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 September 30, 2022

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

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)

(877) 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 October 20, 2022, there were 135,923,572 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 SEPTEMBER 30, 2022

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

ENPHASE ENERGY, INC.

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

	As of	
	September 30, 2022	December 31, 2021
ASSETS		
Current assets:		
Cash and cash equivalents	$ 337,583	$ 119,316
Marketable securities	1,079,713	897,335
Accounts receivable, net of allowances of $594 and $1,590 at September 30, 2022 and December 31, 2021, respectively	367,647	333,626
Inventory	146,451	74,400
Prepaid expenses and other assets	51,270	37,784
Total current assets	1,982,664	1,462,461
Property and equipment, net	91,801	82,167
Operating lease, right of use asset, net	18,128	14,420
Intangible assets, net	90,924	97,758
Goodwill	195,508	181,254
Other assets	140,439	118,726
Deferred tax assets, net	178,371	122,470
Total assets	$ 2,697,835	$ 2,079,256
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 92,823	$ 113,767
Accrued liabilities	255,800	157,912
Deferred revenues, current	79,609	62,670
Warranty obligations, current (includes $28,120 and $14,612 measured at fair value at September 30, 2022 and December 31, 2021, respectively)	32,350	19,395
Debt, current	89,654	86,052
Total current liabilities	550,236	439,796
Long-term liabilities:		
Deferred revenues, non-current	239,971	187,186
Warranty obligations, non-current (includes $55,434 and $36,395 measured at fair value at September 30, 2022 and December 31, 2021, respectively)	73,530	53,982
Other liabilities	25,418	16,530
Debt, non-current	1,198,627	951,594
Total liabilities	2,087,782	1,649,088
Commitments and contingencies (Note 10)		
Stockholders' equity:		
Common stock, $0.00001 par value, 300,000 shares authorized; and 135,857 shares and 133,894 shares issued and outstanding at September 30, 2022 and December 31, 2021, respectively	1	1
Additional paid-in capital	762,012	837,924
Accumulated deficit	(136,418)	(405,737)
Accumulated other comprehensive loss	(15,542)	(2,020)
Total stockholders' equity	610,053	430,168
Total liabilities and stockholders' equity	$ 2,697,835	$ 2,079,256

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 September 30, 2022	Three Months Ended September 30, 2021	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021
Net revenues	$ 634,713	$ 351,519	$ 1,606,201	$ 969,330
Cost of revenues	366,797	211,161	942,307	578,222
Gross profit	267,916	140,358	663,894	391,108
Operating expenses:				
Research and development	44,188	29,411	119,163	73,937
Sales and marketing	55,257	39,296	150,189	84,504
General and administrative	32,436	34,300	102,647	74,530
Restructuring charges	594	—	594	—
Total operating expenses	132,475	103,007	372,593	232,971
Income from operations	135,441	37,351	291,301	158,137
Other income (expense), net				
Interest income	3,680	110	4,936	281
Interest expense	(2,255)	(12,628)	(7,159)	(32,463)
Other (expense) income, net	(2,611)	874	(5,208)	814
Loss on partial settlement of convertible notes	—	—	—	(56,382)
Total other expense, net	(1,186)	(11,644)	(7,431)	(87,750)
Income before income taxes	134,255	25,707	283,870	70,387
Income tax (provision) benefit	(19,443)	(3,898)	(40,261)	22,471
Net income	$ 114,812	$ 21,809	$ 243,609	$ 92,858
Net income per share:				
Basic	$ 0.85	$ 0.16	$ 1.80	$ 0.69
Diluted	$ 0.80	$ 0.15	$ 1.70	$ 0.65
Shares used in per share calculation:				
Basic	135,633	134,721	135,056	133,719
Diluted	145,962	141,220	144,058	143,091

See Notes to Condensed Consolidated Financial Statements.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Net income	$ 114,812	$ 21,809	$ 243,609	$ 92,858
Other comprehensive loss:				
Foreign currency translation adjustments	(3,364)	(1,792)	(5,670)	(302)
Marketable securities				
Change in net unrealized loss	(933)	(284)	(7,852)	(284)
Net change, net of income tax benefit of $328 and $2,759 for the three and nine months ended September 30, 2022, respectively, and $97 for the three and nine months ended September 30, 2021.	(933)	(284)	(7,852)	(284)
Comprehensive income	$ 110,515	$ 19,733	$ 230,087	$ 92,272

See Notes to Condensed Consolidated Financial Statements.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Common stock and paid-in capital				
Balance, beginning of period	$ 713,474	$ 762,612	$ 837,925	$ 534,745
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	693	42	5,280	3,684
Payment of withholding taxes related to net share settlement of equity awards	(4,589)	(3,313)	(19,396)	(20,311)
Equity component of convertible notes issued, net of tax	—	—	—	207,970
Cost of convertible notes hedge related to the convertible notes issued, net of tax	—	—	—	(213,322)
Sale of warrants related to the convertible notes issued	—	—	—	220,800
Equity component of partial settlement of convertible notes	—	—	—	(966,557)
Cost of reacquired equity component on partial settlement of convertible notes	—	—	—	962,176
Stock-based compensation expense	52,435	46,954	146,171	77,110
Balance, end of period	$ 762,013	$ 806,295	$ 762,013	$ 806,295
Accumulated deficit				
Balance, beginning of period	$ (251,230)	$ (180,137)	$ (405,737)	$ (51,186)
Cumulative-effect adjustment to accumulated deficit related to the adoption of ASU 2020-06	—	—	25,710	—
Net income	114,812	21,809	243,609	92,858
Repurchase of common stock	—	—	—	(200,000)
Balance, end of period	$ (136,418)	$ (158,328)	$ (136,418)	$ (158,328)
Accumulated other comprehensive loss				
Balance, beginning of period	$ (11,245)	$ 1,924	$ (2,020)	$ 434
Foreign currency translation adjustments	(3,364)	(1,792)	(5,670)	(302)
Change in net unrealized loss on marketable securities, net of tax	(933)	(284)	(7,852)	(284)
Balance, end of period	$ (15,542)	$ (152)	$ (15,542)	$ (152)
Total stockholders' equity, ending balance	$ 610,053	$ 647,815	$ 610,053	$ 647,815

See Notes to Condensed Consolidated Financial Statements.

ENPHASE ENERGY, INC.

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

	Nine Months Ended September 30,	
	2022	2021
Cash flows from operating activities:		
Net income	$ 243,609	$ 92,858
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	42,766	21,409
Amortization of marketable securities premiums, net of accretion of purchase discounts	2,091	58
Provision for doubtful accounts	52	450
Asset impairment	1,200	—
Non-cash interest expense	6,090	31,893
Loss on partial settlement of convertibles notes	—	56,382
Deemed repayment of convertible notes attributable to accreted debt discount	—	(15,585)
Change in fair value of debt securities	(390)	(3,153)
Stock-based compensation	153,157	77,110
Deferred income taxes	15,732	(28,790)
Changes in operating assets and liabilities:		
Accounts receivable	(18,680)	(93,069)
Inventory	(72,051)	(23,640)
Prepaid expenses and other assets	(20,826)	(18,762)
Accounts payable, accrued and other liabilities	42,288	71,787
Warranty obligations	32,207	21,599
Deferred revenues	63,858	64,308
Net cash provided by operating activities	491,103	254,855
Cash flows from investing activities:		
Purchases of property and equipment	(30,014)	(39,050)
Purchase of intangible asset	—	(250)
Investments in private companies	(1,000)	(58,000)
Business acquisitions, net of cash acquired	(27,680)	(55,239)
Purchases of marketable securities	(572,237)	(545,490)
Maturities of marketable securities	377,156	35,000
Net cash used in investing activities	(253,775)	(663,029)
Cash flows from financing activities:		
Issuance of convertible notes, net of issuance costs	—	1,188,439
Purchase of convertible note hedges	—	(286,235)
Sale of warrants	—	220,800
Principal payments and financing fees on debt	—	(1,422)
Partial repurchase of convertible notes	—	(289,312)
Proceeds from exercise of equity awards and employee stock purchase plan	5,280	3,684
Repurchase of common stock	—	(200,000)
Payment of withholding taxes related to net share settlement of equity awards	(19,396)	(20,311)
Net cash provided by (used in) financing activities	(14,116)	615,643
Effect of exchange rate changes on cash and cash equivalents	(4,945)	(1,302)
Net increase in cash and cash equivalents	218,267	206,167
Cash and cash equivalents—Beginning of period	119,316	679,379
Cash and cash equivalents—End of period	$ 337,583	$ 885,546
Supplemental cash flow disclosure:		
Supplemental disclosures of non-cash investing and financing activities:		
Purchases of property and equipment included in accounts payable	$ 5,366	$ 6,867
Purchases of property and equipment through tenant improvement allowance	$ 748	$ —
Contingent consideration in connection with the acquisition	$ —	$ 3,500

See Notes to Condensed Consolidated Financial Statements.

ENPHASE ENERGY, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

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 nine months ended September 30, 2022 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, and the continuing COVID-19 pandemic.

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, 2021 filed with the SEC on February 11, 2022 (the “Form 10-K”).

Summary of Significant Accounting Policies

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, other than as a result of the Company’s adoption of the new accounting guidance related to convertible senior notes, effective January 1, 2022, as discussed in “Recently Adopted Accounting Pronouncements” below.

