

Spring 5-12-2023

Clearfield Inc: A Financial Analysis Report

Logan Zajac

logan.zajac.2@go.minnesota.edu

Follow this and additional works at: <https://red.mnstate.edu/thesis>



Part of the [Accounting Commons](#), and the [Finance and Financial Management Commons](#)

Researchers wishing to request an accessible version of this PDF may [complete this form](#).

Recommended Citation

Zajac, Logan, "Clearfield Inc: A Financial Analysis Report" (2023). *Dissertations, Theses, and Projects*. 793.

<https://red.mnstate.edu/thesis/793>

This Project (696 or 796 registration) is brought to you for free and open access by the Graduate Studies at RED: a Repository of Digital Collections. It has been accepted for inclusion in Dissertations, Theses, and Projects by an authorized administrator of RED: a Repository of Digital Collections. For more information, please contact RED@mnstate.edu.

Clearfield Inc
A Financial Analysis Report

A Project Presented to
The Graduate Faculty of
Minnesota State University Moorhead

by
Logan Frank Zajac

In Partial Fulfillment of the
Requirements for the Degree of
Master of Science in
Accounting and Finance

May 2023
Moorhead, Minnesota

TABLE OF CONTENTS

EXECUTIVE SUMMARY	iv
LIST OF TABLES	v
INTRODUCTION	1
FIRM CHARACTERISTICS	1
COMPANY BACKGROUND AND DESCRIPTION.....	1
OWNERSHIP/EXECUTIVES	2
STRATEGY	4
RISK FACTORS	5
SOCIAL RESPONSIBILITY	6
SWOT ANALYSIS	6
INDUSTRY CHARACTERISTICS	8
PORTER’S FIVE FORCES.....	8
MARKET ANALYSIS.....	10
CUSTOMERS.....	10
MARKETS	10
PESTEL FRAMEWORK	11
QUALITATIVE ANALYSIS SUMMARY	13
QUALITY OF EARNINGS	13
SIGNIFICANT NOTE DISCLOSURES	13
EXTERNAL AUDITOR	14
EARNINGS QUALITY ASSESSMENT	15
HISTORICAL FINANCIAL ANALYSIS	16

FINANCIAL RATIOS.....	16
STATEMENT OF CASH FLOWS SUMMARY.....	21
CONCLUSION.....	22
INTEGRATION	22
APPENDIX A: CLEARFIELD INC FINANCIAL STATEMENTS.....	24
APPENDIX B: CAMBIUM NETWORKS FINANCIAL STATEMENTS.....	27
REFERENCES	30

EXECUTIVE SUMMARY

Clearfield Inc is a manufacturer and distributor of telecommunication equipment, mainly Fiber. The firm is headquartered in Brooklyn Park, MN with an office and manufacturing plant. Additionally, Clearfield has operations in both Mexico and Finland. The firm provides work for approximately 407 full-time employees and is owned by 277 shareholders.

A thorough analysis of the Company using a benchmark, Cambium Networks Corp, showed that Clearfield Inc is a high-growth firm, with the most recent sales growth of around 90%, with expectations of more growth and expansion. Qualitative characteristics and historical financial statements point to great overall past and future performance.

LIST OF TABLES AND FIGURES

Table 1. 2022 Salary of Certain Executives.....	3
Table 2. Earnings Quality	15
Table 3. Activity Ratios	16
Table 4. Liquidity Ratios	18
Table 5. Profitability Ratios	19
Figure 1. Return on Investment Comparison	20
Table 6. Growth Rates	20
Table 7. Cash Flows Summary	21

INTRODUCTION

My goal during the analysis of Clearfield Inc is to act as a financial analysis to determine the firm's past and future performance. To do this, I had to analyze both qualitative and quantitative characteristics. The quantitative characteristics had to be compared against a benchmark to assess performance relative to the industry.

Both MAIN (Clearfield Inc) and BENCHMARK (Cambium Networks Corp) needed to follow three selection criteria; had to be a public company headquartered or incorporated in the Midwest, traded on the Russell 2000 index, and have the same primary four or three-digit SIC code.

FIRM CHARACTERISTICS

Company Background and Description

Clearfield, Inc was incorporated in MN on March 1979. They are headquartered in Minneapolis, MN. "Clearfield designs, manufactures, and distributes fiber optic management, protection and delivery products for communications networks" (Clearfield, Inc. 2022, 1). Clearfield was originally named Americable after merging Americable and Computer System Products. In 2003 they were purchased by APA Enterprises. In 2007, APA Enterprises changed course after years of losses, and in the same year Cheri Beranek took new role of CEO. In the following year, the Company rebranded and officially named itself Clearfield Inc. (Wikimedia Foundation 2022). Clearfield does business in the US in "International markets, primarily in the Caribbean, in Canada, and Central and South America" (Clearfield, Inc. 2022, 3). In July 2022, they acquired Nestor Cables Ltd, a developer and manufacturer of fiber optic cables solutions located in Finland. The plan with the newly acquired subsidiary is to integrate the supply

of fiber optic cables vertically. Clearfield sells directly to customers, through distribution partners and to original equipment suppliers. Sales are by both its sales team and independent sales representatives.

Clearfield's current employee base consists of personnel who come mostly from Minnesota, most from Brooklyn Park, Finland and Estonia, and Mexico. As of September 30, 2022, the firm had 407 full-time employees and contracted approximately 725 personnel in the Mexico facilities through a Maquiladora agreement (Clearfield, Inc. 2022, 7).

Ownership/Executives

At the end of the fiscal year 2022, there were 277 common stockholders with 13,818,452 outstanding shares. Ownership of voting securities by directors, executives, and investors with above 5% ownership interest was just above 40% as of the end of 2022 (Clearfield, Inc., 2023). The "named executive officers" of Clearfield include Cheryl Beranek – President and CEO, Daniel R. Herzog – CFO, and John P. Hill – COO. All three are offered a base salary, a bonus that is dependent on net sales for the fiscal year, stock awards, option, awards, non-equity incentive plan compensation, matching contributions to 401(k), term life insurance premium and long-term disability. In 2022, total compensation for Cheryl Beranek was \$1,972,574, for Daniel Herzog was \$946,444, and for John Hill was \$1,971,534 (Clearfield, Inc. 2023).

Table 1. 2022 Salary of Certain Executives

2022 Salary (in \$)	Salary	Stock Awards	Option Award	Non-Equity Incentive Plan Compensation	All Other Compensation	Total
Cheryl Beranek	374,415	224,642	224,642	954,757	20,112	\$1,972,574
Daniel Herzog	248,433	219,167	149,055	315,510	14,279	\$946,444
John Hill	374,415	398,649	224,642	954,757	19,072	\$1,971,534

Data from Clearfield's 2023 Proxy Statement

Clearfield, Inc. President and CEO Cheri Beranek appears to be the main reason for Clearfield's success. Since Cheri took her spot as CEO in 2008, Clearfield has had 14 years of profitability and has gained Forbes recognition as America's Best Small Company three times (*Cheri Beranek... 2023*). Cheri has had a variety of executive-level positions with high-growth technology companies and extensive non-profit experience in the Fargo/Moorhead area including work at North Dakota State University. She is a published author and has been recognized with many awards with a few of the highest honors being named into the Minnesota Business Hall of Fame in 2021 and 2016 Female Executive of the Year in New York City by the International Stevie Awards (*Cheri Beranek... 2023*). COO Johnny Hill has also had quite an impact on the success of Clearfield. He has been there since 2008, has approximately 25 years of strategic and hands-on experience in the industry, and has amassed many patents (*Johnny Hill... 2023*). The final "named executive," Daniel Herzog, has been CFO since joining in 2003. Before this firm, he had previous financial leadership roles in publicly and privately held manufacturing and software industries (*Daniel Herzog... 2023*).

