

Ciena Corporation

Investor Presentation

Fall 2022

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 17, 2021 and Ciena's Quarterly Report on Form 10-Q for the third quarter of fiscal 2022.

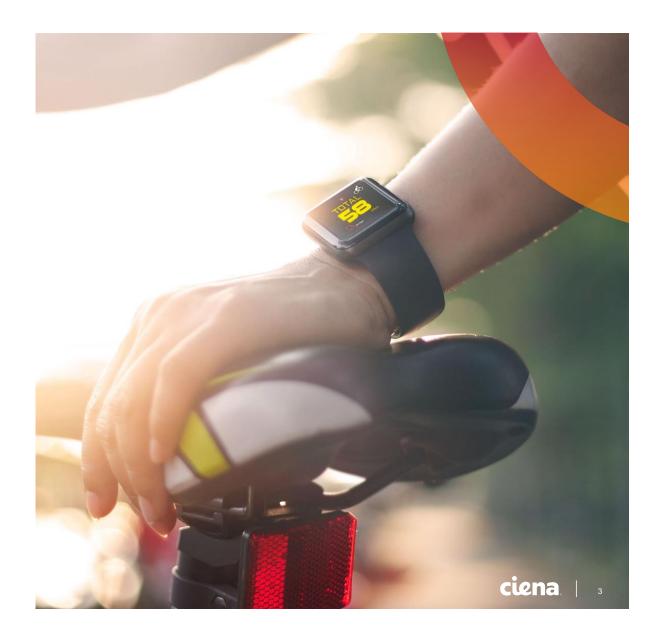
All information, statements, and projections in this presentation and the related earnings call speak only as of the date of this presentation and related earnings call. Ciena assumes no obligation to update any forward-looking or other information included in this presentation or related earnings calls,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



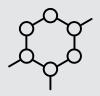
Overview

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



Leading technology and innovation¹

- R&D spend ~15% of total revenue
- ~2,700 R&D specialists
- DWDM pioneer and first to market with 40G, 100G, 400G and 800G technology
- ~2,000 issued patents and 500 pending patents



Diversification and scale¹

- 41% of FY21 revenue from non-telco customers
- 1,700+ customers
- Operations in 35+ countries
- Top 10 customers in FY21 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 markets²
- Ex-China, quarterly market share has grown from ~12% in 2011 to ~25% in 2020¹



Demonstrated track record of performance¹

- 7% 5-year revenue CAGR
- Adjusted operating margin has grown by more than 580 basis points since 2018
- 19% 5-year total shareholder return CAGR³



Strong balance sheet

- Our balance sheet represents a competitive advantage
- \$1.7B+ in cash and investments at FYE21
- \$1.0B share
 repurchase program
 including a \$250M
 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)
- 2022 Institutional Investor Magazine, Best ESG Communications for our sector

¹ Statistics based on FY 2021, unless otherwise noted

² As cited by Omdia, Dell'Oro Group and Cignal AI for different markets

³ Based on closing share price between 8/17/2017 and 8/16/2022

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[™] for increased optical network capacity and service availability, and Adaptive IP[™] Apps for advanced real-time visualization and analysis of multi-vendor IP networks.





Converged Packet Optical Networking: Full suite of compact modular and converged software-programmable platforms, 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 a common Service-Aware Operating System (SAOS) and WaveLogic Coherent Optics—provide the building blocks for low-touch, high-velocity IP, Segment Routing, Ethernet, MPLS, and pluggable PON for 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

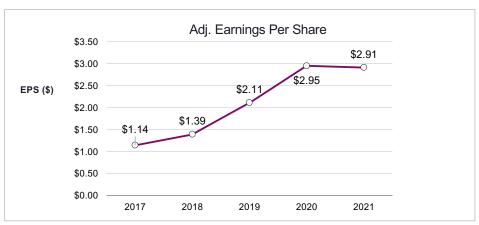
Software Led Transformation

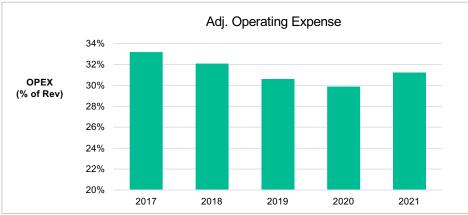
- Drive digital transformation and network automation with Blue Planet
- Grow software business and gain customer adoption of recurring, subscription models
- Pursue advanced services led transformation with network migration, optimization, and multi-vendor capabilities

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

FY 2021 and historical performance









^{*} A reconciliation of these non-GAAP measures to our GAAP results is included in the press release for the relative period.

