Alliance Fiber Optic Products, Inc.

NASDAQ: AFOP

Analyst: Kevin Akbaraly
Sector: Technology

BUY

Price Target: $23

Key Statistics as of 4/7/2015

Market Price:	$17.40
Industry:	Communications Equipment
Market Cap:	$309.7M
52-Week Range:	$10.75 - $22.60
Beta:	1.33

Thesis Points:

- The market is currently underestimating the growth prospect surrounding the fiber optics industry
- AFOP is well positioned to become a target company at a time of industry consolidation
- The company is currently undervalued compared to its peers

Company Description:

Alliance Fiber Optic Products, Inc. designs, manufactures, and markets various fiber optic components and integrated modules for communications equipment manufacturers and service providers in North America, Europe, and Asia. It provides connectivity products, including connectivity modules; optical connectors, adapters, and cable assemblies; fused and planar fiber optical splitters and couplers; optical tap couplers and ultra-low polarization dependent loss tap couplers; amplifier wave division multiplexers (WDM) couplers; optical fixed attenuators; fused fiber WDM couplers; and fiber array units. The company also offers optical passive products comprising filter WDMs, filter WDMs, dense wave division multiplexers (DWDMs), coarse wavelength division multiplexers, compact coarse wavelength division multiplexers, add/drop DWDM filters, optical isolators, optical bypass switches, and automatic variable optical attenuators. Alliance Fiber Optic Products, Inc. was founded in 1995 and is headquartered in Sunnyvale, California.

Thesis

Alliance Fiber Optic Products Inc. is a leading and innovative company within the fiber optics sub-industry. The firm has recently enjoyed high revenue growths and margins improvement over the past few years. The market is however underestimating the growth prospect surrounding the industry because of past concerns. Also M&A activities have increased over the past five years, and AFOP is well positioned to become a potential target company for future industry consolidation. Finally, the company is currently undervalued compared to its peers and investors can take advantage of current market price to enter into a long position. Therefore, a BUY is recommended on AFOP with a target price of $23, representing an upside potential of 33% based on current market price.

Underestimation of Growth Potential by the Market

AFOP manufactures and markets a broad range of high-performance fiber optic components, and integrated modules incorporating these components, for leading and emerging communications equipment manufacturers and service providers. The company focuses specifically on components that are used by Original Equipment Manufacturers (OEM) in the implementation of optical fibers around the world. Before the creation of the Internet, the data transferred on long distances were voice traffic for the most part but since the tech-bubble that arrived in the 1990s, the amount of data that needed to be transferred has constantly increased over time. Nowadays, people use smartphones, computers and other devices on a daily basis that provide users an increasing number of information instantly. Additionally, the apparition of "Cloud" services is also shaping the technology industry as people are now able to stock more and more data "online" rather than on physical devices such as internal hard-drives. The new way that people interact with their web-based applications and programs is referred to as Web 2.0 and is considered to be a driver for the future of the Internet. This trend shows that the tech industry is looking for a more and more connected community facilitating people and businesses' lives and efficiency. These data need to be transferred through a more a more complex network that use different components and devices that are generally not visible by the public but necessary for the transfer of information. Fiber optic and other new devices allow companies and individual users to transfer large amounts of electronic data in a very fast way, and the architecture of such a network is made of three different segments. First, "long-haul" networks allow the connection between cities around the world over very long distances. The amount of data treated in this process is phenomenal and in order to solve congestion problems, service providers have invested heavily in new resources using optical infrastructures over the past years. Currently, related companies are developing new technologies allowing the transport of data at a speed up to 400 GBps compared to the 50, 100 and 200 GBps devices used previously and Infinira recently declared to be working on project along with Facebook with a capacity of 8 Terra per second. Secondly, "Metropolitan" networks connect "long-haul" networks to "last-mile" access networks, which represent the end user community. Due to the increase in data traffic and demand for enhanced services, service providers have also heavily invested in optical infrastructures in order to reduce capacity constraints and increase access efficiency. Thirdly, "last-mile" access networks connect "metropolitan" networks to commercial and individual end users via their respective service providers. Traditional access providers use existing copper wire-based infrastructures that are very slow compared to high-speed networks provided through optical technology. Following the demand for increased speed and network reliance, service providers have began to deploy fiber technologies in order to provide high bandwidth connectivity to end users as well. Finally, "Enterprise" networks represent local networks serving the business community connecting office buildings but also the increasing need of efficient datacenters.

