

Photon Control Inc.

Rapidly Improving Industry Fundamentals Not Reflected in Stock Price. Buy on Exceptional Risk/Reward Characteristics.

PHO-TSX: \$1.02
Buy
\$1.65 Target

Bottom line: Rapidly improving industry fundamentals have yet to be reflected in Photon Control's ("Photon" or the "Company") estimates and valuation. Recent earnings announcements and conference call commentary by Lam Research (LRCX-NASDAQ, NR), TSMC (2330-TSEC, NR), Tokyo Electron (8035-TYO, NR), and KLA Corp (KLAC-NASDAQ, NR) all point to a bottoming of the cycle and a much more constructive outlook for the balance of 2019 and for 2020. With a growing and more flagrant disconnect in valuation, we believe Photon shares currently present exceptional risk-reward characteristics. Namely:

- WFE players Applied Materials (AMAT-NASDAQ, NR), Lam Research, Tokyo Electron, and ASML Holding (ASML-NASDAQ, NR) are all close to or at all-time highs while Photon's shares are down ~60% from its summer 2018 high (see Exhibit 1, on P. 2).
- On the earnings power front, last quarter's EBITDA of \$1.2M is the trough in our mind. We expect that in an upcycle, PHO's quarterly EBITDA will surpass last year's Q218 peak of \$5.1M with minimal capital investment. That implies current valuation of 15.7x trough EBITDA and 3.7x peak EBITDA. We believe the Company's products are still not fully entrenched within its customer base, providing for further growth beyond industry dynamics.
- Given its growth dynamics, margin profile, and relatively lower competitive pressures, the Company has historically traded at an 18% premium to Lam Research (+46%/-10% premium/discount at +/- 1 standard deviation). The Company's shares currently sit at a 6% discount to LRCX (i.e. close to the 1 standard deviation mark). We fully expect PHO's EBITDA estimates to move up in tandem with the industry, rendering the current discount to historicals even more pronounced (see Exhibit 2, on P. 3).
- The Company's current cash position of \$0.30/shr provides for some downside protection as well as flexibility to allocate capital toward buybacks.

Q319 preview: The Company is set to report Q319 results on Wednesday, November 6, 2019, with a conference call the same day at 11AM ET (1-800-319-4610). The midrange of the guidance of \$6.5-8.5M implies a 5.5% sequential increase in sales. The Company expects EBITDA margins in the 17-21% range, implying an EBITDA range of \$1.1M to \$1.8M. We are calling for \$7.5M in sales and \$1.4M in EBITDA.

Lam Research Industry Commentary (Oct. 23, 2019): "From an industry perspective, we have revised upward our view on 2019 WFE to the mid \$40 billion range versus our prior estimate of down mid- to high-teens percentage year-on-year, which implied a low \$40B level of spending. We are beginning to see improvement in the memory market, led first by NAND. NAND demand dynamics are improving and oversupply conditions should continue to abate as we move through the December quarter. We expect to exit 2019 with a bit supply growth rate for NAND of approximately 30%, which is well below our view on long-term demand. And as a result, NAND inventories are expected to decline to normalize levels in the first half of calendar 2020.

Projected Total Return: 61.8%
Valuation: DCF (12.0% discount, 3.0% GRIP)

Market Data

Market Cap. (\$M)	106.6
Net Cash (\$M)	31.4
EV (\$M)	75.1
Basic Shares S/O (M)	104.5
Diluted Shares S/O (M)	104.5
Avg. Daily Volume (K)	67.0
52 Week Range	\$0.82 - \$1.80
Dividend Yield	0.0%

Revisions

	Current	Old
2019E Revenue (\$M)	31.1	NC
2019E Adj. EBITDA (\$M)	5.3	NC
2019E EPS	\$0.02	NC

Financial Metrics

FYE Dec 31	2016A	2017A	2018A	2019E	2020E
Revenue (\$M)	32.2	43.8	46.7	31.1	34.2
Y/Y Growth	16.7%	36.2%	6.6%	-33.5%	10.0%
Adj. EBITDA (\$M)	9.7	14.3	15.4	5.3	7.6
Margin	30.0%	32.6%	32.9%	17.0%	22.3%
EPS FD	\$0.06	\$0.05	\$0.10	\$0.02	\$0.04