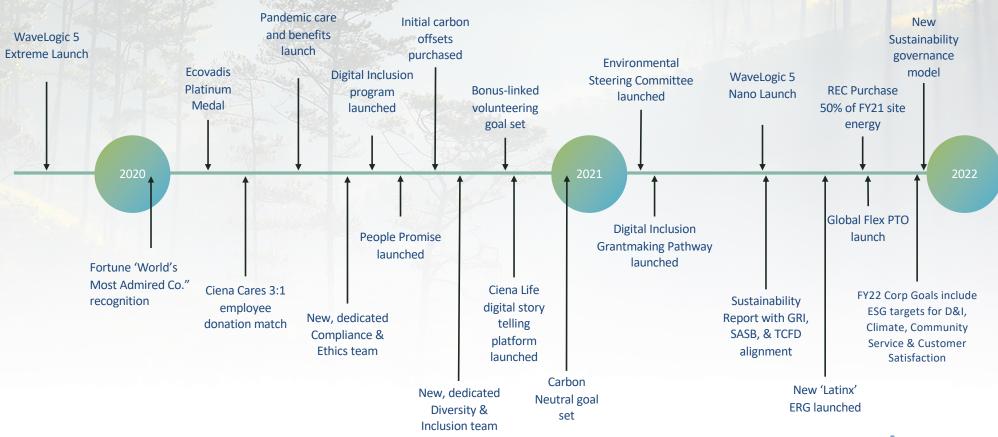
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Our ESG journey (see more ESG information on our website)



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Sustainability Achievements 2020-22



Innovation to drive sustainable outcomes

Research and development focuses on environmental responsibility

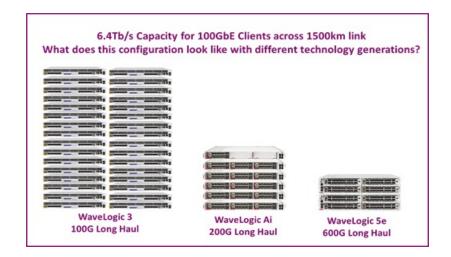
Our WaveLogic innovations address massive bandwidth demand while using less energy.

From 2009 to 2019, WaveLogic helped avoid 3M MTCO₂e into our atmosphere.

WaveLogic 5e vs 3 yields a 3x increase in fiber capacity, 80% reduction in power/bit, and an 85% reduction in footprint.

Our coherent innovation—delivering an 80x increase in data throughput (10→ 800Gb/s)—has enabled immense benefits for network operators.

We're introducing power efficient <u>pluggable forms</u> for data center applications.



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

In 2022, we are purchasing wind, solar, and biomass credits to aim for 75% renewable energy at our offices.



Reporting our emissions

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



Offsetting our emissions

We offset 43% of our 2019 and 71% of our 2020 reported emissions. We are targeting 75% for 2022.



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

Our company goal is to reduce business air travel emissions by 50% from our pre-Covid 2019 levels.

