# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 8-K	
CURRENT REPORT	

# Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event Reported): February 4, 2019

#### **FLUIDIGM CORPORATION**

(Exact Name of Registrant as Specified in Charter)

**Delaware** (State or Other Jurisdiction of Incorporation)

001-34180 (Commission File Number) 77-0513190 (I.R.S. Employer Identification Number)

#### 7000 Shoreline Court, Suite 100, South San Francisco, California 94080

(Address of Principal Executive Offices) (Zip Code)

(650) 266-6000

(Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:
Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425) Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12) Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)) Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
ndicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2). Emerging growth company [ ]
f an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or evised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. [ ]

#### Item 2.02. Results of Operations and Financial Condition.

On February 7, 2019, Fluidigm Corporation issued a press release reporting its financial results for the fourth quarter and full year ended December 31, 2018. A copy of the press release is furnished herewith as Exhibit 99.1.

The foregoing information in this Current Report on Form 8-K, including exhibit 99.1 attached hereto, is being "furnished" and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and shall not be incorporated by reference in any filing under the Securities Exchange Act of 1934, as amended, or the Securities Act of 1933, as amended, except as expressly set forth by specific reference in such future filing.

Item 5.02. Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On February 4, 2019, Mai Chan (Grace) Yow, the Executive Vice President, Worldwide Manufacturing of Fluidigm Singapore Pte. Ltd. ("Fluidigm Singapore"), a wholly owned subsidiary of Fluidigm Corporation (the "Company"), notified the Company of her intention to retire. Ms. Yow plans to retire from Fluidigm Singapore in September 2019, after assisting with the transition of her responsibilities.

#### Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No. Description

99.1 <u>Fluidigm Corporation Press Release dated February 7, 2019.</u>

# SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

# FLUIDIGM CORPORATION

Date: February 7, 2019

By: \( \frac{\s/\text{Vikram Jog}}{\text{Vikram Jog}} \)

Vikram Jog

Chief Financial Officer

## Fluidigm Announces Fourth Quarter and Full Year 2018 Financial Results

Fourth quarter revenue increased 17 percent to \$32.3 million

Mass cytometry revenue growth of 48 percent in fourth quarter

Full year 2018 revenue increased 11 percent to \$113.0 million Including equity offering, ending cash of \$95.4 million

SOUTH SAN FRANCISCO, Calif., Feb. 07, 2019 (GLOBE NEWSWIRE) -- Fluidigm Corporation (NASDAQ:FLDM) today announced financial results for the fourth quarter and full year ended December 31, 2018.

#### **Financial Highlights**

Fourth Quarter 2018

- Total revenue increased 17 percent to \$32.3 million from \$27.7 million in the fourth quarter of 2017, with mass cytometry revenue growth of 48 percent compared to the year ago period.
- GAAP net loss was \$14.8 million, compared with a GAAP net loss of \$10.5 million for the fourth quarter of 2017. GAAP net loss was higher in the fourth quarter of 2018 primarily due to non-cash interest associated with the convertible debt exchange in 2018 and the impact of a favorable litigation settlement in the fourth quarter of 2017.
- Non-GAAP net loss was \$2.4 million, compared with a \$3.0 million non-GAAP net loss for the fourth quarter of 2017.

#### Full Year 2018

- Total revenue increased 11 percent to \$113.0 million from \$101.9 million in full year 2017.
- GAAP net loss was \$59.0 million, compared with a GAAP net loss of \$60.5 million for the full year 2017.
- Non-GAAP net loss was \$20.7 million, compared with a \$30.2 million non-GAAP net loss for the full year 2017.

"We experienced exceptional global revenue growth underpinned by strong operational execution in the fourth quarter," said Chris Linthwaite, President and CEO.

"Demand for the Hyperion<sup>TM</sup> Imaging System, Helios<sup>TM</sup>, and associated consumables reflects sustained momentum in the adoption rate of mass cytometry in the fourth quarter. The general trend in multi-system placements continues, driven by immunology-related research in pharma and biotech. Last month, a major contract research organization announced an expansion of its mass cytometry capacity. Today, we announced a consortium project with pharma companies that are relying on our pioneering mass cytometry and Imaging Mass Cytometry<sup>TM</sup> systems for insights on immune function," added Linthwaite.

