

# **Ciena Corporation**

**Investor Presentation** 

Spring 2023

## Forward-looking statements and non-GAAP measures

Information in this presentation and related comments of presenters contain a number of forward-looking statements. These statements are based on current expectations, forecasts, assumptions and other information available to the Company as of the date hereof. Forward-looking statements include Ciena's prospective financial results, return of capital plans, business strategies, expectations about its addressable markets and market share, and business outlook for future periods, as well as statements regarding Ciena's expectations, beliefs, intentions or strategies regarding the future. Often, these can be identified by forward-looking words such as "target" "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "should," "will," "plan," "predict," "potential," "project", "continue," and "would" or similar words.

Ciena's actual results, performance or events may differ materially from these forward-looking statements made or implied due to a number of risks and uncertainties relating to Ciena's business, including: the effect of broader economic and market conditions on our customers and their business; our ability to execute our business and growth strategies; the impact of supply chain constraints or disruptions; the duration and severity of the COVID-19 pandemic and the impact of countermeasures taken to mitigate its spread on macroeconomic conditions, economic activity, demand for our technology solutions, short- and long-term changes in customer or end user needs, continuity of supply chain, our business operations, liquidity and financial results; changes in network spending or network strategy by our customers; seasonality and the timing and size of customer orders, including our ability to recognize revenue relating to such sales; the level of competitive pressure we encounter; the product, customer and geographic mix of sales within the period; changes in foreign currency exchange rates; factors beyond our control such as natural disasters, climate change, acts of war or terrorism, geopolitical events, including but not limited to the ongoing conflict between Ukraine and Russia, and public health emergencies; changes in tax or trade regulations, including the imposition of tariffs, duties or efforts to withdraw from or materially modify international trade agreements; and the other risk factors disclosed in Ciena's periodic reports filed with the Securities and Exchange Commission (SEC) including Ciena's Annual Report on Form 10-K filed with the SEC on December 16, 2022 and Ciena's Quarterly Report on Form 10-Q filed with the SEC on March 8, 2023.

All information, statements, and projections in this presentation and the related earnings call speak only as of the date of this presentation and related earnings call. Ciena assumes no obligation to update any forward-looking or other information included in this presentation or related earnings calls, whether as a result of new information, future events or otherwise.

In addition, this presentation includes historical, and may include prospective, non-GAAP measures of Ciena's gross margin, operating expense, operating profit, EBITDA, net income, and net income per share. These measures are not intended to be a substitute for financial information presented in accordance with GAAP. A reconciliation of non-GAAP measures used in this presentation to Ciena's GAAP results for the relevant period can be found in the Appendix to this presentation. Additional information can also be found in our press release filed this morning and in our reports on Form 10-Q and Form 10K filed with the Securities and Exchange Commission.

With respect to Ciena's expectations under "Business Outlook", Ciena is not able to provide a quantitative reconciliation of the adjusted (non-GAAP) gross margin, operating expense, operating margin and earnings per share guidance measures to the corresponding gross profit and gross profit percentage, and operating expense GAAP measures without unreasonable efforts. Ciena cannot provide meaningful estimates of the non-recurring charges and credits excluded from these non-GAAP measures due to the forward-looking nature of these estimates and their inherent variability and uncertainty. For the same reasons, Ciena is unable to address the probable significance of the unavailable information.

# **Our Pedigree**



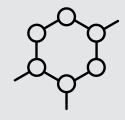
## **Overview**

Ciena is an industry-leading global networking systems, services, and software company with a strong track record of creating shareholder value



# Leading technology and innovation<sup>1</sup>

- R&D spend ~17% of total revenue
- ~3,300 R&D specialists
- DWDM pioneer, first to market with 40G, 100G, 400G and 800G technology
- In FYQ2'23, announced WaveLogic<sup>™</sup> 6 to support up to 1.6Tbps single-carrier wavelengths
- 2,000+ issued patents



# Diversification and scale<sup>1</sup>

- 38% revenue from non-telco customers
- 1,600+ customers
- Operations in 35+ countries
- Top 10 customers in FY22 included four web-scalers, three US service providers, two international service providers and one cable operator



#### Market leadership

- Recognized as the market leader in our space
- #1 or #2 market share across our Optical markets<sup>2</sup>



