price of the 2026 Warrants, the 2026 Warrants will have a dilutive effect on the Company's earnings per share, unless the Company elects, subject to certain conditions, to settle the 2026 Warrants in cash. Taken together, the purchase of the Notes due 2026 Hedge and the sale of the 2026 Warrants are intended to reduce potential dilution from the conversion of the Notes due 2026 and to effectively increase the overall conversion price from $307.47 to $397.91 per share. The 2026 Warrants are only exercisable on the applicable expiration dates in accordance with the 2026 Warrants. Subject to the other terms of the 2026 Warrants, the first expiration date applicable to the Warrants is June 1, 2026, and the final expiration date applicable to the 2026 Warrants is July 27, 2026.

Given that the transactions meet certain accounting criteria, the Notes due 2026 Hedge and the 2026 Warrants transactions are recorded in stockholders' equity, and they are not accounted for as derivatives and are not remeasured each reporting period.

Convertible Senior Notes due 2025

On March 9, 2020, the Company issued $320.0 million aggregate principal amount of our 0.25% convertible senior notes due 2025 (the "Notes due 2025"). The Notes due 2025 are general unsecured obligations and bear interest at an annual rate of 0.25% per year, payable semi-annually on March 1 and September 1 of each year, beginning September 1, 2020. The Notes due 2025 are governed by an indenture between the Company and U.S. Bank National Association, as trustee. The Notes due 2025 will mature on March 1, 2025, unless earlier repurchased by the Company or converted at the option of the holders. The Company may not redeem the notes prior to the maturity date, and no sinking fund is provided for the notes. The Notes due 2025 may be converted, under certain circumstances as described below, based on an initial conversion rate of 12.2637 shares of common stock per $1,000 principal amount (which represents an initial conversion price of $81.54 per share). The conversion rate for the Notes due 2025 will be subject to adjustment upon the occurrence of certain specified events but will not be adjusted for accrued and unpaid interest. In addition, upon the occurrence of a make-whole fundamental change (as defined in the relevant indenture), the Company will, in certain circumstances, increase the conversion rate by a number of additional shares for a holder that elects to convert its notes in connection with such make-whole fundamental change. The Company received approximately $313.0 million in net proceeds, after deducting the initial purchasers' discount, from the issuance of the Notes due 2025.

The Notes due 2025 may be converted prior to the close of business on the business day immediately preceding September 1, 2024, in multiples of $1,000 principal amount, at the option of the holder only under the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on June 30, 2020 (and only during such calendar quarter), if the last reported sale price of the Company's common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day; (2) during the five business day period after any five consecutive trading day period (the "measurement period") in which the "trading price" (as defined in the relevant indenture) per $1,000 principal amount of notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of the Company's common stock and the conversion rate on each such trading day; or (3) upon the occurrence of specified corporate events. On and after September 1, 2024 until the close of business on the second scheduled trading day immediately preceding the maturity date of March 1, 2025, holders may convert their notes at any time, regardless of the foregoing circumstances. Upon the occurrence of a fundamental change (as defined in the relevant indenture), holders may require the Company to repurchase all or a portion of their Notes due 2025 for cash at a price equal to 100% of the principal amount of the notes to be repurchased plus any accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

As of June 30, 2023 and December 31, 2022, the sale price of the Company’s common stock was greater than or equal to $106.00 (130% of the notes conversion price) for at least 20 trading days (whether consecutive or not) during a period of 30 consecutive trading days preceding the quarter-ended June 30, 2023 and December 31, 2022. As a result, the Notes due 2025 are convertible at the holders’ option through September 30, 2023. Accordingly, the Company classified the net carrying amount of the Notes due 2025 of $93.4 million and $90.9 million as Debt, current on the condensed consolidated balance sheet as of June 30, 2023 and December 31, 2022, respectively. From July 1, 2023 through the date this Quarterly Report on Form 10-Q is available to be issued, the Company has not received any requests for conversion of the Notes due 2025.

For the period from March 9, 2020, the issuance date, through May 19, 2020, the number of authorized and unissued shares of the Company’s common stock that are not reserved for other purposes was less than the maximum number of underlying shares that would be required to settle the Notes due 2025 into equity. Accordingly, unless and until the Company had a number of authorized shares that were not issued or reserved for any other purpose that equaled or exceeded the maximum number of underlying shares (the “Share Reservation Condition”), the Company would have been required to pay to the converting holder in respect of each $1,000 principal amount of notes being converted solely in cash in an amount equal to the sum of the daily conversion values for each of the 20 consecutive trading days during the related observation period. However, following satisfaction of the Share Reservation Condition, the Company could settle conversions of notes through payment or delivery, as the case may be, of cash, shares of the Company’s common stock or a combination of cash and shares of its common stock, at the Company’s election. As further discussed below, the Company satisfied the Share Reservation Condition during May 2020.

In accounting for the issuance of the Notes due 2025, on March 9, 2020, the conversion option of the Notes due 2025 was deemed an embedded derivative requiring bifurcation from the Notes due 2025 (the “host contract”) and separate accounting as an embedded derivative liability, as a result of the Company not having the necessary number of authorized but unissued shares of its common stock available to settle the conversion option of the Notes due 2025 in shares. The proceeds from the Notes due 2025 were first allocated to the embedded derivative liability and the remaining proceeds were then allocated to the host contract. On March 9, 2020, the carrying amount of the embedded derivative liability of $68.7 million representing the conversion option was determined using the Binomial Lattice model and the remaining $251.3 million was allocated to the host contract. The difference between the principal amount of the Notes due 2025 and the fair value of the host contract (the “debt discount”) is amortized to interest expense using the effective interest method over the term of the Notes due 2025.

On May 20, 2020, at the Company’s annual meeting of stockholders, the stockholders approved an amendment to the Amended and Restated Certificate of Incorporation to increase the number of authorized shares of the Company’s common stock, par value $0.00001 per share, from 150,000,000 shares to 200,000,000 shares (the “Amendment”). The Amendment became effective upon filing with the Secretary of State of Delaware on May 20, 2020. As a result, the Company satisfied the Share Reservation Condition. The Company may now settle the Notes due 2025 and warrants issued in conjunction with the Notes due 2025 (the “2025 Warrants”) through payment or delivery, as the case may be, of cash, shares of its common stock or a combination of cash and shares of its common stock, at the Company’s election. Accordingly, on May 20, 2020, the embedded derivative liability was remeasured at a fair value of $116.3 million and was then reclassified to additional paid-in-capital in the condensed consolidated balance sheet in the second quarter of 2020 and is no longer remeasured as long as it continues to meet the conditions for equity classification. The Company recorded the change in the fair value of the embedded derivative in other expense, net in the condensed consolidated statement of operations during the year ended December 31, 2020.

The Company separated the Notes due 2025 into liability and equity components which resulted in a tax basis difference associated with the liability component that represents a temporary difference. The Company recognized the deferred taxes of $0.2 million for the tax effect of that temporary difference as an adjustment to the equity component included in additional paid-in capital in the condensed consolidated balance sheet.

Debt issuance costs for the issuance of the Notes due 2025 were approximately $7.6 million, consisting of initial purchasers' discount and other issuance costs. In accounting for the transaction costs, the Company allocated the total amount incurred to the Notes due 2025 host contract. Transaction costs were recorded as debt issuance cost (presented as contra debt in the condensed consolidated balance sheet) and are being amortized to interest expense over the term of the Notes due 2025.

Partial repurchase of Notes due 2025

Concurrently with the offering of the Notes due 2026 and Notes due 2028, the Company entered into separately- and privately-negotiated transactions to repurchase approximately $217.7 million aggregate principal amount of the Notes due 2025. The Company paid $217.7 million in cash and issued approximately 1.67 million shares of its common stock to the holders of the repurchased notes with an aggregate fair value of $302.7 million, representing the conversion value in excess of the principal amount of the Notes due 2025, which were fully offset by shares received from the Company's settlement of the associated note hedging arrangements discussed below. The total amount of $217.7 million paid to partially settle the repurchases of the Notes due 2025 was allocated between the liability and equity components of the amount extinguished by determining the fair value of the liability component immediately prior to the note repurchases and allocating that portion of the conversion price to the liability component in the amount of $184.5 million. The residual of the conversion price of $4.3 million of the repurchased Notes due 2025, net of inducement loss of $37.5 million for additional shares issued, was allocated to the equity component of the repurchased Notes due 2025 as an increase of additional paid-in capital. The fair value of the note settlement for such repurchases was calculated using a discount rate of 4.35%, representing an estimate of the Company's borrowing rate at the date of repurchase with a remaining expected life of approximately 4.1 years. As part of the settlement of the repurchase of the Notes due 2025, the Company wrote-off the $38.5 million unamortized debt discount and $4.1 million debt issuance cost apportioned to the principal amount of Notes due 2025 repurchased. The Company recorded a loss on partial settlement of the repurchased Notes due 2025 of $9.4 million in Other income (expense), net in the three months ended March 31, 2021, representing the difference between the consideration attributed to the liability component and the sum of the net carrying amount of the liability component and unamortized debt issuance costs. Further, the Company also recorded loss on inducement of $37.5 million in Other income (expense), net in the three months ended March 31, 2021, representing the difference between the fair value of the shares that would have been issued under the original conversion terms with respect to the repurchased Notes due 2025.

During the second quarter of 2021, $0.1 million in aggregate principal amount of the Notes due 2025 were converted, and the principal amount of the converted Notes due 2025 was repaid in cash. In connection with such conversions during the second quarter of 2021, the Company also issued 485 shares of its common stock to the holders of the converted Notes due 2025, with an aggregate fair value of $0.1 million, representing the conversion value in excess of the principal amount of the Notes due 2025, which were fully offset by shares received from the settlements of the associated note hedging arrangements. Following the repurchase transactions summarized above, as of June 30, 2023, $102.2 million aggregate principal amount of the Notes due 2025 remained outstanding.

The derived effective interest rate on the Notes due 2025 host contract was determined to be 5.18%, which remains unchanged from the date of issuance. The remaining unamortized debt discount was $8.0 million as of June 30, 2023, and will be amortized over approximately 1.7 years from June 30, 2023.

Notes due 2025 Hedge and Warrant Transactions

In connection with the offering of the Notes due 2025, the Company entered into privately-negotiated convertible note hedge transactions (the "Notes due 2025 Hedge") pursuant to which the Company has the option to purchase a total of approximately 3.9 million shares of its common stock (subject to anti-dilution adjustments), which is the same number of shares initially issuable upon conversion of the notes, at a price of $81.54 per share, which is the initial conversion price of the Notes due 2025. The total cost of the convertible note hedge transactions was approximately $89.1 million. The convertible note hedge transactions are expected generally to reduce potential dilution to the Company's common stock upon any conversion of the Notes due 2025 and/or offset any cash payments the Company is required to make in excess of the principal amount of converted notes, as the case may be.

