IPG Photonics Corp (IPGP)

$141.82 (As of 01/03/20)

Price Target (6-12 Months): **$120.00**

Long Term: 6-12 Months	**Zacks Recommendation:** (Since: 11/04/19) Prior Recommendation: Neutral	**Underperform**
Short Term: 1-3 Months	**Zacks Rank:** (1-5)	**5-Strong Sell**
	Zacks Style Scores:	VGM:F
	Value: F | Growth: F	Momentum: B

Summary

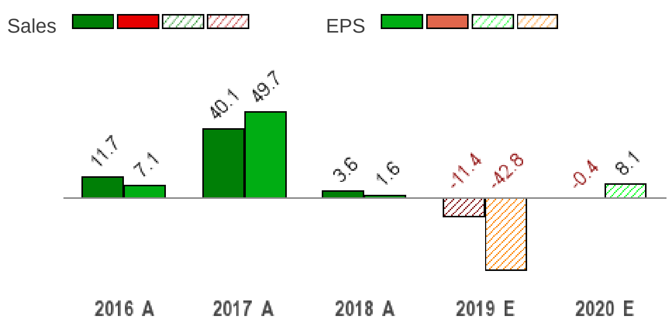
IPG Photonics is bearing the brunt of uncertain macroeconomic environment and geopolitical factors. Foreign exchange currency fluctuations, and tariffs and trade associated challenges in China and Europe has been weighing on revenues. Further, exposure to the materials processing markets and customer concentration are major headwinds. Weakness in additive manufacturing, metal cutting and 3D printing applications remain deterrents. Decline in ASPs also remains a concern. Higher manufacturing cost and increasing investments are likely to put margins under pressure. Notably, shares of the company have underperformed the industry in the past year. However, momentum in 10 kilowatt and 6 kilowatt ultra-high power CW lasers holds promise. Further, synergies from Genesis buyout and growth in system sales applications bode well, in the days ahead.

Price, Consensus & Surprise

Data Overview

52 Week High-Low	**$182.17 - $113.67**
20 Day Average Volume (sh)	**325,654**
Market Cap	**$7.5 B**
YTD Price Change	**-2.1%**
Beta	**2.17**
Dividend / Div Yld	**$0.00 / 0.0%**
Industry	**Lasers Systems and Components**
Zacks Industry Rank	**Top 13% (34 out of 252)**
Last EPS Surprise	**-9.2%**
Last Sales Surprise	**-2.5%**
EPS F1 Est- 4 week change	**-2.0%**
Expected Report Date	**02/11/2020**
Earnings ESP	**-5.7%**
P/E TTM	**28.8**
P/E F1	**31.2**
PEG F1	**4.0**
P/S TTM	**5.6**

Sales and EPS Growth Rates (Y/Y %)



Sales Estimates (millions of $)

	Q1	Q2	Q3	Q4	Annual*
2020	284 E	332 E	347 E	326 E	1,289 E
2019	315 A	364 A	329 A	286 E	1,294 E
2018	360 A	414 A	356 A	330 A	1,460 A

EPS Estimates

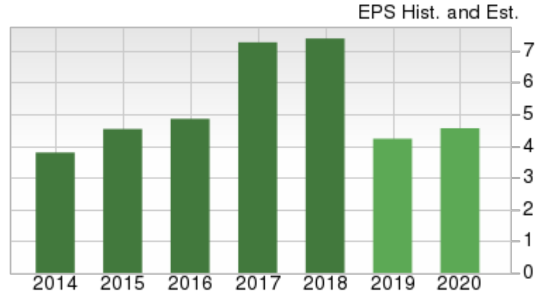
	Q1	Q2	Q3	Q4	Annual*
2020	$0.85 E	$1.16 E	$1.23 E	$1.11 E	$4.56 E
2019	$1.02 A	$1.42 A	$1.08 A	$0.80 A	$4.22 E
2018	$1.93 A	$2.24 A	$1.87 A	$1.40 A	$7.38 A

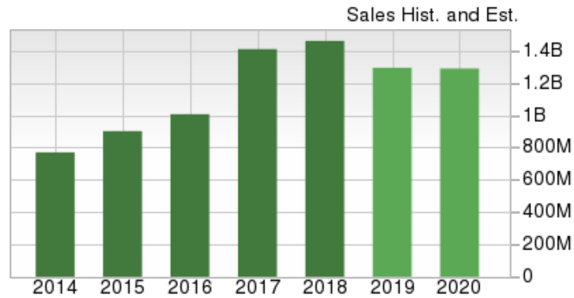
*Quarterly figures may not add up to annual.