## Strong balance sheet

- Our balance sheet represents a competitive advantage
- \$1.2B in cash and investments at FYE22
- \$1.0B share repurchase program including a \$500M accelerated share repurchase (ASR) announced in December 2021



#### **Strong ESG progress**

- ISS Governance Score 1 of 5
- Ecovadis Platinum Medal (Top 1%)
- Great Place To Work (US, Canada, India)
- 2023 Institutional Investor Magazine, Best ESG Communications for our sector



<sup>&</sup>lt;sup>1</sup> Statistics based on FY 2022, unless otherwise noted

<sup>&</sup>lt;sup>2</sup> As cited by Omdia, Dell'Oro Group and Cignal AI for different markets, ex-China

## Our portfolio

## Enabling the Adaptive Network™



#### SOFTWARE CONTROL AND AUTOMATION

**Blue Planet**® multi-domain orchestration, federated inventory, and service order management solutions support service lifecycle automation across multi-layer, multi-vendor networks.

Ciena's Manage, Control and Plan (MCP) domain controller provides intelligent, data-driven, software-defined programmability to lifecycle network operations across multi-layer Ciena-based infrastructure.



#### **ANALYTICS AND INTELLIGENCE**

**Blue Planet**® Unified Assurance and Analytics and Route Optimization and Analysis software unify multi-layer, multi-domain assurance, with Al-powered analytics to provide strategic insights that transform and streamline business, IT, and network operations.

MCP Advanced Apps enhance operations and simplify user experience for optimization of multi-layer network performance, featuring Liquid Spectrum<sup>™</sup> for increased optical network capacity and service availability, and Adaptive IP<sup>™</sup> Apps for advanced real-time visualization and analysis of multi-vendor IP networks.



#### PROGRAMMABLE INFRASTRUCTURE

Converged Packet Optical Networking: Full suite of compact modular and converged software-programmable platforms and pluggables, featuring Ciena's award-winning WaveLogic™ Coherent Optics, fully instrumented, reconfigurable line systems and agnostic packet/OTN switching, designed to maximize scale, flexibility, and open networking. Delivers optimal network performance across applications from metro to submarine, and is the dominant platform used globally for Data Center Interconnect.

**Routing and Switching:** Purpose-built routing, switching, and x86 VNF hosting platforms—leveraging Service-Aware Operating System (SAOS), virtualized software, and WaveLogic Coherent Optics—provide the building blocks for low-touch, high-velocity IP, Segment Routing, Ethernet, MPLS, vBNG, and pluggable PON for next-generation broadband access, aggregation, and metro networks.

#### **CIENA SERVICES**

Enables customers to deliver the exceptional experiences their end users expect. Ciena regional teams partner with customers to build, operate, improve, and transform their network.

Ciena leverages a robust set of services, proven processes, and tools to enable customer success and accelerate their journey to the Adaptive Network.

## Our corporate strategy



### Lead

**Our Core Business** 

- Strengthen optical innovation leadership
- Grow optical market share by addressing fast-growing opportunities
- Pursue coherent pluggables as new consumption model
- Increase international business and grow attached services



### Invest

Next Generation Metro and Edge

- Expand use cases for Routing & Switching portfolio and addressable market opportunity
- Innovate and diversify solutions portfolio with enhanced IP/Ethernet capabilities
- Address expanding 5G, edge cloud, packet routing and edge computing applications



## **Expand**

Software Led Transformation

- Drive digital transformation and network automation with Blue Planet
- Grow software business and gain customer adoption of recurring, subscription models
- Pursue advanced services led transformation with network migration, optimization, and multi-vendor capabilities

... has enhanced our ability to create and seize opportunities in our markets and has yielded consistent, differentiated performance