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



Digital Transformation & Automation



Data Center



Mobility & 5G



IoT & Connected Objects

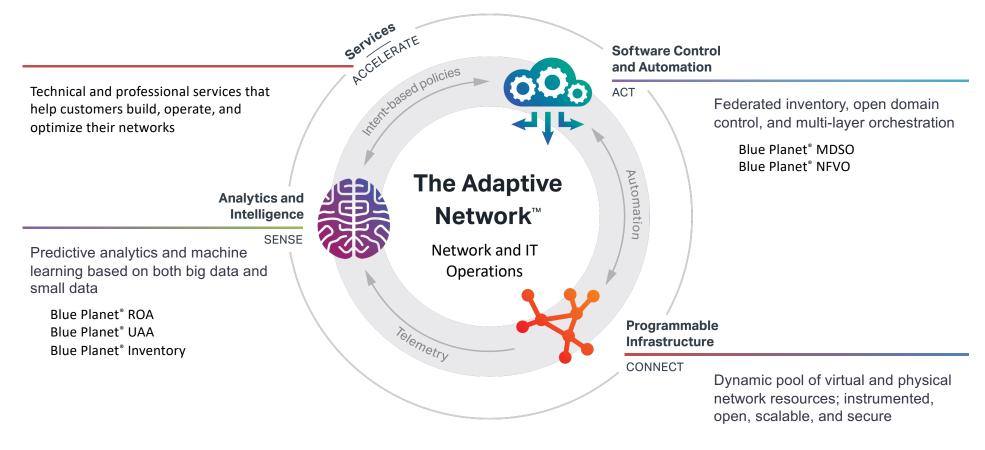


Virtual & Hybrid Lifestyles



Our vision for a new network end-state

Closing the Loop – to deliver the Adaptive Network



Next-Gen Metro & Edge is a key growth segment in the networking industry

Core Transport

2020

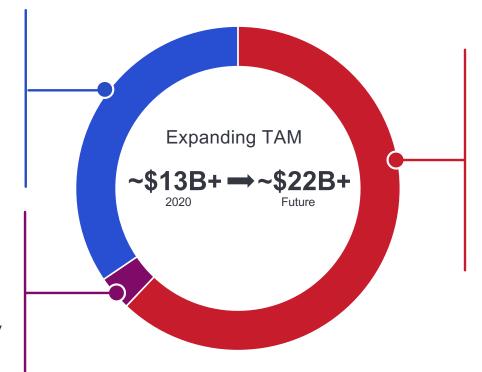
Future

- 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

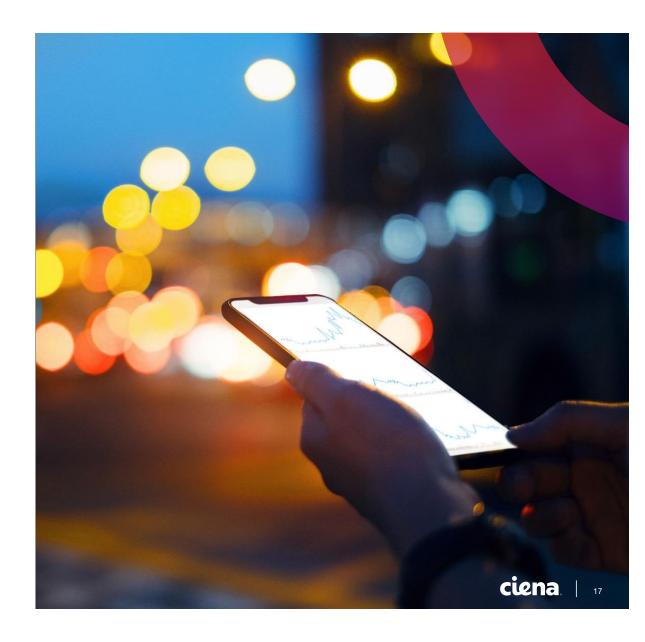
2020

Future

- Cloud Services
- xHaul Applications
- Ethernet Data Services
- Residential / Enterprise

^{*}Market data excludes China, and is based on Omdia, Dell'Oro, Cignal AI, and Ciena analysis

Q3 Fiscal 2022 results



Q3 FY 2022 key highlights

Achieving balanced growth

- Non-telco represented approximately 38% of total revenue
- APAC region represented 15% of total revenue
- Routing and Switching revenue increased 45% YoY, in part reflecting strong contribution from the recently added Vyatta platform
- Platform Software and Services increased 11% YoY, representing 7% of total revenue

Driving the pace of innovation

- GAAP R&D investment was approximately 17% of total revenue
- 754 100G+ total customers, which includes 13 new wins on WaveLogic Ai and 14 new wins on WaveLogic 5 Extreme
- Gaining business momentum with our Universal Aggregation and XGS-PON solution
- Added 25 new Adaptive IP customers in Q3 bringing the total to nearly 200
- IP/Optical convergence leveraging WL5n ramping both 51xx and 81xx platforms over ELS & RLS