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 01/03/2020. The reports text is as of 01/06/2020.

Overview

Oxford, MA-based IPG Photonics Corp develops and manufactures fiber & diode lasers, fiber amplifiers and transceivers that are used for diverse applications, like materials processing, advanced applications, communications and medical.





IPG's laser products include low (1 to 99 watts), medium (100 to 999 watts) and high (1,000 watts and above) output power lasers from 0.3 to 4.5 microns in wavelength.

These lasers may be continuous wave (CW), quasi-continuous wave (QCW) or pulsed. The company's pulsed line includes nanosecond, picosecond and femtosecond lasers.

The company offers several different types of lasers according to the type of gain medium they use. These are ytterbium, erbium and thulium, as well as Raman and hybrid fiber-crystal lasers.

IPG's amplifier products range from milliwatts to up to 1,500 watts of output power from 1 to 2 microns in wavelength.

The company offers erbium-doped fiber amplifiers (EDFAs), Raman amplifiers, ytterbium & thulium specialty fiber amplifiers and broadband light sources.

Moreover, its transceivers provide interconnect, coarse wavelength division multiplexing (CWDM), DWDM, and tunable-based pluggable interfaces to serve optical transmission needs from 100 meters over multimode fiber to over 1,200 kilometers. The company added this product portfolio through the acquisition of Menara Networks.

IPG reported total revenues of $1.46 billion in 2018, up 3.6% over 2017 tally.

Geographically, North America, China, Germany and Japan contributed 13.9%, 43.1%, 7.6% and 6%, respectively to 2018 revenues.

Meanwhile, Eastern Europe/CIS, Other Asia and Australia, and Rest of the World accounted for 20.3%, 8.7% and 0.4%, respectively to revenues.

The company faces competition from the likes of Coherent, nLight, Maxphotonics, Raycus Fiber Laser Technologies, and Lumentum Holdings among others.

Reasons To Sell:

- IPG's significant exposure to the materials processing markets is a key headwind. Revenues from material processing offerings accounted for 94.1% of total 2018 revenues. Any downturn in this market will significantly impact top-line growth. Additionally, the company faces customer concentration risk in terms of geographic location. In 2018, 43.1% of the company's sales were derived from China and 20.3% of revenues were derived from Other including Eastern Europe/CIS. Moreover, five largest customers accounted for approximately 26% of net sales in 2018, which is a substantial risk in our view. Loss of any of these major customers can hurt top-line growth, which is a concern in our view.

IPG's significant exposure to the materials processing markets, dependency on few customers and substantial China exposure are likely to negatively impact financial performance.

- Moreover, the company generates a significant portion of its revenues (86.1% in 2018) from the International market. Hence, we anticipate adverse foreign currency exchange rates to impede revenue growth in the near term owing to fluctuation in the U.S. dollar as against the Chinese renminbi, Russian Ruble, the Euro and other foreign currencies.

- Further, we expect gross margin to contract going forward. Although gross margin has expanded in the last couple of years, we believe that unfavorable product mix – due to increasing percentage of lower margin high-power lasers – will hurt gross margin. Further, being a vertically integrated company – fixed costs – particularly related to direct labor is significantly high for IPG. This is a major headwind as the company may not be able to maneuver this fixed cost in case of a revenue shortfall.

- Moreover, the company is trading at premium in terms of Price/Sales (P/S). IPG Photonics currently has a trailing 12-month P/S ratio of 5.68. This level compares unfavorably with what the industry witnessed in the last year. Additionally, the ratio is higher than the average level of 5.50 and is near the high end of the valuation range in this period. Consequently, the valuation looks slightly stretched from P/S perspective.

Risks

- IPG is regarded as the pioneer and leader of the fiber lasers technology market. The company has a dominant position in the core material processing market on the back of its expertise in handling fiber lasers, which are more reliable, efficient, robust, compact and easier to operate than conventional lasers. Improvements in their output power levels and cost, as well as superior performance and lower cost of ownership have been driving the adoption of fiber-lasers. Management noted that use of high-strength steel and aluminum in automotive manufacturing and decreasing the weight of vehicles are driving the use of fiber lasers over other manufacturing methods such as stamping, non-laser welding, riveting and adhesives. Other trends, such as miniaturization of parts and electronics are driving adoption of lasers because no other tools can work as precisely. We believe that growing usage of fiber laser bodes well for IPG in the long run. Moreover, the company's strong IP base, which includes more than 350 patents issued and over 430 pending patent applications worldwide (as of Dec 31, 2018), is a key catalyst.