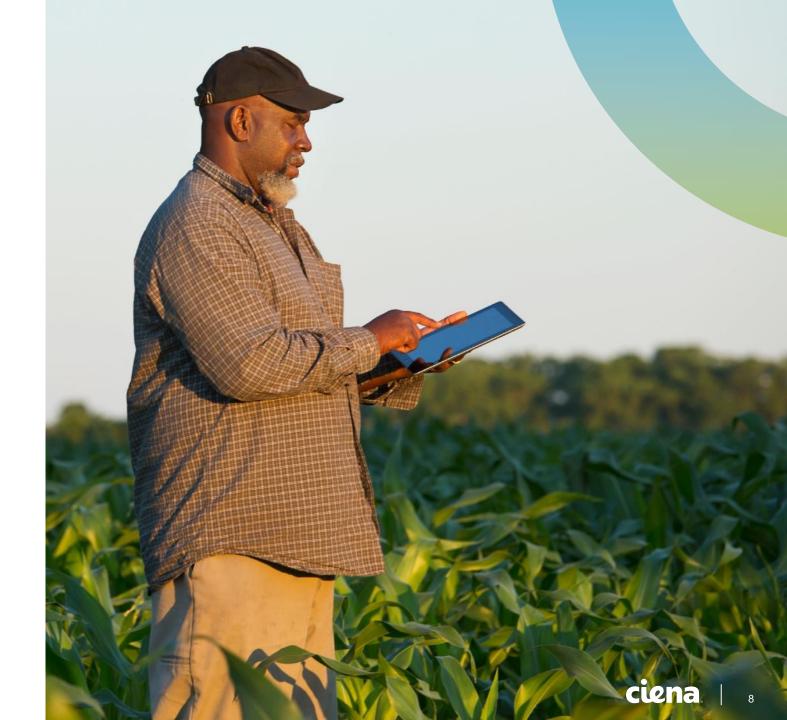
## Fiscal 2022

#### YEAR-END RESULTS

Revenue	Adjusted gross margin	Adjusted operating margin	Adjusted EPS	Cash & Investments
\$3.63B	43.6%	11.2%	\$1.90	\$1.2B

- Strong secular demand trends 5G, Cloud, Automation, Infrastructure, Broadband, Huawei displacement
- Grew orders by 26% year-over-year, ending the year with \$4.2B in backlog
- Strong balance sheet and ability to invest strategically in our portfolio and go-to-market capabilities
- 200+ customers globally for WaveLogic<sup>™</sup> 5 Extreme; ~50,000 WL5e modems shipped to date
- Continued diversification with \$1B in orders from webscale customers
- Achieved sustainability objectives, including increased participation in the Ciena Cares program, reduced air travel, and company-wide diversity and inclusion training

# Our ESG journey (see more ESG information on our website)



## Meaningful social impact

Programs support local and global communities

#### **Ciena Cares**

We support our peoples' passions for giving back and honor their dedication through matched giving, unlimited paid time off for volunteerism, and recognition.



### **Digital Inclusion**

We unlock opportunities for underserved youth with a five-year, \$10M commitment to enable greater digital access, tools, and learning for students.





## Reduction of our environmental footprint

Commitment to achieve carbon neutrality for our operations by 2024



#### Managing our impact

Our Environmental Steering Committee oversees our environmental initiatives.



#### Investing in renewable energy

We purchased wind, solar, and biomass credits to achieve 75% renewable energy at our offices in 2022.



#### Reporting our emissions

We measure our emissions in accordance with the Greenhouse Gas Protocol and received a score of B for our annual participation in the Carbon Disclosure Project.



#### Offsetting our emissions

We offset 75% of our emissions in 2021, 71% in 2020, and 43% in 2019.



#### **Energy efficient offices and labs**

We retrofit certain sites to increase LED lighting, enhance our building controls and systems, and expand our on-site solar photovoltaic (PV) plant.



#### Reducing air travel emissions

We achieved our company objective to reduce business air travel emissions by 50% in 2022 from our pre-Covid 2019 levels.

We submitted science-based targets for approval by the Science Based Targets initiative (SBTi) for the next stage of our sustainability journey.



## **Our People Promise**

A key element of our strategy is fostering a workplace environment where employees are empowered, feel included and have an opportunity to make a difference through their work.





- Community Impact Programs
- Ciena Cares
- Digital Inclusion
- Volunteering Time Off
- Service Initiatives



- Flexible Working
- Competitive Compensation and Benefits
- Employee Recognition
- Growth and Development



- Employee Wellbeing
- Diversity, Inclusion & Belonging
- Employee Engagement
- Pay Equity and Fairness