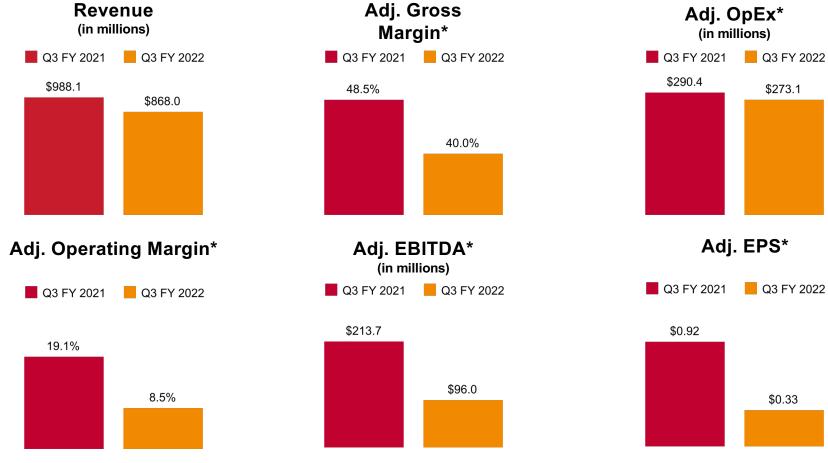
Prioritizing long term shareholder value

- Total shareholder return five year CAGR of 19%¹
- As part of our \$1 billion stock repurchase program, we repurchased approximately 3.2 million shares during the quarter for \$155 million



¹ Based on closing share price between 8/17/2017 to 8/16/2022

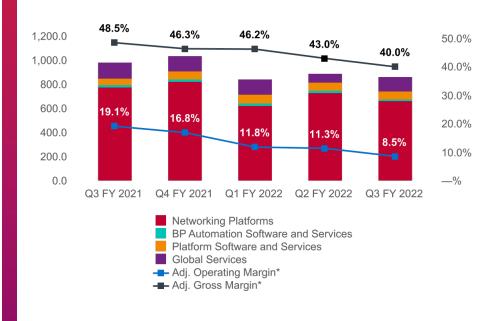
Q3 FY 2022 comparisons (year-over-year)



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Revenue by segment

(Amounts in millions)

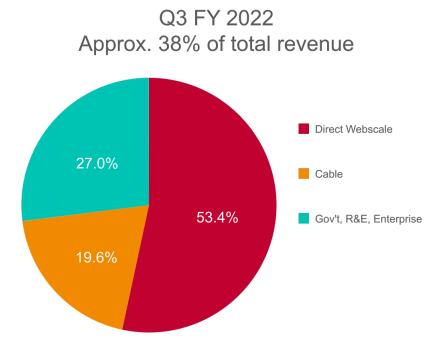


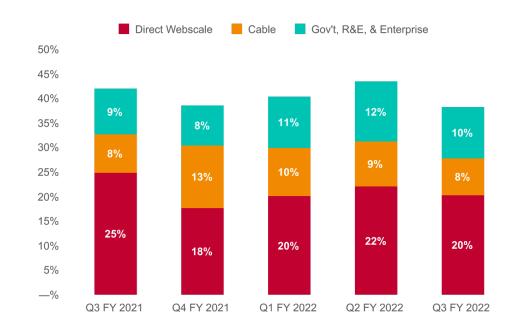
	Q3 FY	2022	Q3 FY	2021			
	Revenue	%**	Revenue	%**			
Networking Platforms							
Converged Packet Optical	\$563.9	65.0	\$712.9	72.1			
Routing and Switching	100.7	11.6	69.7	7.1			
Total Networking Platforms	664.6	76.6	782.6	79.2			
Platform Software and Services	63.5	7.3	56.9	5.8			
Blue Planet Automation Software and Services	17.3	2.0	16.6	1.7			
Global Services							
Maintenance Support and Training	72.8	8.4	74.0	7.5			
Installation and Deployment	38.7	4.4	46.7	4.7			
Consulting and Network Design	11.1	1.3	11.3	1.1			
Total Global Services	122.6	14.1	132.0	13.3			
Total	\$868.0	100.0 %	\$988.1	100.0 %			

^{*} A reconciliation of these non-GAAP measures to GAAP results is included in the appendix to this presentation.