- IPG's vertically integrated business model is a key differentiator, in our view. This not only helps it to maintain technological lead but also keep costs of production significantly lower as evident from gross margin expansion over the three years. This has also aided the company to continue investments on product development. We also note that its research & development (R&D) expense in 2018 surged 21.7% over 2017. Despite this incremental investment, the company posts industry-leading operating margin. In the long term management forecasts gross margin in the range of 50–55% and operating margin in the range of 32–37% and aims to deliver double-digit revenue growth.

- Further, acquisitions have helped the company to expand its product portfolio. In November 2018, the company inked a deal to acquire privately held Genesis Systems Group (Genesis). The acquisition will help IPG to evolve as a provider of welding solutions and strategic partner to end customers. Notably, Genesis contributed $20 million in total revenues in third-quarter 2019. In 2016, the company acquired Menara Networks, which helped in expanding telecom product offering to include pluggable optical transceivers. The acquisitions of Innovative Laser Technologies (ILT) and OptiGrate Corp are positive. ILT offers precision laser systems, with a focus on the medical device industry. IPG management believes that the acquisition will strengthen presence in the medical vertical, simultaneously expanding ILT's addressable market into other verticals that require precision laser solutions. OptiGrate is a manufacturer of volume Bragg grating (VBG)-based filters and components. Bragg gratings are key components in all fiber lasers. OptiGrate's products enable performance improvement, miniaturization, and cost reduction of ultrafast pulsed lasers. The company supplies holographic optical elements to customers in optoelectronic, analytical, medical, defense, and other industries and also has strong clientele. The addition of OptiGrate is expected to assist the company easily develop the new ultrafast pulsed lasers.

- IPG is gradually expanding into new end-markets like advanced applications (3D Printing, Cinema, and micro-materials processing), communications and medical based on robust product portfolio and strong intellectual property (IP). IPG anticipates total addressable market (TAM) to hit $12 billion in 2023, from estimated figure of $10 billion in 2019, which presents significant growth prospects. IPG plans to expand the wavelengths at which its lasers currently operate in the near future. This includes UV, orange, red, green lasers and mid-infrared lasers for fine and micro processing, projection as well as other novel applications. IPG is in the process of developing pulsed fiber lasers with ultra-short pulse durations, pulsed and QCW lasers with high peak powers and mid infra-red lasers. The company also reported first-sales of its RGB laser, which is now used in cinemas by its OEM partner. Moreover, the company is developing new medical applications using fiber lasers for urological and dental procedures. The expansion into new end-markets will eventually lower exposure to the core material processing market, which is positive for investors over the long term.

Last Earnings Report

IPG Photonics Q3 Earnings & Revenues Lag Estimates

Quarter Ending	09/2019
Report Date	Oct 29, 2019
Sales Surprise	-2.46%
EPS Surprise	-9.24%
Quarterly EPS	1.08
Annual EPS (TTM)	4.92

IPG Photonics Corporation reported third-quarter 2019 earnings of $1.07 per share, which lagged the Zacks Consensus Estimate by 9.2%. Further, the reported figure declined 42% from the year-ago quarter.

Revenues of $329.14 million fell 8% on a year-over-year basis, and missed the consensus mark of 337.45 million.

Unfavorable foreign-exchange movement limited earnings by 1 cent and revenues by $5 million.

Uncertainty in macroeconomic environment and geopolitical factors reduced demand for high-power CW lasers across China and Europe, which impacted the third-quarter top line.

However, Genesis acquisition contributed $20 million in total revenues in the reported quarter.

Revenues by Application

Materials processing (93% of total revenues) declined 8.4% year over year to $306.3 million, thanks to weakness in 3D printing and metal cutting applications.

Further, revenues from other markets (7%) improved 4.7% year over year to $22.9 million.

Revenues by Geography

Sales in United States and other North America (representing 21.6% of total sales) improved 32.1% year over year to $71.0 million.

However, sales in Eastern Europe/CIS (18.9%) declined 6.3% from the year-ago quarter to $62.2 million.