Strategy

Clearfield has three main manufacturing plants, one in Brooklyn Park, Minnesota and two facilities in Tijuana, Mexico that operate as Maquiladoras (Clearfield, Inc. 2022, 5). Maquiladora is a factory in Mexico that is run by a foreign company, the goods created are then exported back into the country of the Company. This factory type provides Clearfield with cheaper labor and employment in Mexico. Maquiladoras also has its disadvantages: factories in Mexico may not be run as properly, causing worse working conditions. Therefore, may give Clearfield a bad image by allowing/participating in poor working conditions. Changes in border restrictions or laws in Mexico can have a negative effect on operations.

Clearfield is currently working on growth and expansion. In 2022 they added a new distribution center, expanded their Mexican facility by just over three times the space, and, as mentioned previously, acquired Nestor Cables Ltd. This growth and expansion have helped the firm achieve a net sales increase of 92%, a gross profit increase of 84.6%, and a stock price increase from \$45.08 to \$104.64 in the fiscal year 2022 (Clearfield, Inc 2022, 14). Clearfield focuses on an innovative strategy to simplify its customers' business. One product sold to their service customers allows them to connect twice as many homes in their Fiber to the home builds, which delivers highest possible level of bandwidth directly to the user.

In 2022, one customer, a distributor, comprised 14% of net sales. Since the acquisition of Nestor Cables, Clearfield has experienced an increase in the concentration of customers based in Europe (Clearfield, Inc. 2022, 5). Clearfield purchases numerous materials and components from multiple suppliers, but some components and third-party

contract manufacturing services are purchased from a single or a limited number of suppliers. The loss of access to any of these components or third-party contract manufacturing could adversely affect the ability to deliver products on time and financial performance. Clearfield typically experiences lower sales in their first and second fiscal quarters (fourth and first calendar quarters) “due to customer budget cycles, deployment schedules of outdoor products, some customer geographical concentrations as well as standard vacation and holiday calendars” (Clearfield Inc. 2022, 6).

Risk Factors

According to Clearfield’s 2022 10-K report, for the fiscal year of 2023, Clearfield expects to experience additional significant net sales growth as compared to the fiscal year 2022. A few firm risk factors could hinder growth and success. The recent years’ inflationary price pressures of components and raw materials caused Clearfield to pass on the increased prices to their customers, which may cause some customers to cancel or refrain from purchasing their products. Acquisitions provide growth and opportunity for the firm but they come with risks, including not realizing the benefits from the acquisition in the expected time frame or unforeseen issues that could negatively affect the firm. As a result of the acquisition of Nestor Cable Ltd. Clearfield has a subsidiary that has the Euro as its functional currency. This creates an exposure to foreign currency risk, which Clearfield has chosen not to hedge against. As a manufacturer, Clearfield bears the risk of defective products that could cause a loss in reputation, sales, and customers.

Social Responsibility

To better the environment, Clearfield has several company-wide programs. One of these is a recycling program in all their facilities and processes compliant with the European Union's Directive 2002/95/EC, which restricts the use of certain hazardous substances in electrical and electronic equipment (Clearfield, Inc. 2023). Clearfield has programs to reinforce its company values and build corporate culture, as well as training programs for technical employees to allow them to develop the necessary skill set for their roles and promote career development (Clearfield, Inc. 2022, 6).

SWOT Analysis

Strengths: Clearfield relies on product performance and the ability to meet customer needs for highly specified design, engineering, and delivery on a timely basis. They manufacture “products on both a quick-turn and scheduled delivery basis” (Clearfield, Inc. 2022, 2). The products that Clearfield offer gives their service provider customers the ability to work more efficiently, speeding up the time to revenue for them. Clearfield operates with 36 granted patents and multiple pending patents both inside and outside the United States that give Clearfield an upper hand against competitors by providing useful products that others cannot. They also have many trademarks and logos to market and promote products.

Weaknesses: Clearfield believes that many of its competitors “have greater resources, including greater sales, product development, marketing, financial, technical, or engineering resources” (Clearfield, Inc. 2022, 5). As a result, competitors may be able to sell competitive products at lower/discounted prices. Days inventory is high compared

to competitors, requiring more raised capital to be invested into the channel (Department, S. M.)

Opportunities: Governmental funds like Connect American Fund and Rural Digital Opportunity Fund are funds that were put into place to expand our country's broadband network, specifically in rural areas. These funds could encourage the spending of Clearfield's customers on projects that utilize their products. More and more activities are being done online every year including working from home and entertainment. Users of these activities strive for faster, more reliable, and even mobile internet which customers of Clearfield can provide. This will increase demand for certain products offered by Clearfield.

Threats: On the other side of governmental actions, certain reforms are scheduled in the coming years to eliminate subsidies that Clearfield's customers have traditionally relied on. Another threat is the intense competition in the industry that may reduce prices and lower gross profits (Clearfield, Inc. 2022, 18). Satellite internet, even though not popular or as reliable, could become a threat down the road.

The opportunities and threats of the SWOT analysis are not necessarily related to the firm but to the industry. Another common framework that is used to analyze an industry is Porter's Five Forces: Competition, barriers to entry/exit, power of suppliers, power of customers, and the threat of substitutes. These will be discussed further in the next section.

INDUSTRY CHARACTERISTICS

Clearfield, Inc. is in the telecommunications industry; more specifically, it operates in the telephone and telegraph apparatus industry (SIC 3661), where they design and manufacture equipment. The current state of the telecommunications industry is influenced by rapid technological changes, evolving industry standards, and new product and service introductions. For Clearfield to stay competitive they need to actively adapt and introduce new products as the industry's technological changes quickly evolve.

Clearfield is aware that many competitors have superior engineering and product development resources. They continue to invest resources in product development and the potential for third-party independent laboratory testing to obtain industry certifications (Clearfield, Inc. 2022, 5).

Porter's Five Forces

Competition in the industry: "The market for the fiber management, fiber protection, and fiber delivery products provided by the Clearfield segment is highly competitive" (Clearfield, Inc. 2022, 4). Competition in the telecommunications industry is based on numerous factors including price, product quality, ease of installation, product innovation and manufacturing capability. Clearfield has various competitors for different products. Some competitors are Corning Cabling Systems Inc, AFL Telecommunications, Nokia, Emerson Network Power, PPC Broadband Inc. and several smaller companies in various markets. Clearfield has stayed competitive and continues to innovate and patent new technologies.

Barriers to entry/exit: To be successful and competitive in the telecommunications industry, a firm needs to incur high research and development costs to keep up with the

technological advancements of competitors. The average R&D cost for Clearfield for the past three years was just over \$1 million per year, which is low for the industry. Product patents are necessary to be competitive in the industry. There are also high startup costs for any type of manufacturing, including telecommunication equipment. So, the entry barriers for the telecommunication industry are capital requirements, investment costs, and research and development costs.

Power of suppliers: Clearfield gets many critical components for manufacturing from single or limited-source suppliers (Clearfield, Inc. 2022, 10). This gives these limited suppliers more power against Clearfield than if multiple suppliers were available.

Power of customers: In the fiscal year 2022 Clearfield had one customer that comprised 14% of net sales; and in the previous two years they had two customers that comprised just about 30% of net sales (Clearfield, Inc. 2022, 5). High customer concentration represents exposure to market and other risks and could severely affect Clearfield if they were to find another firm to purchase goods. The power that is given to these customers with such a high percentage of net sales, could result in them seeking lower prices and better deals. Clearfield managed this risk by continuing to offer competitive products that others have not been able to replicate.

The threat of substitutes: Fiber is the emerging technology everyone is switching to. There are currently no good substitutes, but the telecommunication industry is always making technological advancements that could replace the current use of Fiber. Clearfield has had to make a business change, switching its name from APA Enterprises and manufacturing optoelectronic equipment to Clearfield Inc manufacturing

telecommunication equipment. So, if Fiber becomes obsolete and a business change was required to be sustainable, Clearfield could do what's needed to stay relevant.