Additionally, the Company separately entered into privately-negotiated warrant transactions in connection with the offering of the Notes due 2025 whereby the Company sold the 2025 Warrants to acquire approximately 3.9 million shares of the Company’s common stock (subject to anti-dilution adjustments) at an initial strike price of $106.94 per share. The Company received aggregate proceeds of approximately $71.6 million from the sale of the 2025 Warrants. If the market value per share of the Company’s common stock, as measured under the 2025 Warrants, exceeds the strike price of the 2025 Warrants, the 2025 Warrants will have a dilutive effect on the Company’s earnings per share, unless the Company elects, subject to certain conditions, to settle the 2025 Warrants in cash. Taken together, the purchase of the convertible note hedges in connection with the Notes due 2025 Hedge and the sale of the 2025 Warrants are intended to reduce potential dilution from the conversion of the Notes due 2025 and to effectively increase the overall conversion price from $81.54 to $106.94 per share. The 2025 Warrants are only exercisable on the applicable expiration dates in accordance with the agreements relating to each of the 2025 Warrants. Subject to the other terms of the 2025 Warrants, the first expiration date applicable to the 2025 Warrants is June 1, 2025, and the final expiration date applicable to the 2025 Warrants is September 23, 2025.

During the first quarter of 2021, in connection with the repurchase of $217.7 million aggregate principal amount of the Notes due 2025 summarized above, the Company entered into partial unwind agreements with respect to certain of the Notes due 2025 Hedge and the 2025 Warrants. In connection with these unwind transactions, the Company received shares of the Company’s common stock as a termination payment for the portion of the Notes due 2025 Hedge that were unwound, and the Company issued shares of its common stock as a termination payment for the portion of the 2025 Warrants that were unwound. As a result of the unwind agreements for the Notes due 2025 Hedge and the 2025 Warrants, the Company received 1.9 million of the Company’s common stock from the Notes due 2025 Hedge settlement and issued 1.8 million of the Company’s common stock from the 2025 Warrants that were unwound. Following the unwind transactions summarized above, as of June 30, 2023, options to purchase approximately 1.3 million shares of common stock remained outstanding under the Notes due 2025 Hedge, and 2025 Warrants exercisable to purchase approximately 1.3 million shares remained outstanding.

For the period from March 9, 2020, the issuance date of the Notes due 2025 Hedge and 2025 Warrants, through May 19, 2020, the number of authorized and unissued shares of the Company’s common stock that are not reserved for other purposes was less than the maximum number of underlying shares that will be required to settle the Notes due 2025 through the delivery of shares of the Company’s common stock. Accordingly, the Notes due 2025 Hedge and 2025 Warrants could only be settled on net cash settlement basis. As a result, the Notes due 2025 Hedge and 2025 Warrants were classified as a convertible notes hedge asset and 2025 Warrants liability, respectively, in the condensed consolidated balance sheet and the change in fair value of derivatives was included in other expense, net in the condensed consolidated statement of operations.

On May 20, 2020, at the Company’s annual meeting of stockholders, the stockholders approved the Amendment and satisfied the Share Reservation Condition (as discussed above), and as a result, the convertible notes hedge asset and the 2025 Warrants liabilities were remeasured at a fair value of $117.1 million and $96.4 million, respectively, and were then reclassified to additional paid-in-capital in the condensed consolidated balance sheet in the second quarter of 2020 and is no longer remeasured as long as they continue to meet the conditions for equity classification. The change in the fair value of the convertible notes hedge asset and the 2025 Warrants liability were recorded in other expense, net in the condensed consolidated statements of operations during the three and six months ended June 30, 2020.

Convertible Senior Notes due 2023

In August 2018, the Company sold $65.0 million aggregate principal amount of 4.0% convertible senior notes due 2023 (the “Notes due 2023”) in a private placement. On May 30, 2019, the Company entered into separately and privately-negotiated transactions with certain holders of the Notes due 2023 resulting in the repurchase and exchange, as of June 5, 2019, of $60.0 million aggregate principal amount of the notes in consideration for the issuance of 10,801,080 shares of common stock and separate cash payments totaling $6.0 million. As of both June 30, 2023 and December 31, 2022, $5.0 million aggregate principal amount of the Notes due 2023 remained outstanding.

The remaining outstanding Notes due 2023 are general unsecured obligations and bear interest at a rate of 4.0% per year, payable semi-annually on February 1 and August 1 of each year. The Notes due 2023 are governed by an indenture between the Company and U.S. Bank National Association, as trustee. The remaining outstanding Notes due 2023 will mature on August 1, 2023, unless earlier repurchased by the Company or converted at the option of the holders. The Company may not redeem the remaining Notes due 2023 prior to the maturity date, and no sinking fund is provided for such notes. The remaining Notes due 2023 are convertible, at a holder's election, in multiples of $1,000 principal amount, into shares of the Company's common stock based on the applicable conversion rate. The initial conversion rate for such notes is 180.018 shares of common stock per $1,000 principal amount of notes (which is equivalent to an initial conversion price of approximately $5.56 per share). The conversion rate and the corresponding conversion price are subject to adjustment upon the occurrence of certain events but will not be adjusted for any accrued and unpaid interest. Holders of the remaining Notes due 2023 who convert their notes in connection with a make-whole fundamental change (as defined in the applicable indenture) are, under certain circumstances, entitled to an increase in the conversion rate. Additionally, in the event of a fundamental change, holders of the remaining Notes due 2023 may require the Company to repurchase all or a portion of their notes at a price equal to 100% of the principal amount of notes, plus any accrued and unpaid interest, including any additional interest to, but excluding, the repurchase date. Holders may convert all or any portion of their Notes due 2023 at their option at any time prior to the close of business on the business day immediately preceding the maturity date, in multiples of $1,000 principal amount.

9. COMMITMENTS AND CONTINGENCIES

Operating Leases

The Company leases office facilities under noncancellable operating leases that expire on various dates through 2032, some of which may include options to extend the leases for up to 12 years.

The components of lease expense are presented as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(In thousands)			
Operating lease costs	$ 2,416	$ 2,052	$ 5,008	$ 3,989

The components of lease liabilities are presented as follows:

	June 30, 2023	December 31, 2022
	(In thousands except years and percentage data)	
Operating lease liabilities, current (Accrued liabilities)	$ 5,773	$ 5,371
Operating lease liabilities, non-current (Other liabilities)	20,311	19,077
Total operating lease liabilities	$ 26,084	$ 24,448
Supplemental lease information:		
Weighted average remaining lease term	5.6 years	5.3 years
Weighted average discount rate	6.7%	6.5%

Supplemental cash flow and other information related to operating leases, were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(In thousands)			
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows from operating leases	$ 1,788	$ 1,325	$ 3,490	$ 2,843
Non-cash investing activities:				
Lease liabilities arising from obtaining right-of-use assets	$ 2,852	$ —	$ 4,368	$ 6,742

Undiscounted cash flows of operating lease liabilities as of June 30, 2023 were as follows:

	Lease Amounts
	(In thousands)
Year:	
2023 (remaining six months)	$ 3,752
2024	6,691
2025	5,940
2026	4,252
2027	2,882
Thereafter	7,857
Total lease payments	31,374
Less: imputed lease interest	(5,290)
Total lease liabilities	$ 26,084

Purchase Obligations

The Company has contractual obligations related to component inventory that its contract manufacturers procure on its behalf in accordance with its production forecast as well as other inventory related purchase commitments. As of June 30, 2023, these purchase obligations totaled approximately $633.4 million.

Litigation

From time-to-time, the Company may be involved in litigation relating to claims arising out of its operations, the ultimate disposition of which could have a material adverse effect on its operations, financial condition or cash flows. The Company is not currently involved in any material legal proceedings; however, the Company may be involved in material legal proceedings in the future. Such matters are subject to uncertainty and there can be no assurance that such legal proceedings will not have a material effect on its business, results of operations, financial position or cash flows.

10. STOCKHOLDERS' EQUITY

In May 2021, the board of directors authorized a share repurchase program (the “2021 Repurchase Program”) pursuant to which the Company was authorized to repurchase up to $500.0 million of the Company’s common stock, from time to time in the open market or through structured repurchase agreements with third parties, $200.0 million of which was remaining as of March 31, 2023.

During the three and six months ended June 30, 2023, the Company repurchased and subsequently retired 1,254,474 shares of common stock from the open market at an average cost of $159.43 per share for a total of $200.0 million. Of the 1,254,474 shares repurchased, 833,517 shares were retired as of June 30, 2023 and recorded as “Repurchase of common stock” in the accompanying condensed consolidated statements of changes in stockholders’ equity. The remaining 420,957 shares repurchased were retired in July 2023 and recorded as “Treasury stock, at cost” in the accompanying consolidated statements of changes in stockholders’ equity. The full

$500.0 million of the Company's common stock authorized under the 2021 Repurchase Program has been repurchased as of June 30, 2023.

11. STOCK-BASED COMPENSATION

Stock-based Compensation Expense

Stock-based compensation expense for all stock-based awards, which includes shares purchased under the Company's 2011 Employee Stock Purchase Plan ("ESPP"), restricted stock units ("RSUs") and performance stock units ("PSUs"), expected to vest is measured at fair value on the date of grant and recognized ratably over the requisite service period.

In addition, as part of certain business acquisitions, the Company is obligated to issue shares of common stock of the Company as payment subject to achievement of certain targets. For such payments, the Company records stock-based compensation classified as post-combination expense recognized ratably over the measurement period presuming the targets will be met.

The following table summarizes the components of total stock-based compensation expense included in the condensed consolidated statements of operations for the periods presented:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(In thousands)			
Cost of revenues	$ 3,398	$ 3,131	$ 7,067	$ 5,638
Research and development	23,765	16,266	45,243	29,995
Sales and marketing	14,515	22,176	35,934	35,233
General and administrative	12,488	11,491	25,577	29,995
Total	$ 54,166	$ 53,064	$ 113,821	$ 100,861

The following table summarizes the various types of stock-based compensation expense for the periods presented:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(In thousands)			
Stock options, RSUs and PSUs	$ 51,852	$ 47,228	$ 108,809	$ 91,340
Employee stock purchase plan	1,803	1,014	3,843	2,396
Post combination expense accrual (Accrued liabilities)	511	4,822	1,169	7,125
Total	$ 54,166	$ 53,064	$ 113,821	$ 100,861

As of June 30, 2023, there was approximately $407.6 million of total unrecognized stock-based compensation expense related to unvested equity awards, which are expected to be recognized over a weighted-average period of 2.8 years.

Equity Awards Activity

Stock Options

The following table summarizes stock option activity:

	Number of Shares Outstanding	Weighted-Average Exercise Price per Share	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value (1)
	(In thousands)		*(Years)*	*(In thousands)*
Outstanding at December 31, 2022	1,464	$ 1.83		
Granted	—	—		
Exercised	(92)	1.64		$ 15,375
Canceled	—	—		
Outstanding at June 30, 2023	1,372	$ 1.85	1.5	$ 227,200
Vested and expected to vest at June 30, 2023	1,372	$ 1.85	1.5	$ 227,200
Exercisable at June 30, 2023	1,372	$ 1.85	1.5	$ 227,200

(1) The intrinsic value of options exercised is based upon the value of the Company's stock at exercise. The intrinsic value of options outstanding, vested and expected to vest, and exercisable as of June 30, 2023 is based on the closing price of the last trading day during the period ended June 30, 2023. The Company's stock fair value used in this computation was $167.48 per share.