Valuation Data

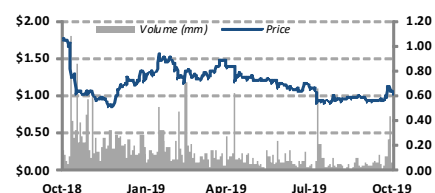
FYE Dec 31	2016A	2017A	2018A	2019E	2020E
EV/Sales	2.3x	1.7x	1.6x	2.4x	2.2x
EV/EBITDA	7.8x	5.3x	4.9x	14.3x	9.9x
P/E	17.8x	20.9x	10.7x	63.3x	27.1x
P/E (ex-cash)	12.5x	14.8x	7.5x	44.6x	19.1x

Quarterly Data

	Q1	Q2	Q3	Q4
Rev. '18 (\$M)	13.9	14.6	10.1	8.2
Rev. '19 (\$M)	8.0	7.1	7.5	8.4
Adj. EBITDA '18 (\$M)	4.7	5.1	3.0	2.5
Adj. EBITDA '19 (\$M)	1.5	1.2	1.4	1.6
FD EPS '18	0.03	0.0	0.01	0.02
FD EPS '19	0.00	0.0	0.01	0.01

Company Description

Photon is a precision measurement solutions company, designing, manufacturing and distributing a range of optical sensors and instruments to measure temperature, pressure, position, and flow. The Company's products are primarily used by manufacturers of Wafer Fabrication Equipment (WFE) to the semiconductor industry. The Company also caters to the oil and gas, life science, and manufacturing industries. The Company was originally formed in 1988 and went public in 2000. Photon is based in Richmond, BC.



While the timing of the memory equipment spending recovery is always hard to predict, we are encouraged that customers continue to manage supply growth even as we're starting to see favorable end market demand indicators. This is a sign of a healthy industry and a good setup for increased NAND spending in 2020.

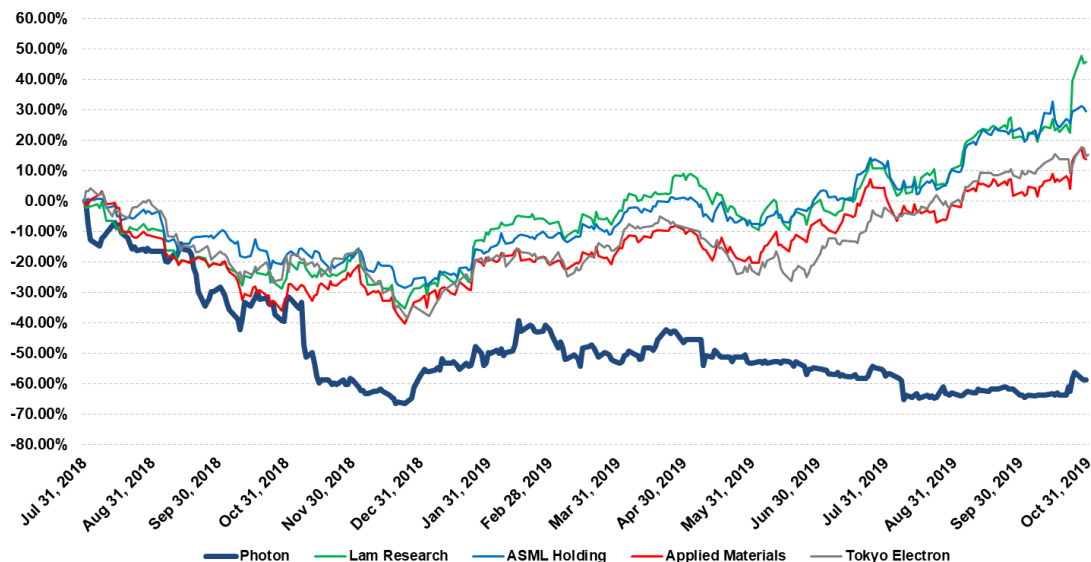
On the DRAM front, inventories have remained elevated and we do not expect them to reach normalize levels until the second half of 2020. However, we see positive demand catalyst ahead in both the server and smartphone markets. Our server CPU upgrade cycle is expected to begin next year with increased adoption of new generation platforms from leading manufacturers. For smartphones, major vendors are planning to launch additional 5G models, which are expected to drive content growth for the overall smartphone market in 2020.