Recently Adopted Accounting Pronouncements

In August 2020, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2020-06, "Debt - Debt with Conversion and Other Options (subtopic 470-20) and Derivatives and Hedging - Contracts in Entity's Own Equity (subtopic 815-40)" ("ASU 2020-06"), which reduces the number of accounting models in subtopic ASC 470-20 that require separate accounting for embedded conversion features. As a result, a convertible debt instrument will be accounted for as a single liability measured at its amortized cost as long as no other features require bifurcation and recognition as derivatives. By removing those separation models, the effective interest rate of convertible debt instruments will be closer to the coupon interest rate. Further, the diluted net income per share calculation for convertible instruments will require the Company to use the if-converted method. The treasury stock method should no longer be used to calculate diluted net income per share for convertible instruments.

The Company adopted ASU 2020-06 in the annual period beginning January 1, 2022, on a modified retrospective basis. Upon adoption of ASU 2020-06, the Company is no longer required to bifurcate the conversion feature related to the issuance of $575.0 million aggregate principal amount of its 0.0% convertible senior notes due 2028 (the "Notes due 2028") and $632.5 million aggregate principal amount of its 0.0% convertible senior notes due 2026 (the "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 value of debt and amortized over the remaining terms of the convertible senior notes. Accordingly, the Company recorded a net decrease to additional paid-in capital by $207.9 million, net of tax to remove the equity component separately recorded for the conversion features associated with the convertible senior notes and equity component associated with the issuance costs, an increase to the carrying value of its convertible debt instrument by $244.5 million to reflect the full principal amount of the convertible senior notes outstanding net of issuance costs, a decrease to deferred tax liability of $62.3 million, and a decrease to accumulated deficit by $25.7 million, net of tax in the Company's consolidated balance sheet with no impact on the Company's consolidated statements of operations.

Also upon adoption of ASU 2020-06, the Company is no longer utilizing the treasury stock method for earnings per share impact for 0.25% convertible senior notes due 2025 (the "Notes due 2025"), the Notes due 2026 and the Notes due 2028 (together, the "Convertible Senior Notes"). Instead, the Company is applying the if-converted method when reporting the number of potentially dilutive shares of common stock as the Company may at its election, settle its Convertible Senior Notes through payment or delivery, as the case may be, in cash, shares of its common stock or a combination of cash and shares of its common stock. 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 Convertible Senior Notes. 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.

Recently Issued Accounting Pronouncements

Not Yet Effective

In October 2021, the FASB issued 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 in a business combination 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. ASU 2021-08 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2022. Early adoption is permitted. The Company does not expect the adoption of ASU 2021-08 to have a significant impact on its condensed consolidated financial statements and plans to adopt the standard effective January 1, 2023.

ENPHASE ENERGY, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

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 (“PV”) 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 September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Primary geographical markets:				
U.S.	$ 451,787	$ 267,553	$ 1,243,907	$ 769,911
International	182,926	83,966	362,294	199,419
Total	$ 634,713	$ 351,519	$ 1,606,201	$ 969,330
Timing of revenue recognition:				
Products delivered at a point in time	$ 614,928	$ 336,359	$ 1,550,942	$ 927,330
Products and services delivered over time	19,785	15,160	55,259	42,000
Total	$ 634,713	$ 351,519	$ 1,606,201	$ 969,330

Contract Balances

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

	September 30, 2022	December 31, 2021
	(In thousands)	
Receivables	$ 367,647	$ 333,626
Short-term contract assets (Prepaid expenses and other assets)	28,921	23,508
Long-term contract assets (Other assets)	87,627	69,583
Short-term contract liabilities (Deferred revenues, current)	79,609	62,670
Long-term contract liabilities (Deferred revenues, non-current)	239,971	187,186

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 in the nine months ended September 30, 2022.

Significant changes in the balances of contract assets (prepaid expenses and other assets) as of September 30, 2022 are as follows (in thousands):

Contract Assets	
Contract Assets, beginning of period	$ 93,091
Amount recognized	(20,464)
Increase	43,921
Contract Assets, end of period	$ 116,548

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 September 30, 2022 are as follows (in thousands):

Contract Liabilities		
Contract Liabilities, beginning of period	$	249,856
Revenue recognized		(55,259)
Increase due to billings		124,983
Contract Liabilities, end of period	$	319,580

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:

		September 30, 2022
		(In thousands)
Fiscal year:		
2022 (remaining three months)	$	21,227
2023		76,861
2024		70,403
2025		63,310
2026		47,765
Thereafter		40,014
Total	$	319,580

3. OTHER FINANCIAL INFORMATION

Inventory

Inventory consists of the following:

		September 30, 2022		**December 31, 2021**
		(In thousands)		
Raw materials	$	42,125	$	25,429
Finished goods		104,326		48,971
Total inventory	$	146,451	$	74,400

Accrued Liabilities

Accrued liabilities consist of the following:

	September 30, 2022	December 31, 2021
	(In thousands)	
Salaries, commissions, incentive compensation and benefits	$ 17,644	$ 13,062
Customer rebates and sales incentives	138,614	79,038
Freight	28,064	20,522
Operating lease liabilities, current	4,193	3,830
Liability due to supply agreements	15,416	14,653
Contingent consideration	—	3,710
Post combination expense accrual	7,447	8,602
Income tax payable	15,728	340
VAT payable	16,252	7,231
Liabilities related to restructuring activities	331	—
Other	12,111	6,924
Total accrued liabilities	$ 255,800	$ 157,912

4. BUSINESS COMBINATIONS

Acquisition of SolarLeadFactory, LLC. ("SolarLeadFactory")

On March 14, 2022, the Company completed the acquisition of 100% of the shares of SolarLeadFactory, a privately-held company. SolarLeadFactory provides high quality leads to solar installers. As part of the purchase price, the Company paid approximately $26.1 million in cash on March 14, 2022.

The acquisition has been accounted for as a business combination under the acquisition method, and accordingly, the total purchase price is allocated to the tangible and identifiable intangible assets acquired and liabilities assumed based on their respective fair values on the acquisition date.

In addition to the purchase price summarized above, the Company will be obligated to issue up to approximately $10.0 million in shares of common stock of the Company payable in the second quarter of 2023, subject to achievement of certain operational targets. As the additional payments require continuous employment of certain key employees of SolarLeadFactory and are subject to other conditions, these payments are being accounted for as post-combination expense and will be recognized ratably over the one-year period presuming conditions will be met.

The following table summarizes the preliminary estimated fair values of the assets acquired and liabilities assumed at the acquisition date, which are subject to change within the measurement period as the fair value assessments are finalized (in thousands):

Cash and cash equivalents	$ 1,426
Net tangible assets acquired	813
Intangible assets	11,200
Goodwill	12,612
Net assets acquired	$ 26,051

The excess of the consideration paid over the fair values assigned to the assets acquired and liabilities assumed represents the goodwill resulting from the acquisition. Goodwill is primarily attributable to expected synergies in the Company's solar offerings and cross-selling opportunities. The entire goodwill amount is expected to be deductible for U.S. federal income tax purposes over 15 years.

Intangible assets consist primarily of developed technology and customer relationships. Developed technology includes a combination of unpatented technology, trade secrets, computer software and research processes that represent the foundation for the existing and planned new products to facilitate the generation of new content. Customer relationships relates to SolarLeadFactory's ability to sell current and future offerings, as well as products built around the current offering, to its existing customers.

The following table shows the fair value of the separately identifiable intangible assets at the time of acquisition and the period over which each intangible asset will be amortized:

	Preliminary Fair Value	Useful Life
	(In thousands)	*(Years)*
Developed technology	$ 3,600	5
Customer relationships	7,600	5
Total identifiable intangible assets	$ 11,200	

Pro forma financial information has not been presented for the SolarLeadFactory acquisition as the impact to the Company's condensed consolidated financial statements was not material.

The Company incurred and accrued costs related to acquisition of $0.4 million that were recorded in general and administrative expenses in the accompanying condensed consolidated statements of operations for the nine months ended September 30, 2022.

5. GOODWILL AND INTANGIBLE ASSETS

The Company's goodwill as of September 30, 2022 and December 31, 2021 are as follows:

Goodwill	September 30, 2022	December 31, 2021
	(In thousands)	
Goodwill, beginning of period	$ 181,254	$ 24,783
Goodwill acquired	16,377	156,390
Currency translation adjustment	(2,123)	81
Goodwill, end of period	$ 195,508	$ 181,254

The Company's purchased intangible assets as of September 30, 2022 and December 31, 2021 are as follows:

	September 30, 2022				December 31, 2021			
	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	38,650	3,600	(14,846)	27,404	13,100	25,550	(8,958)	29,692
Customer relationships	41,021	7,600	(17,339)	31,282	26,421	14,600	(11,448)	29,573
Trade names	37,700	—	(5,748)	31,952	—	37,700	(93)	37,607
Order backlog	600	—	(600)	—	—	600	—	600
Total purchased intangible assets	$ 118,257	$ 11,200	$ (38,533)	$ 90,924	$ 39,807	$ 78,450	$ (20,499)	$ 97,758

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Developed technology	$ 2,012	$ 896	$ 5,888	$ 2,586
Customer relationships	2,066	1,532	5,891	3,994
Trade names	1,885	85	5,655	232
Order backlog	—	—	600	—
Total amortization expense	$ 5,963	$ 2,513	$ 18,034	$ 6,812

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 September 30, 2022 is presented below (in thousands):

	September 30, 2022
Fiscal year:	
2022 (remaining three months)	$ 5,963
2023	24,096
2024	21,299
2025	19,984
2026	16,425
Thereafter	2,871
Total	$ 90,638

6. CASH EQUIVALENTS AND MARKETABLE SECURITIES

The cash equivalents and marketable securities consist of the following:

	As of September 30, 2022					
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Cash Equivalents	Marketable Securities
	(In thousands)					
Money market funds	$ 182,559	$ —	$ —	$ 182,559	$ 182,559	$ —
Certificates of deposit	21,040	—	(136)	20,904	—	20,904
Commercial paper	119,751	2	(201)	119,552	15,231	104,321
Corporate notes and bonds	171,874	5	(3,943)	167,936	2,924	165,012
U.S. Treasuries	282,489	19	(189)	282,319	45,878	236,441
U.S. Government agency securities	562,061	—	(9,026)	553,035	—	553,035
Total	$ 1,339,774	$ 26	$ (13,495)	$ 1,326,305	$ 246,592	$ 1,079,713

	As of December 31, 2021					
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Cash Equivalents	Marketable Securities
	(In thousands)					
Money market funds	$ 35,789	$ —	$ —	$ 35,789	$ 35,789	$ —
Certificates of deposit	16,001	—	(2)	15,999	6,000	9,999
Commercial paper	215,964	—	(114)	215,850	26,997	188,853
Corporate notes and bonds	199,244	—	(872)	198,372	760	197,612
U.S. Treasuries	14,999	—	(1)	14,998	—	14,998
U.S. Government agency securities	487,743	—	(1,870)	485,873	—	485,873
Total	$ 969,740	$ —	$ (2,859)	$ 966,881	$ 69,546	$ 897,335

The following table summarizes the contractual maturities of the Company's cash equivalents and marketable securities as of September 30, 2022:

	Amortized Cost	Fair Value
	(In thousands)	
Due within one year	$ 1,210,299	$ 1,201,119
Due within one to three years	129,475	125,186
Total	$ 1,339,774	$ 1,326,305

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

7. WARRANTY OBLIGATIONS

The Company's warranty activities were as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Warranty obligations, beginning of period	$ 96,551	$ 59,938	$ 73,377	$ 45,913
Accruals for warranties issued during period	13,370	4,780	33,591	11,993
Changes in estimates	927	3,593	22,902	15,517
Settlements	(6,539)	(4,141)	(19,010)	(9,828)
Increase due to accretion expense	2,952	1,260	6,295	3,307
Other	(1,381)	2,082	(11,275)	610
Warranty obligations, end of period	105,880	67,512	105,880	67,512
Less: current portion	(32,350)	(16,728)	(32,350)	(16,728)
Non-current	$ 73,530	$ 50,784	$ 73,530	$ 50,784

Changes in Estimates

In the three months ended September 30, 2022, the Company recorded $0.9 million in warranty expense from change in estimates related to continuing analysis of field performance data and diagnostic root-cause failure analysis primarily for Enphase IQ™ Battery storage systems. In the three months ended September 30, 2021, the Company recorded $3.6 million in warranty expense from change in estimates, of which $2.2 million relates to the increase in replacement costs assumption changes and $1.4 million is due to continuing analysis of field performance data and diagnostic root-cause failure analysis primarily relating to its prior generation products.

In the nine months ended September 30, 2022, the Company recorded $22.9 million in warranty expense from change in estimates, of which $14.0 million relates to continuing analysis of field performance data and diagnostic root-cause failure analysis primarily for Enphase IQ™ Battery storage systems and prior generation products, $4.9 million relates to an increase in expedited freight costs and replacement costs, and $4.0 million due to an increase in labor reimbursement rates. In the nine months ended September 30, 2021, the Company recorded $15.5 million in warranty expense from change in estimates, of which $9.1 million relates to continuing analysis of field performance data and diagnostic root-cause failure analysis primarily relating to its prior generation products, and $6.4 million relates to the increase in replacement costs assumption changes.

8. 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:

	September 30, 2022			December 31, 2021		
	(In thousands)					
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Assets:						
Cash and cash equivalents:						
Money market funds	$ 182,559	$ —	$ —	$ 35,789	$ —	$ —
Certificates of deposit	—	—	—	—	6,000	—
Commercial paper	—	15,231	—	—	26,997	—
Corporate notes and bonds	—	2,924	—	—	760	—
U.S. Treasuries	—	45,878	—	—	—	—
Marketable securities:						
Certificates of deposit	—	20,904	—	—	9,999	—
Commercial paper	—	104,321	—	—	188,853	—
Corporate notes and bonds	—	165,012	—	—	197,612	—
U.S. Government agencies	—	553,035	—	—	485,873	—
U.S. Treasuries	—	236,441	—	—	14,998	—
Other assets						
Investments in debt securities	—	—	41,432	—	—	41,042
Total assets measured at fair value	$ 182,559	$ 1,143,746	$ 41,432	$ 35,789	$ 931,092	$ 41,042
Liabilities:						
Accrued liabilities						
Contingent consideration	$ —	$ —	$ —	$ —	$ —	$ 3,710
Warranty obligations						
Current	—	—	28,120	—	—	14,612
Non-current	—	—	55,434	—	—	36,395
Total warranty obligations measured at fair value	—	—	83,554	—	—	51,007
Total liabilities measured at fair value	$ —	$ —	$ 83,554	$ —	$ —	$ 54,717

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, and Notes due 2025 at face value less unamortized discount and issuance costs on its condensed consolidated balance sheets. As of September 30, 2022, the fair value of the Notes due 2028, Notes due 2026 and Notes due 2025 was $690.6 million, $735.1 million and $369.1 million, respectively. The fair value as of September 30, 2022 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.

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. Further, the Company has concluded that the Company’s investment in a debt security is considered a Level 3 measurement due to the use of significant unobservable inputs in the valuation model. Principal plus accrued interest receivable of the investment approximates the fair value.

Investment in debt securities are recorded in “Other assets” on the accompanying condensed consolidated balance sheet as of September 30, 2022. The changes in the balance in investments in debt securities during the period are as follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Balance at beginning of period	$ 40,913	$ 47,369	$ 41,042	$ —
Investment	—	13,000	—	58,000
Fair value adjustments included in other (expense) income, net	519	784	390	3,153
Balance at end of period	$ 41,432	$ 61,153	$ 41,432	$ 61,153

Contingent consideration

The estimated fair value of the contingent consideration incurred in connection with the Company’s acquisition of Sofdesk Inc. during the three months ended March 31, 2021 is considered a Level 3 measurement due to the use of significant unobservable inputs. These unobservable inputs include probability assessment of expected future customer count over the period in which the obligation is expected to be settled. The value was determined using a discounted risk-neutral expected (probability-weighted) cash flow methodology. The resulting expected contingent consideration payment is discounted back to present value using the Company’s cost of debt. The fair value of contingent consideration arrangement is reassessed quarterly based on assumptions used in the Company’s latest projections and input provided by management. Any change in the fair value estimate, which could include accretion of interest expense due to passage of time as well as any changes in the inputs to the model, is recorded in the Company’s condensed consolidated statement of operations for that period.

The following table reflects the activity for the Company's contingent consideration liabilities measured at fair value using Level 3 inputs for the three and nine months ended September 30, 2022:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Balance at beginning of period	$ —	$ 3,596	$ 3,710	$ —
Addition	—	—	—	3,500
Fair value adjustments included in other income (expense), net	—	57	15	153
Paid	—	—	(3,725)	—
Balance at end of period	$ —	$ 3,653	$ —	$ 3,653

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 failure rates, claim 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 included a discount rate based on the Company's credit-adjusted risk-free 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 September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Balance at beginning of period	$ 73,923	$ 38,037	$ 51,007	$ 28,736
Accruals for warranties issued during period	12,472	4,780	32,362	11,993
Changes in estimates	1,141	1,980	19,732	7,318
Settlements	(5,548)	(2,838)	(14,272)	(6,663)
Increase due to accretion expense	2,952	1,260	6,295	3,307
Other	(1,385)	2,081	(11,570)	609
Balance at end of period	$ 83,554	$ 45,300	$ 83,554	$ 45,300

Quantitative and Qualitative Information about Level 3 Fair Value Measurements

As of September 30, 2022 and December 31, 2021, the significant unobservable inputs used in the fair value measurement of the Company's liabilities designated as Level 3 are as follows, of which the monetary impact for change in discount rate is captured in "Other" in the table above:

			Percent Used (Weighted Average)	
Item Measured at Fair Value	Valuation Technique	Description of Significant Unobservable Input	September 30, 2022	December 31, 2021
Warranty obligations for products sold since January 1, 2014	Discounted cash flows	Profit element and risk premium	16%	15%
		Credit-adjusted risk-free rate	16%	12%

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 requirements of a third-party participant willing to assume the Company's warranty obligations. The credit-adjusted risk-free rate ("discount rate") is determined by reference to the Company's own credit standing at the fair value measurement date. Increasing the profit element and risk premium input by 100 basis points would result in a $0.7 million increase to the liability. Decreasing the profit element and risk premium by 100 basis points would result in a $0.7 million reduction of the liability. Increasing the discount rate by 100 basis points would result in a $2.9 million reduction of the liability. Decreasing the discount rate by 100 basis points would result in a $3.1 million increase to the liability.

9. DEBT

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

	September 30, 2022	December 31, 2021
	(In thousands)	
Convertible notes		
Notes due 2028	$ 575,000	$ 575,000
Less: unamortized debt discount	—	(143,636)
Less: unamortized debt issuance costs	(7,032)	(5,775)
Carrying amount of Notes due 2028 [(1)]	567,968	425,589
Notes due 2026	632,500	632,500
Less: unamortized debt discount	—	(104,755)
Less: unamortized debt issuance costs	(6,809)	(6,678)
Carrying amount of Notes due 2026 [(1)]	625,691	521,067
Notes due 2025	102,175	102,175
Less: unamortized debt discount	(11,344)	(14,584)
Less: unamortized debt issuance costs	(1,177)	(1,539)
Carrying amount of Notes due 2025	89,654	86,052
Notes due 2023	5,000	5,000
Less: unamortized issuance costs	(32)	(62)
Carrying amount of Notes due 2023	4,968	4,938
Total carrying amount of debt	1,288,281	1,037,646
Less: current portion of convertible notes	(89,654)	(86,052)
Debt, non-current	$ 1,198,627	$ 951,594

(1) The net carrying amount was increased on January 1, 2022 as a result of the adoption of ASU 2020-06. Refer to Note 1, Summary of Significant Accounting Policies, in this Quarterly Report on Form 10-Q for further information.