The following table summarizes information about stock options outstanding at June 30, 2023:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	Number of Shares	Weighted-Average Remaining Life	Weighted-Average Exercise Price	Number of Shares	Weighted-Average Exercise Price
	(In thousands)	*(Years)*		*(In thousands)*	
$0.70 —— $1.11	422	2.0	$ 0.89	422	$ 0.89
$1.29 —— $1.29	858	1.2	1.29	858	1.29
$1.31 —— $5.53	65	1.7	4.43	65	4.43
$14.58 —— $14.58	20	2.8	14.58	20	14.58
$64.17 —— $64.17	7	3.8	64.17	7	64.17
Total	1,372	1.5	$ 1.85	1,372	$ 1.85

Restricted Stock Units

The following table summarizes RSU activity:

	Number of Shares Outstanding		Weighted-Average Fair Value per Share at Grant Date	Weighted-Average Remaining Contractual Term		Aggregate Intrinsic Value [1]
	(In thousands)			*(Years)*		*(In thousands)*
Outstanding at December 31, 2022	2,253	$	181.01			
Granted	423		214.80			
Vested	(691)		142.41		$	140,740
Canceled	(147)		176.87			
Outstanding at June 30, 2023	1,838	$	203.65	1.3	$	307,877
Expected to vest at June 30, 2023	1,838	$	203.65	1.3	$	307,865

(1) The intrinsic value of RSUs vested is based upon the value of the Company's stock when vested. The intrinsic value of RSUs outstanding and expected to vest as of June 30, 2023 is based on the closing price of the last trading day during the period ended June 30, 2023. The Company's stock fair value used in this computation was $167.48 per share.

Performance Stock Units

The following summarizes PSU activity:

	Number of Shares Outstanding		Weighted-Average Fair Value per Share at Grant Date	Weighted-Average Remaining Contractual Term		Aggregate Intrinsic Value [1]
	(In thousands)			*(Years)*		*(In thousands)*
Outstanding at December 31, 2022	376	$	197.82			
Granted	383		240.72			
Vested	(375)		195.81		$	79,438
Canceled	(19)		227.35			
Outstanding at June 30, 2023	365	$	243.30	1.7	$	61,087
Expected to vest at June 30, 2023	365	$	243.30	1.7	$	61,087

(1) The intrinsic value of PSUs vested is based upon the value of the Company's stock when vested. The intrinsic value of PSUs outstanding and expected to vest as of June 30, 2023 is based on the closing price of the last trading day during the period ended June 30, 2023. The Company's stock fair value used in this computation was $167.48 per share.

12. INCOME TAXES

For the three months ended June 30, 2023 and 2022, the Company's income tax provision totaled $27.4 million and $15.2 million, respectively, on a net income before income taxes of $184.6 million and $92.2 million, respectively. For the six months ended June 30, 2023 and 2022, the Company's income tax provision totaled $59.5 million and $20.8 million, respectively, on a net income before income taxes of $363.6 million and $149.6 million, respectively. For both the three and six months ended June 30, 2023 and 2022, the income tax provision was calculated using the annualized effective tax rate method and was primarily due to projected tax expense in the U.S. and foreign jurisdictions that are profitable, partially offset by a tax deduction from employee stock compensation reported as a discrete event.

For the three and six months ended June 30, 2023 and 2022, in accordance with FASB guidance for interim reporting of income tax, the Company has computed its provision for income taxes based on a projected annual effective tax rate while excluding loss jurisdictions which cannot be benefited.

In August 2022, the U.S. enacted the IRA, which included revisions to the Internal Revenue Code of 1986, as amended. The IRA introduced a 15% corporate alternative minimum income tax ("CAMT") for corporations whose average adjusted financial income for any consecutive three-year period ending after December 31, 2021, exceeds $1.0 billion. Further, the IRA also extended the investment tax credits for clean energy and expanded the incentives to clean energy manufacturing. The Company is not subject to the CAMT based on the current operating results and interpretations of the latest IRA guidance.

13. NET INCOME PER SHARE

Basic net income per share is computed by dividing net income by the weighted average number of shares of common stock outstanding during the period. Diluted net income per share is computed in a similar manner, but it also includes the effect of potential common shares outstanding during the period, when dilutive. Potential common shares include stock options, RSUs, PSUs, shares to be purchased under the Company's ESPP, the Notes due 2023, Notes due 2025, Notes due 2026, Notes due 2028, and the 2025 Warrants. Refer to Note 8. "Debt," for additional information about the Company's outstanding debt.

The following table presents the computation of basic and diluted net income per share for the periods presented:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(In thousands, except per share data)			
Numerator:				
Net income	$ 157,191	$ 76,976	$ 304,064	$ 128,797
Convertible senior notes interest and financing costs, net	1,651	662	3,255	1,304
Adjusted net income	$ 158,842	$ 77,638	$ 307,319	$ 130,101
Denominator:				
Shares used in basic per share amounts:				
Weighted average common shares outstanding	136,607	135,196	136,650	134,768
Shares used in diluted per share amounts:				
Weighted average common shares outstanding used for basic calculation	136,607	135,196	136,650	134,768
Effect of dilutive securities:				
Employee stock-based awards	1,760	3,042	2,155	3,399
Notes due 2023	900	900	900	900
Notes due 2025	1,253	—	1,253	—
2025 Warrants	503	512	575	460
Notes due 2026	2,057	2,057	2,057	2,057
Notes due 2028	2,018	2,018	2,018	2,018
Weighted average common shares outstanding for diluted calculation	145,098	143,725	145,608	143,602
Basic and diluted net income per share				
Net income per share, basic	$ 1.15	$ 0.57	$ 2.23	$ 0.96
Net income per share, diluted	$ 1.09	$ 0.54	$ 2.11	$ 0.91

Diluted earnings per share for the three and six months ended June 30, 2023 and 2022 includes the dilutive effect of potentially dilutive common shares by application of the treasury stock method for stock options, RSUs, PSUs, ESPP, the 2025 Warrants, the 2026 Warrants, the 2028 Warrants and includes potentially dilutive common shares by application of the if-converted method for the Notes due 2025, Notes due 2026 and Notes due 2028. To the extent these potential common shares are antidilutive, they are excluded from the calculation of diluted net income per share.

Further, the Company under the relevant sections of the indentures, irrevocably may elect to settle principal in cash and any excess in cash or shares of the Company's common stock for its Notes due 2025, Notes due 2026 and Notes due 2028. If and when the Company makes such election, there will be no adjustment to the net income and the Company will use the average share price for the period to determine the potential number of shares to be issued based upon assumed conversion to be included in the diluted share count.

The following outstanding shares of common stock equivalents were excluded from the calculation of the diluted net income per share attributable to common stockholders because their effect would have been antidilutive:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2023	2022	2023	2022
	(In thousands)			
Employee stock-based awards	1,226	572	1,006	598
2028 Warrants	2,477	2,425	2,046	2,735
2026 Warrants	2,524	2,471	2,085	2,788
Notes due 2025	—	1,253	—	1,253
Total	6,227	6,721	5,137	7,374

14. RELATED PARTY

In 2018, a member of the Company's board of directors and one of its principal stockholders, Thurman John Rodgers, purchased $5.0 million aggregate principal amount of the Notes due 2023 in a concurrent private placement. As of both June 30, 2023 and December 31, 2022, $5.0 million aggregate principal amount of the Notes due 2023 were outstanding. Refer to Note 8. "Debt," for additional information related to this purchase.

15. SUBSEQUENT EVENTS

Investment in a privately-held company

In July 2023, the Company invested $15.0 million in cash in a privately-held company. The investment does not require consolidation into the Company's financial statements because the privately-held company is not a variable interest entity and the Company does not hold a majority voting interest.

Share repurchase program

In July 2023, the Company's Board of Directors authorized the repurchase of up to $1.0 billion of the Company's common stock. The Company may repurchase shares of common stock from time to time through solicited or unsolicited transactions in the open market, in privately negotiated transactions or pursuant to a Rule 10b5-1 plan. The timing, price and volume of repurchases will be based on market conditions, relevant securities laws, and other considerations. The share repurchase program may be discontinued or amended at any time by the Company's Board of Directors and expires on July 26, 2026.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

Forward-Looking Statements

The following discussion and analysis of our financial condition and results of operations should be read together with our condensed consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q. This discussion contains forward-looking statements reflecting our current expectations and involves risks and uncertainties. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expect," "plan," "anticipate," "believe," "estimate," "predict," "intend," "potential" or "continue" or the negative of these terms or other comparable terminology. Such statements, include but are not limited to statements regarding: our expectations as to future financial performance, including expenses, liquidity sources and cash requirements; the capabilities, performance and competitive advantage of our technology and products and planned changes; timing of new product releases, and the anticipated market adoption of our current and future products; our expectations regarding, demand for our products; our business strategies, including anticipated trends and operating conditions; our expectations regarding our internal reorganization; growth of and development in markets we target, and our expansion into new and existing markets; our performance in operations, including component supply management; our product quality and customer service; our expectations regarding geopolitical developments, such as the conflict in Ukraine and inflationary pressures and their impact on our business operations, financial performance and the markets in which we, our suppliers, manufacturers and installers operate; and the importance of and anticipated benefits from government incentives for solar products, including through changes in the tax laws, rules and regulations. You should be aware that the forward-looking statements contained in this report are based on our current views and assumptions, and are subject to known and unknown risks, uncertainties and other factors that may cause actual events or results to differ materially. For a discussion identifying some of the important factors that could cause actual results to vary materially from those anticipated in the forward-looking statements, see below, those discussed in the section entitled "Risk Factors" herein and those included in our Annual Report on Form 10-K for the year ended December 31, 2022 filed on February 13, 2023 (the "Form 10-K"). Unless the context requires otherwise, references in this report to "Enphase," "we," "us" and "our" refer to Enphase Energy, Inc. and its consolidated subsidiaries.

Business Overview

We are a global energy technology company. We deliver smart, easy-to-use solutions that manage solar generation, storage and communication on one platform. We revolutionized the solar industry with our microinverter technology and we produce a fully integrated solar-plus-storage solution. As of June 30, 2023, we have shipped approximately 68 million microinverters, and more than 3.5 million Enphase residential and commercial systems have been deployed in over 145 countries.

The Enphase® Energy System™, powered by IQ® Microinverters and IQ™ Batteries, our current generation integrated solar, storage and energy management offering, enables self-consumption and delivers our core value proposition of yielding more energy, simplifying design and installation and improving system uptime and reliability. The IQ family of microinverters, like all of our previous microinverters, is fully compliant with NEC 2014 and 2017 rapid shutdown requirements. Unlike string inverters, this capability is built-in, with no additional equipment necessary.

The Enphase Energy System brings a high technology, networked approach to solar generation plus energy storage, by leveraging our design expertise across power electronics, semiconductors and cloud-based software technologies. Our integrated approach to energy solutions maximizes a home's energy potential while providing advanced monitoring and remote maintenance capabilities. The Enphase Energy System with IQ uses a single technology platform for seamless management of the whole solution, enabling rapid commissioning with the Enphase® Installer App and consumption monitoring with IQ™ Gateway with IQ™ Combiner+, Enphase® App, a cloud-based energy management platform, and our IQ Battery. System owners can use the Enphase App to monitor their home's solar generation, energy storage and consumption from any web-enabled device. Unlike some of our competitors, who utilize a traditional inverter, or offer separate components of solutions, we have built-in system redundancy in both photovoltaic generation and energy storage, eliminating the risk that comes with a single point of failure. Further, the nature of our cloud-based, monitored system allows for remote firmware and software updates, enabling cost-effective remote maintenance and ongoing utility compliance.

We sell primarily to solar distributors who combine our products with others, including solar modules products and racking systems, and resell to installers in each target region. In addition to our solar distributors, we sell directly to select large installers, original equipment manufacturers ("OEMs") and strategic partners. Our OEMs customers include solar module manufacturers who integrate our microinverters with their solar module products and resell to both distributors and installers. Strategic partners include providers of solar financing solutions. We also sell certain products and services to homeowners primarily in support of our warranty services and legacy product upgrade programs via our online store.