Turning to Foundry and Logic. Spending in this segment has been strong throughout 2019 and based on recent customer commentary looks to remain so heading into next year. Diverse end market applications are driving higher levels of Foundry and Logic spending. Moreover, challenges in scaling functional block such as SRAM and logic devices are leading to increases in die sizes and these in turn are accelerating changes in device architectures and chip manufacturing technologies. Lam's growing position with key Foundry and Logic customers has positioned us to incrementally benefit from these secular trends.

[...] Also, with early indications of improving NAND demand and positive catalyst on the horizon for DRAM, we are increasingly optimistic that calendar year 2020 is setting up to be a year of outperformance for Lam as spending mix moves back in our favor.”

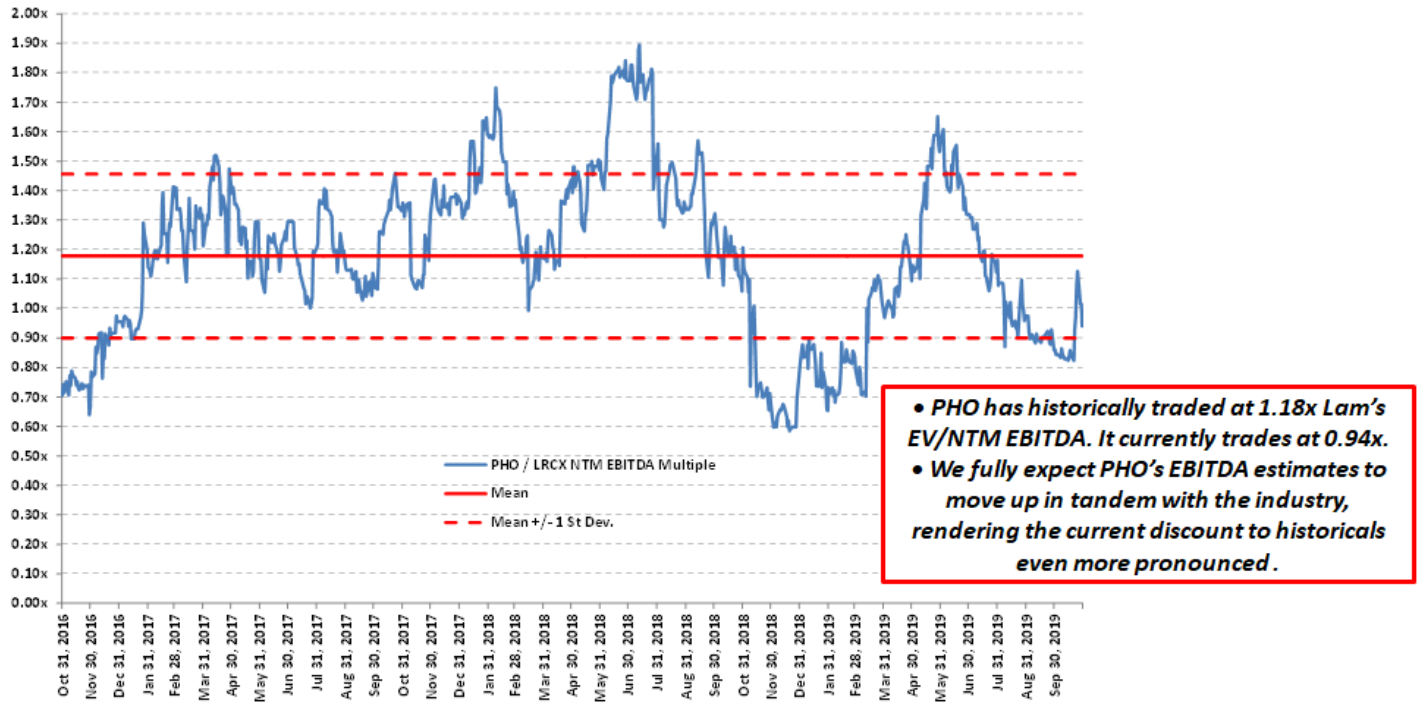
TSMC Capex Commentary (Oct. 17, 2019): “I will first talk about our capital budget for this year. In TSMC, we build capacity according to our customers' demand. To forecast such demand, we take into consideration, not only from each individual customer's indication, but also our own forecast based on macro as well as market segment outlook. Given the stronger outlook for 5G deployment next year, the demand for our 7-nanometer and 5-nanometer has increased significantly in the last few months. We have, therefore, decided to raise our full year 2019 CapEx by \$4B to meet this increased demand. We now expect our 2019 CapEx to be between \$14B and \$15B. About \$1.5B of the \$4B CapEx increase is for 7-nanometer capacity and \$2.5B is for 5-nanometer capacity. Although we're not able to give you a formal guidance for our next year's CapEx until next January, we currently plan next year's CapEx to be somewhat similar to our revised 2019 CapEx.”