Moreover, sales in Germany (5.2%) slumped 20.8% from the year-ago quarter to $17.2 million.

Revenues from China (36.9%) fell 23.6% to $121.3 million.

Sales in Japan (6.6%) remained almost flat at $21.9 million year over year.

Sales in other Asia and Australia, and rest of the world (approximately 10.8%) collectively improved 5.4% year over year to $35.6 million.

Revenues by Product Group

Sales of high-power CW lasers (56.2% of total revenues) were down 18.7% from the year-ago quarter to $184.9 million, primarily owing to weaker-than-expected demand in China and Europe, and decline in ASPs (or average selling price).

However, management noted that demand for 10 kilowatt and 6 kilowatt ultra-high power CW lasers gained momentum.

Specifically, sales of 10 kilowatts or greater high power CW lasers grew 3% on a year-over-year basis.

Medium-power CW laser sales (3.6%) slumped 37.7% year over year to $11.9 million, on account of weakness in additive manufacturing and cutting.

Further, pulsed lasers sales (10.3%) of $33.9 million declined 4.4% year over year.

QCW lasers sales (3.8%) fell 31.7% year over year to $12.5 million.

However, system sales (10%) of $32.9 million soared 124% from the year-ago reported figure, primarily driven by synergies from Genesis acquisition.

Other revenues (16.1%), which include amplifiers, accessories, service, and parts, came in at $53.1 million, up 28.2% year over year.

Operating Details

IPG Photonics reported gross margin of 46.4%, contracting 840 bps on a year-over-year basis. This can be attributed to higher manufacturing cost and lower revenue base.

As a percentage of revenues, operating expenses expanded 390 bps on a year-over-year basis to 23.9%, primarily due to higher investments in sales, engineering and administrative expenses.

Consequently, operating margin contracted from 34.8% reported in the year-ago quarter to 22.5%.

Balance Sheet & Cash Flow

IPG Photonics ended the third quarter with $1.08 billion in cash & cash equivalents and short-term investments compared with $1.04 billion reported in the previous quarter.

Total debt (including current portion) came in at $42.6 million, down from $43.6 million in the previous quarter.

The company generated $91.8 million in cash flow from operations compared with the previous quarter's reported figure of $58.1 million.

The company repurchased stock worth $24 million during the third quarter.

Guidance for Q4

For the fourth quarter, IPG Photonics anticipates sales in the range of $270-$300 million.

Earnings are projected in the range of 55-95 cents per share.

Recent News

On **Mar 4, 2019**, IPG Photonics announced that its latest solutions aided the company secure multiple awards at 2019 Lightwave Innovation Reviews program.

Valuation

IPG Photonics' shares are down 0.2% in the past six-month period, and up 20.6% over the trailing 12-month period. Stocks in the Zacks sub-industry and the Zacks Computer & Technology sector are up 17.9% and 13.6% in the past six-month period, respectively. Over the past year, the Zacks sub-industry and the sector are up 36.8% and 34%, respectively.

The S&P 500 index is up 10.4% in the past six-month period and 28.5% in the past year.

The stock is currently trading at 31.08X forward 12-month earnings, which compares to 25.97X for the Zacks sub-industry, 22.17X for the Zacks sector and 18.71X for the S&P 500 index.

Over the past five years, the stock has traded as high as 34.42X and as low as 14.25X, with a 5-year median of 20.78X. Our Underperform recommendation indicates that the stock will perform worse than the market. Our $120 price target reflects 26.32X forward 12-month earnings.

The table below shows summary valuation data for IPGP

Valuation Multiples - IPGP					
		Stock	Sub-Industry	Sector	S&P 500
P/E F 12M	Current	31.08	25.97	22.17	18.71
	5-Year High	34.42	29.4	22.17	19.34
	5-Year Low	14.25	14.09	16.86	15.17
	5-Year Median	20.78	19.89	19.24	17.44
P/S F12M	Current	5.83	5.51	3.57	3.47
	5-Year High	9.21	5.83	3.57	3.47
	5-Year Low	3.77	2.1	2.3	2.54
	5-Year Median	5.23	3.82	3.01	3
EV/Sales TTM	Current	4.85	5.28	4.19	3.23
	5-Year High	9.26	6.73	4.2	3.3
	5-Year Low	3.09	2.28	2.56	2.16
	5-Year Median	4.87	4.03	3.44	2.8