^{**} Denotes % of total revenue

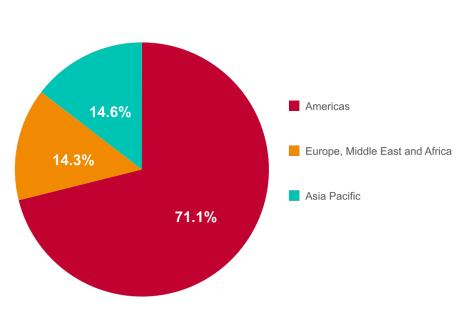
Non-telco revenue

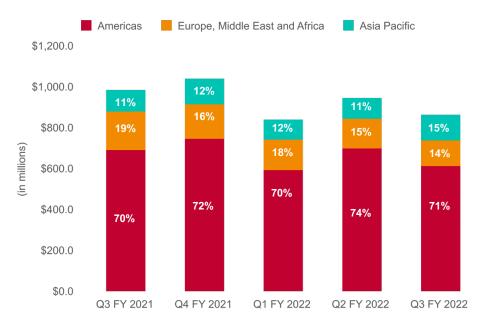




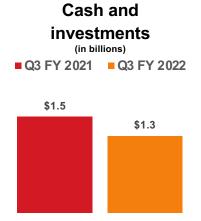
Revenue by geographic region

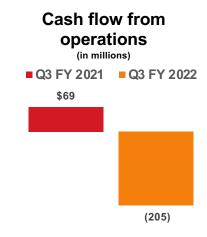


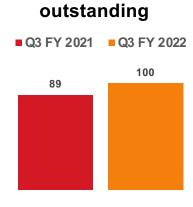




Q3 FY 2022 comparative operating metrics

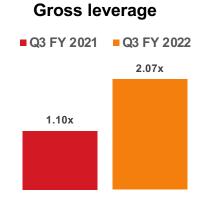


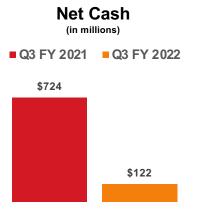




Days sales

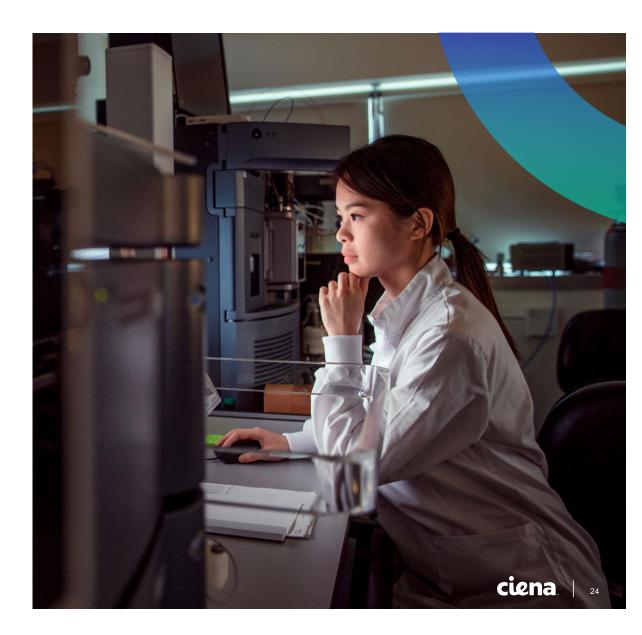






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Business outlook



Economic considerations and assumptions in our 2022 outlook

Revenue Assumptions

- The length and severity of current supply conditions will negatively impact both overall industry growth rates and our revenue
- Component suppliers deliver on the supply commitments consistent with our expectations and we do not encounter any substantial new decommits that we cannot successfully mitigate
- No new Covid-related lockdowns exacerbate an already challenging supply environment