Prior to 2004, different companies have started to build-up their inventories in anticipation of high growth in the deployment of optical infrastructures. However, by 2004, these companies have realized that this expected growth turned to be over estimated at this time, which led to an overcapacity in terms of available components. Indeed, service providers have been challenged due to high costs needed for the deployment of this network at a time of increased competition and price war to gain market share. As a result, this failure has raised skepticism among industry players and investors who are now more cautious regarding optical infrastructures. On the other hand, when looking at investments made over the last

decade we can see that as of today, 42.5% of commercial and individual buildings are now connected through optical infrastructures versus 10.9% only in 2004 in the U.S, representing a compounded annual growth rate of 15% over the period. A similar trend is also presented in Europe, and an even higher growth in Asia. During Q4 2014 only, investments made have increased by 27% around Asia, the fastest growth since 2000. Service providers are now focusing more and more on the quality of services provided compared to the early 2000, and can enjoy lower costs related to the deployment of their new networks. Investments in servers, networks and infrastructures related to Web 2.0 deployment is expected to top $50 billion in 2015 compared to $38 billion in 2014 and $30 billion in 2013, representing a 31.6% and 26.7% YoY growth respectively. A recent study estimates that the market of components used for optical infrastructures will reach $3.3 billion by 2020 compared to $1 billion in 2015, representing a CAGR of 27% over the next five years. Due to the early anticipation that happened prior to 2004, the market is therefore underestimating the growth prospect of the optical component market because of raised concerns that occurred in the past. However, the trend is showing an acceleration over the last decade, which is estimated to continue in the future.

Fiber optic components are divided into two different categories that are called active and passive. Active components use power and electrical signals to create, modulate and amplify optical signals. Passive components connect, guide, mix, filter, route, adjust and stabilize optical signals transmitted via active components. Alliance Fiber Optic Products focuses solely on passive and connectivity products that are used for the proper utilization of active components. The company's expertize allows AFOP to provide a broad range of products that help service providers improve the treatment and efficiency of data transmissions even further. Through the researches made by AFOP's 76 engineers based in the United Stated, Taiwan and China, the company engages in the development of new products in respect with future technologies and market trends in order to offer its customers the highest-quality products that are available on the market. As of December 31, 2014, the company had 69 issued patents and 18 pending ones within the U.S. as well as 13 foreign patents expiring between December 2015 and December 2031. AFOP has integrated the manufacturing process of its technology, allowing it to protect its "know-how" from competitors even when intellectual property rights do not protect related products. The manufacturer is therefore a step ahead as it focuses on tomorrow's technology, which can be highly valued by its customers in the future and therefore help the company be in line or exceed expected growth in coming years.

Focus on Customer Portfolio

As of December 31, 2014, Alliance Fiber Optic Products had more than 200 customers around the globe. The company's portfolio of customer is broad and accounts different types of categories. AFOP serves large tech companies dealing with their networks deployment by themselves such as Google, but also OEMs that use AFOP's products in the manufacturing process of their own products. Thanks to its broad range of products and specialization, the company could potentially deal with any third-party involved in optical infrastructures. However, the company stated in its 2014 annual report that only one customers accounted for 39.6% and 35.3% of company's revenues in 2014 and 2013 respectively and that the top 10 customers represented 70% of company's revenues in 2014. This factor increases risks associated with the dependence on a single customer, which in turn could lead to lower revenues if the client reduces or cuts its investments in the future. AFOP does not provide the name of its customers but rumors and management discussions have confirmed that Google might be this client. Google is one of the big players among service providers wanting to offer online services using fiber optics to end-users. Google has also recently spent $600 million in the development of its new datacenter in Oregon that is twice the size of its data center located within the Columbia River George community, and is currently considering its expansion into Atlanta and Taiwan. This trend is being followed by other tech giants that are increasing their spending into new networks and datacenters around the world. Facebook has recently granted a contract to Infinera for the development of its new long-haul network in Europe, which consists of a 4,000 km network. Apple has announced a $2 billion investment into green datacenters located in Ireland and Denmark, Amazon has stated its intention to replace its enterprise datacenter and Microsoft is currently working on a $750 million project in Wyoming. As stated by the CEO in AFOP's last company's presentation, the company does not need to deal directly with these tech companies to get involved in these projects. Indeed, as the component manufacturer receives 70% of its revenues from

connectivity devices, it can potentially get involved by providing its products to OEMs in charge of related projects. The sub-industry is still considered fragmented, and it is common for different competitors to use others' components to provide finished devices. As a result, AFOP is currently focusing on increasing its number of clients in order to reduce risks associated with customer dependency, and the current macro trend should help AFOP diversify its portfolio in coming years.