Convertible Senior Notes due 2028

On March 1, 2021, the Company issued $575.0 million aggregate principal amount of 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.

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 of 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 September 30, 2022, the unamortized deferred issuance cost for the Notes due 2028 was $7.0 million on the condensed consolidated balance sheet.

The following table presents the total amount of interest cost recognized in the statement of operations relating to the Notes due 2028:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Amortization of debt discount	$ —	$ 4,929	$ —	$ 11,412
Amortization of debt issuance costs	327	235	969	550
Total interest cost recognized	$ 327	$ 5,164	$ 969	$ 11,962

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 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 earlier repurchased 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 September 30, 2022, the unamortized deferred issuance cost for the Notes due 2026 was $6.8 million on the condensed consolidated balance sheet.

The following table presents the total amount of interest cost recognized in the statement of operations relating to the Notes due 2026:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Amortization of debt discount	$ —	$ 5,650	$ —	$ 13,023
Amortization of debt issuance costs	502	404	1,489	943
Total interest cost recognized	$ 502	$ 6,054	$ 1,489	$ 13,966

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 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 September 30, 2022 and December 31, 2021, 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 September 30, 2022 and December 31, 2021. As a result, as of October 1, 2022, the Notes due 2025 are convertible at the holders' option through December 31, 2022. Accordingly, the Company classified the net carrying amount of the Notes due 2025 of $89.7 million and $86.1 million as Debt, current on the condensed consolidated balance sheet as of September 30, 2022 and December 31, 2021, respectively. From October 1, 2022 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 nine months ended September 30, 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 nine months ended September 30, 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 September 30, 2022, $102.2 million aggregate principal amount of the Notes due 2025 remained outstanding.

The following table presents the total amount of interest cost recognized relating to the Notes due 2025:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Contractual interest expense	$ 64	$ 64	$ 192	$ 278
Amortization of debt discount	1,103	1,047	3,239	4,469
Amortization of debt issuance costs	122	123	363	539
Total interest cost recognized	$ 1,289	$ 1,234	$ 3,794	$ 5,286

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 $11.3 million as of September 30, 2022, and will be amortized over approximately 2.4 years from September 30, 2022.

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.

ENPHASE ENERGY, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

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 September 30, 2022, 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 nine months ended September 30, 2021.

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 September 30, 2022 and December 31, 2021, $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.

The following table presents the amount of interest cost recognized relating to the contractual interest coupon and the amortization of debt issuance costs of the Notes due 2023:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Contractual interest expense	$ 50	$ 50	$ 150	$ 150
Amortization of debt issuance costs	10	10	30	30
Total interest costs recognized	$ 60	$ 60	$ 180	$ 180

10. 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 September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Operating lease costs	$ 2,006	$ 1,684	$ 5,995	$ 5,130

The components of lease liabilities are presented as follows:

	September 30, 2022	December 31, 2021
	(In thousands except years and percentage data)	
Operating lease liabilities, current (Accrued liabilities)	$ 4,193	$ 3,830
Operating lease liabilities, non-current (Other liabilities)	16,955	11,920
Total operating lease liabilities	$ 21,148	$ 15,750
Supplemental lease information:		
Weighted average remaining lease term	5.7 years	5.9 years
Weighted average discount rate	6.4%	7.4%

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows from operating leases	$ 1,265	$ 1,529	$ 4,108	$ 4,315
Non-cash investing activities:				
Lease liabilities arising from obtaining right-of-use assets	$ 2,329	$ 437	$ 9,071	$ 437

Undiscounted cash flows of operating lease liabilities as of September 30, 2022 are as follows:

	Lease Amounts
	(In thousands)
Year:	
2022 (remaining three months)	$ 1,308
2023	5,526
2024	4,714
2025	4,048
2026	3,131
Thereafter	6,554
Total lease payments	25,281
Less: imputed lease interest	(4,133)
Total lease liabilities	$ 21,148

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 September 30, 2022, these purchase obligations totaled approximately $706.7 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.

11. STOCK-BASED COMPENSATION

Stock-based Compensation Expense

Stock-based compensation expense for all stock-based awards, which includes stock options, restricted stock units ("RSUs") and performance-based 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 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 September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Cost of revenues	$ 3,188	$ 2,915	$ 8,826	$ 4,957
Research and development	17,400	10,999	47,395	22,215
Sales and marketing	20,069	15,472	55,302	24,344
General and administrative	11,639	17,568	41,634	25,594
Total	$ 52,296	$ 46,954	$ 153,157	$ 77,110

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Stock options, RSUs and PSUs	$ 51,075	$ 45,992	$ 142,415	$ 74,193
Employee stock purchase plan	1,360	962	3,756	2,917
Post combination expense accrual (Accrued liabilities)	(139)	—	6,986	—
Total	$ 52,296	$ 46,954	$ 153,157	$ 77,110

As of September 30, 2022, there was approximately $295.5 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 2.4 years.

ENPHASE ENERGY, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

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, 2021	2,264	$ 1.90		
Granted	—	—		
Exercised	(580)	2.25		$ 128,183
Canceled	(1)	8.82		
Outstanding at September 30, 2022	1,683	$ 1.78	2.2	$ 463,982
Vested and expected to vest at September 30, 2022	1,683	$ 1.78	2.2	$ 463,982
Exercisable at September 30, 2022	1,683	$ 1.78	2.2	$ 463,982

(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 September 30, 2022 is based on the closing price of the last trading day during the period ended September 30, 2022. The Company's stock fair value used in this computation was $277.47 per share.

The following table summarizes information about stock options outstanding at September 30, 2022:

	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	460	2.6	$ 0.91	460	$ 0.91
$1.29 —— $1.29	1,000	2.0	1.29	1,000	1.29
$1.31 —— $5.53	196	2.0	2.76	196	2.76
$14.58 —— $14.58	20	3.6	14.58	20	14.58
$64.17 —— $64.17	7	4.6	64.17	7	64.17
Total	1,683	2.2	$ 1.78	1,683	$ 1.78

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, 2021	2,786	$ 100.73		
Granted	691	194.55		
Vested	(1,145)	66.63		$ 216,507
Canceled	(160)	141.49		
Outstanding at September 30, 2022	2,172	145.58	1.1	$ 602,620
Expected to vest at September 30, 2022	2,171	$ 145.58	1.1	$ 602,496

(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 September 30, 2022 is based on the closing price of the last trading day during the period ended September 30, 2022. The Company's stock fair value used in this computation was $277.47 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, 2021	445	$ 169.82		
Granted	392	192.72		
Vested	(303)	168.88		$ 51,393
Canceled	(179)	171.32		
Outstanding at September 30, 2022	355	$ 195.14	0.4	$ 98,607
Expected to vest at September 30, 2022	355	$ 195.14	0.4	$ 98,607

(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 September 30, 2022 is based on the closing price of the last trading day during the period ended September 30, 2022. The Company's stock fair value used in this computation was $277.47 per share.

12. INCOME TAXES

For the three months ended September 30, 2022 and 2021, the Company's income tax provision of $19.4 million and $3.9 million, respectively, on net income before income taxes of $134.3 million and $25.7 million, respectively, and for the nine months ended September 30, 2022, the Company's income tax provision of $40.3 million on net income before income taxes of $283.9 million 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 nine months ended September 30, 2021, the Company's income tax benefit of $22.5 million, on net income before income taxes of $70.4 million calculated using the annualized effective tax rate method, was primarily due to tax deduction in the first quarter of 2021 from employee stock compensation reported as a discrete event, partially offset by projected tax expense in the U.S. and foreign jurisdictions that are profitable.

For the three and nine months ended September 30, 2022 and 2021, in accordance with FASB guidance for interim reporting of income tax, the Company has computed its benefit (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. Inflation Reduction Act (“IRA”) was enacted into law. The IRA contains a number of revisions to the Internal Revenue Code, including a 15% corporate minimum income tax, expanded tax credits for clean energy incentives and a 1% excise tax on corporate stock repurchases in tax years beginning after December 31, 2022. The Company is in the process of evaluating provisions included under the IRA and its impact to the Company’s consolidated financial statements.

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 2011 Employee Stock Purchase Plan (the “ESPP”), the Notes due 2023, 1.0% convertible senior notes due 2024 (the “Notes due 2024”), Notes due 2025, Notes due 2026, Notes due 2028, and warrant transactions in connection with the offering of the Notes due 2024 (the “2024 Warrants”), 2025 Warrants, 2026 Warrants and the 2028 Warrants. See Note 9, “Debt,” for additional information about the Company’s outstanding notes.