Exhibit 1 – Photon Stock Performance vs. Select WFE Players



Source: Historical Data – S&P Capital IQ

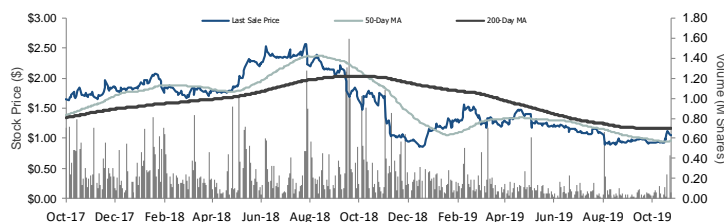
Exhibit 2 – PHO EV/NTM EBITDA vs. Lam Research



Source: Historical Data – Company Filing, S&P Capital IQ; Forecasts/estimates – Echelon Wealth Partners, S&P Capital IQ

Photon Control Inc. (PHO-T, \$1.02) - Data Sheet

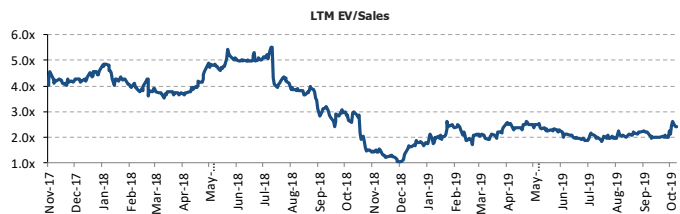
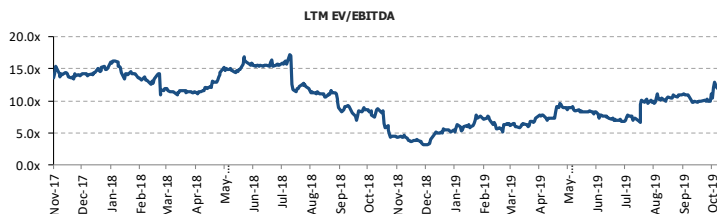
BUY | PT: \$1.65



Company Description
Photon is a precision measurement solutions company, designing, manufacturing and distributing a range of optical sensors and instruments to measure temperature, pressure, position, and flow. The Company's products are primarily used by manufacturers of Wafer Fabrication Equipment (WFE) to the semiconductor industry. The Company also caters to the oil and gas, life science, and manufacturing industries. The Company was originally formed in 1988 and went public in 2000. Photon is based in Richmond, BC.

