



Research Alert

CIEN

ANALYST: BRENT MILLER

19 MAY 2011

Ciena Corp.
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INDUSTRY	Communication Equipment
PRICE	\$25.66 (03/18/11)
MARKET CAP	2.44 billion
ENT. VALUE	3.24 billion
P-E RATIO	NA
EV/REVENUE	2.17
DEBT/EBITDA	NA
SHORT INTEREST	29.0%
DAYS TO COVER	4.8

Earnings Quality Thesis

We are initiating coverage of Ciena Corp. (CIEN) with an Earnings Quality Grade of D. A persistent level of negative FCF has led to a significant increase in both total and operating accruals. Recent-period earnings also have benefited from nonrecurring gains and possibly unsustainably low inventory and warranty reserve levels. In addition, a spike in the company's three-month DSO metric may indicate an increase in late-in-quarter sales, longer terms, or higher collections risk. This concern is compounded by the fact that deferred revenue growth has not kept pace with accelerating revenue and AR levels. Because of the increase in AR and decline in deferred revenue, customer cash collections lag sales by a material amount, leading us to voice quality-of-revenue concerns. Finally, absent the contribution from a recent acquisition, CIEN's organic revenue growth would have posted declines in each of the two most recent quarters, leading to additional revenue sustainability concerns.

EARNINGS QUALITY GRADE

Scale A - F

D

Gap between net income and FCF widens pg 5

CIEN has reported negative FCF for seven straight TTM periods, leading to a sizable jump in both total and operating accruals. Accordingly, there could be an increased risk that CIEN's recent bottom-line results will prove to be less persistent than expected. This may raise the risk of quarterly EPS falling short of consensus sell-side estimates.

Sustainable EPS trails GAAP EPS by a significant margin pg 7

Ancillary and nonrecurring gains have resulted in our estimate of Sustainable EPS trailing GAAP and non-GAAP EPS by a considerable margin in the two most recent quarters. Both GAAP EPS and the company's pro-forma EPS appear to have benefited from historically low warranty and inventory reserves, a trend that may prove to be unsustainable. The nonrecurring nature of many of these benefits may foreshadow lower-than-expected bottom-line results going forward.

Negative trends in AR and deferred revenue pressure cash collections pg 14

An accelerating level of receivables growth has led to a 17 day YOY increase in three-month DSO. Days of deferred revenue has also exhibited a material decline over both the long and short term. Because of these two trends, TTM cash collected from customers trailed reported sales by 16.6%, which is the largest differential in CIEN's five-year history. The relative decline in cash collections suggests a lower level of balance-sheet support for future revenue growth.



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Company Background and Introduction to Gradient's Thesis

COMPANY BACKGROUND

Ciena Corp. (CIEN) provides communications networking equipment, software, and services that support the transport, switching, aggregation, and management of voice, video, and data traffic. CIEN acts as a network specialist by targeting the transition of disparate legacy communications networks to converged, next-generation architectures, which are better able to handle increased traffic and efficiently deliver a broader mix of high-bandwidth communications services. The company's products, along with its embedded, network element software and unified service and transport management, are designed to enable service providers to efficiently and cost-effectively deliver critical enterprise and consumer-oriented communication services. The company's Packet-Optical Transport (57.1% of FY2010 sales), Packet-Optical Switching (9.1% of FY2010 sales) and Carrier Ethernet Service Delivery products (14.5% of FY2010 sales) are used, individually or as part of an integrated solution, in networks operated by global communications service providers, cable operators, governments, and enterprises. CIEN's Software and Services segment (19.4% of FY2010 sales) is composed of the company's integrated network and service management software and a broad range of consulting and support services, including installation and deployment, maintenance support, consulting, network design and training activities.

GRADIENT'S THESIS

Our thesis centers on a number of earnings and revenue quality concerns that could place CIEN at an increased risk of share-price underperformance. These concerns include:

- Persistent, negative FCF that has led to a significant increase in both total and operating accruals.
- Recent-period earnings have benefited from nonrecurring gains and possibly unsustainably low inventory and warranty reserve levels.
- A spike in the company's three-month DSO metric, which may indicate an increase in late-in-quarter sales, longer terms, or higher collections risk.
- Sluggish growth in deferred revenue growth, which has not kept pace with increases in revenue and AR levels.
- Because of the increase in AR and decline in deferred revenue, customer cash collections lag sales by a material amount, leading us to voice quality-of-revenue concerns.
- Weak organic revenues—CIEN's organic revenue growth would have posted declines in each of the two most recent quarters—further elevate our concerns about revenue sustainability.





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Taken together, we believe the above findings may indicate that CIEN is increasingly at risk of missing earnings targets.¹

Recent Results

CIEN reported Q1 FY2011 non-GAAP diluted EPS of $-\$0.14$ on revenue of $\$433.3$ million (See Table 1, next page.) The company's bottom line exceeded the consensus sell-side estimate of $-\$0.16$ by $\$0.02$, while Q1 sales came in $\$11.6$ million higher than the sell-side target of $\$421.7$ million. However, CFO James Moylan also acknowledged (Q1 FY2011 analyst call) that approximately $\$10.0$ million of revenue recorded in the period was the result of the "acceleration" of product shipments into the first quarter. Later in the call, CEO Gary Smith attributed the revenue acceleration to a pull-forward effect relating to CIEN's implementation of a new ERP system. Regardless of the rationale, it is clear that this revenue pull-forward accounted for nearly all of the Q1 revenue and EPS beats.