ENPHASE ENERGY, INC.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands, except per share data)			
Numerator:				
Net income	$ 114,812	$ 21,809	$ 243,609	$ 92,858
Convertible senior notes interest and financing costs, net	1,623	44	1,966	133
Adjusted net income	$ 116,435	$ 21,853	$ 245,575	$ 92,991
Denominator:				
Shares used in basic per share amounts:				
Weighted average common shares outstanding	135,633	134,721	135,056	133,719
Shares used in diluted per share amounts:				
Weighted average common shares outstanding	135,633	134,721	135,056	133,719
Effect of dilutive securities:				
Employee stock-based awards	3,344	4,379	3,433	4,919
Notes due 2023	900	900	900	900
Notes due 2024	—	46	—	1,014
2024 Warrants	—	44	—	856
Notes due 2025	1,253	658	—	976
2025 Warrants	757	472	594	707
Notes due 2026	2,057	—	2,057	—
Notes due 2028	2,018	—	2,018	—
Weighted average common shares outstanding for diluted calculation	145,962	141,220	144,058	143,091
Basic and diluted net income per share				
Net income per share, basic	$ 0.85	$ 0.16	$ 1.80	$ 0.69
Net income per share, diluted	$ 0.80	$ 0.15	$ 1.70	$ 0.65

For the three and nine months ended September 30, 2022, the dilutive effect of potentially dilutive common shares is reflected in diluted earnings per share by application of the treasury stock method for stock options, RSUs, PSUs, the 2025 Warrants, the 2026 Warrants and the 2028 Warrants. To the extent these potential common shares are antidilutive, they are excluded from the calculation of diluted net income per share.

For the three and nine months ended September 30, 2022, due to adoption of ASU 2020-06 on January 1, 2022, the Company is no longer utilizing the treasury stock method for earnings per share impact for the Notes due 2025, Notes due 2026 and Notes due 2028. Instead, the Company is applying the if-converted method when reporting the number of potentially dilutive shares of common stock as the Company may at its election, settle its Convertible Senior Notes through payment or delivery, as the case may be, in cash, shares of its common stock or a combination of cash and shares of its common stock. Under this method, diluted earnings per share is determined by assuming that all of the Convertible Senior Notes were converted into shares of the Company’s common stock at the beginning of the reporting period.

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.

Diluted earnings per share for the three and nine months ended September 30, 2021 includes the dilutive effect of stock options, RSUs, PSUs, shares to be purchased under the ESPP, the Notes due 2023, the Notes due 2024, the 2024 Warrants, the Notes due 2025 and the 2025 Warrants. Certain common stock issuable under stock options, RSUs, PSUs, the Notes due 2026, the 2026 Warrants, the Notes due 2028 and the 2028 Warrants have been omitted from the diluted net income per share calculation because including such shares would have been antidilutive.

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 September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
	(In thousands)			
Employee stock-based awards	35	76	249	170
Notes due 2028	—	1,333	—	1,255
2028 Warrants	959	2,662	1,933	2,381
Notes due 2026	—	1,629	—	1,509
2026 Warrants	978	2,713	1,970	2,427
Notes due 2025	—	—	1,253	—
Total	1,972	8,413	5,405	7,742

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 September 30, 2022 and December 31, 2021, $5.0 million aggregate principal amount of the Notes due 2023 were outstanding. For additional information related to this purchase, see Note 9, "Debt," for additional information related to this purchase.

15. SUBSEQUENT EVENTS

On October 10, 2022, the Company completed the acquisition of 100% of the voting interest of GreenCom Networks AG ("GreenCom"), a privately-held company. GreenCom provides Internet of Things software solutions for customers to connect and manage a wide range of distributed energy devices within the home. As part of the consideration, the Company paid approximately $34.9 million in cash. The Company incurred costs related to the acquisition of $0.6 million that were recorded in general and administrative expenses in the accompanying condensed consolidated statements of operations for the three and nine months ended September 30, 2022. The Company is currently in the process of completing the preliminary purchase price allocation, which will be included in the Company's Annual Report on Form 10-K for the year ending December 31, 2022.

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; expense levels; liquidity sources; the capabilities and performance of our technology and products and planned changes; timing of new product releases; our business strategies, including anticipated trends; growth and developments in markets in which we target; the anticipated market adoption of our current and future products; performance in operations, including component supply management; product quality and customer service; risks related to supply chain disruptions, the ongoing COVID-19 pandemic; geo-political events, such as the conflict in Ukraine; new government regulations, such as the Inflation Reduction Act of 2022 ("IRA"); and the anticipated benefits and risks relating to our recent acquisitions. 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, 2021 filed on February 11, 2022 (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 September 30, 2022, we have shipped more than 52 million microinverters, and over 2.7 million Enphase residential and commercial systems have been deployed in more than 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; 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.

In March 2022, we completed the acquisition of SolarLeadFactory, LLC. ("SolarLeadFactory"), a privately-held company. SolarLeadFactory provides high quality leads to solar installers. As part of the purchase price, we paid approximately $26.1 million in cash on March 14, 2022. In addition to the purchase price paid, we are obligated to pay up to approximately $10.0 million in shares of our common stock in the second quarter of 2023 subject to achievement of certain operational and employment targets.

Further details on the above acquisition may be found in Note 4, "Business Combinations," in the notes to the condensed consolidated financial statements included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

On October 10, 2022, we completed the acquisition of 100% of the voting interest of GreenCom Networks AG, a privately-held company. GreenCom provides Internet of Things software solutions for customers to connect and manage a wide range of distributed energy devices within the home. As part of the consideration, we paid approximately $34.9 million in cash. We are currently in the process of completing the preliminary purchase price allocation, which will be included in our Annual Report on Form 10-K for the year ended December 31, 2022.

Factors Affecting our Business and Operations

Supply Chain Constraints. Due to increased demand across a range of industries, the global supply chain and the semiconductor industry have experienced significant disruptions in recent periods. We have seen supply chain challenges and logistics constraints increase, including component shortages, which have, in certain cases, caused delays in critical components and inventory, longer lead times, and have resulted in increased costs. We believe these supply chain challenges will persist for the foreseeable future. In addition, the impact of inflation on the price of components, raw materials and labor has increased, although in the near term we have not seen our gross margin impacted by inflation as we increased prices for our product offerings in the second half of 2021 and in 2022 as well.

During the three months ended September 30, 2022, overall reliability of supply improved and the majority of our suppliers were able to deliver components by their promised, though in many cases, extended, lead times. We continue to work to mitigate the effects from supply chain constraints and the impacts of inflation. In the event we are unable to mitigate the impact of delays and/or price increases in raw materials, electronic components and freight, it could delay the manufacturing and installation of our products, which would adversely impact our cash flows and results of operations, including revenue and gross margin.

COVID-19 Pandemic. The impact of the COVID-19 pandemic and countermeasures taken to contain its spread remain dynamic. We continue to monitor the situation and actively assess further implications for our business, supply chain, fulfillment operations and overall demand. We continue to take meaningful precautions in accordance with relevant guidelines to protect the health and safety of our employees. The extent of the continuing impact of COVID-19 on our operational and financial performance will depend on various developments, including the duration and spread of the virus and its variants, impact on our end-customers' spending, volume of sales, impact on our partners, suppliers and employees, and actions that may be taken by governmental authorities, including the effects of government-mandated lockdowns in several cities in China during 2022. If the COVID-19 pandemic or its adverse effects become more severe or prevalent or are prolonged in the locations where we, our customers, suppliers or manufacturers conduct business, or we experience more pronounced disruptions in our business or operations, or in economic activity and demand for our products and services generally, our business and results of operations in future periods could be materially adversely affected. Further information relating to the risks and uncertainties related to the ongoing COVID-19 pandemic may be found in Part I, Item 1A "Risk Factors" of the Form 10-K.

Inflation Reduction Act of 2022. In August 2022, the IRA was enacted, which includes extension of the investment tax credit ("ITC") and production tax credit ("PTC") for solar as well as a new advanced manufacturing PTC to incentivize clean energy component sourcing and production, including for the production of solar related components, battery cells and battery packs. The IRA provides for an advanced manufacturing PTC on microinverters of 11 cents per alternating current watt basis. The manufacturing PTC for each component including on 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 0.0% 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 includes a 15% corporate minimum income tax and a 1% excise tax on corporate stock repurchases in tax years beginning after December 31, 2022.

Russia and Ukraine Conflict. In February 2022, armed conflict escalated between Russia and Ukraine. The United States and certain other countries have imposed sanctions on Russia and could impose further sanctions, which could damage or disrupt international commerce and the global economy. While we do not have sales or operations in Russia or Ukraine, it is possible that the conflict or actions taken in response, could adversely affect some of our markets and suppliers, the broader economic and financial markets, or costs and availability of components and materials, or cause further supply chain disruptions.

Products

Our Enphase IQ Battery storage systems, with usable and scalable capacity of 10.1 kWh and 3.4 kWh, are based on our Ensemble OS™ energy management technology, which powers the world's first grid-independent microinverter-based storage system to customers in North America, and has been shipping since the second quarter of 2020. The Enphase IQ Battery storage systems feature our embedded grid-forming microinverters that enable the Always-On capability that keeps homes powered when the grid goes down, and the ability to save money when the grid is up. These systems are now compatible with both new and existing Enphase IQ solar systems with M-series™, IQ6™ and IQ7™ microinverters. In January 2021, we announced expanded compatibility of the Enphase® Energy System™ with our M-series microinverters and string inverters. The expanded compatibility provides approximately 300,000 additional Enphase system owners with the possibility of achieving grid-agnostic energy resilience through the Enphase Upgrade Program. The program provides solar installers the opportunity to renew engagements with the installed base of Enphase system owners through microinverter, solar, and energy storage upgrades, and reflects our continued commitment to reliability, service, and long-term customer relationships. We currently ship our Enphase IQ Battery storage systems to customers in North America, Belgium and Germany. Enphase IQ Batteries in Belgium and Germany 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.

During the second quarter of 2021, we introduced IQ™ Load Controller for our Enphase IQ Battery storage systems. Load control allows 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. We began shipping our IQ Load Controller, which includes updated features, in December 2021.

Our Enphase Energy System integrates with most leading models of home standby AC generators, providing enhanced performance and a glitch-free transition for homeowners during power outages. Homeowners can also monitor real-time power flow, start and stop their generator remotely, set quiet hours to prevent their generator from operating until their batteries fall below a designated threshold, and control it all with the Enphase® App. The new feature functions without a generator automatic transfer switch and is designed to eliminate the power glitches that reset home electronic appliances when switching to generator power.