To conclude Porter's five forces, the telecommunications industry has high competition, barriers to entry/exit, power of suppliers, and power of customers, and a low threat of substitutes. With this information Clearfield's potential for growth is expected to be average. Not all forces are in the same direction towards low or high industry profitability.

MARKET ANALYSIS

Customers

Clearfield breaks up its product customers into different categories: National Carrier (wireless/wireless national telco carries (tier 1)), Community Broadband (tier 2 and 3 telco carriers, utilities, municipalities, and alternative carriers), Multiple System Operators (cable television), and International (primarily Europe, Central/Latin American and Canada). They also have Legacy build-to-print copper and fiber assemblies (primarily contract manufacturing) (Clearfield, Inc. 2022, 3). The tiers are based on the size of the customer. An example of a tier 1 telco carrier is AT&T and tier 2 is Sprint. The future market growth of Clearfield's customers, the telecom services market, is expected to grow from 2023 to 2030 at about 6.3% per year. In 2022 the market size for global telecom services was valued at USD 1.81 trillion (Telecom Services Market Size... 2023).

Markets

Clearfield's primary markets for its products are FTTP, FTTB, FTT-Cell site, DAS, C-RAN, and build-to-print. FTTP – Fiber to the premise or Fiber to the home,

delivers directly to the user. FTTB – Fiber to the business, is for Multiple System Operators (cable television) and tier 1 telco carriers. FTT-Cell site – Fiber to the Cell site, wireless service providers enhance their bandwidth coverage. DAS – Distributed-antenna system, a network of spatially separated antenna nodes to provide wireless service within a geographic area. C-RAN – Centralized, cloud computing-based architecture for radio access networks. Build to print – Contract manufacturing services for original equipment manufacturers (Clearfield, Inc. 2022, 2).

Clearfield’s capital market consists of a loan and a security agreement with a bank that provides the firm with a \$40 million revolving line of credit that matures on April 27, 2025. The borrowed amounts will bear interest at a variable rate of the CME Group one-month term Secured Overnight Financing Rate plus 1.85%. As of September 30, 2022, the interest rate was 4.36%. As of the same date the Company has borrowed \$16,700,000. Being that Clearfield is a C Corporation, its ability obtain capital is easy but costly through a public offering. Clearfield believes that its current balances of cash and equivalents are enough to meet capital and investment requirements for a year and intends on using excess funds on a share repurchasing program that was put into place in 2014 but was suspended due to COVID-19 (Clearfield, Inc. 2022, 31).

PESTEL Framework

Political: The government can influence telecommunications providers by offering new funding programs or taking away others already in place. More funding for telecommunications will result in more use of products offered by Clearfield and the inverse if programs are discontinued.

Economical: Interest rates and inflation affect all markets and telecommunications is no exception. The high interest rates greatly affect the housing market and the reduce the number of new houses built. A decrease in the new houses would decrease the number of customers for the Fiber to the Home market.

Social: A lot of Communication nowadays is online, whether that be through Instagram, Snapchat, Twitter, Zoom or any other online media sites. These sites can only be accessed using the internet, which customers of Clearfield provide.

Technological: Technological advancements quickly changes the telecommunications industry. New technology can make products offered by telecommunication equipment manufacturers cheaper and more efficient. New technology also requires firms to spend a lot of time and money on research and development. Recently, new technology has created a different type of internet, satellite internet. Satellite internet would create a different market for rural areas where the traditional cable and Fiber internet cannot reach.

Environmental: The telecommunications industry is huge industry and is estimated to use 2% to 3% of the total power consumption of the world (Ramsay 2021). Finding ways to decrease power consumption or use renewable energy sources could appeal to potential customers that are actively looking for ways to better the environment.

Legal: There are few current legal factors, other than common regulations and licenses that telecommunication providers must follow, affecting the markets or industry.

Qualitative Analysis Summary

After looking at the qualitative aspects of Clearfield Inc. it appears that they are a stable firm with many growth and expansion opportunities. Clearfield's great executive team that has led the firm to many years of profitability despite the 2019 COVID pandemic. Clearfield is staying above the growth rate of the industry. Clearfield can maintain a competitive advantage by offering its customers products that simplify their work. To further analyze Clearfield, the next sections will discuss the quantitative characteristics of the firm. These will include earnings quality, a variety of ratios, and a look at the cash flows of both Clearfield Inc and Cambium Networks Corp.

QUALITY OF EARNINGS

Significant Note Disclosures

Before diving into the quantitative analysis of Clearfield an introduction of Cambium Networks Corp is needed. Cambium Networks is headquartered in Illinois, is also a manufacturer of telecommunication equipment, and has just over half the market cap of Clearfield.

Clearfield's investments have been classified as held-to-maturity and recorded at amortized cost. However, during the second quarter of fiscal 2022, the Company sold investments and reclassified them as available-for-sale, which is reported at fair value (Clearfield, Inc. 2022, 44).

Clearfield determines its allowance for doubtful accounts by considering the length of time trade receivables are past due, the Company's previous loss history, the customer's current ability to pay its obligations to the company, and the condition of the general economy and the industry as a whole. At the beginning of the fiscal year 2022,

Clearfield had an allowance for doubtful accounts of \$79,000 and had no adjustments throughout the year (Clearfield, Inc. 2022, 44). Cambium uses the loss-rate method for determining credit losses. This method uses rate-based historical losses adjusted for the same factors that Clearfield uses (Cambium Networks Corp, 2022, F-9).

Clearfield's inventories consist of finished goods, raw materials, and work-in-process and are stated at the lower of average cost or net realizable value. An inventory reserve is established for any identified excess, slow-moving, and obsolete inventory through a charge to the cost of sales. Cambium's inventory policy does not differ.

Clearfield's subsidiary, Nestor Cables, factors some accounts receivable that are accounted for as a secured borrowing. The total factoring liability as of September 30, 2022, was \$4,391,000 (Clearfield, Inc. 2022, 63).

External Auditor

Baker Tilly, LLP audited Clearfield Inc; they have served as the firm's external auditor since 2013. Baker Tilly is the tenth-largest accounting firm in the US (*The IPA 500 2023*). Baker Tilly gave an unqualified opinion. The consolidated financial statements present fairly, in all material respects, the financial position of the Company as of September 20, 2022. Also stated in the opinion, Clearfield maintained, in all material respects, effective internal control over financial reporting. Baker Tilly expressed a critical audit matter concerning with the acquisition of Nestor Cables; the fair value estimates for certain assets and liabilities involved significant estimation uncertainty.

KPMG LLP audits Cambium Networks Corp. They have served as the firm's external auditor since 2019, the first year it went public. Cambium Networks received an

unqualified opinion and maintained effective internal control. There was no critical audit matter. KPMG is one of the big four accounting firms in the US, so this gives greater assurance of high-quality earnings.

Earnings Quality Assessment

Table 2. Earnings Quality

Firm	Year	Cash flows from operations	Operating Income	Cash flows/Operating Income
2022				
Clearfield Inc		1,001,000	63,817,000	0.01569
Cambium		-3,054,000	19,880,000	-0.15362
2021				
Clearfield Inc		10,902,839	25,234,141	0.43207
Cambium		29,960,000	36,419,000	0.82264
2020				
Clearfield Inc		6,655,773	8,384,000	0.79387
Cambium		56,901,000	23,948,000	2.37602

Clearfield's recent year earnings quality assessment using cash flows from operations and operating income is poor. This poor assessment is mainly due to the large increases in both inventories and receivables. The growth rates for sales, accounts receivable, and inventory from fiscal 2021 to fiscal 2022 are 92%, 176%, and 199%, respectively. The growth increase of receivables and inventory above sales is alarming. This could mean that there is some management manipulation of these accounts. The mass increase in inventory could also result from increased labor and material costs and, hopefully, the need to hold more inventory in anticipation of more sales growth. Looking at previous years when sales growth was not so high, the ratio comes closer to one, which typically means better quality of earnings.