Q1 gross margin came in at 38.9%, representing a 669 bps (143 bps) YOY (QOQ) decline. Non-GAAP gross margin demonstrated a similar trend, falling by 462 bps (185 bps) YOY (QOQ) to 41.8%. In the company's Q1 FY2011 10Q, management alluded to lower ASPs resulting from the company's attempt to gain market share and break into new markets as key drivers of the decline:

Gross margin for the first quarter of fiscal 2011 was adversely affected by sales of lower margin common equipment within our Packet-Optical Transport product segment as part of our strategy to gain new customers, enter new markets or capture market share for our 40G and 100G coherent optical transport technology. [Emphasis added]

Our exposure to pricing pressure has been most severe in metro and core applications for our Packet-Optical Transport platforms, which we expect will comprise a greater percentage of our overall revenue as a result of the MEN Acquisition. As a result, and in an effort to retain or secure customers, enter new markets or capture market share, in the past we have and in the future we may agree to pricing or other unfavorable commercial terms that result in lower or negative gross margins on a particular order or group of orders. [Emphasis added]

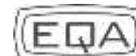
In addition, CFO Moylan asserted that Q1 FY2011 non-GAAP gross margin benefited from a one-time $\$6.9$ million reversal of a warranty-loss contingency. Absent this nonrecurring benefit, CIEN's non-GAAP gross margin would have demonstrated a more precipitous decline, falling by 621 bps (345 bps) YOY (QOQ) to 40.2%.

Given pro-forma gross-margin levels, the firm's Q2 non-GAAP target of the "low 40% range,"² and the competitive pricing pressure detailed above, we believe full-year

¹ While we generally include a brief relative valuation analysis in most of our *Research Alerts*, CIEN's negative earnings, EBITDA, forward earnings

² Provided by CFO James Moylan on the Q1 FY2011 analyst call.





margins may be lower than anticipated by the market. In this regard, it is difficult to ascertain how the company will achieve management's recently reiterated (Q1 analyst call) non-GAAP gross margin target of the mid 40s by FYE 2011.

On a more positive note, CIEN's GAAP operating expenses declined by 164 bps (73 bps) YOY (QOQ) to 57.6% of net sales. The relative decline in non-GAAP operating expenses was even greater—892 bps (473 bps) to 42.0% of Q1 revenues. On the Q1 FY2011 analyst call, CEO Smith attributed the OpEx decline to "improved operating efficiencies and accelerated synergies." However, CFO Moylan's disclosure that that the company's Q2 FY2011 pro-forma OpEx target was approximately \$180.0 million, along with fact that most of management's Q2 revenue guidance range implies a QOQ decline (see next paragraph), could indicate that operating expenses will comprise a larger percentage of sales in Q2 relative to the first quarter.

CIEN management issued Q2 FY2011 revenue guidance of between \$415 million and \$435 million, which was below the immediately preceding sell-side consensus estimate of \$438.9 million. The midpoint of Q2 top-line guidance also implies a 1.9% QOQ decline, which would represent the first sequential drop in sales since the Q2 FY2010 MEN acquisition. Taking this one step further, the company's aforementioned gross-margin and OpEx targets, combined with management's forecasted other expense and diluted share count, implies a Q2 non-GAAP EPS guidance range of -\$0.08 to -\$0.13 per share.³ Given the current consensus Q2 EPS estimate of -\$0.10, this exercise appears to indicate that most sell-side analysts are expecting the company to hit the top end of its revenue and gross-margin guidance. However, given the fundamental and earnings quality headwinds detailed in this report, we believe this bottom-line target may prove to be overly optimistic.

Table 1. Summary of Recent Operating Trends
(\$ in millions except per-share data)

	Q1 FY2011	Q4 FY2010	Q3 FY2010	Q2 FY2010	Q1 FY2010
Revenue	\$433.3	\$417.6	\$389.7	\$253.5	\$175.9
YOY % change	146.4%	136.9%	136.5%	75.8%	5.1%
Gross margin	38.9%	40.3%	37.0%	41.4%	45.6%
YOY bps change	-669	-370	-836	-71	266
Operating expenses/sales	57.6%	58.3%	50.3%	51.3%	59.2%
YOY bps change	-164	295	-1,522	-1,707	-742
GAAP diluted EPS	-\$0.84	-\$0.86	-\$1.18	-\$0.97	-\$0.58
Non-GAAP diluted EPS	-\$0.14	-\$0.18	-\$0.09	-\$0.13	-\$0.12

³ Best-case scenario assumes revenue of \$435 million while worst-case scenario assumes revenue of \$415 million. Both estimates assume a non-GAAP gross margin level of 41.0% and used management's OpEx, other expense and diluted share count target of \$180.0 million, \$9.6 million and 150 million shares, respectively. CIEN's effective tax rate was assumed to be -0.8%, which is the company's TTM effective tax rate for the 12 months ended 01/31/11.





Concerns About the Sustainability of Revenue Growth

MEN ACQUISITION MASKS DECLINE IN LEGACY BUSINESSES REVENUE

CIEN's sales for the 12 months ended 01/31/10 demonstrated a concerning long-term trend, with revenue declining by 21.5% YOY to \$661.1 million. The revenue contraction was most acute in Q2 FY2009, which alone exhibited a YOY revenue decline of 40.5%. In the Q2 FY2009 earnings release, CEO Gary Smith attributed the top-line slowdown to the "difficult macro and industry environment and continued delays in consumer spending." In Q3 FY2009, sales continued to suffer, with revenue declining by 34.9% YOY to \$164.8 million. The three months ended 01/31/10 brought some modest improvement, with quarterly sales increasing by 5.1% YOY to \$175.9 million (see Table 2, next page).

It was against this backdrop of sluggish top-line results that CIEN completed its acquisition of the optical networking and Carrier Ethernet assets of Nortel's Metro Ethernet Networks (MEN) business on 03/19/10. CIEN management stated that the company acquired the MEN business because of its market leadership in in high-capacity 40G and 100G coherent optical transport technology. According to CIEN's FY2010 10K, MEN's optical networking and Ethernet products enable "network operators to seamlessly upgrade their existing 2.5G and 10G networks, thereby enabling a significant increase in network capacity without the need for new fiber deployments or complex reengineering."

While CIEN's acquisition of the MEN business may have been consistent with the company's long-term strategic plan to establish itself as a leading solution as clients begin to transition from disparate legacy communication networks to multi-purpose Ethernet/IP-based network architectures, there is no doubt that the acquisition has masked a significant decline in the company's legacy operations. For the 12 months ended 01/31/11, CIEN's reported sales came in at \$1.49 billion, representing a 126.0% YOY increase. However, after backing out the \$689.8 million in MEN-related acquisition revenue, TTM sales demonstrate a much smaller, 4.3% YOY increase. Furthermore, much of the YOY uptick in organic revenue appears to be related to the 38.7% YOY increase posted in Q2 FY2010. Since that quarter, CIEN has reported three straight QOQ declines in sales. In addition, the YOY growth rate has fallen from 1.9% in Q3 FY2010 to -8.1% and -9.1% in Q4 FY2010 and Q1 FY2011, respectively.