We began shipping our Enphase Energy System with IQ8™ microinverters in the fourth quarter of 2021 to customers in North America. Our investment in custom application specific integrated circuit chips has resulted in a software-defined microinverter smart enough to form a microgrid. Many homeowners often assume that their solar systems will function if the sun is shining, even during a power outage. This has unfortunately not been true until the introduction of IQ8. Now, with IQ8 homeowners can realize the true promise of solar — to make and use their own power. IQ8 solar microinverters can provide Sunlight Backup™ during an outage, even without a battery.

In the second quarter of 2022 the Enphase IQ8 Microinverter-based system was certified by UL, a global safety science leader, for the new North American safety and grid interconnection standards for connecting solar inverters, energy storage systems, and distributed energy resources to the grid.

We participate in the ConnectedSolutions program, which is an incentive program implemented by two utilities in the Northeast region of the United States to reduce electrical demand during high-use periods. Enphase Storage customers in Connecticut, Massachusetts and Rhode Island can sign-up, monitor, track money earned, and control participation in the program using the Enphase App. We announced during the third quarter of 2021 our participation in Hawaiian Electric's Battery Bonus grid services program. This program offers a new incentive for homeowners on the island of Oahu to install a new home battery. During the fourth quarter of 2021, we announced our participation in the Arizona Public Service ("APS") residential battery services program. The APS program offers homeowners who install Enphase IQ Batteries in its service territory the chance to participate and earn money through one-time, upfront incentives. In addition, we announced during the first quarter of 2022 that the Vermont-based utility Green Mountain Power ("GMP") will offer Enphase Energy Systems to its customers in a cutting-edge battery lease grid services pilot program. Homeowners can also enroll in GMP's "Bring Your Own Device" grid services program, which enables customers with their own Enphase Energy Systems to participate and earn an up-front incentive. These grid services programs enable utilities to leverage the IQ Battery instead of turning on polluting peaker plants, while generating an income stream for the IQ Battery owner. While these programs do not currently drive material revenues, we believe that facilitating grid services participation for our customers can reduce the lifetime cost of IQ Batteries and help drive increased demand for our Enphase Energy Systems.

Results of Operations

Net Revenues

	Three Months Ended September 30,		Change in		Nine Months Ended September 30,		Change in	
	2022	2021	$	%	2022	2021	$	%
	(In thousands, except percentages)							
Net revenues	$ 634,713	$ 351,519	$ 283,194	81 %	$ 1,606,201	$ 969,330	$ 636,871	66 %

Three months ended September 30, 2022 and 2021

Net revenues increased by 81%, or $283.2 million, in the three months ended September 30, 2022, as compared to the same period in 2021, driven primarily by a 67% increase in microinverter units volume shipped and a 104% increase in Enphase IQ Battery Megawatt-hour ("MWh") shipped. In the three months ended September 30, 2022, consumer demand increased and component supply improved as we sold approximately 4.3 million microinverter units, as compared to approximately 2.6 million units in the three months ended September 30, 2021. In the three months ended September 30, 2022, we also increased shipments of our Enphase IQ Batteries to customers in the United States and Europe to 133.6 MWh as compared to 65.4 MWh shipped in the same period in 2021. The average selling price of our microinverter products increased by 9% in the three months ended September 30, 2022, as compared to the same period in 2021, primarily driven by a favorable product mix as we sold more IQ8 microinverters relative to IQ7 microinverters in the three months ended September 30, 2022 and increased prices for our product offerings in the second half of 2021 and in 2022 to partially offset the impact of higher logistics costs and component costs from global supply chain pricing pressures.

Nine months ended September 30, 2022 and 2021

Net revenues increased by 66%, or $636.9 million, in the nine months ended September 30, 2022, as compared to the same period in 2021, driven primarily by a 42% increase in microinverter units volume shipped and a 156% increase in Enphase IQ Battery MWh shipped. In the nine months ended September 30, 2022, consumer demand increased and component supply improved, as we sold approximately 10.5 million microinverter units, as compared to approximately 7.4 million units in the nine months ended September 30, 2021. In the nine months ended September 30, 2022, we also increased shipments of our Enphase IQ Batteries to customers in the United States and Europe to 386.4 MWh, as compared to 150.8 MWh shipped in the same period in 2021. The average selling price of our microinverter products increased by 14% in the nine months ended September 30, 2022, as compared to the same period in 2021, primarily driven by a favorable product mix, as we sold more IQ8 microinverters relative to IQ7 microinverters in the nine months ended September 30, 2022 and increased prices for our product offerings in the second half of 2021 and in 2022 to partially offset the impact of higher logistics costs and component costs from global supply chain pricing pressures.

Cost of Revenues and Gross Margin

	Three Months Ended September 30,		Change in		Nine Months Ended September 30,		Change in	
	2022	2021	$	%	2022	2021	$	%
				(In thousands, except percentages)				
Cost of revenues	$ 366,797	$ 211,161	$ 155,636	74 %	$ 942,307	$ 578,222	$ 364,085	63 %
Gross profit	$ 267,916	$ 140,358	$ 127,558	91 %	$ 663,894	$ 391,108	$ 272,786	70 %
Gross margin	42.2 %	39.9 %		2.3 %	41.3 %	40.3 %		1.0 %

Three months ended September 30, 2022 and 2021

Cost of revenues increased by 74%, or $155.6 million, in the three months ended September 30, 2022, as compared to the same period in 2021, primarily due to higher volume of microinverter units sold, higher Enphase IQ Battery MWh shipped, and higher shipping and warranty costs associated with the higher volume of sales globally. The increase was also due to $1.4 million higher amortization of developed technology and $0.4 million higher stock-based compensation.

Gross margin increased by 2.3 percentage points in the three months ended September 30, 2022, as compared to the same period in 2021. The increase was primarily due to an increase in average selling prices driven by a favorable product mix as we sold more IQ8 microinverters relative to IQ7 microinverters in the three months ended September 30, 2022, and price increases to our products in the second half of 2021 and in 2022, as well as cost management efforts. This increase was partially offset by unfavorable impact of 2.1 percentage points from currency fluctuations in the euro relative to the U.S. dollar when we convert the current quarter euro denominated revenue into the U.S. dollar using the comparable prior period's average currency exchange rate and 0.2 percentage points from higher amortization of developed technology.

Nine months ended September 30, 2022 and 2021

Cost of revenues increased by 63%, or $364.1 million, in the nine months ended September 30, 2022, as compared to the same period in 2021, primarily due to higher volume of microinverter units sold, higher Enphase IQ Battery MWh shipped, and higher shipping and warranty costs associated with the higher volume of sales, as well as higher shipping costs of our products due to supply chain disruptions and constraints globally. The increase was also due to $4.2 million higher amortization of developed technology and $4.2 million higher stock-based compensation.

Gross margin increased by 1.0 percentage point in the nine months ended September 30, 2022, as compared to the same period in 2021. The increase was primarily due to an increase in average selling prices driven by a favorable product mix, as we sold more IQ8 microinverters relative to IQ7 microinverters in the nine months ended September 30, 2022, and price increases to our products in the second half of 2021 and in 2022, as well as cost management efforts. The increase was partially offset by unfavorable impact of 1.4 percentage points from currency fluctuations in the euro relative to the U.S. dollar using the comparable prior period's average currency exchange rate and 0.3 percentage point from higher amortization of developed technology.

Research and Development

	Three Months Ended September 30,		Change in		Nine Months Ended September 30,		Change in	
	2022	2021	$	%	2022	2021	$	%
	(In thousands, except percentages)							
Research and development	$ 44,188	$ 29,411	$ 14,777	50 %	$ 119,163	$ 73,937	$ 45,226	61 %
Percentage of net revenues	7 %	8 %			7 %	8 %		

Three months ended September 30, 2022 and 2021

Research and development expense increased by 50%, or $14.8 million, in the three months ended September 30, 2022, as compared to the same period in 2021. The increase was primarily due to $12.3 million of higher personnel-related expenses and $2.5 million of equipment expense associated with our investment in the development, introduction and qualification of new product innovation. The increase in personnel-related expenses was primarily due to hiring and retention programs for employees in New Zealand, India and the United States, 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.

Nine months ended September 30, 2022 and 2021

Research and development expense increased by 61%, or $45.2 million, in the nine months ended September 30, 2022, as compared to the same period in 2021. The increase was primarily due to $40.7 million of higher personnel-related expenses and $4.5 million of equipment expense associated with our investment in the development, introduction and qualification of new product innovation. The increase in personnel-related expenses was primarily due to hiring and retention programs for employees in New Zealand, India and the United States, 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 September 30,		Change in		Nine Months Ended September 30,		Change in	
	2022	2021	$	%	2022	2021	$	%
	(In thousands, except percentages)							
Sales and marketing	$ 55,257	$ 39,296	$ 15,961	41 %	$ 150,189	$ 84,504	$ 65,685	78 %
Percentage of net revenues	9 %	11 %			9 %	9 %		

Three months ended September 30, 2022 and 2021

Sales and marketing expense increased by 41%, or $16.0 million, in the three months ended September 30, 2022, as compared to the same period in 2021. The increase was primarily due to $14.8 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 in the United States and international expansion in Europe. In addition, annual retention programs for employees also resulted in the increase in total compensation costs, including stock-based compensation. The increase in sales and marketing expense in the three months ended September 30, 2022, as compared to the same period in 2021, was also attributable to $2.3 million higher amortization of intangible assets acquired through business combinations and $2.5 million of higher professional services and facility costs to support our business growth. This increase was partially offset by a decrease of $3.6 million in the advertising costs and marketing expenses.