Profitability Assumptions

- Gross margin moderates from FY 2021 levels
- Supply chain constraints, increased component costs, expedite fees and logistics costs will adversely impact gross margin
- As new wins are monetized, we expect our revenue mix to include a larger proportion of lower-margin common equipment
- Operating expense increases to fund strategic investments in our people and portfolio

Business Assumptions

- Economic conditions do not worsen and adverse effects to our business from geopolitical events remain immaterial
- Supply chain and COVID-19 headwinds do not worsen
- Longer-term fundamental demand drivers

 including increasing demand for
 bandwidth, adoption of cloud
 architectures and network automation
 requirements remain strong
- We continue to benefit from strong demand dynamics in our industry given our distinct competitive advantage



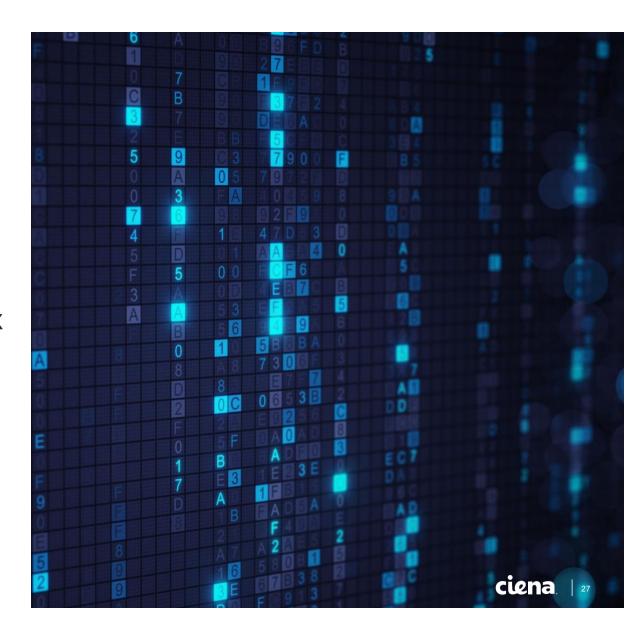
Business Outlook¹

Q4 FY 2022					
Revenue	\$800M to \$880M				
Adjusted Gross Margin	Approximately 40%				
Adjusted Operating Expense	Approximately \$315M				



¹ Projections or outlook with respect to future operating results are only as of September 1, 2022, 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. Copyright © Ciena Corporation 2022. All rights reserved. Proprietary information.

Q3 Fiscal 2022 appendix



Gross Profit Reconciliation (Amounts in thousands)

	Q3 FY 2022	Q2 FY 2022	Q1 FY 2022	Q4 FY 2021	Q3 FY 2021
GAAP gross profit	\$340,779	\$401,781	\$384,187	\$477,119	\$474,550
Share-based compensation-products	1,002	1,058	900	920	1,037
Share-based compensation-services	1,940	1,943	1,584	1,240	1,315
Canadian Emergency Wage Subsidy - products	_	_	_	_	(94)
Canadian Emergency Wage Subsidy - services	_	_	_	_	(47)
Amortization of intangible assets	3,140	3,313	3,312	2,856	2,857
Total adjustments related to gross profit	6,082	6,314	5,796	5,016	5,068
Adjusted (non-GAAP) gross profit	\$346,861	\$408,095	\$389,983	\$482,135	\$479,618
Adjusted (non-GAAP) gross profit percentage	40.0 %	43.0 %	46.2 %	46.3 %	48.5 %

Operating Expense Reconciliation (Amounts in thousands)

	Q3 FY 2022	Q2 FY 2022	Q1 FY 2022	Q4 FY 2021	Q3 FY 2021
GAAP operating expense	\$313,672	\$343,352	\$324,183	\$339,710	\$326,027
Share-based compensation-research and development	8,233	8,309	6,830	5,684	5,541
Share-based compensation-sales and marketing	8,075	8,061	7,060	6,192	6,534
Share-based compensation-general and administrative	7,579	7,334	7,912	7,466	8,237
Canadian Emergency Wage Subsidy-research and development	_	_	_	_	(596)
Canadian Emergency Wage Subsidy-sales and marketing	_	_	_	_	(53)
Canadian Emergency Wage Subsidy-general and administrative	_	_	_	_	(46)
Significant asset impairments and restructuring costs	7,692	9,102	3,409	5,700	9,789
Amortization of intangible assets	8,919	8,920	8,918	5,836	5,967
Acquisition and integration costs	35	495	68	1,712	259
Total adjustments related to operating expense	40,533	42,221	34,197	32,590	35,632
Adjusted (non-GAAP) operating expense	\$273,139	\$301,131	\$289,986	\$307,120	\$290,395