The declining organic revenue growth rate, when combined with quality-of-revenue concerns discussed later in this report, may suggest that CIEN is at a heightened risk of falling short of consensus sales targets in Q2 FY2011 and beyond. Further, lower-than-expected revenue from the MEN business may increase the probability of this scenario unfolding, considering that the firm's legacy operations will likely prove to be insufficient to fill in the top-line chasm. In sum, while the MEN business may prove to be a solid long-term acquisition for CIEN, the fact that company's revenues were in the midst of a protracted period of stagnation before the close of the deal cannot be ignored. Accordingly, we believe that the CIEN's declining organic sales growth does not bode well for the firm's near-term revenue sustainability.



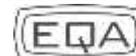


Table 2. Organic Revenue Growth Analysis
(\$ in millions)

	Q1 FY2011	Q4 FY2010	Q3 FY2010	Q2 FY2010	Q1 FY2010
Reported revenue	\$433.31	\$417.61	\$389.68	\$253.47	\$175.88
YOY % change	146.4%	136.9%	136.5%	75.8%	5.1%
MEN revenue	\$273.4	\$255.60	\$221.80	\$53.50	-
Organic revenue	\$159.91	\$162.01	\$167.88	\$199.97	\$175.88
YOY % change	-9.1%	-8.1%	1.9%	38.7%	5.1%

Accruals Demonstrate Material Increase

TTM FCF IN THE RED FOR SEVEN CONSECUTIVE PERIODS

Over the 12 months ended 01/31/11, CIEN's net income⁴ (EBITDA) fell by \$205.3 million (\$54.2 million) to -\$359.2 million (-\$121.0 million) (see Table 3, next page). By comparison, the company's CFOA (FCF) fell by a more precipitous \$309.9 million (\$346.4 million) to -\$297.1 million (-\$358.6 million). The most recent TTM period also marked the seventh consecutive period of the company reporting negative FCF and the fourth consecutive period of sequential declines in the metric.

The magnitude of the cash-flow decline pushed the total accruals-to-average total assets metric up by 882 bps (299 bps) YOY (sequentially) to 0.0% for the 12 months ended 01/31/11. The increase in CIEN's operating accruals, however, was even more pronounced. For the 12 months ended 01/31/11, the company's operating accruals-to-average current assets metric increased by 1,981 bps (572 bps) YOY (sequentially) to 15.7%, which is the highest value reported by the company in the last five years.

The increase in both total and operating accruals appears to have two primary sources. First, from a working-capital perspective, receivables have increased materially over the most recent TTM period, rising by 243.3% (organically) and consuming \$257.3 million in CFOA. We discuss this trend in greater detail, beginning on Page 12. The second driver behind the increase in accruals appears to be a significant divergence between GAAP earnings and our Sustainable Earnings calculation, which adjusts reported EPS for nonrecurring gains/losses and possibly unsustainably low reserve accounts. The widening gap between GAAP earnings and Sustainable Earnings is the focus of the next section of the report.

(See table, TTM Trends in Accruals and Cash Flows, next page)

⁴ CIEN's EBITDA and net income were adjusted upward for the 12 months ended 04/03/09 to 01/31/10 to reflect a \$455.7 million goodwill impairment charge recorded in the three months ended 04/30/09.





Table 3. TTM Trends in Accruals and Cash Flows
(\$ in millions)

12M Ended:	01/31/11	10/31/10	07/31/10	04/30/10	01/31/10
EBITDA	-\$121.0	-\$126.2	-\$121.7	-\$90.7	-\$66.8
YOY % change	-81.1%	-223.6%	-222.1%	<-999.9%	-185.4%
Net income	-\$359.2	-\$333.5	-\$279.9	-\$196.5	-\$154.0
YOY % change	-133.3%	-165.8%	-125.3%	-128.3%	-944.4%
CFOA	-\$297.1	-\$229.0	-\$201.3	-\$67.8	\$12.8
YOY % change	<-999.9%	<-999.9%	<-999.9%	-318.4%	-87.6%
CAPEX	(\$61.5)	(\$51.2)	(\$41.1)	(\$29.8)	(\$25.0)
YOY % change	146.0%	112.4%	66.6%	4.6%	-15.2%
FCF	-\$358.6	-\$280.2	-\$242.4	-\$97.6	-\$12.2
YOY % change	<-999.9%	<-999.9%	-919.3%	<-999.9%	-116.6%
Accruals to average total assets	0.0%	-3.0%	-2.3%	-6.2%	-8.9%
YOY bps change	882	334	324	-166	-446
Operating accruals to average current assets	15.7%	10.0%	8.8%	0.3%	-4.1%
YOY bps change	1,981	1,135	971	28	-421

Sustainable Earnings Lag GAAP Net Income by Significant Margin

NONRECURRING GAINS AND ABNORMALLY LOW RESERVE ACCOUNTS APPEAR TO PROVIDE MATERIAL BOOST TO RECENT RESULTS

In the case of CIENA, the removal of peripheral and nonrecurring gains/losses from the company's recent GAAP results yields a Sustainable EPS figure that has trailed the as-reported GAAP and non-GAAP figure by a significant margin. In the analysis that follows, we detail each of the adjustments that were made to arrive at our estimate of Sustainable EPS for CIEN for each of the last five quarters.

Gain on change in FV of contingent consideration: On 10/19/10, Nortel issued an announcement that it was exercising an early termination provision in a lease agreement with CIEN. As a result, CIEN recorded an unrealized gain of \$13.8 million in Q4 FY2010, resulting in a fair value of \$30.2 million for the contingent consideration right. CIEN received notice of early termination from Nortel, along with a corresponding payment of \$33.5 million, in Q1 FY2011. This payment resulted in CIEN booking a gain of \$3.3 million (the difference between the \$33.5 million payment and the \$30.2 million fair value) in the quarter. We are deducting both gains, as they are nonrecurring and ancillary to CIEN's core business operations.