Nine months ended September 30, 2022 and 2021

Sales and marketing expense increased by 78%, or $65.7 million, in the nine months ended September 30, 2022, as compared to the same period in 2021. The increase was primarily due to $57.7 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 in the United States and international expansion in Europe. In addition, annual retention programs for employees also resulted in the increase in total compensation costs, including stock-based compensation. The increase in sales and marketing expense in the nine months ended September 30, 2022, as compared to the same period in 2021, was also attributable to $6.7 million higher amortization of intangible assets acquired through business combinations and $5.3 million of higher professional services and facility costs to support our business growth. This increase was partially offset by a decrease of $4.1 million in the advertising costs and marketing expenses.

General and Administrative

	Three Months Ended September 30,		Change in		Nine Months Ended September 30,		Change in	
	2022	2021	$	%	2022	2021	$	%
	(In thousands, except percentages)							
General and administrative	$ 32,436	$ 34,300	$ (1,864)	(5)%	$ 102,647	$ 74,530	$ 28,117	38 %
Percentage of net revenues	5 %	10 %			6 %	8 %		

Three months ended September 30, 2022 and 2021

General and administrative expense decreased by 5%, or $1.9 million, in the three months ended September 30, 2022, as compared to the same period in 2021. The decrease was primarily due to $5.9 million of lower stock-based compensation expense related to timing of the grant of annual retention awards in 2021, offset by a $3.1 million increase in investments in technological infrastructure and other operational and facilities costs to support scalability of our business growth, and $1.0 million of higher legal and professional services.

Nine months ended September 30, 2022 and 2021

General and administrative expense increased by 38%, or $28.1 million, in the nine months ended September 30, 2022, as compared to the same period in 2021. The increase was primarily due to $19.1 million of higher personnel-related expenses as a result of an increase in headcount increasing total compensation costs, including stock-based compensation and post business combination employment-related expense, $5.8 million of investments in technological infrastructure and other operational and facilities costs to support scalability of our business growth, and $3.1 million of higher legal and professional services.

Restructuring Charges

	Three Months Ended September 30,		Change in		Nine Months Ended September 30,		Change in	
	2022	2021	$	%	2022	2021	$	%
	(In thousands, except percentages)							
Restructuring charges	$ 594	$ —	$ 594	**	$ 594	$ —	$ 594	**
Percentage of net revenues	0 %	0 %			0 %	0 %		

** Not meaningful

Three and nine months ended September 30, 2022 and 2021

In the three and nine months ended September 30, 2022, we began implementing restructuring actions to reorganize our global workforce, consolidate facilities and eliminate non-core projects. We expect to complete our restructuring activities in 2023. Restructuring charges for the three and nine months ended September 30, 2022 primarily included $0.6 million of one-time termination benefits and other employee-related expenses and impairment of property and equipment, net. We had no restructuring charges in the three months and nine months ended September 30, 2021.

Other Income (Expense), Net

	Three Months Ended September 30,		Change in		Nine Months Ended September 30,		Change in	
	2022	2021	$	%	2022	2021	$	%
	(In thousands, except percentages)							
Interest income	$ 3,680	$ 110	$ 3,570	3,245 %	$ 4,936	$ 281	$ 4,655	1,657 %
Interest expense	(2,255)	(12,628)	10,373	(82)%	(7,159)	(32,463)	25,304	(78)%
Other (expense) income, net	(2,611)	874	(3,485)	(399)%	(5,208)	814	(6,022)	(740)%
Loss on partial settlement of convertible notes	—	—	—	**%	—	(56,382)	56,382	(100)%
Total other expense, net	$ (1,186)	$ (11,644)	$ 10,458	(90)%	$ (7,431)	$ (87,750)	$ 80,319	(92)%

** Not meaningful

Three months ended September 30, 2022 and 2021

Interest income of $3.7 million in the three months ended September 30, 2022 increased, as compared to $0.1 million for the three months ended September 30, 2021, primarily due to an increase in interest rates earned and a higher average cash, cash equivalents and marketable securities balance in the three months ended September 30, 2022, as compared to the same period in 2021.

Cash interest expense

Cash interest expense for each of the three months ended September 30, 2022 and 2021 totaled $0.2 million. Cash interest expense in the three months ended September 30, 2022 primarily includes $0.2 million interest incurred with the Notes due 2025 and Notes due 2023. Cash interest expense in the three months ended September 30, 2021 primarily includes approximately $0.1 million coupon interest incurred with our Notes due 2025, Notes due 2024 and Notes due 2023 and less than approximately $0.1 million accretion of interest expense on contingent consideration.

Non-cash interest expense

Non-cash interest expense of $2.1 million in the three months ended September 30, 2022 primarily related to $2.1 million for the debt discount amortization with our Notes due 2025 and amortization of debt issuance costs with our Notes due 2023, Notes due 2025, Notes due 2026 and Notes due 2028. Non-cash interest expense of $12.4 million in the three months ended September 30, 2021 primarily related to $12.4 million for the debt discount and amortization of debt issuance costs with our Notes due 2024, Notes due 2025, Notes due 2026 and Notes due 2028.

Other expense, net of $2.6 million expense in the three months ended September 30, 2022 relates to a $3.1 million net loss due to foreign currency denominated monetary assets and liabilities, partially offset by $0.5 million non-cash net gain related to change in the fair value of debt securities. Other income, net of $0.9 million in the three months ended September 30, 2021 relates to a $0.8 million non-cash gain for the change in the fair value of debt securities and $0.1 million net loss related to foreign currency exchange and remeasurement.

Nine months ended September 30, 2022 and 2021

Interest income of $4.9 million in the nine months ended September 30, 2022 increased, as compared to $0.3 million for the nine months ended September 30, 2021, primarily due to an increase in interest rates earned and a higher average cash, cash equivalents and marketable securities balance in the nine months ended September 30, 2022, as compared to the same period in 2021.

Cash interest expense

Cash interest expense in the nine months ended September 30, 2022 and 2021 totaled $1.1 million and $0.6 million, respectively. Cash interest expense in the nine months ended September 30, 2022 primarily includes $0.9 million interest incurred with the Notes due 2025 and Notes due 2023, $0.1 million bank charges and $0.1 million accretion of interest expense on contingent consideration for an acquisition. Cash interest expense in the nine months ended September 30, 2021 primarily included $0.4 million coupon interest incurred with our Notes due

2025, Notes due 2024 and Notes due 2023 and $0.2 million accretion of interest expense on contingent consideration.

Non-cash interest expense

Non-cash interest expense of $6.1 million in the nine months ended September 30, 2022 primarily related to $6.1 million for the debt discount amortization with our Notes due 2025 and amortization of debt issuance costs with our Notes due 2023, Notes due 2025, Notes due 2026 and Notes due 2028. Non-cash interest expense of $31.9 million in the nine months ended September 30, 2021 primarily related to $31.8 million for the debt discount and amortization of debt issuance costs with our Notes due 2024, Notes due 2025, Notes due 2026 and Notes due 2028 and less than $0.1 million relates to the amortization of debt issuance costs associated with Notes due 2023.

Other expense, net of $5.2 million in the nine months ended September 30, 2022 relates to $5.4 million net loss due to foreign currency denominated monetary assets and liabilities and $0.3 million impairment of a note receivable, partially offset by $0.4 million non-cash net gain related to change in the fair value of debt securities and $0.2 million interest income. Other income, net of $0.8 million in the nine months ended September 30, 2021 relates to a $3.2 million non-cash gain for the change in the fair value of debt securities, partially offset by a $2.4 million net loss related to foreign currency exchange and remeasurement.

Loss on partial settlement of convertible notes recorded in the nine months ended September 30, 2021 primarily related to the $9.5 million non-cash loss on partial settlement of $87.1 million aggregate principal amount of the Notes due 2024, $9.5 million non-cash loss on partial settlement of $217.8 million aggregate principal amount of the Notes due 2025 and $37.5 million non-cash inducement loss incurred on the repurchase of Notes due 2025. We did not have any such loss in the nine months ended September 30, 2022.

Income Tax (Provision) Benefit

	Three Months Ended September 30,		Change in		Nine Months Ended September 30,		Change in	
	2022	2021	$	%	2022	2021	$	%
				(In thousands, except percentages)				
Income tax (provision) benefit	$ (19,443)	$ (3,898)	$ (15,545)	399 %	$ (40,261)	$ 22,471	$ (62,732)	(279)%

Three months ended September 30, 2022 and 2021

The income tax provision of $19.4 million in the three months ended September 30, 2022 increased, as compared to the income tax provision of $3.9 million in the same period in 2021, 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 2022 compared to 2021, partially offset by tax deduction from employee stock-based compensation.

Nine months ended September 30, 2022 and 2021

The income tax provision of $40.3 million in the nine months ended September 30, 2022 was calculated using the annualized effective tax rate method, primarily related to higher projected tax expense in U.S. and foreign jurisdictions that are more profitable in 2022, partially offset by tax deduction from employee stock-based compensation.

The income tax benefit of $22.5 million for the nine months ended September 30, 2021 was calculated using the annualized effective tax rate method, primarily related to higher tax deduction from employee stock-based compensation, partially offset by higher projected tax expense in foreign jurisdictions that are profitable in 2021.

Liquidity and Capital Resources

Sources of Liquidity

As of September 30, 2022, we had $1.4 billion in net working capital, including cash, cash equivalents and marketable securities of $1.4 billion, of which approximately $1.4 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 U.S. income tax liability associated with our foreign earnings.