# **Market context**



# Six mega trends and the innovations that will enable them

Cloud



AI, Digital Transformation & Automation



**Data Center** 



Mobility & 5G



IoT & Connected Objects



Virtual & Hybrid Lifestyles



## Our vision for a new network end-state

Closing the Loop – to deliver the Adaptive Network

**Software Control** and Automation Technical and professional services that ACT Federated inventory, open domain help customers build, operate, and control, and multi-layer orchestration optimize their networks Blue Planet® MDSO Blue Planet® NFVO Automation **The Adaptive Analytics and** Network™ Intelligence **SENSE** Network and IT Predictive analytics and machine learning based on both big data and **Operations** small data Blue Planet® ROA **Programmable** Telemetry Blue Planet® UAA Infrastructure Blue Planet<sup>®</sup> Inventory CONNECT Dynamic pool of virtual and physical network resources; instrumented,

open, scalable, and secure

## Next-Gen Metro & Edge is a strategic growth segment

Fiber Broadband Access is a key driver in this space

## **Core Transport**

\$6B**→**\$7B

2020

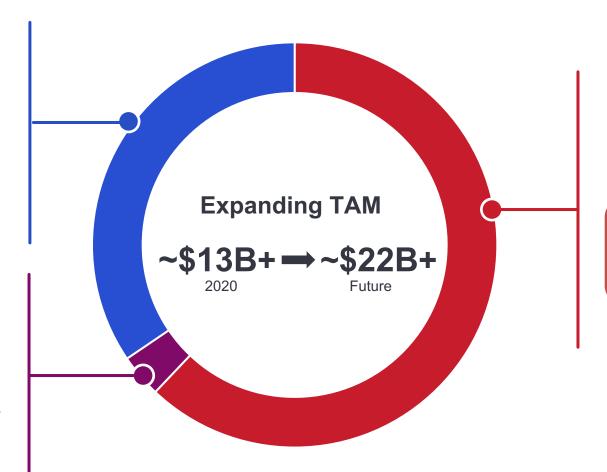
**Future** 

- High-capacity Converged Packet Optical Transport
  - Data Center Interconnect
  - Long Haul
  - Submarine

## **Software**

\$1B+

- Intelligent Automation
  - Orchestration: MDSO & NFV
  - Order Management
  - Inventory
  - Assurance and Analytics



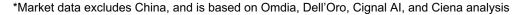
# Next-Gen Metro & Edge



2020

Future

- Fiber Broadband Access
  - Residential
  - Enterprise services
  - Fixed-mobile access
- Cloud Connectivity
- xHaul Solutions
- Converged IP/Optical Infrastructures
- Software Defined Edge
- Ethernet Data Services



# Q1 FY 2023 results



## Recent key highlights

### Achieving balanced growth

- Non-telco represented 40% of total revenue in fiscal Q1 2023
- Routing and Switching revenue increased 39% YoY in fiscal Q1 2023, reflecting strong contribution from portfolio enhancements, including solutions that address the network edge
- APAC revenue increased 41% YoY and 23% QoQ driven by strength in India

## **Driving the pace of innovation**

- GAAP R&D investment was 17.2% of total revenue in fiscal Q1 2023
- Customer traction continues with 400G+ technologies, with 8 new wins on WL5n and 13 new wins on WaveLogic 5 Extreme
  - Record quarter for WL5e shipments with more than 60,000 modems shipped to date
- Brought additional products to market to serve Next-Gen Broadband Access, Enterprise, and Mobility use cases via the weatherized 3985 and the temperature hardened 3984, both with 25Gig support

# Prioritizing long term shareholder value

- Total shareholder return five-year CAGR of 16%¹
- Made strategic investments to expand our addressable market
- Completed the acquisition of Tibit Communications, Inc., a provider of passive optical network solutions
- Completed the acquisition of Benu Networks, Inc., a provider of broadband network gateway software
- Raised \$500M in Incremental Term
  Loan for general corporate purposes
  that improves our cash liquidity position



<sup>&</sup>lt;sup>1</sup> Based on closing share price between 2/14/2018 to 2/14/2023

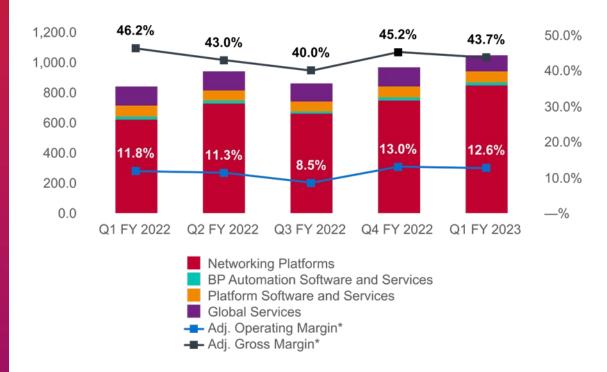
# Q1 FY 2023 comparative financial highlights