"For the full year, we achieved double-digit revenue growth, expanding our markets and building recurring revenue through new content and partnerships. Financial discipline has been an important pillar and we have strengthened our balance sheet this year through a convertible debt exchange and our recent equity offering. We are well-positioned to support accelerating growth in 2019 as we execute on a multi-omic-based strategy to provide meaningful insights in health and disease."

A full reconciliation of GAAP to non-GAAP measures can be found in the tables of this news release.

#### **Fourth Quarter 2018 Results**

#### Revenue by category:

Category	Revenue by Category	Year-over-Year Change	% of Total Revenue
Instruments	\$13.6 million	21%	42%
Consumables	\$13.5 million	15%	42%
Service	\$5.2 million	9%	16%

#### Revenue by market:

- Mass cytometry revenue, comprising instruments, consumables, and service, increased 48 percent to \$19.1 million from \$12.9 million in the prior year period. Mass cytometry product revenue increased 50 percent to \$16.2 million from \$10.8 million in the prior year.
- Microfluidics revenue, comprising instruments, consumables, and service, decreased 11 percent to \$13.2 million from \$14.8 million in the prior year period. Microfluidics product revenue decreased 11 percent to \$11.0 million from \$12.3 million in the prior year period due to lower sales of instruments, offset by consumables growth.

Total revenue by geographic area:

Geographic Area	Revenue by	Year-over-Year	% of Total
	Geography	Change	Revenue
Americas	\$14.2 million	19%	44%
EMEA	\$10.2 million	7%	32%
Asia Pacific	\$7.9 million	26%	24%

#### Product margin:

GAAP product margin was 56.4 percent in the fourth quarter of 2018 compared to 48.0 percent in the year ago period and 52.0 percent in the third quarter. Non-GAAP product margin was 69.6 percent in the fourth quarter of 2018 compared to 63.4 percent in the year ago period and 66.0 percent in the third quarter. The year-over-year increases in product margins were due to higher plant utilization and favorable product mix. Sequentially, increases in product margins were primarily due to favorable product mix and higher plant utilization. In the case of GAAP margin, year-over-year and sequential increases in product margins were coupled with fixed amortization over higher revenue.

Cash, cash equivalents, and investments as of December 31, 2018:

Cash, cash equivalents, and investments as of December 31, 2018, were \$95.4 million, including \$59.5 of net proceeds from the company's public offering of common stock in the fourth quarter. Cash, cash equivalents, and investments as of September 30, 2018, were \$35.8 million.

### **Operational and Business Progress**

#### **Market expansion:**

- Caprion Biosciences, a leading CRO, added an incremental Helios instrument to meet an increasing demand for advance biomarker discovery and immune monitoring services to.
- Fluidigm announced participation in an international consortium, formed with pharma and academic research in Europe. The TIMID Consortium is a unique project that utilizes both mass cytometry and Imaging Mass Cytometry along with other technologies to explore the common cellular basis of T cell-driven immune-mediated inflammatory diseases (TIMIDs). The research is aimed at more precise treatments for IMIDs using existing therapies and identification of new targets for drug development. Frits Koning, Professor of Immunology at Leiden University Medical Center in the Netherlands is leading mass cytometry and Imaging Mass Cytometry analysis of the human mucosal immune system in patients with inflammatory bowel disease.

# **Significant publications:**

- A *Nature Immunology* paper published January 21 by Frits Koning and colleagues from Leiden University Medical Center characterized the development of CD4+ T cells in the human fetal intestine using mass cytometry and Imaging Mass Cytometry along with sequencing methods.
- A *Cell Metabolism* paper that was published on January 31 by Bernd Bodenmiller from the University of Zurich and researchers in Geneva and the US, used Imaging Mass Cytometry to map Human Type 1 Diabetes Progression at a single cell and spatial level. This work opens up new avenues, not available using traditional approaches to explore Type 1 Diabetes pancreas pathology as a starting point to understand the importance of the immune system in this disease.

#### New product innovation and partnership agreements:

- Agreement with Indica Labs to expand and simplify imaging mass cytometry data analysis: Fluidigm and Indica Labs announced a co-marketing agreement to provide another new solution to streamline image analysis for Imaging Mass Cytometry.
- *REAP-seq for multi-omic single-cell analysis for the C1 system*: In January, Fluidigm announced the introduction of a REAP-seq (RNA expression and protein sequencing) protocol for use with the C1. REAP-seq was developed in collaboration with Merck for co-detection of both cellular protein and RNA using microfluidics technology. This protocol is published in *Nature Biotechnology*.