Inflation Reduction Act of 2022. In August 2022, the Inflation Reduction Act of 2022 (the "IRA") was enacted, which includes extension of the investment tax credit ("ITC") as well as a new advanced manufacturing production tax credit ("AMPTC") to incentivize clean energy component sourcing and production, including for the production of microinverters. The IRA provides an AMPTC on microinverters of 11 cents per alternating current watt. The AMPTC for microinverters decreases by 25% each year beginning in 2030 and ending after 2032. Under the IRA, the ITC was extended until 2032 to allow a qualifying homeowner to deduct 30% of the cost of installing residential solar systems from their U.S. federal income taxes, thereby returning a material portion of the purchase price of the residential solar system to homeowners. Under the terms of the current extension, the ITC will remain at 30% through the end of 2032, reduce to 26% for 2033, reduce to 22% for 2034, and further reduce to 0% after the end of 2034 for residential solar systems, unless it is extended before that time. We believe the enactment of the IRA is favorable to our overall business worldwide; however, we are continuing to evaluate the overall impact and applicability of the IRA to our results of operations going forward, including the revisions to the U.S. Internal Revenue Code, which include a 15% corporate minimum income tax and a 1% excise tax on corporate stock repurchases in tax years beginning after December 31, 2022.

During the second quarter of 2023, we began our first shipments of microinverters from our contract manufacturer partners in the United States. We expect to add a total capacity of approximately 4.5 million microinverters per quarter with three different manufacturing partners in the U.S. as we exit 2023, which would bring our overall global capacity to approximately 10 million microinverters per quarter. This allows us to take advantage of the benefits of the IRA, and along with the manufacturing capacity in Romania, could help us better serve our customers by cutting down delivery times and diversifying our supply chain.

Factors Affecting our Business and Operations

As we have a growing global footprint, we are subject to risk and exposure from the evolving macroeconomic environment, including the effects of increased global inflationary pressures and interest rates, fluctuations in foreign currency exchange rates, potential economic slowdowns or recessions, the COVID-19 pandemic and geopolitical pressures, including the unknown impacts of current and future trade regulations and the Russia-Ukraine armed conflict. We continuously monitor the direct and indirect impacts of these circumstances on our business and financial results.

Demand for Products. The demand environment for our products in the United States has experienced a broad-based slowdown, primarily due to high interest rates. During the second quarter of 2023, this resulted in elevated inventory with distributors and installers. We expect to sell less microinverters to distributors and installers during the third quarter of 2023 as they respond to this slower demand environment. We expect these trends to have an adverse effect on our revenue in the second half of 2023.

Unfavorable Macroeconomic and Market Conditions. The global macroeconomic and market uncertainty, including higher interest rates and inflation, have caused disruptions in financial markets and may continue to have an adverse effect on the U.S. and world economies. As a result, customers may decide to delay purchasing our products and services or not purchase at all. A tighter credit market for consumer and business spending could, in turn, adversely affect spending levels of installers and end users and lead to increased price competition for our products. Reductions in customer spending in response to unfavorable or uncertain macroeconomic and market conditions, globally or in a particular region where we operate, would adversely affect our business, results of operations and financial condition. Further information relating to the risks and uncertainties related to unfavorable macroeconomic and market conditions may be found in Part I, Item 1A, "Risk Factors" of the Form 10-K.

Products

The Enphase Energy System, powered by IQ Microinverters, IQ Batteries and other products and services, is an integrated solar, storage and energy management offering that enables self-consumption and delivers our core value proposition of yielding more energy, simplifying design and installation and improving system uptime and reliability.

IQ Microinverters. We recently began shipping our new IQ8 microinverters with peak output AC power of 384W in France, the Netherlands, Spain, Portugal, Poland, and Germany to support newer high-powered solar modules. The new IQ8 Microinverters are designed to maximize energy production and can manage a continuous DC current of 14 amperes, supporting higher powered solar modules through increased energy harvesting.

AC Module (“ACM”) products are integrated systems that allow installers to be more competitive through improved logistics, reduced installation times, faster inspection and training. We continue to make steady progress with our ACM partners, including SunPower Corporation and Maxeon Solar Technologies, Ltd.

IQ Batteries. Our Enphase IQ Battery storage systems, with usable and scalable capacity of 10.1 kWh and 3.4 Kilowatt-hour (“kWh”) for the United States, and 10.5 kWh and 3.5 kWh for Europe and other international countries, are based on our Ensemble OS™ energy system, which powers the world’s first grid-independent microinverter-based storage systems. We currently ship our Enphase IQ Battery storage systems to customers in North America, Belgium, Germany, Austria, France, the Netherlands and Switzerland, Spain and Portugal. Enphase IQ Batteries in Europe can be installed with both single-phase and three-phase third-party solar energy inverters, enabling homeowners to upgrade their existing home solar systems with a residential battery storage solution that reduces costs while providing increased self-reliance.

In May 2023, we introduced our most powerful Enphase Energy System to-date, featuring the new IQ™ Battery 5P and IQ8 Microinverters, for customers in Australia. The IQ Battery 5P is modular with 5 kWh capacity; the IQ8 Microinverters provide a peak output power of 384 W. The IQ Battery 5P is also available for customers in the United States and Puerto Rico. The IQ Battery 5P is modular by design and can deliver 3.84 kW continuous power and 7.68 kW peak power, enabling homeowners to start heavy loads like air conditioners easily during power outages.

Our IQ™ Load Controller for our Enphase IQ Battery storage systems allow homeowners to decide what gets power in their home in the event of a grid outage, with the ability to choose up to four loads. These loads will be on when the grid is present and shed automatically in the event of a grid failure. This product makes installation simpler and saves time for installers.

Electric Vehicle (“EV”) Chargers. The increasing penetration of EVs has implications for home energy management, as households not only consume significantly more power with an EV, but also have a large battery that can be used for both backup and grid service. In the first quarter of 2023, we began production shipments of Enphase branded EV chargers at our existing contract manufacturing facility in Mexico. We expect this move could help to meet the rapidly growing demand for reliable and affordable EV charging solutions by providing a greater supply of product and more predictable lead times. Our EV chargers are compatible with most EVs sold in North America. Customers are able to purchase Enphase-branded EV chargers with a charging power range between 32 amperes and 64 amperes.

In January 2023, we demonstrated our bidirectional EV charger technology enabling vehicle-to-home and vehicle-to-grid functionality. This new bidirectional EV charger is designed to leverage the power of grid forming IQ8 Microinverters and Ensemble OS™ energy management technology to seamlessly integrate into Enphase home energy systems, and can be controlled from the Enphase App, empowering homeowners to make, use, save, and sell their own power.

In June 2023, we introduced the IQ™ Energy Router family of devices in Germany and Austria to enable the integration of select third-party EV chargers and heat pumps into Enphase solar and battery systems. The IQ Energy Router integrates with EV chargers, while the IQ™ Energy Router+ works with both EV chargers and heat pumps.

Results of Operations

Net Revenues

	Three Months Ended June 30,		Change in		Six Months Ended June 30,		Change in	
	2023	2022	$	%	2023	2022	$	%
	(In thousands, except percentages)							
Net revenues	$ 711,118	$ 530,196	$ 180,922	34 %	$ 1,437,134	$ 971,488	$ 465,646	48 %

Three months ended June 30, 2023 and 2022

Net revenues increased by $180.9 million, or 34%, in the three months ended June 30, 2023, as compared to the same period in 2022, driven primarily by a 55% increase in microinverter units volume shipped, as we sold approximately 5.2 million microinverter units in the three months ended June 30, 2023, as compared to approximately 3.3 million units in the three months ended June 30, 2022. The average selling price of our microinverter products increased by 3% in the three months ended June 30, 2023, as compared to the same period in 2022, which contributed to an approximately $13.6 million increase in revenue, primarily driven by a favorable product mix as we sold more IQ8 microinverters relative to IQ7 microinverters in the three months ended June 30, 2023. The increase in total net revenues was partially offset by a decrease in shipments of IQ Batteries from 132.4 Megawatt-hour ("MWh") shipped in the three months ended June 30, 2022 to 82.3 MWh shipped in the three months ended June 30, 2023.

Six months ended June 30, 2023 and 2022

Net revenues increased by $465.6 million, or 48%, for the six months ended June 30, 2023, as compared to the same period in 2022, driven primarily by a 62% increase in microinverter units volume shipped as we sold approximately 10.0 million microinverter units in the six months ended June 30, 2023, as compared to approximately 6.2 million units for the six months ended June 30, 2022. The average selling price of our microinverter products increased by 4% in the six months ended June 30, 2023, as compared to the same period in 2022, which contributed to an approximately $39.7 million increase in revenue, primarily driven by a favorable product mix as we sold more IQ8 microinverters relative to IQ7 microinverters in the six months ended June 30, 2023. The increase in total net revenues was partially offset by a decrease in shipments of IQ Batteries from 252.8 MWh shipped in the six months ended June 30, 2022 to 184.7 MWh shipped in the six months ended June 30, 2023.

Cost of Revenues and Gross Margin

	Three Months Ended June 30,		Change in		Six Months Ended June 30,		Change in	
	2023	2022	$	%	2023	2022	$	%
	(In thousands, except percentages)							
Cost of revenues	$ 387,776	$ 311,191	$ 76,585	25 %	$ 787,421	$ 575,510	$ 211,911	37 %
Gross profit	323,342	219,005	104,337	48 %	649,713	395,978	253,735	64 %
Gross margin	45.5 %	41.3 %			45.2 %	40.8 %		

Three months ended June 30, 2023 and 2022

Cost of revenues increased by $76.6 million, or 25%, in the three months ended June 30, 2023, as compared to the same period in 2022, primarily due to higher volume of microinverter units sold and monetary impact for change in discount rate input to the fair value of our warranty obligations. These costs were partially offset by a decrease in shipments of IQ Batteries, and recognition of credits under the AMPTC, for microinverters manufactured and shipped to customers in the United States during the three months ended June 30, 2023.

Gross margin increased by 4.2 percentage points in the three months ended June 30, 2023, as compared to the same period in 2022. The increase was primarily due to a higher average selling prices driven by a favorable product mix as we sold more IQ8 microinverters relative to IQ7 microinverters in the three months ended June 30, 2023, and favorable impact from foreign currency exchange rate. Gross margin also increased in the three months ended June 30, 2023, as compared to the same period in 2022, due to cost management efforts, such as lower shipping costs and the benefit recognized from credits under AMPTC.

Six months ended June 30, 2023 and 2022

Cost of revenues increased by $211.9 million, or 37%, for the six months ended June 30, 2023, as compared to the same period in 2022, primarily due to higher volume of microinverter units sold and monetary impact for change in discount rate input to the fair value of our warranty obligations. These costs were partially offset by a decrease in shipments of IQ Batteries and the recognition of credit under the AMPTC for microinverters manufactured and shipped to customers in the United States during the six months ended June 30, 2023.

Gross margin increased by 4.4 percentage points for the six months ended June 30, 2023, as compared to the same period in 2022. The increase was primarily due to a higher average selling prices driven by a favorable product mix, as we sold more IQ8 microinverters relative to IQ7 microinverters, as well as cost management efforts such as lower shipping costs and the benefit recognized from credits under AMPTCs.