Industry Consolidation

AFOP has constantly integrated its manufacturing process in an efficient way through its operations in the U.S., Europe and Asia, allowing the company to enjoy higher operating margins relative to its peers. However, the Communication Equipment sub-industry in which the company operates is still considered highly fragmented due to the fast changing technologies that are developed by key players. As it has been stated above, competitors are often specializing into specific components, which lead competitors to be direct customers of one another at the same time. Recently, the sub-industry has seen important M&A activities that have led to strategic moves in a more and more competitive environment. Molex Inc. has acquired an equipment division from Motorola, but also Luxtera Inc. and Westec srl over the past five years. Molex has then been acquired by Koch Industries Inc. in 2013 allowing the company to gain in economy of scale and expand vertically its operations. Also, CommScope Holding Co. has acquired TE Connectivity Ltd in January 2015. AFOP's management team has continuously stated that they would be willing to acquire potential targets that would increase their competitive advantage in the future by using company's current high liquidity. M&A activities are expected to be an important driver in coming years, and could see an acceleration following the current macroeconomic environment. AFOP enjoys high margins relative to its peers by focusing only on passive components, and has been awarded by Forbes as one of the Best-Small Company three years in a row, and most recently as the Most Trustworthy Company. The CEO stated that AFOP does not see any major threat following past mergers and acquisitions made by its peers thanks to the company's product portfolio, but the integration of AFOP into a major peer's operation could lead to important competitive advantages for the acquirer. As a result, AFOP is well positioned to become a potential target for either direct competitors or even giant tech companies such as Google. Therefore, any potential bid could help the company's stock price to rise.

Undervalued Relative to Peers

Alliance Fiber Optic Products had a gross margin of 39.8% in 2014 compared to an average of 39% for its peers, an increase from 38.3% in 2013 and 34.3% in 2012. EBITDA margin was 28.4% in 2014 compared to an average of 9.5% for peers, an increase from 25.3% in 2013 and 15.7% in 2012. These results show that AFOP has been very efficient at increasing its margins over the past years while competitors have struggled to maintain their own. The company has also enjoyed higher growth in revenues compared to competitors over the last year with 13.0% versus 1.9%. ROE equals 20.4% for AFOP compared to 2.7% for peers, and ROA is 16.6% versus 2.5%.

AFOP is currently trading at 14.9 times its earnings compared to 37.1x for competitors while forward P/E is 15.4x compared to 24.5x. Trailing EV/EBITDA is only 10.4x compared to 20.4x for peers while forward EV/EBITDA is 9.7x compared to 12.8x. Finally, P/FCF is currently at 16.9x while competitors are traded at 41.8x. These results show that AFOP is currently trading at a discount compared to its competitors, even though the company has enjoyed higher margins and revenue growth over the last years. On April 2, 2015, the CEO and Sales and Marketing Executive have increased their ownership in the company with a total of 302,000 shares. This is the first insider transaction since May 2014 and could potentially gives a positive signal to investors. A valuation of AFOP has been made using a proforma that is presented on the last page on this report, resulting in a 1-year target price of $23. As a result, I believe that investors could benefit from current market price to enter into a long position with a target price representing an upside potential of 33% based on current price.

Management

Peter Chang is the founder, CEO, Chairman, and President of Alliance Fiber Optic Products. Mr Chang has now more than 15 years of experience in the fiber optics industry with 40 patents to his name. Prior to AFOP, Mr. Chang spent five years at Hon Hai Foxxcon Group in Taiwan as a Division manager, where he established and managed the company's fiber optics division. He was also engineer at Allied Signal and a Member of the Technology Staff at Lucent Bell Labs. Mr. Chang has a BS degree in mechanical engineering from National Taiwan University and a M.A. in Mechanical Engineering from the University of Notre Dame.