#### **Full Year 2018 Results**

#### Revenue by category:

Category	Revenue by Category	Year-over-Year Change	% of Total Revenue
Instruments	\$45.5 million	7%	40%
Consumables	\$48.2 million	15%	43%
Service	\$19.3 million	11%	17%

#### Revenue by market:

- Mass cytometry revenue, comprising instruments, consumables, and service, increased 27 percent to \$59.6 million from \$46.8 million in the prior year period. Mass cytometry product revenue increased 25 percent to \$49.3 million from \$39.6 million in the prior year.
- Microfluidics revenue, comprising instruments, consumables, and service, decreased 3 percent to \$53.4 million from \$55.2 million in the prior year period. Microfluidics product revenue decreased 1 percent to \$44.3 million from \$44.8 million in the prior year period due to lower sales of single-cell microfluidics products and high throughput instruments, partially offset by a strong increase in sales of consumables.

Total revenue by geographic area:

Geographic Area	Revenue by Geography	Year-over-Year Change	% of Total Revenue
Americas	\$51.2 million	4%	46%
EMEA	\$36.6 million	12%	32%
Asia-Pacific	\$25.2 million	26%	22%

Approximate active installed base at year-end 2018:

Active installed base for selected instruments	2018
Mass cytometry	240
Biomark <sup>™</sup> /Biomark HD and EP1™	550
Access Array <sup>™</sup> and Juno <sup>™</sup>	200

#### 2019 Guidance

Consumables pull-through	2019 (\$000)
Mass cytometry	\$73 – \$78
Biomark/Biomark HD and EP1	\$44 - \$50
Access Array and Juno	\$25 - \$30

# First Quarter 2019 Guidance

- Total revenue of \$28 million to \$31 million.
- GAAP operating expenses of \$29.5 million to \$30.5 million.
- Non-GAAP operating expenses of \$26.5 million to \$27.5 million excluding stock-based compensation and depreciation and amortization expenses of approximately \$2 million and \$1 million, respectively.
- Total cash outflow of \$20 million to \$22 million, including total annual incentive compensation and retention bonus payments of \$10.8 million, and a semi-annual interest payment of \$2.8 million.

### **Conference Call Information**

Fluidigm will host a conference call today, February 7, 2019, at 2:00 p.m. PT (5:00 p.m. ET) to discuss fourth quarter and full year 2018 financial results and operational progress. Individuals interested in listening to the conference call may do so by dialing (877) 556-5248 for domestic callers, or (720) 545-0029 for international callers. Please reference Conference ID 2891608. A live webcast of the conference call will be available online from the Investor Relations page of the company's website at http://investors.fluidigm.com/events.cfm. The link will not be active until 1:45 p.m. PT (4:45 p.m. ET) on February 7, 2019.

After the live webcast, the call will be archived on Fluidigm's Investor Relations page at http://investors.fluidigm.com/. In addition, a telephone replay of the teleconference will be available 90 minutes after the end of the call. The replay dial-in numbers are (855) 859-2056 for domestic callers and (404) 537-3406 for international callers. Please use the conference ID number: 2891608. The telephone replay will be available until February 14.

# Statement Regarding Use of Non-GAAP Financial Information

Fluidigm has presented certain financial information in accordance with U.S. GAAP and also on a non-GAAP basis for the three-month periods and years ended December 31, 2018, and December 31, 2017, as well as projected for the first quarter of 2019. Management believes that non-GAAP financial measures, taken in conjunction with GAAP financial measures, provide useful information for both management and investors by excluding certain non-cash and other expenses that are not indicative of the company's core operating results. Management uses non-GAAP measures to compare the company's performance relative to forecasts and strategic plans and to benchmark the company's performance externally against competitors. Our estimates of forward-looking non-GAAP operating expenses exclude estimates for stock-based compensation expense and depreciation and amortization; loss on disposal of property and equipment; future changes relating to developed and acquired technologies; other intangible assets; and income taxes, among other items, certain of which are presented in the tables accompanying our earnings release. The time and amount of certain material items needed to estimate non-GAAP financial measures are inherently unpredictable or outside of our control. Material changes to any of these items could have a significant effect on guidance and future GAAP results. Non-GAAP information is not prepared under a comprehensive set of accounting rules and should only be

used to supplement an understanding of the company's operating results as reported under U.S. GAAP. Fluidigm encourages investors to carefully consider its results under GAAP, as well as its supplemental non-GAAP information and the reconciliation between these presentations, to more fully understand its business. Reconciliations between GAAP and non-GAAP operating results are presented in the accompanying tables of this release.