Gain on extinguishment of debt: In Q4 FY2010, CIEN booked a \$4.9 million gain resulting from its \$76.1 million repurchase of \$81.8 million of the company's outstanding 0.25% convertible notes. The gain consisted of \$5.7 million gain from the purchase of the notes, less \$0.8 million associated with debt issuance costs. As a nonrecurring and noncore gain, we excluded this amount from our Sustainable





Earnings calculation.

Gain/loss on change in FV of embedded option feature: In three of the last four quarters, CIEN has recorded gains/losses resulting from the change in FV of an embedded redemption feature associated with its 4.0% convertible senior notes. The most recent quarter's results included a \$7.1 million gain on the change in FV of the embedded option feature. We adjusted our Sustainable Earnings calculation to account for these peripheral amounts.

Acquisition and integration expense: In every quarter since the MEN acquisition, CIEN has recorded acquisition and integration costs, which it describes as principally consisting of "transaction, consulting and third party service fees" relating to the integration of MEN into the company's combined operations. These fees include a \$24.2 million pretax charge to CIEN's earnings in Q1 FY2011. While CIEN has recorded acquisition- and integration-related charges for five successive quarters, the expense will likely begin to decline in coming quarters as MEN becomes fully integrated into CIEN's operations. This likely downward trend, along with the ancillary nature of the charges, leads us to remove this expense from our Sustainable Earnings calculation.

Patent litigation expense: CIEN booked a \$0.5 million charge relating to a patent litigation settlement in Q1 FY2011. This expense was included in the company's general and administrative expense in the quarter. The nonrecurring and noncore nature of the expense leads us to remove this charge from our Sustainable Earnings calculation.

Loss on termination of indemnification asset: In Q2 FY2010, CIEN booked a \$2.0 million charge relating to the termination of an indemnification asset due to the statute of limitations expiration of one its uncertain tax contingencies acquired as part of the MEN acquisition. We have added this one-time charge back into our Sustainable Earnings calculation for the quarter.

Warranty provision adjustment: For the 12 months ended 01/31/11, CIEN's sales increased by 126.0% (20.8%) YOY (sequentially) to \$1.49 billion (see Table 4, Page 10). Meanwhile the company's warranty reserve was \$48.6 million at 01/31/11, representing a comparatively smaller 26.3% YOY increase while declining by 10.7% on a QOQ basis. These divergent growth rates led to a material 256 bps (115 bps) YOY (sequential) decline in CIEN's warranty reserve to TTM sales to just 3.3%. Given that the reserve is largely a function of the amount of products covered by warranty agreements sold in a given timeframe, one would expect this ratio to stay relatively constant over time, absent a dramatic shift in product mix or reduction in warranty coverage for sold products. This does not appear to be the case in the two most recent periods and the 12 months ended 01/31/11 in particular. The warranty reserve-to-TTM sales metric's value of 3.3% (4.4%) at 01/31/11 (10/31/10) represents the metric's lowest (second-lowest) level in the last five years and lies 202 bps below the company's trailing five-year average of 5.3%. In addition, we note that the warranty provision dropped materially in each of the last two





quarters. For example, CIEN reported just \$1.1 million to the warranty provision in Q1 FY2011, versus \$3.1 million in the year-ago quarter. And during the quarter ended 10/31/11, CIEN actually recorded a negative provision of \$8.6 million (i.e., this amount was reversed out of its reserve directly into earnings).

If the reserve-to-revenue ratio was held constant to this trailing five-year average, CIEN's warranty reserve would have come in at \$78.7 million at 01/31/11, a \$30.1 million difference relative to the reserve's actual ending value. We estimate that this adjustment would have a \$0.20 negative impact on the company's reported EPS in Q1 FY2011 and a \$0.25 negative impact in Q4 FY2010.

In the company's Q1 FY2011 10Q, management offered the following explanation for the drawdown in the reserve:

As a result of the substantial completion of integration activities related to the MEN Acquisition, Ciena consolidated certain support operations and processes during the first quarter of fiscal 2011, resulting in a reduction in costs to service future warranty obligations. As a result of the lower expected costs, Ciena reduced its warranty liability by \$6.9 million, which had the effect of reducing the provisions in the table above. (Q1 FY2011 10Q) [Emphasis added]

This economies of scale explanation could explain why the warranty reserve-to-TTM sales metric has declined from its five-year high of 8.4%, given that this level was reached in the first quarter of the MEN acquisition, when there was a presumably a higher degree of redundant (and inefficient) resources. However, it falls short of explaining the magnitude of the decline relative to the longer-term average. Even after adding the \$6.9 million reversal back into the reserve account, the ending value still trails the five-year historical average by \$23.2 million.

The company does not appear to be recording a lower relative amount of warranty settlements, which discounts another possible explanation (i.e. the probability of warranty-related settlements has declined in recent periods). For example, CIEN recorded \$27.3 million in warranty settlements for the 12 months ended 01/31/11, which comprised 1.8% of total sales recorded in the period, a figure that is equivalent to the trailing five-year average of 1.8%. Given that the probability of warranty write-offs does not appear to have waned, we believe there is an increased risk that the warranty reserve's current level is unsustainably low. Accordingly, we are concerned that CIEN may need to increase its warranty provision in coming periods, an action that could have an adverse effect on reported earnings.

Reflective of this concern, we adjusting Sustainable EPS downward in Q4 FY2010 and Q1 FY2011 to reflect the difference between the warranty reserve-to-TTM sales metric's current value and the metric's trailing five-year average. An opposite adjustment was made in Q1 FY2010 to Q3 FY2010, a period that saw a higher-than-average warranty reserve relative to sales.