Anita K. Ho has been an Acting Chief Financial Officer at Alliance Fiber Optic Products Inc. since July 2002 and serves as its Principal Accounting Officer. Ms. Ho served as a Corporate Controller of Alliance Fiber Optic Products Inc. from October 2000 to July 2007. She served as a Finance Manager at 3Com Corporation from 1998 to 2000. Ms. Ho was a member of the Finance Staff at 3Com Corporation from 1995 to 1998. She holds a BS. in Accounting from Soochow University in Taipei, Taiwan.

David Hubbard is currently the Executive President of Sales and Marketing. Mr. Hubbard is considered as a seasoned veteran of the fiber industry. He joined AFOP in 1996 from Tracor and AEL Industries, where he served as Director of Marketing and Business Development. Prior to that, he spent nearly 10 years at AMP Inc. (now owned by Tyco International) directing the business office for the LYTEL fiber transceiver division. Mr. Hubbard earned his BS degree in physics from State University of New York and holds an MS degree in physics from the University of Connecticut.

Conclusion

Alliance Fiber Optic Products has enjoyed high revenue growth and increased margins over the past years. The macroeconomic trend is showing that key players have started to increase their spending into new infrastructure and networks, which in turn will drive the growth of the fiber optics sub-industry. The market is currently underestimating the growth potential surrounding components manufacturer within this sub-industry, giving investors an interesting opportunity at current level. The company is also focusing on its customers' portfolio, which in turn could decreases risks associated with single clients dependency. The fiber optic sub-industry has recently seen increasing M&A activities due to a fragmented environment. AFOP is well positioned to become a potential target during this consolidation process, which in turn could help the company's stock price to rise. Finally, AFOP is currently traded at a discount compared to its competitors even though the company has been showing higher revenue growths and margins over the last years. As a result, a BUY is recommended on AFOP with a target price of $23 representing an upside potential of 33% based on current market price.

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Alliance Fiber Optic Products Inc.	AFOP	Analyst: Kevin Akbaraly	Current Price: $17.40	Intrinsic Value: $21.16	Target Value: $23.02	Divident Yield: 1%	Target Return: 1-y Return: 33.07%	BULLISH

General Info

Sector	Information Technology
Industry	Communications Equipment
Last Guidance	Feb-04-2015
Next earnings date	4/22/2015

Market Data

Enterprise value	$255.45
Market Capitalization	$310.05
Daily volume	0.31
Shares outstanding	17.82
Diluted shares outstanding	18.94
% shares held by institutions	37.54%
% shares held by insiders	7.10%
Short interest	5.44%
Days to cover short interest	5.55
52 week high	$22.60
52-week low	$10.75
5y Beta	1.46
6-month volatility	44.06%

Peers

Market Cap.

Current Capital Structure

Total debt/market cap	0.00%
Cost of Borrowing	-
Interest Coverage	1076.60%
Altman Z	10.77
Debt Rating	AAA
Levered Beta	1.27
WACC (based on market value weights)	8.98%

Past Earning Surprises

	Revenue	EBITDA	Norm. EPS
Last Quarter	-2.6%	-4.8%	4.2%
Last Quarter-1	-25.8%	-30.8%	-25.0%
Last Quarter -2	-3.9%	-1.5%	9.7%
Last Quarter -3	0.3%	0.0%	13.3%
Last Quarter -4	Chang, Peter	0.0%	39169000.0%

Management

Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014
Chang, Peter	Chairman, Chief Executive Offic	$ 391,690.00	$ 1,662,228.00	$ -
Ho, Anita	Acting Chief Financial Officer an	$ 154,505.00	$ 211,279.00	$ -
Hubbard, David	Executive Vice President of Sales	$ 223,890.00	$ 847,018.00	$ -
Li, Yao	0	$ -	$ -	$ -

10y-Median Performance

	AFOP	Peers	Industry	All U.S. firms
Growth	16.0%		9.8%	7.4%
ROIC	20.2%		13.5%	14.3%
NOPLAT Margin	15.0%		10.8%	10.4%
REV./Invested Capital	134.7%		124.6%	137.4%
Excess Cash/Rev.	94.2%		13.5%	12.9%
Total Cash /Rev.	94.2%		12.3%	15.2%
Unlevered Beta	1.48		1.25	0.95
TEV/REV	1.4x		2.2x	2.5x
TEV/EBITA	8.0x		11.9x	13.1x
PE	15.2x		27.2x	23.5x
P/BV	1.4x		1.7x	2.2x