Research and Development

	Three Months Ended June 30,		Change in		Six Months Ended June 30,		Change in	
	2023	2022	$	%	2023	2022	$	%
	(In thousands, except percentages)							
Research and development	$ 60,043	$ 39,256	$ 20,787	53 %	$ 117,172	$ 74,975	$ 42,197	56 %
Percentage of net revenues	8 %	7 %			8 %	8 %		

Three months ended June 30, 2023 and 2022

Research and development expense increased by $20.8 million, or 53%, in the three months ended June 30, 2023, as compared to the same period in 2022. The increase was primarily due to $15.5 million of higher personnel-related expenses, $3.5 million of equipment expense associated with our investment in the development, introduction and qualification of new products, and $2.4 million of professional services and corporate expenses to support our business growth, partially offset by a decrease of $0.6 million of facility costs from restructuring activities. The increase in personnel-related expenses was primarily due to hiring and retention programs for employees, which increased total compensation costs, including stock-based compensation. The amount of research and development expenses may fluctuate from period to period due to the differing levels and stages of development activity for our products.

Six months ended June 30, 2023 and 2022

Research and development expense increased by $42.2 million, or 56%, for the six months ended June 30, 2023, as compared to the same period in 2022. The increase was primarily due to $32.2 million of higher personnel-related expenses, $7.0 million of equipment expense associated with our investment in the development, introduction and qualification of new products, and $3.9 million of professional services and corporate expenses to support our business growth, partially offset by a decrease of $0.9 million of facility costs from restructuring activities. The increase in personnel-related expenses was primarily due to a growth in headcount from hiring and retention programs for employees, which increased total compensation costs, including stock-based compensation. The amount of research and development expenses may fluctuate from period to period due to the differing levels and stages of development activity for our products.

Sales and Marketing

	Three Months Ended June 30,		Change in		Six Months Ended June 30,		Change in	
	2023	2022	$	%	2023	2022	$	%
	(In thousands, except percentages)							
Sales and marketing	$ 58,405	$ 53,588	$ 4,817	9 %	$ 123,026	$ 94,932	$ 28,094	30 %
Percentage of net revenues	8 %	10 %			9 %	10 %		

Three months ended June 30, 2023 and 2022

Sales and marketing expense increased by $4.8 million, or 9%, in the three months ended June 30, 2023, as compared to the same period in 2022. The increase was primarily due to $2.1 million of higher personnel-related expenses from increased headcount as a result of our efforts to improve customer experience, to provide 24/7 support along with a field service desk for installers and Enphase system owners globally, and to support our business growth globally. The increase in sales and marketing expense in the three months ended June 30, 2023, as compared to the same period in 2022, was also attributable to $3.3 million of higher professional services and advertising costs to support our business growth. This increase was partially offset by a decrease of $0.6 million in equipment and facility costs from restructuring activities.

Six months ended June 30, 2023 and 2022

Sales and marketing expense increased by $28.1 million, or 30%, for the six months ended June 30, 2023, as compared to the same period in 2022. The increase was primarily due to $22.4 million of higher personnel-related expenses from a growth in headcount as a result of our efforts to improve customer experience, to provide 24/7 support along with a field service desk for installers and Enphase system owners globally, and to support our business growth globally. The increase in sales and marketing expense for the six months ended June 30, 2023, as compared to the same period in 2022, was also attributable to $5.7 million of higher professional services, equipment and facility costs to support our business growth.

General and Administrative

	Three Months Ended June 30,		Change in		Six Months Ended June 30,		Change in	
	2023	2022	$	%	2023	2022	$	%
	(In thousands, except percentages)							
General and administrative	$ 34,397	$ 32,125	$ 2,272	7 %	$ 70,662	$ 70,211	$ 451	1 %
Percentage of net revenues	5 %	6 %			5 %	7 %		

Three months ended June 30, 2023 and 2022

General and administrative expense increased by $2.3 million, or 7%, in the three months ended June 30, 2023, as compared to the same period in 2022. The increase was primarily due to $2.8 million of higher personnel-related expenses, including stock-based compensation, and $2.3 million of higher legal, professional services and technological infrastructure to support scalability of our business growth, offset by $2.8 million of lower facility costs from restructuring activities.

Six months ended June 30, 2023 and 2022

General and administrative expense increased by $0.5 million, or 1%, in the six months ended June 30, 2023, as compared to the same period in 2022. The increase was primarily due to $3.9 million of higher legal, professional services and other operational and facility costs to support scalability of our business growth, offset by a $3.4 million of lower personnel-related expenses primarily due to a decrease in stock based compensation from stock awards modification expense recorded in the six months ended June 30, 2022.

Restructuring Charges

	Three Months Ended June 30,		Change in		Six Months Ended June 30,		Change in	
	2023	2022	$	%	2023	2022	$	%
	(In thousands, except percentages)							
Restructuring charges	$ 177	$ —	$ 177	**	$ 870	$ —	$ 870	**
Percentage of net revenues	0.1 %				0.1 %			

** Not meaningful

Three months ended June 30, 2023 and 2022

During the second half of 2022, we began implementing restructuring actions to reorganize our global workforce, consolidate facilities and eliminate non-core projects. Restructuring charges for the three months ended June 30, 2023 primarily consisted of $0.2 million of one-time termination benefits and other employee-related expenses. We had no restructuring charges in the three months ended June 30, 2022. As of June 30, 2023, we have completed our restructuring activities.

Six months ended June 30, 2023 and 2022

Restructuring charges in the six months ended June 30, 2023 primarily consisted of $0.9 million of one-time termination benefits and other employee-related expenses. We had no restructuring charges in the six months ended June 30, 2022. As of June 30, 2023, we have completed our restructuring activities.

Other Income (Expense), Net

	Three Months Ended June 30,		Change in		Six Months Ended June 30,		Change in	
	2023	2022	$	%	2023	2022	$	%
	(In thousands, except percentages)							
Interest income	$ 16,526	$ 796	$ 15,730	1,976 %	$ 29,566	$ 1,256	$ 28,310	2,254 %
Interest expense	(2,219)	(2,168)	(51)	2 %	(4,375)	(4,904)	529	(11)%
Other income (expense), net	(33)	(456)	423	(93)%	393	(2,597)	2,990	(115)%
Total other income (expense), net	$ 14,274	$ (1,828)	$ 16,102	881 %	$ 25,584	$ (6,245)	$ 31,829	(510)%

Three months ended June 30, 2023 and 2022

Interest income was $16.5 million in the three months ended June 30, 2023, as compared to $0.8 million for the three months ended June 30, 2022, primarily due to an increase in interest rates and a higher average cash, cash equivalents and marketable securities balance in the three months ended June 30, 2023, as compared to the same period in 2022.

Cash interest expense

Cash interest expense for each of the three months ended June 30, 2023 and 2022 totaled $0.1 million, which primarily included interest incurred with the Notes due 2025 the Notes due 2023.

Non-cash interest expense

Non-cash interest expense of $2.1 million in each of the three months ended June 30, 2023 and 2022, primarily related to $2.1 million for the debt discount amortization with the Notes due 2025 and amortization of debt issuance costs with the Notes due 2023, Notes due 2025, Notes due 2026 and the Notes due 2028.

Other income (expense), net of less than $0.1 million expense in the three months ended June 30, 2023 related to a $2.1 million net loss due to foreign currency denominated monetary assets and liabilities, partially offset by a $2.1 million non-cash net gain related to change in the fair value of debt securities and interest income.

Other income (expense), net of $0.5 million expense in the three months ended June 30, 2022 related to a $1.5 million net loss related to foreign currency denominated monetary assets and liabilities, partially offset by $1.0 million non-cash net gain related to change in the fair value of debt securities.

Six months ended June 30, 2023 and 2022

Interest income was $29.6 million in the six months ended June 30, 2023, as compared to $1.3 million in the same period in 2022, primarily due to an increase in interest rates and a higher average cash, cash equivalents and marketable securities balance in the six months ended June 30, 2023, as compared to the same period in 2022.

Cash interest expense

Cash interest expense in the six months ended June 30, 2023 and 2022 totaled $0.2 million and $0.9 million, respectively. Cash interest expense in the six months ended June 30, 2023, primarily included $0.2 million in interest incurred with the Notes due 2025 and Notes due 2023. Cash interest expense for the six months ended June 30, 2022, primarily included $0.8 million interest incurred with the Notes due 2025 and Notes due 2023, and $0.1 million accretion of interest expense on contingent consideration for an acquisition.

Non-cash interest expense

Non-cash interest expense of $4.1 million in the six months ended June 30, 2023, primarily related to $4.1 million for the debt discount amortization with the Notes due 2025 and amortization of debt issuance costs with the Notes due 2023, Notes due 2025, Notes due 2026 and Notes due 2028.

Non-cash interest expense of $4.0 million in the six months ended June 30, 2022, primarily related to $4.0 million for the debt discount amortization with the Notes due 2025 and amortization of debt issuance costs with the Notes due 2023, Notes due 2025, Notes due 2026 and Notes due 2028.

Other income (expense), net of $0.4 million income in the six months ended June 30, 2023, primarily related to $3.4 million non-cash net gain related to a change in the fair value of debt securities and $0.5 million in interest income, partially offset by a $3.5 million net loss due to foreign currency denominated monetary assets and liabilities.

Other income (expense), net of $2.6 million expense in the six months ended June 30, 2022, primarily related to a $2.2 million net loss related to foreign currency denominated monetary assets and liabilities, $0.3 million impairment of note receivable and $0.1 million non-cash net loss related to change in the fair value of debt securities.

Income Tax Provision

	Three Months Ended June 30,		Change in		Six Months Ended June 30,		Change in	
	2023	2022	$	%	2023	2022	$	%
	(In thousands, except percentages)							
Income tax provision	$ (27,403)	$ (15,232)	$ (12,171)	80 %	$ (59,503)	$ (20,818)	$ (38,685)	186 %

Three months ended June 30, 2023 and 2022

The income tax provision was $27.4 million in the three months ended June 30, 2023, as compared to the income tax provision of $15.2 million in the same period in 2022, both calculated using the annualized effective tax rate method, primarily due to higher projected tax expense in U.S. and foreign jurisdictions that are more profitable in 2023 compared to 2022, partially offset by tax deduction from employee stock-based compensation.

Six months ended June 30, 2023 and 2022

The income tax provision was $59.5 million in the six months ended June 30, 2023, as compared to the income tax provision of $20.8 million in the same period in 2022, both calculated using the annualized effective tax rate method, primarily due to higher projected tax expense in the U.S. and foreign jurisdictions that are more profitable in 2023, compared to 2022, partially offset by the tax deduction from employee stock-based compensation.

Liquidity and Capital Resources

Sources of Liquidity

As of June 30, 2023, we had $1.8 billion in net working capital, including cash, cash equivalents and marketable securities of $1.8 billion, of which approximately $1.8 billion were held in the United States. Our cash, cash equivalents and marketable securities primarily consist of U.S. treasuries, money market mutual funds, corporate notes and bonds and both interest-bearing and non-interest-bearing deposits, with the remainder held in various foreign subsidiaries. We consider amounts held outside the United States to be accessible and have provided for the estimated income tax liability on the repatriation of our foreign earnings.