As of 01/03/2020

Industry Analysis **Zacks Industry Rank:** Top 13% (34 out of 252)

Top Peers

Cutera, Inc. **(CUTR)**	Neutral
II-VI Incorporated **(IIVI)**	Neutral
IRIDEX Corporation **(IRIX)**	Neutral
nLight Inc. **(LASR)**	Neutral
Lumentum Holdings Inc. **(LITE)**	Neutral
MKS Instruments, Inc. **(MKSI)**	Neutral
Microvision, Inc. **(MVIS)**	Neutral
Coherent, Inc. **(COHR)**	Underperform

Industry Comparison Industry: Lasers Systems And Components

Industry Peers

	IPGP Underperform	X Industry	S&P 500	COHR Underperform	LASR Neutral	LITE Neutral
VGM Score	F	-	-	F	F	B
Market Cap	7.53 B	69.12 M	23.66 B	4.02 B	747.63 M	6.32 B
# of Analysts	5	2	13	3	4	9
Dividend Yield	0.00%	0.00%	1.79%	0.00%	0.00%	0.00%
Value Score	F	-	-	F	F	C
Cash/Price	0.14	0.07	0.04	0.08	0.19	0.14
EV/EBITDA	10.55	9.09	13.88	20.52	24.26	27.33
PEG Ratio	3.95	6.19	1.99	NA	NA	1.20
Price/Book (P/B)	3.17	3.17	3.36	3.11	3.37	4.05
Price/Cash Flow (P/CF)	15.64	19.12	13.62	16.65	40.66	13.39
P/E (F1)	31.18	49.88	18.74	33.01	149.43	16.76
Price/Sales (P/S)	5.63	1.98	2.67	2.81	4.16	3.81
Earnings Yield	3.21%	1.40%	5.32%	3.03%	0.66%	5.97%
Debt/Equity	0.02	0.07	0.72	0.31	0.00	0.58
Cash Flow ($/share)	9.07	0.03	6.94	10.00	0.49	6.12
Growth Score	F	-	-	D	F	A
Hist. EPS Growth (3-5 yrs)	13.47%	13.47%	10.56%	36.01%	NA	82.75%
Proj. EPS Growth (F1/F0)	7.84%	39.35%	7.41%	-14.75%	488.89%	14.98%
Curr. Cash Flow Growth	-5.07%	-2.41%	14.83%	-46.32%	82.51%	53.33%
Hist. Cash Flow Growth (3-5 yrs)	20.92%	20.92%	9.00%	18.56%	NA	53.13%
Current Ratio	9.08	2.17	1.23	4.56	8.47	4.49
Debt/Capital	1.61%	15.20%	42.92%	23.39%	0.00%	36.69%
Net Margin	19.45%	-2.18%	11.08%	3.76%	0.11%	-2.18%
Return on Equity	11.50%	-2.07%	17.10%	8.95%	0.09%	17.81%
Sales/Assets	0.50	1.10	0.55	0.66	0.71	0.60
Proj. Sales Growth (F1/F0)	-0.37%	8.92%	4.20%	-2.18%	9.12%	11.08%
Momentum Score	B	-	-	B	F	A
Daily Price Chg	-3.18%	0.00%	-0.61%	-1.41%	-2.08%	-0.97%
1 Week Price Chg	0.66%	0.00%	0.13%	1.20%	0.56%	0.48%
4 Week Price Chg	1.18%	-1.30%	2.60%	15.60%	0.41%	13.58%
12 Week Price Chg	9.13%	20.86%	8.87%	8.46%	35.90%	57.77%
52 Week Price Chg	30.59%	30.59%	29.34%	70.16%	18.49%	109.95%
20 Day Average Volume	325,654	27,998	1,603,615	178,390	277,872	1,573,710
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	-2.00%	0.00%	0.00%	0.00%	-10.08%	0.97%
(F1) EPS Est 12 week change	-20.87%	7.73%	-0.57%	-27.79%	-582.50%	8.87%
(Q1) EPS Est Mthly Chg	-4.21%	0.00%	0.00%	0.00%	-8.87%	0.36%

Zacks Stock Rating System

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

Zacks Recommendation

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we have an excellent balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

Zacks Rank

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

Zacks Style Scores

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.

Value Score	F
Growth Score	F
Momentum Score	B
VGM Score	F

As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

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