	Q1 FY 2023	Q1 FY 2022
Revenue	\$1,056.5M	\$844.4M
Adjusted Gross Margin*	43.7%	46.2%
Adjusted Operating Expense*	\$329.3M	\$290.0M
Adjusted Operating Margin*	12.6%	11.8%
Adjusted EBITDA*	\$155.1M	\$123.7M
Adjusted EPS*	\$0.64	\$0.47

<sup>\*</sup> A reconciliation of these non-GAAP measures to our GAAP results is included in the press release for the relative period.



# Revenue by segment (Amounts in millions)



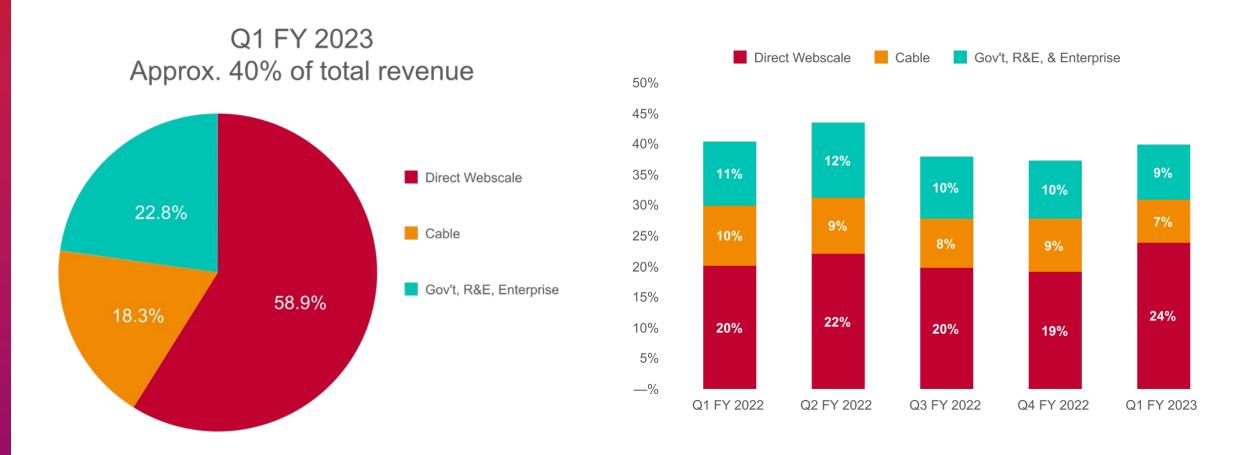
	Q1 FY 2023		Q1 FY	2022
	Revenue	%**	Revenue	%**
Networking Platforms				
Converged Packet Optical	\$735.6	69.6	\$540.9	64.1
Routing and Switching	119.5	11.3	85.7	10.1
Total Networking Platforms	855.1	80.9	626.6	74.2
Platform Software and Services	73.4	6.9	72.9	8.6
Blue Planet Automation Software and Services	15.4	1.5	21.1	2.5
Global Services				
Maintenance Support and Training	67.9	6.4	72.5	8.6
Installation and Deployment	34.6	3.3	40.4	4.8
Consulting and Network Design	10.1	1.0	10.9	1.3
Total Global Services	112.6	10.7	123.8	14.7
Total	\$1,056.5	100.0	\$844.4	100.0

<sup>\*</sup> A reconciliation of these non-GAAP measures to GAAP results is included in the appendix to this presentation.



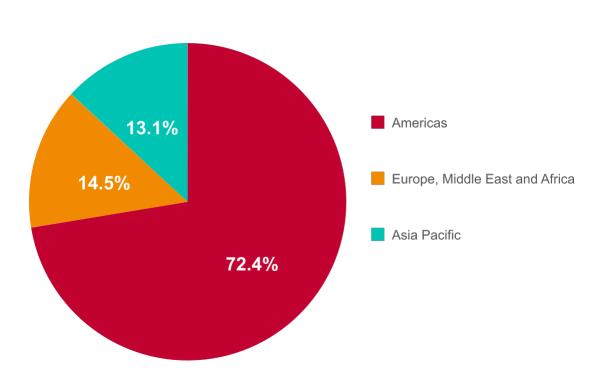
<sup>\*\*</sup> Denotes % of total revenue