Table 4. Warranty Reserve Analysis
(\$ in millions)

12M Ended:	01/31/11	10/31/10	07/31/10	04/30/10	01/31/10
Sales	\$1,494.1	\$1,236.6	\$995.3	\$770.4	\$661.1
YOY % change	126.0%	89.5%	51.7%	3.5%	-21.5%
Sequential % change	20.8%	24.2%	29.2%	16.5%	1.3%
Warranty reserve	\$48.6	\$54.4	\$64.5	\$64.7	\$38.4
YOY % change	26.3%	35.3%	63.8%	66.3%	6.5%
QOQ % change	-10.7%	-15.7%	-0.3%	68.3%	-4.4%
Warranty reserve/sales	3.3%	4.4%	6.5%	8.4%	5.8%
YOY bps change	-256	-176	48	317	153
Sequential bps change	-115	-208	-191	258	-35

Inventory provision adjustment: CIEN's inventory balance was \$267.3 million at 01/31/11, representing a 180.1% YOY increase (see Table 5, below). By contrast, the company's inventory reserve increased by a comparatively smaller 31.2% YOY to \$30.6 million. As a result, CIEN's inventory reserve comprised 10.3% of gross inventory at quarter end, compared to 19.7% at 01/31/10. The metric's current value is also below the company's trailing five-year average of 18.3%.

Holding the inventory reserve-to-gross inventory metric constant with this 18.3% historical average would result in a \$54.6 million inventory reserve at 01/31/11, representing a \$24.0 million differential. After making similar adjustments to prior-period reserve balances, this process results in an -\$0.01 (-\$0.28) EPS adjustment for the three-month (12-month) period ended 01/31/11.

Table 5. Inventory Reserve Analysis
(\$ in millions)

	01/31/11	10/31/10	07/31/10	04/30/10	01/31/10
Inventory	\$267.3	\$261.6	\$222.2	\$233.4	\$95.4
YOY % change	180.1%	197.0%	148.0%	155.7%	4.5%
Inventory reserve	\$30.6	\$30.8	\$30.5	\$28.0	\$23.3
YOY % change	31.2%	28.2%	41.6%	26.5%	-5.3%
Inventory reserve/Gross inventory	10.3%	10.5%	12.1%	10.7%	19.7%
YOY bps change	-938	-1,089	-731	-881	-161

The cumulative amount of these changes resulted in a \$6.3 million⁵ downward adjustment to CIEN's reported net income, which translated to a \$0.07 deduction from the company's GAAP EPS (see Table 6, next page). As a result, the company's Q1 FY2011 Sustainable EPS came in at -\$0.91, compared to the GAAP figure of -\$0.84. The spread is even more pronounced relative to CIEN's non-GAAP EPS value of -\$0.14, which is \$0.77 higher than our sustainable measure. By contrast, in

⁵ As CIEN's effective tax rate was -0.8% for the 12-month period ended 01/31/11, we did not make any tax-related adjustments in arriving at our final adjustments to net income and EPS.





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Q2 FY2010, Sustainable EPS of -\$0.61 exceeded GAAP EPS of -\$0.97 by \$0.36 (see Chart 1, next page). In Q3 FY2010, Sustainable EPS remained above GAAP EPS, although the differential dropped to \$0.14. By Q4 FY2010, the trend had reversed, with Sustainable EPS trailing GAAP EPS by a material -\$0.33.

The most significant drivers of this reversal appear to be a material drawdown of the company's inventory and warranty reserves. As discussed above, the current levels of both reserves appear well below recent historical norms, which could result in an increase in the inventory and warranty provisions in coming periods, a scenario that could exert material downward pressure on reported EPS.

Table 6. Sustainable Earnings Adjustments
(\$ in millions, except per-share figures)

	Q1 FY2011	Q4 FY2010	Q3 FY2010	Q2 FY2010	Q1 FY2010
Gain on change in FV of contingent consideration	-\$3.3	-\$13.8			
Gain on extinguishment of debt		-\$4.9			
Gain/Loss on change in FV of embedded option feature	-\$7.1		\$4.1	-\$6.6	
Acquisition and integration expense	\$24.2	\$18.1	\$17.0	\$39.2	\$27.0
Patent litigation expense	\$0.5				
Loss on termination of indemnification asset				\$2.0	
Warranty provision adjustment	-\$19.4	-\$22.9	-\$12.0	\$20.5	-\$2.2
Inventory provision adjustment	-\$1.2	-\$7.0	\$4.1	-\$21.5	-\$1.9
Total	-\$6.3	-\$30.5	\$13.2	\$33.6	\$22.9
EPS Impact	-\$0.07	-\$0.33	\$0.14	\$0.36	\$0.25
Sustainable EPS	-\$0.91	-\$1.18	-\$1.04	-\$0.61	-\$0.33



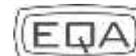
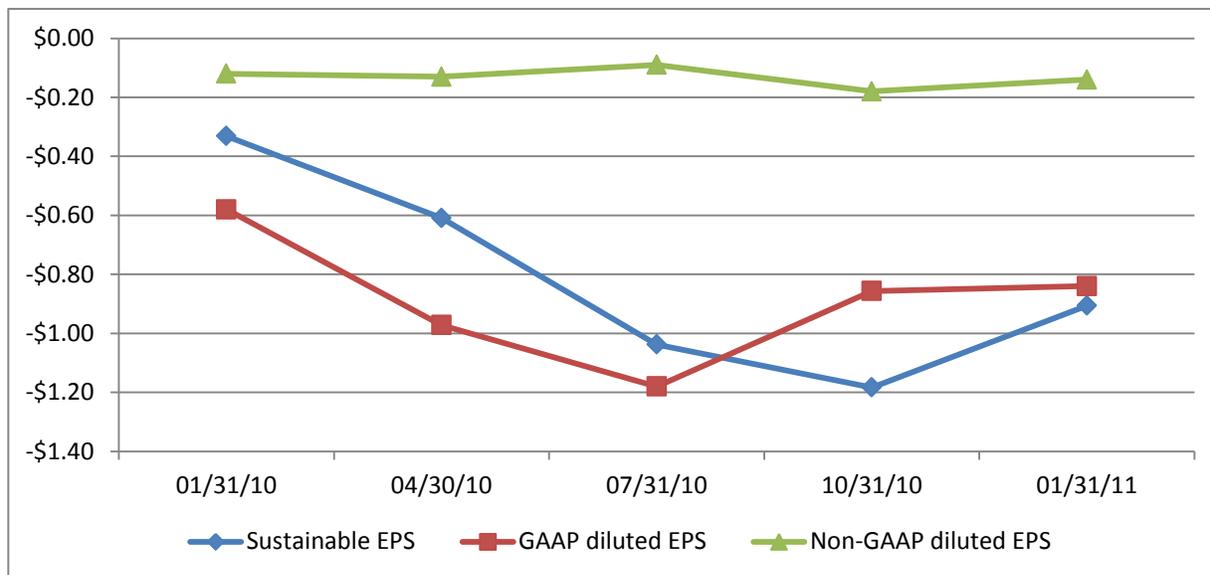