	Six Months Ended June 30,		Change in	
	2023	2022	$	%
	(In thousands, except percentages)			
Cash, cash equivalents and marketable securities	$ 1,800,492	$ 1,247,801	$ 552,691	44 %
Total Debt	$ 1,294,497	$ 1,286,215	$ 8,282	1 %

Our cash, cash equivalents and marketable securities increased by $552.7 million for the six months ended June 30, 2023, as compared to the same period in 2022, primarily due to cash generated from operations, partially offset by cash used to fund acquisitions, investments in private companies, and payments of withholding taxes related to net share settlement of equity awards.

Total carrying amount of debt increased by $8.3 million for the six months ended June 30, 2023, as compared to the same period in 2022, primarily due to the accretion of debt discount.

We expect that our principal short-term (over the next 12 months) and long-term cash needs related to our operations will fund working capital, strategic investment, acquisitions, payment of withholding taxes for net share settlement of equity awards and purchase of property and equipment, such as production lines at our contract manufacturing partners. We plan to fund any cash requirements for the next 12 months from our existing cash, cash equivalents and marketable securities on hand, and cash generated from operations. We anticipate that access to the debt market will be more limited compared to prior years as interest rates have increased and are expected to continue to rise. Our ability to obtain debt or any other additional financing that we may choose to, or need to, obtain will depend on, among other things, our development efforts, business plans, operating performance and the condition of the capital markets at the time we seek financing.

Repurchase of Common Stock. In May 2021, our board of directors authorized a share repurchase program (the "2021 Repurchase Program") pursuant to which we were authorized to repurchase up to $500.0 million of our common stock, $200.0 million of which was remaining as of March 31, 2023. The repurchases could be funded from available working capital and could be executed from time to time, subject to general business and market conditions and other investment opportunities, through open market purchases or privately negotiated transactions, including through Rule 10b5-1 plans. During the three months ended June 30, 2023, we repurchased 1,254,474 shares for an aggregate amount of $200.00 million. Of the 1,254,474 shares repurchased, 833,517 shares were retired by June 30, 2023 and the remaining 420,957 shares repurchased were retired in July 2023. As of June 30, 2023, the 2021 Repurchase Program has been completed.

Cash Flows. The following table summarizes our cash flows for the periods presented:

	Six Months Ended June 30,	
	2023	2022
	(In thousands)	
Net cash provided by operating activities	$ 515,475	$ 303,093
Net cash provided by (used in) investing activities	(427,582)	84,226
Net cash used in financing activities	(284,039)	(10,220)
Effect of exchange rate changes on cash and cash equivalents	1,578	(942)
Net increase (decrease) in cash and cash equivalents	$ (194,568)	$ 376,157

Cash Flows from Operating Activities

Cash flows from operating activities consisted of our net income adjusted for certain non-cash reconciling items, such as stock-based compensation expense, non-cash interest expense, change in the fair value of debt securities, deferred income taxes, depreciation and amortization, and changes in our operating assets and liabilities. Net cash provided by operating activities increased by $212.4 million for the six months ended June 30, 2023, as compared to the same period in 2022, primarily due to an increase in our gross profit as a result of increased revenue, partially offset by higher operating expenses as we continue to invest in the long-term growth of our business.

Cash Flows from Investing Activities

For the six months ended June 30, 2023, net cash used in investing activities of $427.6 million was primarily from the purchase of $1,272.9 million of marketable securities, $66.5 million used in purchases of test and assembly equipment to expand our supply capacity, related facility improvements and information technology enhancements, including capitalized costs related to internal-use software, partially offset by $911.8 million sale and maturities of marketable securities.

For the six months ended June 30, 2022, net cash used from investing activities of $84.2 million was primarily $193.0 million maturities of marketable securities, partially offset by $60.1 million purchase of marketable securities, $27.7 million net cash used to acquire SolarLeadFactory and Clipper Creek, Inc., and $21.1 million used in purchases of test and assembly equipment to expand our supply capacity, related facility improvements and information technology enhancements including capitalized costs related to internal-use software.

Cash Flows from Financing Activities

For the six months ended June 30, 2023, net cash used in financing activities of approximately $284.0 million was primarily from $200.0 million paid to repurchase our common stock under the 2021 Repurchase Program, and the payment of $84.6 million in employee withholding taxes related to net share settlement of equity awards, partially offset by $0.6 million net proceeds from employee stock option exercises and purchases under our employee stock purchase plan.

For the six months ended June 30, 2022, net cash used by financing activities of approximately $10.2 million was primarily from the payment of $14.8 million in employee withholding taxes related to net share settlement of equity awards, partially offset by $4.6 million net proceeds from employee stock option exercises and purchases under our employee stock purchase plan.

Contractual Obligations

Our contractual obligations primarily consist of our Notes due 2028, Notes due 2026, Notes due 2025, Notes due 2023, obligations under operating leases and inventory component purchases. As of June 30, 2023, there have been no material changes from our disclosure in the Form 10-K. For more information on our future minimum operating leases and inventory component purchase obligations as of June 30, 2023, refer to Note 9, “Commitments and Contingencies - Purchase Obligations” and for more information on our notes and other related debt, refer to Note 8, “Debt” of the notes to condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Critical Accounting Policies

Our condensed consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States (“GAAP”). In connection with the preparation of our condensed consolidated financial statements, we are required to make assumptions and estimates about future events and apply judgments that affect the reported amounts of assets, liabilities, revenue, expenses and related disclosures. We base our assumptions, estimates and judgments on historical experience, current trends and other factors that management believes to be relevant at the time our condensed consolidated financial statements are prepared. On a regular basis, we review the accounting policies, assumptions, estimates and judgments to ensure that our condensed consolidated financial statements are presented fairly and in accordance with GAAP. However, because future events and their effects cannot be determined with certainty, actual results could differ from our assumptions and estimates. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected.

We consider an accounting policy to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, and if different estimates that reasonably could have been used, or changes in the accounting estimates that are reasonably likely to occur periodically, could materially impact the condensed consolidated financial statements.

Adoption of New and Recently Issued Accounting Pronouncements

Refer to Note 1, “Description of Business and Basis of Presentation - Summary of Significant Accounting Policies” of the notes to condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q for a discussion of adoption of new accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

There have been no material changes in our market risk compared to the disclosures in Part II, Item 7A, “Quantitative and Qualitative Disclosures About Market Risk” in the Form 10-K. Also see the section entitled “Risk Factors” in Part I, Item 1A in the Form 10-K.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2023. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”) includes, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Based on the evaluation of our disclosure controls and procedures as of June 30, 2023, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective.

Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Changes in Internal Control

There were no changes in our internal control over financial reporting identified in management’s evaluation pursuant to Rules 13a-15(d) or 15d-15(d) of the Exchange Act during the period covered by this Quarterly Report on Form 10-Q that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, we may be involved in litigation relating to claims arising out of our operations, the ultimate disposition of which could have a material adverse effect on our operations, financial condition, or cash flows. We are not currently involved in any material legal proceedings, and our management believes there are currently no material claims or actions pending against us.

Item 1A. Risk Factors

Investing in our securities involves a high degree of risk. Before investing in our securities, you should consider carefully the information contained in this quarterly report and in the Form 10-K, including the risk factors identified in Part I, Item 1A, “Risk Factors” thereof. This quarterly report contains forward-looking statements that involve risks and uncertainties. See “Forward-Looking Statements” in “Management’s Discussion and Analysis of Financial Conditions and Results of Operations” above. Our actual results could differ materially from those contained in the forward-looking statements. Any of the risks discussed in the Form 10-K, in other reports we file with the U.S. Securities and Exchange Commission (“SEC”), and other risks we have not anticipated or discussed, could have a material adverse impact on our business, financial condition or results of operations. Except as set forth below, there has been no material change to our risk factors from those disclosed in Part I, Item 1A, “Risk Factors” in the Form 10-K.

The reduction, elimination or expiration of government subsidies and economic incentives for on-grid solar electricity applications could reduce demand for solar photovoltaic systems and harm our business.

The market for on-grid applications, where solar power is used to supplement a customer’s electricity purchased from the utility network or sold to a utility under tariff, depends in large part on the availability and size of government and economic incentives that vary by geographic market. Because our customers’ sales of solar power are typically into the on-grid market, the reduction, elimination or expiration of government subsidies and economic incentives for on-grid solar electricity may negatively affect the competitiveness of solar electricity relative to conventional and non-solar renewable sources of electricity and could harm or halt the growth of the solar electricity industry and our business.

National, state and local government bodies in many countries, including the United States, have provided incentives in the form of feed-in tariffs (“FiTs”), rebates, tax credits and other incentives to system owners, distributors, system integrators and manufacturers of solar photovoltaic (“PV”) systems to bolster the cost competitiveness of solar electricity in on-grid applications relative to the cost of utility power, and to reduce dependency on other forms of energy. Many of these government incentives expire, phase out over time, terminate upon the exhaustion of the allocated funding, require renewal by the applicable authority or are being changed by governments due to changing market circumstances or changes to national, state or local energy policy.

Electric utility companies or generators of electricity from other non-solar renewable sources of electricity may successfully lobby for changes in the relevant legislation in their markets that are harmful to the solar industry. Reductions in, or eliminations or expirations of, governmental incentives in regions where we focus our sales efforts could result in decreased demand for and lower revenue from solar PV systems there, which would adversely affect sales of our products. In addition, our ability to successfully penetrate new geographic markets may depend on new countries adopting and maintaining incentives to promote solar electricity, to the extent such incentives are not currently in place. Furthermore, electric utility companies may establish pricing structures or interconnection requirements that could adversely affect our sales and be harmful to the solar and distributed rooftop solar generation industry.

Among other government-established incentives, net metering and related policies have supported the growth of on-grid solar products, and changes to such policies may reduce demand for electricity from our solar service offerings. Net metering is a utility rate program that requires a consumer’s electric company to purchase the excess solar energy that the consumer’s solar panels produce and pay the retail rate for electricity exported to the grid, less certain non-bypassable fees paid by the consumer. For example, in 2016, the California Public Utilities Commission (CPUC) issued an order retaining retail rate-based net metering credits for residential customers of California's major utilities as part of NEM 2.0. Customers under NEM 2.0 were subject to interconnection charges and must take service under time-of-use rates with different electricity prices during peak and off-peak hours. Existing customers who receive service under the prior net metering program, as well as new customers under the NEM 2.0 program, remain eligible for the NEM 2.0 program for a period of 20 years. However, on December 15, 2022, the CPUC adopted a "NEM 3.0" policy, also known as the Net Billing Tariff, that unbundles export compensation from retail rates and instead bases it on a tool called the Avoided Cost Calculator ("ACC"), which estimates the hourly utility costs that are avoided by exports from distributed generation. The CPUC did seek to ease the transition for the solar market by adopting export "adders" to the hourly ACC values for the first several years of the tariff. Nevertheless, these ACC-based export compensation values are significantly lower than retail rates for most hours of the year and may therefore increase payback periods, and thereby reduce demand, for solar-only systems. These types of modifications to net metering incentives could harm our business, both in California where we have derived a significant portion of historical revenues in the United States, and if pursued in other jurisdictions.

Our focus on a limited number of specific markets increases risks associated with the modification, elimination, or expiration of governmental subsidies and economic incentives for on-grid solar electricity applications.

To date, we have generated most of our revenues from North America, and revenues generated from the U.S. market represented 76%, 80%, and 82% of our total revenue for the annual period ending on December 31, 2022, 2021, and 2020, respectively. We also expect to continue to generate a majority of our revenues from North America in the future.