#### **Use of Forward-Looking Statements**

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, among others, statements regarding revenue growth in 2019, the execution of product strategies and anticipated effect on our business, anticipated benefits of collaborations and contractual relationships, consumables pull-through for 2019, and projected revenues, expenses, and cash flows for the first quarter of 2019. Forward-looking statements are subject to numerous risks and uncertainties that could cause actual results to differ materially from currently anticipated results, including but not limited to challenges inherent in developing, manufacturing, launching, marketing, and selling new products; risks relating to reliance on sales of capital equipment for a significant proportion of revenues in each quarter; potential product performance and quality issues; the possible loss of key employees, customers, or suppliers; intellectual property risks; competition; uncertainties in contractual relationships: Fluidigm research and development, sales, marketing, and distribution plans and capabilities; reduction in research and development spending or changes in budget priorities by customers; interruptions or delays in the supply of components or materials for, or manufacturing of, its products; seasonal variations in customer operations; unanticipated increases in costs or expenses; and risks associated with international operations. Information on these and additional risks and uncertainties and other information affecting Fluidigm's business and operating results is contained in the Fluidigm Annual Report on Form 10-K for the year ended December 31, 2017, and in its other filings with the Securities and Exchange Commission, including the Fluidigm Quarterly Report on Form 10-O for the guarter ended September 30, 2018. These forward-looking statements speak only as of the date hereof. Fluidigm disclaims any obligation to update these forward-looking statements except as may be required by law.

#### **About Fluidigm**

Fluidigm (NASDAQ:FLDM) is an industry-leading biotechnology tools provider with a vision to improve life through comprehensive health insight. We focus on the most pressing needs in translational and clinical research, including cancer, immunology, and immunotherapy. Using proprietary CyTOF® and microfluidics technologies, we develop, manufacture, and market multi-omic solutions to drive meaningful insights in health and disease, identify biomarkers to inform decisions, and accelerate the development of more effective therapies. Our customers are leading academic, government, pharmaceutical, biotechnology, and plant and animal research laboratories worldwide. Together with them, we strive to increase the quality of life for all. For more information, visit fluidigm.com.

Fluidigm, the Fluidigm logo, CyTOF, and Access Array, Biomark, C1, EP1, Helios, Hyperion, Imaging Mass Cytometry, and Juno are trademarks and/or registered trademarks of Fluidigm Corporation in the United States and/or other countries. All other trademarks are the sole property of their respective owners. Fluidigm products are provided for Research Use Only. Not for use in diagnostic procedures.

#### Contact:

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# FLUIDIGM CORPORATION CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share amounts)
(Unaudited)

Three Months Ended December 31,			Twelve Months Ended Dec 31,			d December	
·	2018		2017		2018		2017
\$	13,660	\$	11,322	\$	45,491	\$	42,505
	13,494		11,694		48,159		41,894
	27,154		23,016		93,650		84,399
	5,171		4,729		19,314		17,348
	-		-		-		190
	32,325		27,745		112,964		101,937
	11,844		11,979		44,861		45,039
	1,670		1,479		6,454		4,916
	13,514		13,458		51,315		49,955
		\$ 13,660 13,494 27,154 5,171 - 32,325 11,844 1,670	\$ 13,660 \$ 13,494 \$ 27,154 \$ 5,171 \$ 32,325 \$ 11,844 \$ 1,670	31,       2018     2017       \$ 13,660     \$ 11,322       13,494     11,694       27,154     23,016       5,171     4,729       -     -       32,325     27,745       11,844     11,979       1,670     1,479	31,       2018     2017       \$ 13,660     \$ 11,322     \$ 13,494       27,154     23,016       5,171     4,729       -     -     -       32,325     27,745       11,844     11,979       1,670     1,479	31,     2018       \$ 13,660     \$ 11,322     \$ 45,491       \$ 13,494     \$ 11,694     \$ 48,159       27,154     \$ 23,016     \$ 93,650       5,171     \$ 4,729     \$ 19,314       -     -     -       32,325     \$ 27,745     \$ 112,964       11,844     \$ 11,979     \$ 44,861       1,670     \$ 1,479     \$ 6,454	2018         2017         2018           \$ 13,660         \$ 11,322         \$ 45,491         \$ 13,494         \$ 48,159           27,154         23,016         93,650         93,650         \$ 19,314         \$ 27,745         \$ 112,964           11,844         11,979         44,861         4,4729         44,861         4,670         4,479         6,454