Chart 1. One-Year EPS Comparison



Quarterly DSO Metric Exhibits Significant Spike

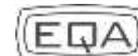
SURGE IN RECEIVABLES DRIVES QUARTERLY DSO METRIC HIGHER; WILL 12-MONTH METRIC FOLLOW SUIT?

As mentioned previously, the largest working-capital driver of the accruals build is increasing receivables, which accounts for \$257.3 million of the CFOA burn over the past year. CIEN's receivables balance at 01/31/11 was \$369.7 million, which represented a 250.0% YOY increase (see Table 7, next page). By comparison, the revenue grew by 146.4% YOY to \$433.3 million for the three months ended 01/31/11. These divergent growth rates resulted in the company's accounts receivable-to-quarterly sales metric increasing by 2,527 bps YOY to 85.3% for the three months ended 01/31/11. The current value also lies well above the metric's trailing five-year average of 68.0% and represents the second-highest total over this same time period.

In addition, CIEN's three-month DSO increased by 29.3% YOY to 75 days. As with accounts receivable to sales, the company's current three-month DSO value represents a marked increase from the trailing five-year average of 60 days and was the second highest total over this most recent five-year period. In addition, while CIEN's 12-month DSO metric fell by 2.9% YOY to 63 days in the most recent period, its current value is four days above the company's trailing five-year average of 59 days. More concerning, the three-month DSO metric crossed over the 12-month metric in Q4 FY2010 before spiking to its current value of 75 days in the most recent quarter (see Chart 2, Page 14). This upswing in quarterly DSO may signal higher 12-month DSO values in the future as the higher near-term growth in receivables begins to pull the longer-term trend line upward.

In the Q1 FY2011 10Q, CIEN management attributed the increase in accounts





receivable to “higher sales volume,” while attributing the increase in DSO⁶ to “a larger proportion of sales occurring later in our first quarter of fiscal 2011.” Previously, in the Q3 FY2010 10Q, CIEN management also pointed to a “larger proportion of sales occurring late in our third quarter of fiscal 2010” as a key driver of the YOY spike in DSO for the nine months ended 07/31/10. The fact that company management specifically cited late-quarter billings as catalysts for increases in the DSO in two of the most recent three quarters leads us to question whether this trend is sustainable. If the later-quarter billings were an effort to pull subsequent-quarter billings into the current quarter to meet top-line growth estimates, the company will need to continue to pull the receivables forward in subsequent quarters or see a material increase in bookings in order to avoid a revenue shortfall in subsequent quarters. In particular, we note that management has disclosed that approximately \$10.0 million in Q2 FY2011 sales were pulled forward into Q1 (see Page 3). Even if the late-quarter billings were an organic occurrence, we continue to have concerns that any billing delays or customer cancellations could put the firm at increased risk of missing top-line estimates.

Table 7. Quarterly DSO Analysis
(\$ in millions)

3M Ended:	01/31/11	10/31/10	07/31/10	04/30/10	01/31/10
Revenue	\$433.3	\$417.6	\$389.7	\$200.0 ⁷	\$175.9
YOY % change	146.4%	136.9%	136.5%	38.7%	5.1%
Accounts receivable	\$369.7	\$343.6	\$260.3	\$171.8 ⁸	\$105.6
YOY % change	250.0%	190.6%	116.4%	47.3%	-19.0%
Accounts receivable/Sales	85.3%	82.3%	66.8%	85.9%	60.1%
YOY bps change	2,527	1,519	-621	502	-1,789
DSO	75	66	51	63	58
YOY % change	29.3%	6.9%	-22.9%	-19.0%	-20.8%

⁶ CIEN appears to use the ending receivables balance in calculating both three-month and 12-month DSO metrics, whereas we have used the average receivables balance, calculated as the trailing two-quarter average for three-month DSO and trailing five-quarter average for 12-month DSO. In a period of rising relative receivables growth, using average balances tends to smooth out the increase in DSO, resulting in lower (and more conservative) DSO figures than the ending balance method.

⁷ CIEN’s sales for the three months ended 04/30/10 have been adjusted downward to reflect a partial-quarter revenue contribution of \$53.5 million resulting from the 03/19/10 MEN acquisition. Adjustments were not made in subsequent periods because these quarters reflected a full quarter’s worth of MEN sales, avoiding the distortion resulting from partial sales being compared to the acquired entity’s full receivables balance in Q2 FY2010.

⁸ CIEN’s receivables balance at 04/30/10 has been adjusted downward to reflect the \$7.1 million in receivables acquired from the 03/19/10 MEN acquisition. Adjustments were not made in subsequent periods because these quarters reflected a full quarter’s worth of MEN sales, avoiding the distortion resulting from partial sales being compared to the acquired entity’s full receivables balance in Q2 FY2010.





Chart 2. Trends in 12-Month and Three-Month DSO



Long- and Short-Term Deferred-Revenue Metrics Trending Negatively

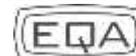
WILL RELATIVE DECLINE IN DEFERRED REVENUE SERVE AS A PRECURSOR TO DISAPPOINTING TOP-LINE GROWTH?

For the 12 months ended 01/31/11, CIEN's sales came in at \$1.44 billion, reflecting a 117.9% YOY increase. By comparison, CIEN's deferred-revenue balance at 01/31/11 was \$105.5 million, representing a comparatively smaller 30.4% increase (see Table 8, next page). This gap in growth rates resulted in a 492 bps YOY decline in the company's 12-month deferred revenue-to-sales metric to 7.3%. In addition, the firm's 12-month days of deferred revenue fell by 46.9% YOY to 23 days, a value that also lies 29.0% below the trailing five-year average of 32 days.