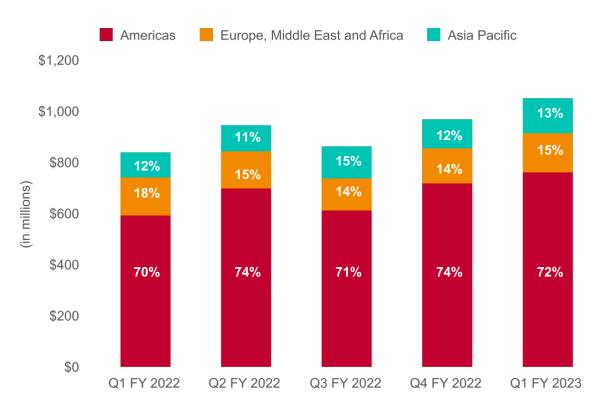
# Continued revenue strength derived from non-telco customers



# Revenue by geographic region







# **Business outlook**



## Economic considerations and assumptions in our fiscal 2023 outlook

### **Business Assumptions**

- Macro environment does not significantly worsen and any adverse effects on our business, including with respect to our customers' capex priorities and their ability to take delivery of product during the year, remain immaterial
- Longer-term fundamental industry demand drivers – including increasing demand for bandwidth, adoption of cloud architectures and network automation requirements – will drive customers to prioritize network capex to address this demand
- Huawei displacement opportunities and government infrastructure spending provide growth tailwinds
- We continue to benefit from strong demand dynamics in our industry given our distinct competitive advantages

### **Revenue Assumptions**

- Supply chain conditions remain volatile, but continue to improve gradually throughout the year
- Component suppliers largely deliver on their supply commitments and we do not encounter any substantial decommits that we cannot successfully mitigate

### **Profitability Assumptions**

- Supply and logistics costs remain elevated but begin to ease throughout the year
- As new wins and early deployments accelerate with supply chain improvements, we expect our product mix to include a larger proportion of lowermargin common equipment
- Operating expense increases to fund strategic investments as we expand our addressable market and aim to capture opportunities that advance our position in key growth areas

## Business outlook<sup>1</sup>

	Q2 FY 2023
Revenue	\$1,035M to \$1,115M
Adjusted Gross Margin	Low 40s%
Adjusted Operating Expense	Approximately \$335M

	FY 2023
Revenue Growth	20% to 22%
Adjusted Gross Margin	42% to 44%
Adjusted Operating Expense	Approximately \$330M per quarter for the remainder of the year

<sup>&</sup>lt;sup>1</sup> Projections or outlook with respect to future operating results are only as of April 6, 2023, the date presented on the related earnings call. Actual results may differ materially from these forward-looking statements. Ciena assumes no obligation to update this information, whether as a result of new information, future events or otherwise.



# Q1 FY 2023 appendix



# Gross Profit Reconciliation (Amounts in thousands)

	Q1 FY 2023	Q4 FY 2022	Q3 FY 2022	Q2 FY 2022	Q1 FY 2022
GAAP gross profit	\$455,946	\$433,597	\$340,779	\$401,781	\$384,187
Share-based compensation-products	1,051	907	1,002	1,058	900
Share-based compensation-services	2,297	2,066	1,940	1,943	1,584
Amortization of intangible assets	2,883	2,005	3,140	3,313	3,312
Total adjustments related to gross profit	6,231	4,978	6,082	6,314	5,796
Adjusted (non-GAAP) gross profit	\$462,177	\$438,575	\$346,861	\$408,095	\$389,983
Adjusted (non-GAAP) gross profit percentage	43.7 %	45.2 %	40.0 %	43.0 %	46.2 %

# Operating Expense Reconciliation (Amounts in thousands)

	Q1 FY 2023	Q4 FY 2022	Q3 FY 2022	Q2 FY 2022	Q1 FY 2022
GAAP operating expense	\$370,730	\$356,329	\$313,672	\$343,352	\$324,183
Share-based compensation-research and development	9,234	8,507	8,233	8,309	6,830
Share-based compensation-sales and marketing	8,424	8,084	8,075	8,061	7,060
Share-based compensation-general and administrative	9,468	7,610	7,579	7,334	7,912
Significant asset impairments and restructuring costs	4,298	13,621	7,692	9,102	3,409
Amortization of intangible assets	7,441	5,754	8,919	8,920	8,918
Acquisition and integration costs	2,558	_	35	495	68
Total adjustments related to operating expense	41,423	43,576	40,533	42,221	34,197
Adjusted (non-GAAP) operating expense	\$329,307	\$312,753	\$273,139	\$301,131	\$289,986