Income from Operations Reconciliation (Amounts in thousands)

	Q3 FY 2022	Q2 FY 2022	Q1 FY 2022	Q4 FY 2021	Q3 FY 2021
GAAP income from operations	\$27,107	\$58,429	\$60,004	\$137,409	\$148,523
Total adjustments related to gross profit	6,082	6,314	5,796	5,016	5,068
Total adjustments related to operating expense	40,533	42,221	34,197	32,590	35,632
Total adjustments related to income from operations	46,615	48,535	39,993	37,606	40,700
Adjusted (non-GAAP) income from operations	\$73,722	\$106,964	\$99,997	\$175,015	\$189,223
Adjusted (non-GAAP) operating margin percentage	8.5 %	11.3 %	11.8 %	16.8 %	19.1 %

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Net Income Reconciliation (Amounts in thousands)

	Q3 FY 2022	Q2 FY 2022	Q1 FY 2022	Q4 FY 2021	Q3 FY 2021
GAAP net income	\$10,512	\$38,922	\$45,823	\$103,499	\$238,232
Exclude GAAP provision (benefit) for income taxes	4,319	8,330	9,219	25,826	(96,690)
Income before income taxes	14,831	47,252	55,042	129,325	141,542
Total adjustments related to income from operations	46,615	48,535	39,993	37,606	40,700
Unrealized gain on cost method equity investment	_	_	(4,120)	_	_
Adjusted income before income taxes	61,446	95,787	90,915	166,931	182,242
Non-GAAP tax provision on adjusted income before income taxes	12,412	19,349	18,365	34,221	37,360
Adjusted (non-GAAP) net income	\$49,034	\$76,438	\$72,550	\$132,710	\$144,882
Weighted average basic common shares outstanding	149,862	152,197	154,151	155,232	155,271
Weighted average diluted potential common shares outstanding ⁽¹⁾	150,463	153,344	155,807	156,689	156,744

Net Income per Common Share					
	Q3 FY 2022	Q2 FY 2022	Q1 FY 2022	Q4 FY 2021	Q3 FY 2021
GAAP diluted net income per potential common share	\$ 0.07	\$ 0.25 \$	0.29 \$	0.66 \$	1.52
Adjusted (non-GAAP) diluted net income per potential common share	\$ 0.33	\$ 0.50 \$	0.47 \$	0.85 \$	0.92

^{1.} Weighted average dilutive potential common shares outstanding used in calculating Adjusted (non-GAAP) diluted net income per potential common share for the third quarter of fiscal 2022 includes 0.6 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)	Q3 FY 2022	Q2 FY 2022	Q1 FY 2022	Q4 FY 2021	Q3 FY 2021
Net income (GAAP)	\$10,512	\$38,922	\$45,823	\$103,499	\$238,232
Add: Interest expense	12,642	11,985	8,648	7,916	7,776
Less: Interest and other income (loss), net	366	808	3,686	(168)	795
Add: Provision (benefit) for income taxes	4,319	8,330	9,219	25,826	(96,690)
Add: Depreciation of equipment, building, furniture and fixtures, and amortization of leasehold improvements	22,250	22,377	23,653	24,315	24,623
Add: Amortization of intangible assets	12,059	12,233	12,230	8,692	8,824
EBITDA	\$61,416	\$93,039	\$95,887	\$170,416	\$181,970
Less: Canadian Emergency Wage Subsidy	_	_	_	_	836
Add: Share-based compensation cost	26,857	26,673	24,297	21,366	22,471
Add: Significant asset impairments and restructuring costs	7,692	9,102	3,409	5,700	9,789
Add: Acquisition and integration costs	35	495	68	1,712	259
Adjusted EBITDA	\$96,000	\$129,309	\$123,661	\$199,194	\$213,653



Thank You