Cambium's earnings quality for the recent year is also poor, and just like Clearfield the difference between operating cash flows and operating income is mostly

due to the change in inventories. In the most recent year, sales decreased but both receivables and inventory increased. Even though this metric used to calculate earnings quality does not look good for both firms, the fact that top-level auditing firms audit both should be able to assure on the quality of the financial statements.

HISTORICAL FINANCIAL ANALYSIS

Financial Ratios

Table 3. Activity Ratios

Activity Ratios	Firm	2022	2021	2020	2019	2018
Accounts Receivable Turnover (times)	Clearfield	7.39	9.29	9.22	7.62	7.74
	Cambium	3.7	5.19	4.71	4.45	4.32
Days' Sales in Receivables (days)	Clearfield	72.47	50.61	42.3	40.38	60.64
	Cambium	110.52	76.57	77.38	80.93	91.93
Inventory Turnover (times)	Clearfield	2.88	3.8	4.71	5.49	5.04
	Cambium	3.34	5.17	3.68	3.75	4.89
Days' Sales in Inventory (days)	Clearfield	189.99	126.25	95.34	62.85	78.63
	Cambium	137.26	70.43	89.15	112	88.77
Accounts Payable Turnover (days)	Clearfield	21.82	27.05	30.72	37.85	34.29
	Cambium	9.98	11.37	9.90	10.92	11.46
Days' Payable Outstanding (days)	Clearfield	55.74	42.27	24.41	22.13	18.49
	Cambium	75.24	58.88	81	67.77	68.54
Total Asset Turnover (times)	Clearfield	1.53	1.27	1.05	1.09	1.08
	Cambium	1.18	1.53	1.47	1.7	1.83
Cash Conversion Cycle (days)	Clearfield	206.72	134.59	113.23	81.1	120.78
	Cambium	172.53	88.11	85.53	125.16	112.16

Data from FINSAS and own calculations

Clearfield excels over the benchmark, Cambium Networks, regarding accounts receivable turnover, days' sales in receivables, and in just the most recent year total asset turnover. An accounts receivable turnover of just about double the benchmark shows that

Clearfield can collect receivables from clients efficiently. Recently, Clearfield has become more efficient with its use of its assets and the inverse for Cambium.

Both Clearfield and Cambium seem to do poorly with their cash conversion cycles. According to [taulia.com](https://www.taulia.com), across all industries the median cash conversion cycle is between 30 and 45 days, manufacturing firms should expect a few more days (*Cash conversion cycle 2023*). Clearfield is way over the median cash conversion cycle time with the most recent year being about 207 days. This metric comes from the weakening days' sales in receivables, days' sales in inventory, and days' payable outstanding. To understand the long cash conversion cycle, we can examine accounting policies involving receivables and inventory. Having no interest on receivables allows customers not to feel the rush to make payments on their balances. The inventories policy does not indicate why the days' sales in inventory is large. It comes down to the large increase in ending inventory at fiscal year-end. An increasing days' payable outstanding could be both good and bad. It means that Clearfield can hold on to the cash and use it before needing to pay and it could mean that Clearfield is struggling to acquire enough cash to pay off balances.

Table 4. Liquidity Ratios

Liquidity and Debt Management Ratios	Firm	2022	2021	2020	2019	2018
Current Ratio	Clearfield	3.1	3.49	5.04	6.43	8.25
	Cambium	2.44	2.2	1.53	1.91	1.59
Acid Test	Clearfield	1.47	2.1	3.6	4.95	6.08
	Cambium	1.58	1.57	1.12	1.15	0.98
Cash Ratio	Clearfield	0.43	1.15	2.6	3.57	3.51
	Cambium	0.55	0.72	0.58	0.29	0.07
Working Capital (in thousands)	Clearfield	108,428	51,035	42,108	35,900	36,111
	Cambium	125,769	98,449	57,524	61,449	39,274
Debt-to-Equity	Clearfield	55.25%	21.27%	15.16%	9.28%	7.77%
	Cambium	85.36%	107.13%	224.60%	331.96%	-790.57%
Times-Interest-Earned	Clearfield	206.25	0	0	0	0
	Cambium	10.11	8.47	4.4	0.09	0.72

Data from FINSAS and own calculations

Looking at the top three liquidity ratios in the above table (current ratio, acid test, and cash ratio), Clearfield is becoming less liquid, and Cambium is becoming more liquid. For Clearfield, becoming less liquid makes sense as they work on a growth strategy. Therefore, all excess funds need to be put back into the Company. The inverse is for Cambium as come from a few years of losses and are trying to remain stable. Clearfield's working capital is like the benchmark, both being a positive number meaning that they have enough current assets to cover current liabilities. The current capital structure of Clearfield and the benchmark differ but appear to be moving closer to each other. Clearfield is working on growth and a leveraged firm can grow more quickly, whereas Cambium has a high debt ratio because of low to negative retained earnings amount. Even though Clearfield's moving towards a leveraged firm is good, it increases the risk of default. For Clearfield, the times-interest-earned ratio shows that the current default risk is low because they can cover interest many times. Clearfield has a plan in

place to repurchase stock and borrowed on the line of credit in the most recent year, causing the firm to become more leveraged. The firm has recently announced the possibility of a public offering to increase capital to grow. The specifics of the reasoning for capital have not been disclosed.

Table 5. Profitability Ratios

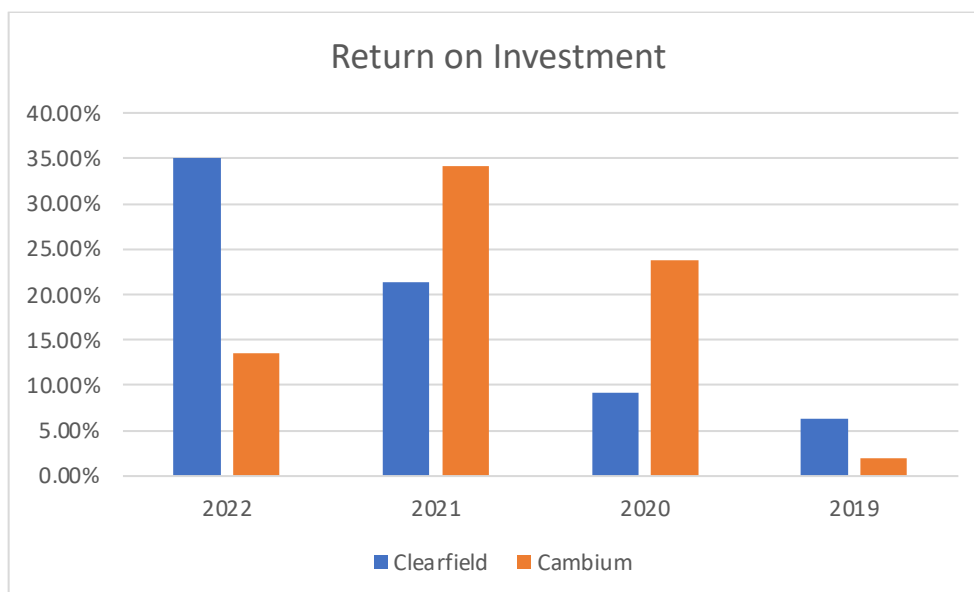
Profitability Ratios	Firm	2022	2021	2020	2019	2018
Gross Profit Margin	Clearfield	41.70%	43.46%	40.74%	38.44%	39.92%
	Cambium	48.89%	47.88%	50.06%	49.14%	47.77%
Operating Margin	Clearfield	23.56%	17.93%	9.01%	6.10%	6.53%
	Cambium	6.70%	10.84%	8.60%	0.49%	2.63%
Net Profit Margin	Clearfield	18.22%	14.44%	7.84%	5.37%	5.50%
	Cambium	6.80%	11.14%	6.67%	#N/A	#N/A
Return on Assets	Clearfield	27.81%	18.38%	8.23%	5.85%	5.95%
	Cambium	8.05%	17.09%	9.82%	#N/A	#N/A
Return on Equity	Clearfield	39.27%	21.79%	9.25%	6.35%	6.41%
	Cambium	15.69%	42.64%	35.96%	#N/A	#N/A
Return on Investment	Clearfield	35.07%	21.36%	9.11%	6.32%	#N/A
	Cambium	13.49%	34.18%	23.70%	2.01%	#N/A
Return on Capital Employed	Clearfield	35.97%	23.93%	9.88%	6.89%	7.32%
	Cambium	10.91%	24.26%	24.40%	1.24%	8.38%