There are several important incentives (including the ITC), AMPTC and other U.S. federal and state tax incentives, that impact our business. Under the IRA, the ITC was extended until 2032 to allow a qualifying homeowner to deduct 30% of the cost of installing residential solar systems from their U.S. federal income taxes, thereby returning a material portion of the purchase price of the residential solar system to homeowners. Under the terms of the current extension, the ITC will remain at 30% through the end of 2032, reduce to 26% for 2033, reduce to 22% for 2034, and further reduce to 0% after the end of 2034 for residential solar systems, unless it is further extended before that time. The Internal Revenue Service has not provided guidance so there is still uncertainty on how the new tax rules will be applied. If the ITC, AMPTC, or other tax credits are reduced or eliminated as part of futures changes to the U.S. Internal Revenue Code, changes to state law or regulatory reform initiatives by subsequent legislative action or by a presidential administration, sales of our products in North America and other markets could be adversely affected. In addition, changes to the IRA could impact the benefits we currently expect to receive from our plans to increase our domestic manufacturing footprint in the United States, in partnership with third-party contract manufacturers.

Several European countries, including Germany, Belgium, Italy and the United Kingdom, have adopted reductions in or concluded their net energy metering or FiT programs. Certain countries have proposed or enacted taxes levied on renewable energy. These and related developments have significantly impacted the solar industry in Europe and may adversely affect the future demand for solar energy solutions in Europe, which could adversely impact our results of operations.

We also sell our products in Australia. In 2012, Australia enacted a Renewable Energy Target that is intended to ensure that 33,000 Gigawatt-hours of Australia's electricity comes from renewable sources by 2020. This policy supports both the installation of large-scale centralized renewable generation projects, along with small-scale systems of under 100kW each for residential and small business customers. This target was met in 2019; however, the scheme continues to require high-energy users to meet their obligations under the policy until 2030. During 2018, the state of Victoria introduced state-based incentive schemes, aimed at solar customers in the state of Victoria. Other Australian states and territories introduced similar programs in 2019. Any change in, or failure to implement, these programs may adversely affect the demand for solar energy solutions in Australia.

Reductions in incentives and uncertainty around future energy policy, including local content requirements, have negatively affected and may continue to negatively affect our business, financial condition and results of operations as we seek to increase our business domestically and abroad. Additionally, as we further expand to other countries, changes in incentive programs or electricity policies could negatively affect returns on our investments in those countries as well as our business, financial condition and results of operations.

Our business is subject to tax liabilities.

We are subject to income tax, indirect tax or other tax claims by tax agencies in jurisdictions in which we conduct business. Significant judgment is required in determining our worldwide provision for income taxes. Tax laws are dynamic and subject to change as new laws are passed and new interpretations of the law are issued or applied. The IRA included significant changes to the U.S. federal income tax laws, the consequences of which could increase our future U.S. income tax expense. As additional guidance is issued by the applicable taxing authorities and as new accounting treatment is clarified, we may report additional adjustments in the period if new information becomes available. We have deferred tax assets related to net operating losses or tax credits that could be subject to limitations under IRS Code Sections 382 or 383, and State separate return limitation year rules. The limitations could reduce our ability to utilize our net operating losses or tax credits before the expiration of the tax attributes. Tax law changes or the limitations could be material and could materially affect our tax obligations and effective tax rate.

In the ordinary course of our business, there are many transactions and calculations where the ultimate income tax, indirect tax, or other tax determination is uncertain. Although we believe our tax estimates are reasonable, we cannot be certain that the final determination of our tax audits and litigation will not be materially different from that which is reflected in historical tax provisions and accruals. Should additional taxes be assessed as a result of an audit, assessment or litigation, there could be a material adverse effect on our cash, tax provisions and net income in the period or periods for which that determination is made.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

On June 27, 2023, as additional earn out consideration for our acquisition of all the outstanding shares of 365 Pronto, Inc. (“365 Pronto”) in December 2021, we issued 23,366 shares of our common stock to the stockholder representative of the former holders of capital stock of 365 Pronto. The issuance of the shares was deemed to be exempt from the registration requirements of the Securities Act of 1933, as amended (the “Securities Act”), in reliance on Section 4(a)(2) of the Securities Act as a transaction by an issuer not involving any public offering. The issuance of these shares was made without any general solicitation or advertising, and an appropriate legend was placed on the share certificate issued in the transaction to reflect the restricted nature of the shares.

Stock Repurchase Program

In May 2021, our board of directors authorized the 2021 Repurchase Program pursuant to which we may repurchase up to an aggregate of $500.0 million of our common stock. We utilized approximately $200.0 million remaining for repurchase of shares during the three months ended June 30, 2023. As of June 30, 2023, the 2021 Repurchase Program is completed.

The following table provides information about our purchases of our common stock during the three months ended June 30, 2023 (in thousands, except per share amounts):

Period Ended	Total Number of Shares Purchased	Average Price Paid per Share(1)	Total Number of Shares Purchased as Part of Publicly Announced Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Programs(2)
April 2023	148,557	$ 164.60	148,557	$ 175,548
May 2023	684,960	$ 156.81	684,960	$ 68,140
June 2023	420,957	$ 161.87	420,957	$ —
Total	1,254,474		1,254,474	

(1) Average price paid per share includes brokerage commissions.

(2) During the three months ended June 30, 2023, we repurchased 1,254,474 shares of our common stock at a weighted average price of $159.43 per share for an aggregate amount of $200.0 million.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

Rule 10b5-1 Trading Plans

During the three months ended June 30, 2023, Mandy Yang, our Vice President and Chief Financial Officer, and an officer for purposes of Section 16 of the Exchange Act, terminated her equity trading plan put in place in accordance with Rule 10b5-1(c)(1) under the Exchange Act. Ms. Yang's trading plan was terminated on May 2, 2023 during an open insider trading window. An equity trading plan is a written document that preestablishes the amounts, prices and dates (or formula for determining the amounts, prices and dates) of future purchases or sales of our stock, including sales of shares acquired under our employee and director equity plans.

Item 6. Exhibits

A list of exhibits filed with this report or incorporated herein by reference is found in the Exhibit Index below.

		Incorporation by Reference				
Exhibit Number	**Exhibit Description**	**Form**	**SEC File No.**	**Exhibit**	**Filing Date**	**Filed Herewith**
3.1	Amended and Restated Certificate of Incorporation of Enphase Energy, Inc.	8-K	001-35480	3.1	4/6/2012	
3.2	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Enphase Energy, Inc.	10-Q	001-35480	3.1	8/9/2017	
3.3	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Enphase Energy, Inc.	10-Q	001-35480	2.1	8/6/2018	
3.4	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Enphase Energy, Inc.	8-K	001-35480	3.1	5/27/2020	
3.5	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Enphase Energy, Inc.	S-8	333-256290	4.5	5/19/2021	
3.6	Amended and Restated Bylaws of Enphase Energy, Inc.	8-K	001-35480	3.1	4/8/2022	
10.1#	Amendment No. 3 to Flextronics Manufacturing Services Agreement by and between Enphase Energy, Inc. and Flextronics Industrial, Ltd., dated as of June 22, 2023.					X
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a)/15d-14(a).					X
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a)/15d-14(a).					X
32.1*	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, as amended.					X
101.INS	XBRL Instance Document.					X
101.SCH	XBRL Taxonomy Extension Schema Document.					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE	XBRL Taxonomy Extension Presentation Document.					X
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibits 101).					X

Certain portions of this exhibit have been omitted pursuant to Item 601 of Regulation S-K, as the Company has determined that (i) the omitted information is not material and (ii) the omitted information is of the type that the Company customarily treats as private or confidential.

* The certifications attached as Exhibit 32.1 accompany this Quarterly Report on Form 10-Q pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act, and shall not be deemed "filed" by Enphase Energy, Inc. for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, nor shall they be deemed incorporated by reference in any filing under the Securities Act, except as shall be expressly set forth by specific reference in such filing.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Quarterly Report on Form 10-Q to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: July 27, 2023

ENPHASE ENERGY, INC.

By: /s/ Mandy Yang

Mandy Yang
Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)
(Duly Authorized Officer)

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both not material and would likely cause competitive harm to the Company if publicly disclosed.

Exhibit 10.1

AMENDMENT NO. 3 TO FLEXTRONICS MANUFACTURING SERVICES AGREEMENT

THIS AMENDMENT NO. 3 TO FLEXTRONICS MANUFACTURING SERVICES AGREEMENT (this "Amendment"), dated as of June 22, 2023 (the "Amendment Effective Date"), is by and between Enphase Energy, Inc., a Delaware corporation having its business at 47281 Bayside Parkway, Fremont, California 94538 ("Enphase" or "Customer") and Flextronics Industrial, Ltd., a Mauritius corporation having its place of business at Suite 402, St. James Court, St. Denis Street, Port Louis, Mauritius ("Flex" or "Flextronics"). Capitalized terms not defined herein will have the meaning given to them in the MSA (as defined below).

WHEREAS, Enphase and Flex are parties to a Flextronics Manufacturing Services Agreement dated as of March 1, 2009 (the "MSA" or "Agreement") (individually, Enphase and Flex are referred to herein as a "Party" and together as the "Parties"); and

WHEREAS, the Parties wish to amend the MSA as provided for herein. With respect to Flex, this Amendment shall apply solely to the Flex facility located at 1000 Technology Drive, West Columbia, South Carolina 29170.

NOW, THEREFORE, the Parties agree as follows:

1. A new Section 2.10 shall be added to the MSA, reading as follows:

New Manufacturing Location in West Columbia, South Carolina USA. The Parties agree that during or around the month of July 2023, Flextronics will commence the manufacture of certain Products for Customer in Flextronics's facility located at 1000 Technology Drive, West Columbia, South Carolina 29170 (**"Flextronics Columbia"**). Customer shall award Flextronics [*] **("Business Award")**. The Business Award occurred [*] will include ramping at least two (2) fully automated lines. Further, the Business Award will be governed by the provisions of this Agreement (as amended) in accordance with an applicable Product-Specific Addendum signed by both Parties, which will include details of the line configurations, fees, pricing and other relevant terms and conditions applicable to the Business Award.

2. A new Section 2.11 shall be added to the MSA, reading as follows:

Testing and Quality Assurance. Flextronics shall use commercially reasonable efforts to maintain and implement ongoing quality assurance and testing policies sufficient to satisfy its obligations under Amendment No. 3 and Enphase's standard quality assurance policies as communicated to Flextronics and mutually agreed by the Parties in writing. Prior to packaging and delivery of the Products, Flextronics shall perform mutually agreed tests and inspections on the Products for verification of conformance with the mutually agreed Specifications, as well as manufacturing and quality assurance, in accordance with the mutually agreed Specifications.

3. A new Section 10.16 shall be added to the MSA, reading as follows:

Subject to Flextronics's confidentiality, security, and safety policies, and during the term of this Agreement, Customer or its designee may visit the Flextronics Columbia facility to audit Flextronics's conformity with the manufacturing requirements of Amendment No. 3, including manufacturing in accordance with the applicable Product Specifications and mutually agreed written quality requirements. Flextronics shall keep such records in sufficient detail to enable Customer or its designee to determine that Flextronics is providing manufacturing services for Customer Products in accordance with the terms of Amendment No. 3, and shall permit said records to be inspected during Flextronics's normal business hours, at Customer's expense, promptly following reasonable prior written notice by Customer. Notwithstanding the foregoing, in no event shall Flextronics be required to disclose or provide any information that it is obligated to a third party to maintain as confidential.