	As of September 30,		Change in	
	2022	2021	$	%
	(In thousands, except percentages)			
Cash, cash equivalents and marketable securities	$ 1,417,296	$ 1,394,123	$ 23,173	2 %
Total Debt	$ 1,288,281	$ 1,026,283	$ 261,998	26 %

Our cash, cash equivalents and marketable securities increased by $23.2 million in the nine months ended September 30, 2022, compared to the same period in 2021, primarily due to cash generated from operations, partially offset by cash used to fund acquisitions, make investments in private companies, repurchase our outstanding common stock and make payments of withholding taxes related to net share settlement of equity awards.

Total carrying amount of debt increased by $262.0 million in the nine months ended September 30, 2022, as compared to the same period in 2021, primarily due to adoption of ASU 2020-06 as of January 1, 2022, partially offset by repayment of the Notes due 2024 and partial repayment of the Notes due 2025. Refer to Note 1, "Description of Business and Basis of Presentation - Recently Adopted Accounting Pronouncements" in this Quarterly Report on Form 10-Q for further information on adoption of ASU 2020-06.

We had net operating loss carryforwards for federal and California income tax purposes of approximately $153.9 million and $92.8 million, respectively, as well as federal and state research credit carryforwards of approximately $17.3 million and $9.8 million, respectively, as of December 31, 2021. When we utilize all of our net operating loss and research credit carryforwards, which we expect to occur for the taxable year of 2022, our cash paid for taxes in the United States will substantially increase.

We plan to fund any cash requirements 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.

Cash from operations could be affected by various risks and uncertainties, including, but not limited to, the continued effects of COVID-19, the ongoing conflict in Ukraine, new regulations and other risk factors discussed in the section entitled "Risk Factors" herein and those included in the Form 10-K. We believe that our cash flow from operations with existing cash, cash equivalents and marketable securities will be sufficient to meet our anticipated cash needs for working capital and capital expenditures for at least the next twelve months and thereafter for the foreseeable future, including our ability to make payments on our outstanding debt.

Our future capital requirements will depend on many factors including our growth rate, the timing and extent of spending to support development efforts, the expansion of sales and marketing activities, the introduction of new and enhanced products, the costs to acquire or invest in complementary businesses and technologies, the costs to ensure access to adequate manufacturing capacity, the continuing market acceptance of our products and macroeconomic events, such as the impacts from the COVID-19 pandemic, inflation, increase in interest rates, and the ongoing conflict in Ukraine. We may also choose to seek additional equity or debt financing. In the event that additional financing is required from outside sources, we may not be able to raise it on terms acceptable to us or at all. If we are unable to raise additional capital when desired, our business, operating results and financial condition may be adversely affected.

Repurchase of Common Stock. In May 2021, our board of directors authorized a share repurchase program (the "2021 Repurchase Program") pursuant to which we may repurchase up to an additional $500.0 million of our common stock. The repurchases may 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. Such purchases are expected to continue through May 2024 unless otherwise extended or shortened by our board of directors. As of September 30, 2022, we have approximately $200.0 million remaining for repurchase of shares under the 2021 Repurchase Program.

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

	Nine Months Ended September 30,	
	2022	2021
	(In thousands)	
Net cash provided by operating activities	$ 491,103	$ 254,855
Net cash used in investing activities	(253,775)	(663,029)
Net cash provided by (used in) financing activities	(14,116)	615,643
Effect of exchange rate changes on cash	(4,945)	(1,302)
Net increase in cash and cash equivalents	$ 218,267	$ 206,167

Cash Flows from Operating Activities

Cash flows from operating activities consist 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, asset impairment, and changes in our operating assets and liabilities. Net cash provided by operating activities increased by $236.2 million in the nine months ended September 30, 2022, as compared to the same period in 2021, primarily due to an increase in our gross profit as a result of increased revenues, 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 nine months ended September 30, 2022, net cash used in investing activities of $253.8 million was primarily from $572.2 million purchase of marketable securities, $27.7 million net cash used to acquire SolarLeadFactory and Clipper Creek, Inc., $30.0 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 and $1.0 million used to invest in a private company, partially offset by $377.2 million maturities of marketable securities.

For the nine months ended September 30, 2021, net cash used in investing activities of $663.0 million was primarily from approximately $545.5 million used in purchases of marketable securities, $58.0 million from the investment in a debt security, $55.3 million net cash used to acquire Sofdesk Inc. and DIN Engineer Service LLP's solar design services business, and $39.1 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, partially offset by approximately $35.0 million maturities of marketable securities.

Cash Flows from Financing Activities

For the nine months ended September 30, 2022, net cash used by financing activities of approximately $14.1 million was primarily due to $19.4 million payment of employee withholding taxes related to net share settlement of equity awards, partially offset by $5.3 million net proceeds from employee stock option exercises and purchases under our employee stock purchase plan.

For the nine months ended September 30, 2021, net cash provided by financing activities of approximately $615.6 million was primarily from $1,188.4 million net proceeds from the issuance of our Notes due 2028 and Notes due 2026, $220.8 million from sale of warrants related to our Notes due 2028 and Notes due 2026 and approximately $3.7 million net proceeds from employee stock option exercises, partially offset by $286.2 million purchase of convertible note hedge related to our Notes due 2028 and Notes due 2026, $289.3 million cash paid to settle both $87.1 million in aggregate principal amount of the Notes due 2024 and $217.8 million in aggregate principal amount of the Notes due 2025, $200.0 million paid to repurchase shares of our common stock, $20.3 million payment of employee withholding taxes related to net share settlement of equity awards, and $1.4 million of repayment on sale of long-term financing receivables.

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 purchase. As of September 30, 2022, 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 September 30, 2022, see Note 10, “Commitments and Contingencies - Purchase Obligations” and for more information on our notes and other related debt, see Note 9, “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 U.S. (“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 and recently issued 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 September 30, 2022. 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 September 30, 2022, 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 our Form 10-K, including the risk factors identified in Item 1A of Part I 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 our Form 10-K, in this quarterly report, in other reports we file with the 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 presented in our Form 10-K.

Challenges relating to current supply chain constraints, including with respect to semiconductors and integrated circuits, could adversely impact our revenues, gross margins and results of operations.

Due to increased demand across a range of industries, the global supply market for certain raw materials and components, including, in particular, semiconductor, integrated circuits and other electronic components used in some of our products, has experienced significant constraint and disruption in recent periods. This constrained supply environment has adversely affected, and could further affect, component availability, lead times and cost, and could increase the likelihood of unexpected cancellations or delays of previously committed supply of key components. In an effort to mitigate these risks, we have incurred higher costs to secure available inventory, have extended our purchase commitments and placed non-cancellable, advanced orders with or through suppliers, particularly for long lead time components. Our efforts to expand our manufacturing capacity and multi-source and pre-order components may fail to reduce the impact of these adverse supply chain conditions on our business.

Despite our mitigation efforts, these constrained supply conditions may adversely impact our revenues and results of operations. At the same time, increased costs associated with supply premiums, labor, expediting fees and freight and logistics may adversely impact our gross margin, profitability and ability to reduce the cost to manufacture our products in a manner consistent with prior periods. The COVID-19 pandemic and conflict in Ukraine has also contributed to and exacerbated this strain, and there can be no assurance that the impacts of the pandemic and conflict in Ukraine on our supply chain will not continue, or worsen, in the future. The current supply chain challenges could also result in increased use of cash, engineering design changes and delays in new product introductions, each of which could adversely impact our business and financial results. In the event these supply chain challenges persist for the foreseeable future, these conditions could adversely impact our results of operations.

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 the majority of our revenues from North America, and a substantial majority of our revenues comes from the U.S., and revenues generated from the U.S. market have represented 80%, 82% and 84% of our net revenues for the annual periods ended on December 31, 2021, 2020 and 2019, respectively. We also expect to continue to generate a substantial amount of our revenues from North America in the future.

There are a number of important incentives (including the ITC, PTC 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 0.0% 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 ITC, PTC 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, net energy metering tariffs are being evaluated and, in some instances modified, which may have a negative impact on future inverter sales. We derive a significant portion of our revenues from California's residential solar market and the existing California net energy metering tariff has been very successful in incentivizing the installation of residential solar power systems. Future legislative or regulatory changes in California, such as the current development of the proposal related to Net Energy Metering 3.0, may discourage further growth in the residential solar market.

A number of 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 the solar energy solutions in Europe, which could adversely impact our results of operations.

Our business is subject to potential 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 a significant amount of deferred tax assets and a portion of the deferred tax assets related to net operating losses or tax credits could be subject to limitations under the Code Sections 382 or 383. 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

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. As of September 30, 2022, we have approximately $200.0 million remaining for repurchase of shares under the 2021 Repurchase Program. Purchases may be completed from time to time in the open market or through structured repurchase agreements with third parties. The program may be discontinued or amended at any time and expires on May 13, 2024. Such purchases are expected to continue through May 2024 unless otherwise extended or shortened by our board of directors.

The following table provides information about our purchases of our common stock during the three months ended September 30, 2022 (in thousands, except per share amounts):

Period Ended	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Programs
July 2022	—	—	—	$ 200,000
August 2022	—	—	—	$ 200,000
September 2022	—	—	—	$ 200,000
Total	—		—	

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

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

Exhibit Number	Exhibit Description	Incorporation by Reference				Filed Herewith
		Form	SEC File No.	Exhibit	Filing Date	
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	
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.					X
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.					
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 in Inline XBRL and contained in Exhibit 101).					X

* 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 of 2002, and shall not be deemed "filed" by Enphase Energy, Inc. for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

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: October 25, 2022

ENPHASE ENERGY, INC.

By: /s/ Mandy Yang

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

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: October 25, 2022

/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: October 25, 2022

/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 September 30, 2022, 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: October 25, 2022	Date: October 25, 2022
/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.