Shorter-term trends are equally concerning, with three-month deferred revenue to sales declining by 2,166 bps YOY to 24.3% (see Table 9, page 16). Three-month days of deferred revenue declined by 45.5% YOY to 22 days, or 29.4% above the trailing five-year average of 31 days.

According to the company's FY2010 10K, deferred revenue arises from two primary sources: (1) payments received for products in advance of shipment or in advance of the company's ability to recognize revenue, and (2) payment for service contracts that will be recognized over the contract term. In this regard, we note that the relative level of deferred service revenue does seem to have declined precipitously in recent periods. For the three months ended 01/31/11, deferred service revenue comprised 80.9% of service-related sales, compared to 234.7%





(96.9%) for the three months ended 01/31/10 (10/31/10).⁹ In addition, the metric has declined for four successive quarters. This trend suggests that there has been a fundamental shift in the composition of service revenues that resulted in a lower relative level of service-related deferred revenue being recorded.

An additional remaining explanation for the relative decline in deferred revenue could be that a greater percentage of MEN-based sales might be recorded upfront relative to CIEN's legacy operations. The latter explanation could point to a lower level of customer advances resulting from sales generated from the acquired MEN business. Absent additional disclosures from management, however, it is difficult to disentangle the legacy deferred revenue from that acquired from MEN and pinpoint a precise reason for the relative decline in service deferred revenue.¹⁰

Regardless of the underlying cause, the significant decline in deferred revenue relative to sales suggests a decreased level of balance-sheet support for future revenue growth. Accordingly, CIEN may leave itself with little margin for error in generating new order growth with a lower relative amount of deferred revenue being amortized to revenue each period. Any downturn in demand may therefore place the company at increased risk of falling short of consensus top-line estimates, as amortized deferred revenue may be insufficient to fill in the revenue gap.

**Table 8. TTM Deferred Revenue Analysis
(\$ in millions)**

	12M Ended:	01/31/11	10/31/10	07/31/10	04/30/10	01/31/10
Revenue		\$1,440.6	\$1,183.1	\$941.8	\$716.9 ¹¹	\$661.1
YOY % change		117.9%	81.3%	43.6%	-3.7%	-21.5%
Deferred revenue		\$105.5	\$105.0	\$90.8	\$63.6 ¹²	\$80.9
YOY % change		30.4%	38.3%	15.6%	-18.5%	12.5%
Deferred revenue/total revenue		7.3%	8.9%	9.6%	8.9%	12.2%
YOY bps change		-492	-276	-233	-161	370
Days of deferred revenue		23	26	30	38	43
YOY % change		-46.9%	-39.4%	-28.4%	2.8%	34.5%

⁹ By contrast, CIEN's deferred product revenue/3M sales metric was 11.4% for the three months ended 01/31/11, representing a 93 bps (223 bps) YOY (QOQ) increase.

¹⁰ We contacted CIEN's investor relations department for additional color on this subject but did not receive a response before the publication of this report.

¹¹ CIEN's sales for the 12 months ended 04/30/10 to 01/31/11 have been adjusted downward to reflect a partial-quarter revenue contribution of \$53.5 million resulting from the 03/19/10 MEN acquisition in Q2 FY2010. Adjustments were not made in subsequent periods because these quarters reflected a full quarter's worth of MEN sales, avoiding the distortion resulting from partial sales being compared to the acquired entity's full deferred revenue balance in Q2 FY2010.

¹² CIEN's deferred revenue balance at 04/30/10 has been adjusted downward to reflect the \$28.1 million in deferred revenue acquired from the 03/19/10 MEN acquisition. Adjustments were not made in subsequent periods because these quarters reflected a full quarter's worth of MEN sales, avoiding the distortion resulting from partial sales being compared to the acquired entity's full deferred revenue balance in Q2 FY2010.



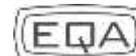


Table 9. Quarterly Deferred Revenue Analysis (\$ in millions)

	3M Ended:	01/31/11	10/31/10	07/31/10	04/30/10	01/31/10
Revenue		\$433.3	\$417.6	\$389.7	\$200.0 ¹³	\$175.9
YOY % change		146.4%	136.9%	136.5%	38.7%	5.1%
Deferred revenue		\$105.5	\$105.0	\$90.8	\$63.6 ¹⁴	\$80.9
YOY % change		30.4%	38.3%	15.6%	-18.5%	12.5%
Deferred revenue/Total revenue		24.3%	25.2%	23.3%	31.8%	46.0%
YOY bps change		-2,166	-1,792	-2,435	-2,229	305
Days of deferred revenue		22	21	18	33	41
YOY % change		-45.5%	-46.5%	-58.3%	-30.5%	2.0%

Cash Collections Plummet Relative to Sales

RELATIVE DECLINE IN CASH COLLECTED FROM CUSTOMERS RAISES REVENUE QUALITY CONCERNS

The negative trends in receivables and working capital are also evident when examining CIEN's cash collected from customers. For the 12 months ended 01/31/11, the company's sales increased by 126.0% YOY to \$1.49 billion. A \$264.1 million increase in receivables, however, was only partially offset by a \$24.6 million increase in deferred revenue (see Table 10, next page). As a result, CIEN's cash collections trailed sales by 16.0% in the period, compared to the 12 months ended 01/31/10, which saw cash collections exceed sales by 5.1%. In addition, the metric's current value of 0.840 is the lowest in the company's trailing five-year history.

Quarterly cash collections also appear to be trailing reported sales, albeit by a smaller margin. For the three months ended 01/31/11, CIEN's cash collected from customers came in at \$407.6 million, trailing reported sales by 5.9%. By contrast, cash collections for the three months ended 01/31/10 exceeded reports sales by 10.0%. In addition, the three-month metric crossed over the 12-month metric in the most recent quarter, which could suggest 12-month cash collections will begin to revert back to its long-term mean value of 1.0 in coming periods (see Chart 3, next page). As this process unfolds, CIEN could see its top line come under pressure as the company begins to work through its receivables balance while amortizing a relatively lower amount of deferred revenue to the income statement. If customer demand falters during this mean-reversion process, CIEN could find itself at an increased risk of falling considerably short of sell-side consensus revenue estimates.