4. A new Section 3.8 shall be added to the MSA, reading as follows:

3.8 IRA incentive.

(i). Flextronics acknowledges that the manufacturing production tax credit ("PTC") available under the Inflation Reduction Act of 2022 (the "**IRA**") is a primary motivation for Customer to seek to have Flextronics manufacture the Products. Flextronics agrees that Customer [*], and the parties will mutually agree to the manner in which such incentives are transferred to the Customer.

Customer shall calculate [*] (quarters end on the last day of March, June, September, and December of each year). After the end of each applicable calendar year, Customer shall inform Flextronics of the estimated full previous year's unit numbers ("**Annual estimate**") by February 15th (1.5 months after the close of the immediately preceding calendar year). Flextronics shall have the right to review and comment on the Annual Estimate and Customer shall use commercially reasonable efforts to cooperate with any information reasonably requested by Flextronics to confirm the Annual Estimate. Within thirty (30) days after the filing of Customer's U.S. federal income tax return, Customer shall provide Flextronics with a schedule setting forth (i) the computation of the PTC amount claimed on Customer's tax return for the immediately preceding tax year, (ii) the aggregate amount of any PTC credit carryforward, (iii) the amount of the Flextronics PTC Payment and (iv) explanation of any variances between the PTC claimed on Customer's tax return and Annual Estimate ("**Final Calculation**"). The Parties shall cooperate in good faith to resolve any disputes with respect to the Final Calculation PTC and Customer shall use commercially reasonable efforts to cooperate with any information reasonably requested by Flextronics to confirm the Final Calculation. If there is a dispute regarding the PTC benefit, payments or Final Calculation, either Party may initiate negotiation proceedings by written notice to the other Party setting forth the particulars of the dispute. The Parties agree to meet in good faith to jointly define the scope and a method to remedy the dispute and shall also have the applicable senior management of Flextronics and Customer to meet and confer in a bona fide attempt to resolve the matter. If the dispute cannot be resolved within thirty (30) days of such negotiation process being initiated, either Party may submit the dispute to arbitration pursuant to Section 10.11 of the MSA. The Parties acknowledge and agree that the PTC amounts and rates are defined by the IRA s and applicable IRC sections, including available Treasury Regulations and relevant Internal Revenue Service ("**IRS**") guidance that may be published, all of which are subject to change.

Customer shall remit the initial PTC Payment based on the Annual estimate to Flextronics no later than March 15th (2.5 months) after the end of the tax year. A true up will be performed to true up the initial PTC payment with Final Calculations. Customer shall provide Flextronics with the relevant portions, including schedules and workpapers, of its U.S. federal income tax return to support the Final Calculations. In the event of an IRS audit of the Customer's federal tax return within three (3) years when the return was filed, or in the event that Customer files an amended federal tax return, the Parties agree to conduct a true-up or reconciliation of the PTC payment based on the outcome of the audit or amendment results. The Parties shall cooperate in good faith to resolve any disputes with respect to the adjusted PTC payment and Customer shall use commercially reasonable efforts to cooperate with any information reasonably requested by Flextronics to confirm the revised Final Calculation. If there is a dispute regarding the PTC benefit or payments the Parties will use the dispute resolution process outlined in the paragraph above.

(ii). Flextronics shall not pursue a tax credit allocation under IRC Section 48C for investments in the production facility that would impair the value of the PTC that Customer may capture related to the activities contemplated in this agreement. Notwithstanding the immediately preceding sentence, Flextronics and Customer recognize that future tax credit provisions and regulations may limit Customer's ability to capture PTC for the production activities and in that case Flextronics shall be permitted to apply for and claim, to the maximum extent permissible under applicable law, the PTC and other similar tax incentives and credits if they are available. As such, should Flextronics wish to pursue such PTC under IRC Section 48C, Flextronics must provide Customer with advanced written notice prior to applying for or claiming any PTC directly related to the production activities contemplated herein.

(iii) To the extent that either Party determines that PTC under the IRA are not available with respect to the manufacturing services performed under this Agreement, Flextronics or Customer may, at either Party's option either: (a) terminate the Agreement upon ninety (90) days' prior written notice to the other Party; or (b) initiate discussions with Flextronics seeking to agree upon a plan regarding further handling of the manufacturing lines, which could include, but not be limited to, resizing the manufacturing capacity, redeploying the manufacturing lines, and/or otherwise. To the extent either Party exercises its rights under this Section 3.8(iii), any amounts due and owing to Flextronics (including for the tax year in which such event occurs) shall be promptly paid by Customer to Flextronics and in any event no later than the dates contemplated herein.

(iv) If, based upon guidance from the IRS or US Department of Treasury or other regulatory body with respect to the IRA, it is determined that the tax incentives under the IRA would require a different transaction structure for the manufacturing of Products than that which is contemplated under this Amendment No. 3, the Parties shall work together in good faith seeking to amend Amendment No. 3 using commercially reasonable efforts to find an alternate structure for the manufacturing of Products that would qualify for such tax incentives.

5. A new Section 2.12 shall be added to the MSA, reading as follows.

2.12 Flextronics covenants that it maintains and complies with a comprehensive code of conduct, which shall contain obligations that are substantially similar to those in the Responsible Business Alliance code of conduct available at https://www.responsiblebusiness.org/code-of-conduct/.

6. A new Section 7.3 shall be added to the MSA, reading as follows:

As between the Parties, Customer will retain ownership of all intellectual property rights in and to the Products and any documentation that Customer provides to Flextronics regarding the Products, including any applicable Specifications, custom tooling requirements, and other information provided by Customer to Flextronics relating to the Products.

7. A new Section 2.13 shall be added to the MSA, reading as follows:

2.13 Flextronics acknowledges and understands that while performing its obligations under this agreement, it will have access to Customer's Confidential Information, as well as other proprietary information which is provided to Flextronics by Customer in writing or in digital form and is valuable to Customer (collectively, "Customer Data"). To safeguard such information on servers controlled by Flextronics, Flextronics shall use commercially reasonable efforts to comply with the following requirements, and promptly following Customer's written request, substantiate and confirm in writing its compliance with the requirements listed below:

a. Flextronics shall conduct an annual cyber security awareness training for all its employees who will have access to Customer Data. This training must be done according to industry standard practices for information security.

b. Flextronics shall ensure that any Customer Data stored on Flextronics controlled servers located on the premises of Flextronics's facility will be accessible via a secure network link for authorized Customer personnel. Flextronics will use commercially reasonable efforts to prohibit Customer Data from being accessed in an unsecure manner from such servers.

c. Flextronics shall use commercially reasonable efforts to avoid unauthorized access to Flextronics controlled servers and systems containing Customer Data using methods which may include (but are not limited to):

i. Having unique user IDs for users controlled by Flextronics;

ii. Promptly disabling or deleting user IDs of Flextronics employees whose employment is terminated;

iii. Identifying and deleting or disabling redundant Flextronics employee user IDs used for accessing Customer Data on Flextronics controlled servers on a periodic basis;

iv. Promptly informing the Customer of any applicable employee user ids to be deactivated (no later than 3 business days from the date on which such employee no longer requires access, or the date on which such employee ceases to be a Flextronics employee)

v. Using commercially reasonable efforts to ensure that Flextronics employee user IDs are not shared.

d. Flextronics shall ensure all Customer Data at rest, on servers controlled by Flextronics and located at Flextronics's facility, is encrypted on all fixed and removable data drives along with operating system drives for Customer Data located on Flextronics's servers (and any PCs or computers used by Flextronics employees who have authorized access to Customer Data). Customer Data in transit between servers located at Flextronics's facility to or from Flextronics employees at a location outside of Flextronics's facility shall be encrypted using the TLS or IP-SEC standards.

e. Promptly following termination of this Agreement, Flextronics shall follow operating guidelines mutually agreed by the Parties for purging Customer Data from Flextronics controlled servers.

f. Flextronics shall implement a BCP (Business Continuity Plan) and DR (Disaster Recovery) plan, and submit the same to Customer for Customer's review and approval. The security continuity controls for information security under the BCP of DR shall be tested annually in order to ensure that they are valid and effective, and Flextronics shall provide relevant information regarding such testing, promptly following Customer's written request.

g. Throughout the term of this Agreement, Flextronics shall maintain a valid ISO 27001 certification.

h. Flextronics shall use commercially reasonable efforts to prohibit the use of unauthorized software and downloads on Flextronics controlled servers, located at Flextronics's facility, that hold Customer Data, and use industry-standard preventative measures and detective measures that will reasonably allow any malware to be promptly identified and contained in such servers.

i. Flextronics will establish a standard operating procedure (SOP), to address any data network security incidents involving Flextronics controlled servers storing Customer Data. This SOP will include the Flextronics's responsibilities and processes that will be implemented in order to ensure a quick, effective and orderly response to address such data network security incidents. This SOP will be approved by the CISO or the information security management of Flextronics.

j. Flextronics shall conduct periodic vulnerability testing on the Flextronics controlled server environment hosting Customer Data at Flextronics's facility and subsequent mitigation, if applicable.

k. If Flextronics uses any WiFi networks in its facilities that allow access to Flextronics servers storing Customer Data reside, Flextronics shall ensure that such WiFi network will not have open access to the internet.

8. The recitals set forth above are incorporated herein by reference and are explicitly made a part of this Amendment.

9. **<u>Counterparts.</u>** This Amendment may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

[SIGNATURES CONTINUED ON NEXT PAGE]

IN WITNESS WHEREOF, the Parties have executed this Amendment as of the Amendment Effective Date.

ENPHASE ENERGY, INC.

By: /s/ Mandy Yang

Name: Mandy Yang

Title: Chief Financial Officer

By: /s/ Ron Swenson

Name: Ron Swenson

Title: VP, Supply Chain

FLEXTRONICS INDUSTRIAL LTD.

By: /s/ B. Vijayandran A/L S. Balasingam

Name: B. Vijayandran A/L S. Balasingam

Title: Director

Exhibit 31.1

CERTIFICATION

I, Badrinarayanan Kothandaraman, certify that:

1. I have reviewed this Form 10-Q of Enphase Energy, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f)) for the registrant and have:
    a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: July 27, 2023

/s/ BADRINARAYANAN KOTHANDARAMAN

Badrinarayanan Kothandaraman
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION

I, Mandy Yang, certify that:

1. I have reviewed this Form 10-Q of Enphase Energy, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f)) for the registrant and have:
    a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: July 27, 2023

/s/ MANDY YANG

Mandy Yang

Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

Exhibit 32.1

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, (the “Exchange Act”) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Badrinarayanan Kothandaraman, President and Chief Executive Officer of Enphase Energy, Inc. (the “Company”), and Mandy Yang, Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer) of the Company, each hereby certifies that, to the best of his or her knowledge:

1. The Company’s Quarterly Report on Form 10-Q for the period ended June 30, 2023, to which this Certification is attached as Exhibit 32.1 (the “Periodic Report”), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: July 27, 2023	Date: July 27, 2023
/s/ BADRINARAYANAN KOTHANDARAMAN	/s/ MANDY YANG
Badrinarayanan Kothandaraman	Mandy Yang
President and Chief Executive Officer (Principal Executive Officer)	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Enphase Energy, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.

A signed original of this written statement has been provided to Enphase Energy, Inc. and will be retained by it and furnished to the Securities and Exchange Commission or its staff upon request.