Data from FINSAS and own calculations

Clearfield is not able to manufacture its products as cheaply as the benchmark, Cambium. Clearfield may be spending more on materials because of the high power of Clearfield's suppliers. Clearfield makes up for the more expensive cost of sales by being more cost-efficient than the benchmark regarding operating expenses. As mentioned earlier, when looking at total asset turnover and now when looking at return on assets, Clearfield can more efficiently manage assets to generate more profit per dollar of assets. Return on equity is a ratio that is hard to

compare because of a low or even negative equity value for Cambium that resulted from previous losses. Clearfield return on investment has steadily increased from year to year, the benchmark also showed increases in return on investment even greater than Clearfield's. However, there was a significant decrease in the most recent, as shown in the figure below.

Figure 1. Return on Investment Comparison



In the most recent year, Clearfield has a substantially higher return on capital employed (ROCE) than the benchmark. A high ROCE is a sign of a successful growth company (McClure 2022). The growth strategy that Clearfield is employing must be working successfully, as most profitability ratios in the above table are increasing and the rest are staying constant.

Table 6. Growth Rates

Growth Rates	Firm	2022	2021	2020	2019	Compound Growth Rate
Sales Growth	Clearfield	92.45%	51.23%	9.46%	9.51%	28.39%
	Cambium	-11.60%	20.61%	4.28%	10.45%	4.19%
Gross Profit Growth	Clearfield	84.62%	61.36%	15.98%	5.46%	29.51%
	Cambium	-9.74%	15.34%	6.23%	13.62%	4.68%
Operating Income Growth	Clearfield	152.90%	200.98%	61.60%	2.31%	65.95%
	Cambium	-45.41%	52.08%	1740.74%	-79.52%	25.64%

Data from FINSAS and own calculations

All three growth ratios of Clearfield surpass the benchmark by a sizeable amount, except for in 2020 when the benchmark went from a bad year in 2019 to in 2020. The sales growth rates align with the growth strategy that Clearfield is employing. The benchmark, Cambium Networks, is probably a good representation of the industry when it comes to growth. When using Porter's Five Forces framework, it was concluded that industry growth is expected to be average. Clearfield was able to go above the growth of the benchmark showing that they continue to be successful.

Statement of Cash Flows Summary

Table 7. Cash Flows Summary

Cash Flows (in 000's)	Firm	2022	2021	2020	2019	2018
Operating	Clearfield	1,001	10,902	6,656	14,733	4,548
	Cambium	-3,054	29,960	56,901	3,553	-10,395
Investing	Clearfield	-8,197	-13,599	-41	-12,962	-12,608
	Cambium	-9,245	-10,166	-5,400	-8,612	-7,500
Financing	Clearfield	10,655	-536	-247	-237	-1,928
	Cambium	1,245	-22,953	-8,368	20,022	15,066
Total Cash Flow	Clearfield	3,435*	-3,233	6,368	1,534	-9,988
	Cambium	-11,129*	-3,181*	43,126*	14,905*	-2,936*

*Figures include effect of exchange rate on cash

Data from statement of cash flows

In general, a positive cash flow is a good indicator that the Company is in a good position. Clearfield's two negative cash flows from the last five years were from 2018 and 2021. To justify the negative cash flow in 2018, Clearfield made a \$10 million acquisition with only a \$24 thousand issuance of common stock, and they repurchased \$1.8 million of stock. The 2021 negative cash flow was due to a large amount of investments purchased. In general, a negative investing cash flow is a good sign that the firm is investing in its future. Clearfield's cash flows don't seem too volatile, meaning that they are doing a good job of managing cash. A high cash inflow for a year is not always great for a company: they could use excess cash to invest in other opportunities. Having a high cash outflow for a year or consecutive years with outflows could mean the Company is not operating effectively or they are investing too much and will eventually run out of cash/capital. The benchmark cannot manage its cash flow as well as Clearfield; the past two years were negative and the year before that they had an extremely high inflow.

CONCLUSION

Integration

By looking at both qualitative and quantitative characteristics of Clearfield Inc, the firm appears to be a high-growth firm with the ability to maintain a competitive advantage in the telecommunication equipment industry. Clearfield has employed a growth strategy; they have had recent acquisitions along with expanding current manufacturing sites. The 2022 sales growth rate of 92.45% backs up this strategy, additionally, Clearfield has had a five-year compound sales growth rate of 28% compared

to the benchmark of 4%. Clearfield is also expecting more growth in the current fiscal year.

Completing the financial analysis resulted in two concerns, the deviation of operating cash flows from operating income and the long cash conversion cycle. Operating income that differs significantly from operating cash flows causes concern about poor quality of earnings/financial statements. The concern may be overstated because Clearfield is audited by a top 10 CPA firm in the US. The other concern, the long cash conversion cycle, is not currently a problem as Clearfield seems to be able to keep an adequate amount of cash, but if they do not find a way to decrease the cycle, it could become a problem in the future.

APPENDIX A: CLEARFIELD INC FINANCIAL STATEMENTS



Powered by Clearbit

Clearfield Inc (NMS: CLFD)