Consensus	3 Mths Ago	Current	Return
Rating:	na	na	na
Target:	na	na	na
Median:	na	na	na
High:	na	na	na
Low:	na	na	na
Consensus Distribution			
Sector Outperform/Buy		na	na
Sector Perform/Hold		na	na
Sector Underperform/Sell		na	na
# Estimates		na	na

Historical Valuation



Key Financial Metrics (in \$M, except EPS)

Financial Summary	2016A	2017A	2018A	Q119A	Q219A	Q319E	Q419E	2019E	2020E
Revenue	32.2	43.8	46.7	8.0	7.1	7.5	8.4	31.1	34.2
Growth y/y	16.7%	36.2%	6.6%	(42.0%)	(51.2%)	(25.0%)	2.0%	(33.5%)	10.0%
Cons.	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cons. 3 Mts. Ago	NA	NA	NA	NA	NA	NA	NA	NA	NA
Gross Profit	16.2	23.3	25.6	4.2	3.9	4.0	4.5	16.6	18.8
Margin	50.4%	53.2%	54.9%	52.7%	54.8%	53.0%	53.0%	53.3%	55.0%
Cons.	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cons. 3 Mts. Ago	NA	NA	NA	NA	NA	NA	NA	NA	NA
Adjusted EBITDA	9.7	14.3	15.4	1.5	1.2	1.4	1.6	5.3	7.6
Margin	30.0%	32.6%	32.9%	18.5%	16.9%	18.3%	19.4%	17.0%	22.3%
Cons.	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cons. 3 Mts. Ago	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diluted EPS	0.06	0.05	0.10	0.00	0.00	0.01	0.01	0.02	0.04
Growth y/y	-30%	-15%	96%	-97%	-97%	-42%	-65%	-83%	133%
Cons.	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cons. 3 Mts. Ago	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other Metrics									
Free Cash Flow	7.1	1.3	12.0	-2.3	-1.8	2.3	1.1	-0.6	4.5
/shr	0.06	0.01	0.11	-0.02	-0.02	0.02	0.01	-0.01	0.04
/market cap	6%	1%	10%	-2%	-2%	2%	1%	-1%	4%
Cash Balance	32.5	34.3	42.4	37.3	31.4	33.7	34.8	34.8	38.9
/shr	0.29	0.30	0.38	0.34	0.29	0.32	0.33	0.33	0.37
/market cap	28%	30%	37%	33%	29%	31%	33%	32%	36%

Key Statistics	Value
52-Week High	\$1.80 76%
52-Week Low	\$0.82 (20%)
Avg Vol (3-Mo)	68K
Shares Outstanding (basic)	104M
Market Cap	\$107M
Net Debt (Net Cash)	-\$31M
Enterprise Value	\$75M
Div Yield	0.0%
FYE	Dec 31
Employees	~100

Top Ownership	M Shares	Δ 6 Mths	% Held
Mawer Investment Manager	10.56	0.00	10.1%
Franklin Resources, Inc.	3.05	0.00	2.9%
PenderFund Capital Manageme	1.84	0.00	1.8%
BMO Global Asset Management	1.36	0.00	1.3%
HSBC Global Asset Managemen	0.94	0.00	0.9%
Spartan Fund Management Inc.	0.62	0.00	0.6%
Dimensional Fund Advisors L.P.	0.57	0.00	0.5%
McGrath, Ronan D.	0.32	0.00	0.3%