¹³ CIEN's sales for the three months ended 04/30/10 have been adjusted downward to reflect a partial quarter revenue contribution of \$53.5 million resulting from the 03/19/10 MEN acquisition. Adjustments were not made in subsequent periods because these quarters reflected a full quarter's worth of MEN sales, avoiding the distortion resulting from partial sales being compared to the acquired entity's full receivables balance in Q2 FY2010.

¹⁴ See Footnote 10.

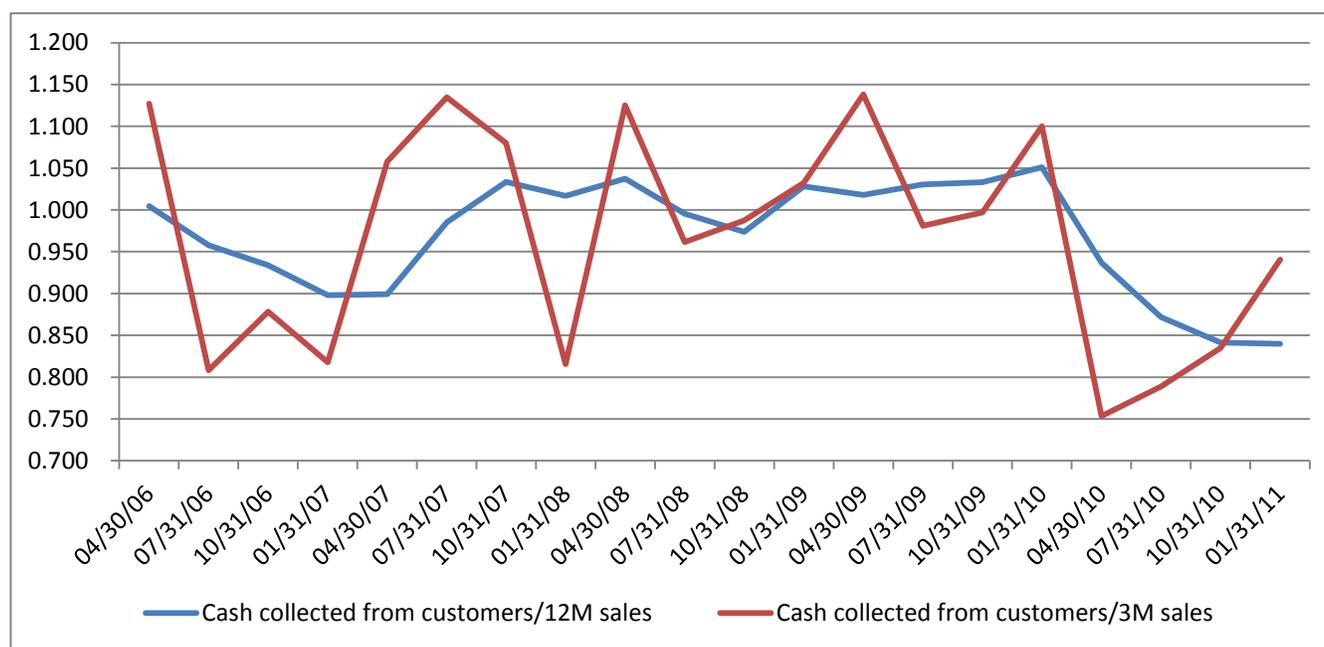




Table 10. TTM Cash Collections Analysis
(\$ in millions)

12M Ended:	01/31/11	10/31/10	07/31/10	04/30/10	01/31/10
Revenue	\$1,494.1	\$1,236.6	\$995.3	\$770.4	\$661.1
YOY % change	126.0%	89.5%	51.7%	3.5%	-21.5%
Change in receivables	-\$264.1	-\$225.3	-\$140.0	-\$62.3	\$24.9
Change in deferred revenue	\$24.6	\$29.1	\$12.3	\$13.7	\$9.0
Cash collected from customers	\$1,254.6	\$1,040.4	\$867.6	\$721.8	\$695.0
YOY bps change	80.5%	54.3%	28.3%	-4.8%	-19.8%
Cash received from customers/ Sales	0.840	0.841	0.872	0.937	1.051
YOY bps change	-20.1%	-18.6%	-15.4%	-8.0%	2.2%

Chart 3. Trends in 12-Month and Three-Month Cash Collections



Conclusion

EARNINGS AND REVENUE QUALITY CONCERNS INDICATE ELEVATED RISK OF SHARE-PRICE UNDERPERFORMANCE

Our analysis of CIEN suggest that the firm will face increasing pressure to meet both revenue and EPS expectations over the near to mid-term. Stagnant deferred revenues and surging receivables have led to a marked deterioration in customer cash collections relative to sales. A material decline in organic revenue growth over the most recent two quarters intensifies our concerns regarding revenue quality and sustainability. An increasing level of accruals will likely begin to pressure CIEN's earnings once cash flows begin to recover. A growing gap





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between sustainable EPS and GAAP EPS suggests that recent results have benefited from nonrecurring gains and unsustainable reductions to inventory and warranty provisions. The combination of increasing accruals and unsustainable earnings may indicate that the company is at an increased risk of posting negative earnings surprises in coming periods. As a result of these concerns, we believe that CIEN carries a significant level of downside risk, and we are initiating coverage with a grade of D.

Risks to Thesis

Consumers are increasingly adopting video, mobile web, smartphones, and tablets, while enterprises are continuing to embrace IT virtualization, cloud computing, and business continuity. These consumer and business trends could lead to a rapid increase in network demand. If this scenario were to unfold, the higher bandwidth demand could result in the expected transition from SONET/SDH networks to multi-purpose Ethernet/IP-based network architectures unfolding at a faster than expected rate. In this case, CIEN could be uniquely positioned among its competitors, resulting in increased revenue and market share. Any rapid acceleration in revenue growth would likely override many of our earnings quality and fundamental concerns.





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