Exchange rate used is that of the Year End reported date

As Reported Annual Balance Sheet

Report Date	09/30/2022	09/30/2021	09/30/2020	09/30/2019	09/30/2018	09/30/2017
Currency	USD	USD	USD	USD	USD	USD
Audit Status	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified
Consolidated	Yes	No	No	No	No	No
Cash & cash equivalents	16650000	13216281	16449636	10081721	8547777	18536111
Short-term investments	5802000	10373831	10582527	13524270	8930225	5937150
Accounts receivable, gross	53783000	19517352	10785757	9407724	12900343	7316726
Less: allowance for doubtful accounts	79000	79473	289085	289085	79085	79085
Accounts receivable, net	53704000	19437879	10496672	9118639	12821258	7237641
Raw materials	66440000	23071833	12287134	7115298	6013166	5991863
Work-in-process	7294000	2481890	1033021	540962	560988	724248
Finished goods	10803000	3361576	2048514	1356720	3475981	1737456
Inventories, gross	84537000	28915299	15368669	-	-	-
Inventory reserve	2329000	1390988	960131	-	-	-
Inventories, net	82208000	27524311	14408538	9012980	10050135	8453567
Other current assets	1758000	953945	585436	769161	742136	978933
Total current assets	160122000	71506247	52522809	42506771	41091531	41143402
Manufacturing equipment	18418000	9178935	8171497	7106041	5202532	5370962
Office equipment	4174000	2901385	4281481	3996251	3809614	3600006
Leasehold improvements	5000000	2589777	2576861	2436346	2417786	2404331
Vehicles	340000	245903	245903	245903	226221	193702
Construction in progress	1715000	150343	19143	8921	-	-
Property, plant & equipment, gross	29647000	15066343	15294885	13793462	11656153	11569001
Less: accumulated depreciation	11418000	10068685	10184897	8380221	6911569	6134829
Property, plant & equipment, net	18229000	4997658	5109988	5413241	4744584	5434172
Long-term investments	22747000	36912777	25143000	23902000	17974000	19816000
Goodwill	6402000	4708511	4708511	4708511	4708511	2570511
Intangible assets, net	6376000	4696151	4829047	5147135	5482555	-
Right of use lease assets	13256000	2305413	2539100	-	-	-
Deferred taxes	-	365467	178118	-	-	-
Deferred tax asset	1414000	-	-	-	-	-
Other assets	582000	418976	266857	210905	227461	529952
Total other assets	50777000	49407295	37664633	33968551	28392527	22916463
Total assets	229128000	125911200	95297430	81888563	74228642	69494037
Current portion of lease liability	3385000	914565	665584	-	-	-
Accounts payable	24118000	9214782	3689587	3173599	2363380	1739791
Accrued compensation	13619000	8729293	4856885	3224860	2048904	2410026
Accrued expenses	6181000	1612833	1202753	208603	568507	93304
Factoring liability	4391000	-	-	-	-	-
Total current liabilities	51694000	20471473	10414809	6607062	4980791	4243121
Long-term debt, net	18666000	-	-	-	-	-
Long-term portion of lease liability	10412000	1615369	2129343	-	-	-
Deferred tax liability	774000	-	-	101690	104935	444076
Deferred rent	-	-	-	246424	268040	281720
Total other liabilities	-	-	2129343	348114	372975	725796
Total liabilities	81546000	22086842	12544152	6955176	5353766	4968917
Common stock	138000	137322	136500	136418	136466	138128
Additional paid-in capital	54539000	58245783	57502905	56976162	55483759	55406888
Accumulated other comprehensive income (loss)	-1898000	-	-	-	-	-
Retained earnings (accumulated deficit)	94803000	45441253	25113873	17820807	13254651	8980104
Total shareholders' equity (deficit)	147582000	103824358	82753278	74933387	68874876	64525120



Powered by Clearbit

Clearfield Inc (NMS: CLFD)

Exchange rate used is that of the Year End reported date

As Reported Annual Balance Sheet

Report Date	09/30/2022	09/30/2021	09/30/2020	09/30/2019	09/30/2018	09/30/2017
Currency	USD	USD	USD	USD	USD	USD
Audit Status	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified
Consolidated	Yes	No	No	No	No	No
Cash & cash equivalents	16650000	13216281	16449636	10081721	8547777	18536111
Short-term investments	5802000	10373831	10582527	13524270	8930225	5937150
Accounts receivable, gross	53783000	19517352	10785757	9407724	12900343	7316726
Less: allowance for doubtful accounts	79000	79473	289085	289085	79085	79085
Accounts receivable, net	53704000	19437879	10496672	9118639	12821258	7237641
Raw materials	66440000	23071833	12287134	7115298	6013166	5991863
Work-in-process	7294000	2481890	1033021	540962	560988	724248
Finished goods	10803000	3361576	2048514	1356720	3475981	1737456
Inventories, gross	84537000	28915299	15368669	-	-	-
Inventory reserve	2329000	1390988	960131	-	-	-
Inventories, net	82208000	27524311	14408538	9012980	10050135	8453567
Other current assets	1758000	953945	585436	769161	742136	978933
Total current assets	160122000	71506247	52522809	42506771	41091531	41143402
Manufacturing equipment	18418000	9178935	8171497	7106041	5202532	5370962
Office equipment	4174000	2901385	4281481	3996251	3809614	3600006
Leasehold improvements	5000000	2589777	2576861	2436346	2417786	2404331
Vehicles	340000	245903	245903	245903	226221	193702
Construction in progress	1715000	150343	19143	8921	-	-
Property, plant & equipment, gross	29647000	15066343	15294885	13793462	11656153	11569001
Less: accumulated depreciation	11418000	10068685	10184897	8380221	6911569	6134829
Property, plant & equipment, net	18229000	4997658	5109988	5413241	4744584	5434172
Long-term investments	22747000	36912777	25143000	23902000	17974000	19816000
Goodwill	6402000	4708511	4708511	4708511	4708511	2570511
Intangible assets, net	6376000	4696151	4829047	5147135	5482555	-
Right of use lease assets	13256000	2305413	2539100	-	-	-
Deferred taxes	-	365467	178118	-	-	-
Deferred tax asset	1414000	-	-	-	-	-
Other assets	582000	418976	266857	210905	227461	529952
Total other assets	50777000	49407295	37664633	33968551	28392527	22916463
Total assets	229128000	125911200	95297430	81888563	74228642	69494037
Current portion of lease liability	3385000	914565	665584	-	-	-
Accounts payable	24118000	9214782	3689587	3173599	2363380	1739791
Accrued compensation	13619000	8729293	4856885	3224860	2048904	2410026
Accrued expenses	6181000	1612833	1202753	208603	568507	93304
Factoring liability	4391000	-	-	-	-	-
Total current liabilities	51694000	20471473	10414809	6607062	4980791	4243121
Long-term debt, net	18666000	-	-	-	-	-
Long-term portion of lease liability	10412000	1615369	2129343	-	-	-
Deferred tax liability	774000	-	-	101690	104935	444076
Deferred rent	-	-	-	246424	268040	281720
Total other liabilities	-	-	2129343	348114	372975	725796
Total liabilities	81546000	22086842	12544152	6955176	5353766	4968917
Common stock	138000	137322	136500	136418	136466	138128
Additional paid-in capital	54539000	58245783	57502905	56976162	55483759	55406888
Accumulated other comprehensive income (loss)	-1898000	-	-	-	-	-
Retained earnings (accumulated deficit)	94803000	45441253	25113873	17820807	13254651	8980104
Total shareholders' equity (deficit)	147582000	103824358	82753278	74933387	68874876	64525120



Powered by Clearbit

Clearfield Inc (NMS: CLFD)