# Income from Operations Reconciliation (Amounts in thousands)

	Q1 FY 2023	Q4 FY 2022	Q3 FY 2022	Q2 FY 2022	Q1 FY 2022
GAAP income from operations	\$85,216	\$77,268	\$27,107	\$58,429	\$60,004
Total adjustments related to gross profit	6,231	4,978	6,082	6,314	5,796
Total adjustments related to operating expense	41,423	43,576	40,533	42,221	34,197
Total adjustments related to income from operations	47,654	48,554	46,615	48,535	39,993
Adjusted (non-GAAP) income from operations	\$132,870	\$125,822	\$73,722	\$106,964	\$99,997
Adjusted (non-GAAP) operating margin percentage	12.6 %	13.0 %	8.5 %	11.3 %	11.8 %

# Net Income Reconciliation (Amounts in thousands)

	Q1 FY 2023	Q4 FY 2022	Q3 FY 2022	Q2 FY 2022	Q1 FY 2022
GAAP net income	\$76,241	\$57,645	\$10,512	\$38,922	\$45,823
Exclude GAAP provision for income taxes	25,078	7,735	4,319	8,330	9,219
Income before income taxes	101,319	65,380	14,831	47,252	55,042
Total adjustments related to income from operations	47,654	48,554	46,615	48,535	39,993
Unrealized gain on cost method equity investment	(26,455)	_	_	_	(4,120)
Adjusted income before income taxes	122,518	113,934	61,446	95,787	90,915
Non-GAAP tax provision on adjusted income before income taxes	26,954	23,015	12,412	19,349	18,365
Adjusted (non-GAAP) net income	\$95,564	\$90,919	\$49,034	\$76,438	\$72,550
Weighted average basic common shares outstanding	149,081	148,548	149,862	152,197	154,151
Weighted average diluted potential common shares outstanding <sup>(1)</sup>	149,551	149,111	150,463	153,344	155,807

Net Income per Common Share							
		Q1 FY 2023	Q4 FY 2022	Q3 FY 2022	Q2 FY 2022	Q1 FY 2022	
GAAP diluted net income per potential common share	\$	0.51 \$	0.39 \$	0.07 \$	0.25 \$	0.29	
Adjusted (non-GAAP) diluted net income per potential common share	\$	0.64 \$	0.61 \$	0.33 \$	0.50 \$	0.47	

<sup>1.</sup> Weighted average dilutive potential common shares outstanding used in calculating Adjusted (non-GAAP) diluted net income per potential common share for the first quarter of fiscal 2023 includes 0.5 million shares underlying certain stock option and stock unit awards.



# Earnings Before Interest, Tax, Depreciation and Amortization (EBITDA) (Amounts in thousands)

Earnings Before Interest, Tax, Depreciation and Amortization (EBITDA)	Q1 FY 2023	Q4 FY 2022	Q3 FY 2022	Q2 FY 2022	Q1 FY 2022
Net income (GAAP)	\$76,241	\$57,645	\$10,512	\$38,922	\$45,823
Add: Interest expense	15,870	13,775	12,642	11,985	8,648
Less: Interest and other income (loss), net	31,973	1,887	366	808	3,686
Add: Provision for income taxes	25,078	7,735	4,319	8,330	9,219
Add: Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements	22,208	27,642	22,250	22,377	23,653
Add: Amortization of intangible assets	10,325	7,759	12,059	12,233	12,230
EBITDA	\$117,749	\$112,669	\$61,416	\$93,039	\$95,887
Add: Share-based compensation cost	30,474	27,174	26,857	26,673	24,297
Add: Significant asset impairments and restructuring costs	4,298	13,621	7,692	9,102	3,409
Add: Acquisition and integration costs	2,558	_	35	495	68
Adjusted EBITDA	\$155,079	\$153,464	\$96,000	\$129,309	\$123,661



# **Thank You**