Non-GAAP Adjustments in estimates computations

Operating Leases Capitalization	100%	Straightline	10 years
R&D Exp. Capitalization	100%	Straightline	10 years
Expl./Drilling Exp. Capitalization	0%	N/A	N/A
SG&A Capitalization	0%	N/A	N/A

Proforma Assumptions

	Hubbard, David	$ -	$ 223,890.00	Adj. Op. Cost/Rev
Money market rate as of today	Li, Yao	LTM	0.0%	69.1%
Annual increase (decrease) in interest rates	0.0%	NTM	5.7%	69.0%
Yield Spread accelaration	1.2	NTM+1	14.5%	68.0%
Marginal Tax Rate	16.0%	NTM+2	15.0%	67.5%
Risk-Free rate	2.6%	NTM+3	15.0%	67.0%
Tobin's Q	1.00	NTM+4	15.0%	66.5%
Op. Cash/Rev.	2%	NTM+5	15.0%	66.0%
Growth in PPE	NPPE Growth tapers to zero until continuing period	NTM+6	12.0%	65.5%
Long term Growth	5.0%	NTM+7	10.0%	65.0%
Long term EBITDA Margin	30.0%	NTM+8	8.0%	65.0%
Long term NOPLAT Margin	25.5%			
Long term ROIC	15.0%			
Most recent Unlevered Beta	1.50			
Long term Unlevered Beta	1.25			

Forecast

	Invested Capital	NOPLAT Margin	ROIC	WACC
LTM	$50.06	25%	43.7%	9.0%
NTM	$54.95	29%	52.9%	9.1%
NTM+1	$60.00	29%	55.4%	9.2%
NTM+2	$65.56	29%	58.7%	9.3%
NTM+3	$71.31	30%	62.4%	9.4%
NTM+4	$77.08	30%	66.9%	9.5%
NTM+5	$82.79	31%	72.1%	9.6%
NTM+6	$88.24	31%	76.3%	9.7%
NTM+7	$93.29	31%	79.8%	9.8%
NTM+8	$97.79	31%	81.6%	9.9%

Valuation

	Invested Capital x (ROIC-WACC)	Enterprise Value (UFCF Valuation only	Total Debt	Other claims	Equity Value	UDCF Valuation	Relative Valuation	Weighted Price Per Share
LTM	$17.41	$377.35	$0.00	-$47.50	$424.85	$24.29	$13.92	$21.70
NTM	$24.09	$392.31	$0.00	-$61.27	$453.58	$25.95	$15.91	$23.44
NTM+1	$27.73	$401.02	$0.00	-$79.73	$480.75	$27.40	$18.96	$25.29
NTM+2	$32.40	$406.74	$0.00	-$101.15	$507.89	$28.91	$22.50	$27.31
NTM+3	$37.82	$407.60	$0.00	-$126.74	$534.33	$30.38	$26.63	$29.44
NTM+4	$44.23	$402.06	$0.00	-$157.42	$559.48	$31.84	$31.48	$31.75
NTM+5	$51.79	$388.27	$0.00	-$194.20	$582.48	$33.01	$37.17	$34.05
NTM+6	$58.79	$363.86	$0.00	-$239.71	$603.57	$34.08	$43.12	$36.34
NTM+7	$65.36	$328.24	$0.00	-$289.16	$617.41	$34.79	$49.13	$38.38
NTM+8	$169.91	$280.60	$0.00	-$346.09	$626.69	$35.17	$54.97	$40.12

Monte Carlo Simulation Assumptions

	Base	Stdev	Min	Max	Distribution
Revenue Variation	**0**	**10%**	**N/A**	**N/A**	**Normal**
Op. Costs Variation	**0**	**10%**	**N/A**	**N/A**	**Normal**
Country Risk Premium	**5%**	**N/A**	**5%**	**7%**	**Triangular**
Long term Growth	**5%**	**N/A**			**Triangular**

Monte Carlo Simulation Results

	Intrinsic Value	1y-Target
Mean est.	$21.70	$23.44
σ(ε)	$0.18	$0.14
3 σ(ε) adjusted price	$21.16	$23.02
Current Price	$17.40	
Analysts' median est.		$18.92