Exchange rate used is that of the Year End reported date

As Reported Annual Cash Flow

Report Date	09/30/2022	09/30/2021	09/30/2020	09/30/2019	09/30/2018	09/30/2017
Currency	USD	USD	USD	USD	USD	USD
Audit Status	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified
Consolidated	Yes	No	No	No	No	No
Net income (loss)	49362000	20327380	7293066	4566156	4274547	3847839
Depreciation & amortization	3413000	2301803	2421754	2178409	-	-
Depreciation & amortization	-	-	-	-	2047746	1622094
Impairment of long-lived assets	-	-	-	-	-	643604
Change in allowance for doubtful accounts	-	209612	-	210000	-	-
Deferred income taxes	-	-187349	-279808	-3245	-339141	32297
Amortization of discount on investments	-42000	-7326	-64327	-71652	-	-
Deferred taxes	-326000	-	-	-	-	-
Loss (gain) on disposal of assets	13000	-	5785	-	-17691	35281
Stock-based compensation	2339000	1280135	773555	1729025	2003207	2319975
Accounts receivable	-24234000	-9150819	-1378033	3492619	-5583617	761569
Inventories, net	-43744000	-13115773	-5395558	1037155	1183998	-80412
Other assets	-282000	-531201	127773	-10469	-	-
Prepaid expenses & other current assets	-	-	-	-	254501	-
Other current assets	-	-	-	-	-	180456
Accounts payable & accrued expenses	14502000	-	-	-	723990	-3064650
Accounts payable, accrued expenses & deferred rent	-	9776377	3151566	1604655	-	-
Net cash flows from operating activities	1001000	10902839	6655773	14732653	4547540	6298053
Purchases of property, plant & equipment & intangible assets	-9148000	-2046004	-1806198	-2511646	-	-
Purchases of property, plant & equipment	-	-	-	-	-1066284	-1951615
Purchases of investments	-248000	-24808755	-34056930	-20311393	-7283075	-17630075
Proceeds from sales & maturities of investments	17386000	-	-	-	-	-
Business acquisition, net of cash acquired	-16187000	-	-	-	-	-
Proceeds from sale of property & equipment	-	-	-	-	83052	5100
Patent additions	-	-	-	-	-123569	-69936
Sale of investments	-	13255000	35822000	9861000	6132000	8107000
Business acquisition	-	-	-	-	-10350000	-
Net cash flows from investing activities	-8197000	-13599759	-41128	-12962039	-12607876	-11539526
Borrowing on line of credit	16700000	-	-	-	-	-
Repurchase of common stock	-	-	-428654	-	-1760442	-3647314
Proceeds from issuance of common stock under employee stock	544000	383697	348776	313891	297860	334692
Repurchase of shares for payment of withholding taxes for vested	-1406000	-	-	-	-	-
Withholding related to exercise of stock options	-5183000	-	-	-	-	-
Proceeds from issuance of common stock upon exercise of stock	-	-458017	9564	2604	-	-
Proceeds from issuance of common stock	-	-	-	-	24012	28717
Tax withholding related to vesting of restricted stock grants & exercises	-	-462115	-176416	-553165	-489428	-952832
Net cash flows from financing activities	10655000	-536435	-246730	-236670	-1927998	-4236737
Effect of exchange rates on cash	-24000	-	-	-	-	-
Increase (decrease) in cash & cash equivalents	3434000	-3233355	6367915	1533944	-9988334	-9478210
Cash & cash equivalents at beginning of year	13216000	16449636	10081721	8547777	18536111	28014321
Cash & cash equivalents at end of year	16650000	13216281	16449636	10081721	8547777	18536111
Cash paid for interest	119000	-	-	-	-	-
Cash paid during the year for income taxes, net of refunds	13744000	5504985	1442079	1683113	719694	1471203

APPENDIX B: CAMBIUM NETWORKS FINANCIAL STATEMENTS

As Reported Annual Balance Sheet						
Report Date	12/31/2022	12/31/2021	12/31/2020	12/31/2019	12/31/2018	12/31/2017
Currency	USD	USD	USD	USD	USD	USD
Audit Status	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified
Consolidated	Yes	Yes	Yes	Yes	Yes	Yes
Scale	Thousands	Thousands	Thousands	Thousands	Thousands	Thousands
Cash	48162	59291	62472	19346	4441	7377
Trade accounts receivable	89758	69471	57657	58774	60235	52323
Other receivables	140	985	1376	434	657	79
Total receivables	89898	70456	59033	59208	60892	52402
Less: allowance for credit losses	577	683	919	580	503	823
Receivables, net	89321	69773	58114	58628	60389	51579
Finished goods	50052	31991	35241	42402	32702	23147
Raw materials	15010	7353	4576	4227	1958	1504
Gross inventory	65062	39344	39817	46629	34860	24651
Less: excess & obsolete provision	7994	5567	5855	4959	3950	2766
Inventories, net	57068	33777	33962	41670	30710	21885
Recoverable income taxes	117	860	1420	-	679	629
Prepaid expenses	11857	12170	4143	5323	3465	2838
Other current assets	6464	4718	5024	4350	5889	1318
Total current assets	212989	180589	165135	129317	105573	85626
Equipment & tooling	33026	29621	24367	22150	18552	13988
Computer equipment	4572	3835	3137	2888	2644	2114
Furniture & fixtures	809	844	745	749	666	389
Leasehold improvements	472	457	282	-	-	-
Total cost	38879	34757	28531	25787	21862	16491
Less: accumulated depreciation	27608	24267	20995	17473	13897	11270
Property & equipment, net	11271	10490	7535	8314	7965	5221
Software, net	8439	5867	3438	3395	3944	3972
Operating lease assets	4011	5899	5083	6872	-	-
Intangible assets, net	9173	10777	12895	15100	8493	12692
Goodwill	9842	9842	9842	8552	8060	8060
Deferred tax assets, net	12782	7604	1537	929	8022	6042
Other noncurrent assets	955	1200	288	-	-	-
Total assets	269462	232268	205753	172479	142057	121613
Accounts payable	31284	28241	30859	25214	23710	18475
Accrued goods & services	10633	12278	7937	8364	8174	5428
Accrued inventory purchases	3189	2218	4830	3094	5339	5509
Accrued customer rebates	13797	7355	7380	3569	4635	3543
Other accrued liabilities	423	97	13	7	115	594
Accrued liabilities	28042	21948	20160	15034	18263	15074
Employee compensation	7394	16601	14911	4652	4377	8505
Current portion of long-term external debt, net	3158	2489	29201	9454	8836	3934
Payable to Sponsor	-	-	-	-	5582	5018
Deferred revenues	8913	6880	6471	7430	2770	2891
Other current liabilities	8429	5981	6009	6084	2761	743
Total current liabilities	87220	82140	107611	67868	66299	54640
Term loan facility	28031	30000	55250	65250	95462	90000
Revolving credit facility	-	-	-	-	10000	-
Less debt issuance costs	-410	-546	-1092	-1638	-2443	-2623
Total debt	27621	29454	54158	63612	103019	87377
Less current portion of term facility	3281	2625	29747	10000	9500	4500
Current portion of debt issuance costs	123	136	546	546	664	566
Long-term external debt, net	24463	26965	24957	54158	94183	83443
Deferred revenues	8617	5363	4448	4852	1541	1356
Noncurrent operating lease liabilities	2170	4112	3332	5335	-	-
Deferred tax liabilities, net	-	-	9	337	-	-
Other noncurrent liabilities	1619	1551	2009	-	605	-
Total liabilities	124089	120131	142366	132550	162628	139439
Share capital	3	3	3	3	772	772
Additional paid in capital	138997	124117	109837	104773	-	-
Capital contribution	-	-	-	-	24651	24651
Treasury shares, at cost	4922	3906	1090	1094	-	-
Retained earnings (accumulated deficit)	12822	-7378	-44799	-63374	-45773	-43400
Accumulated other comprehensive income (loss)	-1527	-699	-564	-379	-221	151
Total shareholders' equity	145373	112137	63387	39929	-20571	-17826



Powered by Clearbit

Cambium Networks Corp (NMS: CMBM)

Exchange rate used is that of the Year End reported date



Powered by Clearbit

Cambium Networks Corp (NMS: CMBM)