Gross profit	18,811	14,287	61,649	51,982
Operating expenses:				
Research and development	7,958	7,158	30,030	30,826
Selling, general and administrative	21,971	15,863	79,783	79,516
Total operating expenses	 29,929	23,021	 109,813	 110,342
Loss from operations	 (11,118)	(8,734)	 (48,164)	 (58,360)
Interest expense	(4,069)	(1,457)	(13,893)	(5,824)
Other income (loss), net	172	(186)	637	385
Loss before income taxes	 (15,015)	(10,377)	 (61,420)	 (63,799)
Income tax benefit (loss)	 240	(79)	 2,407	 3,264
Net loss	\$ (14,775)	\$ (10,456)	\$ (59,013)	\$ (60,535)
Net loss per share, basic and diluted	\$ (0.36)	\$ (0.27)	\$ (1.49)	\$ (1.84)
Shares used in computing net loss per share, basic and diluted	 41,489	 38,704	39,652	 32,980

# FLUIDIGM CORPORATION CONDENSED CONSOLIDATED BALANCE SHEETS

(In thousands)

	Decem	ber 31, 2018	Decembe	er 31, 2017 <sub>(1)</sub>
ASSETS				
Current assets:				
Cash and cash equivalents	\$	95,401	\$	58,056
Short-term investments		-		5,080
Accounts receivable, net		16,651		15,049
Inventories		13,003		15,088
Prepaid expenses and other current assets		2,051		1,528
Total current assets		127,106		94,801
Property and equipment, net		8,825		12,301
Other non-current assets		6,208		7,541
Developed technology, net		57,400		68,600
Goodwill		104,108		104,108
Total assets	\$	303,647	\$	287,351
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities:				
Accounts payable	\$	4,027	\$	4,211
Accrued compensation and related benefits		14,470		10,535
Other accrued liabilities		7,621		8,490
Deferred revenue, current portion		11,464		10,238
Total current liabilities		37,582		33,474
Convertible notes, net		172,058		195,238
Deferred tax liability, net		13,714		16,919
Other non-current liabilities		8,177		10,785
Total liabilities		231,531		256,416
Total stockholders' equity		72,116		30,935
Total liabilities and stockholders' equity	\$	303,647	\$	287,351

<sup>(1)</sup> Derived from audited consolidated financial statements

# FLUIDIGM CORPORATION CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)
(Unaudited)

	Twelve Months Ended December 31,						
		2018	2017				
Operating activities							
Net loss	\$	(59,013)	\$	(60,535)			
Depreciation and amortization		5,372		7,409			
Stock-based compensation expense		11,023		9,092			
Amortization of developed technology		11,200		11,200			
Amortization of debt discounts, premiums and issuance costs		8,379		287			
Loss on disposal of property and equipment		141		135			
Other non-cash items		175		(890)			
Changes in assets and liabilities, net		(2,478)		9,204			
Net cash used in operating activities		(25,201)		(24,098)			
Investing activities							
Purchases of investments		(1,450)		(6,276)			
Proceeds from sales and maturities of investments		6,541		25,550			
Purchases of intangible assets		-		(50)			
Purchases of property and equipment		(372)		(1,566)			
Net cash provided by investing activities		4,719		17,658			
Financing activities							
Payment of debt and equity issuance costs		(2,862)		-			
Proceeds from issuance of common stock		59,469		28,793			
Proceeds from employee equity programs, net		1,053		204			
Net cash provided by financing activities		57,660		28,997			
Effect of foreign exchange rate fluctuations on cash and cash equivalents		167		454			
Net increase in cash and cash equivalents		37,345		23,011			
Cash and cash equivalents at beginning of period		58,056		35,045			
Cash and cash equivalents at end of period	\$	95,401	\$	58,056			