	Return					EV / Sales		EV / EBITDA		P / E		LTM EBITDA Margin	Rev. Growth 2-Yr Est.	Dividend Yield	LTM ROE
	1 Week	1 Month	3 Month	YTD	1 Year	LTM	NTM	LTM	NTM	LTM	NTM				
Wafer Fabrication Equipment / Semi Cap Equipment															
ASML Holding N.V.	(1.0%)	3.4%	15.9%	71.3%	55.7%	9.1x	7.3x	36.6x	21.3x	44.1x	25.6x	24.5%	9.9%	0.9%	19.3%
Applied Materials, Inc.	(1.9%)	8.3%	9.5%	65.1%	64.3%	3.5x	3.5x	13.0x	13.8x	17.5x	17.5x	26.9%	-4.8%	1.5%	40.7%
KLA Corporation	(0.5%)	5.3%	23.2%	87.7%	83.4%	6.0x	5.1x	17.4x	13.0x	24.3x	17.2x	34.2%	15.4%	2.0%	53.0%
Lam Research Corporation	1.3%	16.4%	29.0%	97.6%	89.8%	4.1x	3.8x	14.5x	12.5x	20.4x	17.0x	28.5%	6.8%	1.7%	41.4%
Tokyo Electron Limited	3.5%	7.3%	18.1%	76.4%	40.7%	2.6x	2.7x	10.2x	11.1x	16.2x	18.2x	25.6%	-4.7%	2.3%	28.2%
Hitachi High-Technologies Corporation	3.8%	8.3%	21.8%	95.7%	58.9%	1.0x	1.0x	8.9x	8.5x	20.0x	18.9x	10.9%	-0.4%	1.7%	11.1%
Median	0.4%	7.8%	19.9%	82.0%	61.6%	3.8x	3.6x	13.7x	12.8x	20.2x	17.8x	26.2%	3.2%	1.7%	34.4%
WFE Component Suppliers															
MKS Instruments, Inc.	(0.8%)	17.7%	27.5%	68.0%	47.3%	3.5x	3.2x	16.3x	12.8x	35.8x	19.9x	21.4%	0.0%	0.7%	8.9%
Advanced Energy Industries, Inc.	0.6%	2.1%	0.3%	36.5%	36.2%	3.3x	1.9x	17.5x	17.7x	24.6x	25.2x	18.6%	29.1%	-	14.9%
Brooks Automation, Inc.	(0.1%)	14.4%	9.2%	61.8%	36.5%	4.6x	4.1x	36.1x	23.5x	NM	37.8x	12.8%	17.5%	0.9%	0.4%
Ultra Clean Holdings, Inc.	20.6%	43.8%	44.2%	148.4%	100.0%	0.9x	0.8x	10.5x	N/A	NM	16.1x	8.5%	1.2%	-	0.4%
Median	0.2%	16.0%	18.4%	64.9%	41.9%	3.4x	2.6x	16.9x	17.7x	30.2x	22.6x	15.7%	9.3%	0.4%	4.7%
Photon Control (Street)	(4.7%)	9.7%	(6.4%)	(6.4%)	(41.4%)	2.4x	2.5x	12.0x	12.7x	28.0x	35.3x	20.2%	-15.0%	-	8.1%

Source: Consensus data - CapitalIQ, Historical Data - Company Filings, Forecasts/estimates - Echelon Wealth Partners

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Company: Photon Control Inc. | PHO:TSX

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Is this an issuer related or industry related publication?	Issuer
Does the Analyst or any member of the Analyst's household have a financial interest in the securities of the subject issuer? If Yes: 1) Is it a long or short position? No Position; and, 2) What type of security is it? None.	No
The name of any partner, director, officer, employee or agent of the Dealer Member who is an officer, director or employee of the issuer, or who serves in any advisory capacity to the issuer.	No
Does Echelon Wealth Partners Inc. or the Analyst have any actual material conflicts of interest with the issuer?	No
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During the last 12 months, has Echelon Wealth Partners Inc. received compensation for having provided investment banking or related services to this Issuer?	Yes
Has the Analyst had an onsite visit with the Issuer within the last 12 months?	No
Has the Analyst or any Partner, Director or Officer been compensated for travel expenses incurred as a result of an onsite visit with the Issuer within the last 12 months?	No
Has the Analyst received any compensation from the subject company in the past 12 months?	No
Is Echelon Wealth Partners Inc. a market maker in the issuer's securities at the date of this report?	No