Exchange rate used is that of the Year End reported date

As Reported Annual Income Statement

Report Date	12/31/2022	12/31/2021	12/31/2020	12/31/2019	12/31/2018	12/31/2017
Currency	USD	USD	USD	USD	USD	USD
Audit Status	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified
Consolidated	Yes	Yes	Yes	Yes	Yes	Yes
Scale	Thousands	Thousands	Thousands	Thousands	Thousands	Thousands
Revenues	296899	335854	278459	267028	241762	216671
Cost of revenues	151759	175058	139049	135799	126267	105960
Gross profit (loss)	145140	160796	139410	131229	115495	110711
Research & development expense	49865	47929	43188	47692	38917	32227
Sales & marketing expense	44452	40787	36784	46253	42658	37209
General & administrative expense	24982	29490	28851	30125	18804	17578
Depreciation & amortization	5961	6171	6639	5858	8765	8824
Total operating expenses	125260	124377	115462	129928	109144	95838
Operating income (loss)	19880	36419	23948	1301	6351	14873
Interest expense, net	1977	4269	5326	8076	8113	5018
Other expense, net	-	244	491	546	550	474
Other income (expense), net	114	-	-	-	-	-
Income before income taxes - United States	10269	10943	2648	4183	3544	3356
Income before income taxes - foreign	7748	-20963	15483	-11504	-5856	6025
Income (loss) before income taxes	18017	31906	18131	-7321	-2312	9381
Current U.S. federal income taxes	1174	268	-198	1078	200	379
Current state income taxes	847	-94	-181	643	129	40
Current foreign income taxes	985	376	1007	1157	735	1047
Current income taxes	3006	550	628	2878	1064	1466
Deferred U.S. federal income taxes	-3814	-1662	-664	380	107	3109
Deferred state income taxes (benefit)	-610	-147	-144	-6	-14	340
Deferred foreign income taxes	-765	-4256	-264	7028	-1956	-5333
Deferred income taxes	-5189	-6065	-1072	7402	-1863	-1884
Provision (benefit) for income taxes	-2183	-5515	-444	10280	-799	-418
Net income (loss)	20200	37421	18575	-17601	-1513	9799
Less: net income attributable to non-controlling interest	-	-	-	-	-	-671
Net income (loss) attributable to shareholders	-	-	-	-	-1513	9128
Weighted average shares outstanding - basic	26919.55	26421.087	25707.092	19741.764	77.179	77.179
Weighted average shares outstanding - diluted	28025.278	28628.136	26403.112	19741.764	77.179	77.179
Year end shares outstanding	27313.273	26735.175	26034.526	25672.983	77.179	77.179
Net earnings (loss) per share - basic	0.75	1.42	0.72	-0.89	-19.6	118.27
Net earnings (loss) per share - diluted	0.72	1.31	0.7	-0.89	-19.6	118.27
Number of full time employees	650	573	512	533	-	-
Total number of employees	-	-	-	-	516	-
Number of common stockholders	142	148	175	243	-	-
Foreign currency translation adjustments	-	-135	-372	-158	-	-



Powered by Clearbit

Cambium Networks Corp (NMS: CMBM)

Exchange rate used is that of the Year End reported date

As Reported Annual Cash Flow

Report Date	12/31/2022	12/31/2021	12/31/2020	12/31/2019	12/31/2018	12/31/2017
Currency	USD	USD	USD	USD	USD	USD
Audit Status	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified	Not Qualified
Consolidated	Yes	Yes	Yes	Yes	Yes	Yes
Scale	Thousands	Thousands	Thousands	Thousands	Thousands	Thousands
Net income (loss)	20200	37421	18575	-17601	-1513	9799
Depreciation	3913	3356	3685	3583	2836	2069
Amortization of software & intangible assets	3683	3621	3583	2784	6182	6802
Amortization of debt issuance costs	304	1130	546	1141	576	209
Share-based compensation	10680	7717	3436	17696	-	-
Deferred income taxes	-5189	-6065	-1072	7402	-1863	-1884
Provision for inventory excess & obsolescence	3743	11	1896	-	-	-
Other net income adjustments	-125	-207	540	311	952	201
Receivables	-12906	-11174	3165	622	-7395	-10723
Inventories	-27034	174	5696	-7634	-10009	586
Prepaid expenses	286	-8034	-	-	-	-
Accounts payable	2767	-2710	6097	2096	4261	4726
Accrued employee compensation	-8866	1885	11116	14	-4081	3012
Accrued liabilities	-427	2517	1495	-1296	1539	3380
Accrued sponsor interest & payables	-	-	-	-5457	564	5081
Other assets & liabilities	5917	318	-1857	-108	-2444	-257
Net cash flows from operating activities	-3054	29960	56901	3553	-10395	23001
Purchase of property & equipment	-4574	-6259	-3407	-3002	-5588	-3346
Purchase of software	-4671	-3907	-1659	-944	-1912	-2585
Cash paid for acquisitions	-	-	-334	-4666	-	-
Net cash flows from investing activities	-9245	-10166	-5400	-8612	-7500	-5931
Proceeds from issuance of term loan	-	29812	-	-	9962	120000
Proceeds from issuance of revolver debt	-	-	10000	-	10000	-
Repayment of term loan	-1969	-55250	-10000	-30212	-4500	-46553
Repayment of revolver debt	-	-	-10000	-10000	-	-19962
Payment of debt issuance costs	-	-1220	-	-336	-396	-2832
Proceeds from initial public offering, net of underwriters commissi	-	-	-	65988	-	-
Issuance of ordinary shares	-	1756	-	-	-	-
Issuance of ordinary shares under employee share purchase pla	1966	-	-	-	-	-
Payment of deferred offering costs	-	-	-	-4616	-	-
Proceeds received from share option exercises	2234	4807	1628	-	-	-
Taxes paid related to net share settlement of equity awards	-	-2816	4	-802	-	-
Taxes paid from shares withheld	-986	-	-	-	-	-
Payment to extinguish debt	-	-42	-	-	-	-
Return of capital to Sponsor	-	-	-	-	-	-65712
Distribution to noncontrolling interest	-	-	-	-	-	-9288
Net cash flows from financing activities	1245	-22953	-8368	20022	15066	-24347
Effect of exchange rate on cash	-75	-22	-7	-58	-107	27
Net increase (decrease) in cash	-11129	-3181	43126	14905	-2936	-7250
Cash, beginning of period	59291	62472	19346	4441	7377	14627
Cash, end of period	48162	59291	62472	19346	4441	7377
Income taxes paid	1349	779	2232	1702	1074	1490
Interest paid	807	2062	3998	6455	7614	1532

References

- Cash conversion cycle (cash cycle) definition/formula*. Taulia. (2023, January 9). Retrieved March 6, 2023, from <https://taulia.com/glossary/what-is-the-cash-conversion-cycle-ccc/>
- Cheri Beranek Clearfield, Inc. President and CEO*. Clearfield. (n.d.). Retrieved February 16, 2023, from <https://www.seeclearfield.com/about/cheri-beranek.html>
- Clearfield, Inc. (2022, September 30). *Form 10-K*. Retrieved from <http://www.sec.gov/edgar.shtml>.
- Clearfield, Inc. (2023, January 10). *Proxy Statement*. Retrieved from <http://www.sec.gov/edgar.shtml>.
- Daniel Herzog Chief Financial Officer*. Clearfield. (n.d.). Retrieved February 16, 2023, from <https://www.seeclearfield.com/about/daniel-herzog.html>
- Department, S. M. (n.d.). *Clearfield, Inc. SWOT analysis matrix (strengths, weakness, opportunities, threats)*. Fern Fort University. Retrieved March 1, 2023, from <http://fernfortuniversity.com/term-papers/swot/nyse/3427-clearfield--inc-.php>
- Google. (n.d.). *Clearfield Inc (CLFD) stock price & news*. Google Finance. Retrieved March 9, 2023, from https://www.google.com/finance/quote/CLFD:NASDAQ?sa=X&ved=2ahUKEwj848vPrM_9AhWxMjQIHSSBqwQ3ecFegQIKRAg&window=1Y
- Johnny Hill Chief Operating officer*. Clearfield. (n.d.). Retrieved February 16, 2023, from <https://www.seeclearfield.com/about/johnny-hill.html>
- McClure, B. (2022, December 19). *Spotting profitability with return on capital employed*. Investopedia. Retrieved March 8, 2023, from <https://www.investopedia.com/articles/stocks/05/010305.asp>
- Ramsay, D., & Taaffe, J. (2021, August 19). Home. Retrieved March 21, 2023, from <https://inform.tmforum.org/features-and-opinion/can-the-telecoms-industry-power-down-its-impact-on-the-environment/>
- Telecom Services Market Size & Growth Analysis Report, 2030. (n.d.). Retrieved February 15, 2023, from <https://www.grandviewresearch.com/industry-analysis/global-telecom-services-market>
- Wikimedia Foundation. (2022, January 16). *Clearfield, Inc*. Wikipedia. Retrieved February 16, 2023, from https://en.wikipedia.org/wiki/Clearfield,_Inc.