# FLUIDIGM CORPORATION RECONCILIATION OF GAAP TO NON-GAAP FINANCIAL INFORMATION

(In thousands, except per share amounts)
(Unaudited)

	Three Months Ended December 31,				Twelve Months Ended December 31,						
	2018		2018		2017		2018			2017	
Net loss (GAAP)	\$	(14,775)	\$	(10,456)	\$	(59,013)	\$	(60,535)			
Stock-based compensation expense		4,966		1,995		11,023		9,092			
Amortization of developed technology (a)		2,800		2,800		11,200		11,200			
Depreciation and amortization		1,248		1,457		5,372		5,824			
Interest expense (b)		4,069		1,514		13,893		7,091			
Benefit from acquisition related income taxes (c)		(835)		(433)		(3,360)		(2,968)			
Loss on disposal of property and equipment		141		134		141		135			
Net loss (Non-GAAP)	\$	(2,386)	\$	(2,989)	\$	(20,744)	\$	(30,161)			
Shares used in net loss per share calculation -				_		_		_			
basic and diluted (GAAP and Non-GAAP)		41,489	==	38,704	====	39,652		32,980			
Net loss per share - basic and diluted (GAAP)	\$	(0.36)	\$	(0.27)	\$	(1.49)	\$	(1.84)			

Net loss per share - basic and diluted (Non-GAAP)	\$	(0.06) \$	(0.08)	\$	(0.52)	\$	(0.91)
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### ITEMIZED RECONCILIATION BETWEEN GAAP AND NON-GAAP PRODUCT MARGIN

	Three Months Ended December 31,				Twelve Months Ended Decemb			
		2018		2017		2018		2017
Product margin (GAAP)	\$	15,310	\$	11,037	\$	48,789	\$	39,360
Amortization of developed technology (a)		2,800		2,800		11,200		11,200
Depreciation and amortization (d)		488		538		1,979		2,165
Stock-based compensation expense (d)		303		223		853		1,077
Product margin (Non-GAAP)	\$	18,901	\$	14,598	\$	62,821	\$	53,802
Product margin percentage (GAAP)		56.4%		48.0%		52.1%		46.6%
Product margin percentage (Non-GAAP)		69.6%		63.4%		67.1%		63.7%

### ITEMIZED RECONCILIATION BETWEEN GAAP AND NON-GAAP OPERATING EXPENSES

	Three Months Ended December 31,				Twelve Months Ended December 31,				
		2018		2017		2018		2017	
Operating expenses (GAAP)	\$	29,929	\$	23,021	\$	109,813	\$	110,342	
Stock-based compensation expense (e)		(4,663)		(1,772)		(10,170)		(8,015)	
Depreciation and amortization (e)		(760)		(976)		(3,393)		(4,926)	
Loss on disposal of property and equipment (e)		(141)		(134)		(141)		(135)	
Operating expenses (Non-GAAP)	\$	24,365	\$	20,139	\$	96,109	\$	97,266	

# ITEMIZED RECONCILIATION BETWEEN GAAP AND NON-GAAP LOSS FROM OPERATIONS

	Three Months Ended December 31,				Twelve Months Ended December 31,			
	2018		2017		2018		2017	
Loss from operations (GAAP)	\$	(11,118)	\$	(8,734)	\$	(48,164)	\$	(58,360)
Stock-based compensation expense		4,966		1,995		11,023		9,092
Amortization of developed technology (a)		2,800		2,800		11,200		11,200
Depreciation and amortization (e)		1,248		1,514		5,372		7,091
Loss on disposal of property and equipment (e)		141		134		141		135
Loss from operations (Non-GAAP)	\$	(1,963)	\$	(2,291)	\$	(20,427)	\$	(30,842)

- (a) represents amortization of developed technology in connection with the DVS acquisition
- (b) represents interest expense, primarily on convertible debt
- (c) represents the tax impact on the purchase of intangible assets in connection with the DVS acquisition
- (d) represents expense associated with cost of product revenue
- (e) represents expense associated with research and development, selling, general and administrative activities