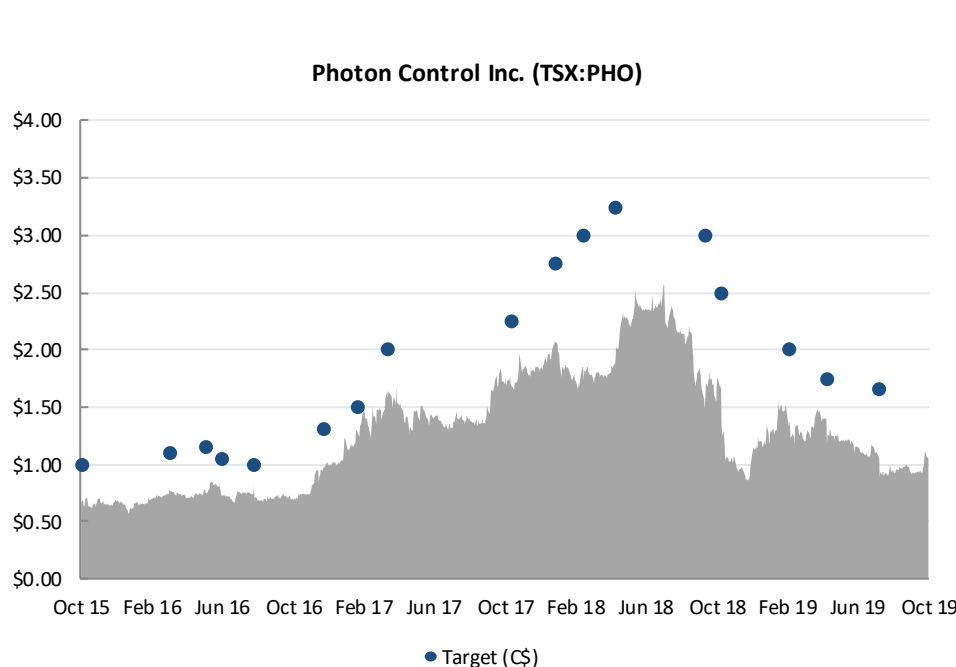
RATING DEFINITIONS

Buy	The security represents attractive relative value and is expected to appreciate significantly from the current price over the next 12 month time horizon.
Speculative Buy	The security is considered a BUY but in the analyst’s opinion possesses certain operational and/or financial risks that are higher than average.
Hold	The security represents fair value and no material appreciation is expected over the next 12-18 month time horizon.
Sell	The security represents poor value and is expected to depreciate over the next 12 month time horizon.
Under Review	While not a rating, this designates the existing rating and/or forecasts are subject to specific review usually due to a material event or share price move.
Tender	Echelon Wealth Partners recommends that investors tender to an existing public offer for the securities in the absence of a superior competing offer.
Dropped Coverage	Applies to former coverage names where a current analyst has dropped coverage. Echelon Wealth Partners will provide notice to investors whenever coverage of an issuer is dropped.

RATINGS DISTRIBUTION

Recommendation Hierarchy	Buy	Speculative Buy	Hold	Sell	Under Review	Restricted	Tender
Number of recommendations	51	43	15	1	7	0	3
% of Total (excluding Restricted)	44%	37%	13%	1%	6%		
Number of investment banking relationships	13	18	4	0	2	0	0
% of Total (excluding Restricted)	35%	49%	11%	0%	5%		

PRICE CHART, RATING & PRICE TARGET HISTORY



Date	Target (C\$)	Rating
30 Oct 2015	\$1.00	Buy
1 Apr 2016	\$1.10	Buy
31 May 2016	\$1.15	Buy
28 Jun 2016	\$1.05	Buy
24 Aug 2016	\$1.00	Buy
21 Dec 2016	\$1.30	Buy
17 Feb 2017	\$1.50	Buy
10 Apr 2017	\$2.00	Buy
9 Nov 2017	\$2.25	Buy
24 Jan 2018	\$2.75	Buy
15 Mar 2018	\$3.00	Buy
10 May 2018	\$3.25	Buy
11 Oct 2018	\$3.00	Buy
8 Nov 2018	\$2.50	Buy
4 Mar 2019	\$2.00	Buy
9 May 2019	\$1.75	Buy
8 Aug 2019	\$1.65	Buy

Coverage Initiated: Oct 30, 2015

Data sourced from: Capital IQ

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