

Safe Harbor for Forward Looking Statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 regarding the future financial performance, business prospects and growth of MKS. These statements are only predictions based on current assumptions and expectations. Any statements that are not statements of historical fact (including statements containing the words "will," "projects," "intends," "believes," "plans," "anticipates," "expects," "estimates," "forecasts," "continues" and similar expressions) should be considered to be forward-looking statements. Actual events or results may differ materially from those in the forward-looking statements set forth herein. Among the important factors that could cause actual events to differ materially from those in the forward-looking statements are the conditions affecting the markets in which MKS operates, including the fluctuations in capital spending in the semiconductor industry and other advanced manufacturing markets, fluctuations in sales to our major customers, the ability of MKS to successfully integrate ESI's operations and employees, unexpected costs, charges or expenses resulting from the ESI acquisition, MKS' ability to realize anticipated synergies and cost savings from the ESI acquisition, the terms of our term loan, competition from larger or more established companies in MKS' markets; MKS' ability to successfully grow ESI's business; potential adverse reactions or changes to business relationships resulting from the ESI acquisition, the challenges, risks and costs involved with integrating the operations of the other companies we have acquired, the Company's ability to successfully grow our business, potential fluctuations in quarterly results, dependence on new product development, rapid technological and market change, acquisition strategy, manufacturing and sourcing risks, volatility of stock price, international operations, financial risk management, and the other factors described in MKS' most recent Annual Report on Form 10-K for the year ended December 31, 2018 and any subsequent Quarterly Reports on Form 10-Q, as filed with the SEC. MKS is under no obligation to, and expressly disclaims any obligation to, update or alter these forward-looking statements, whether as a result of new information, future events or otherwise after the date of this presentation.



Use of Non-GAAP Measures

This presentation includes measures that are not in accordance with U.S. generally accepted accounting principles ("Non-GAAP measures"). These Non-GAAP measures should be viewed in addition to, and not as a substitute for, MKS' reported GAAP results, and may be different from Non-GAAP measures used by other companies. In addition, these Non-GAAP measures are not based on any comprehensive set of accounting rules or principles. MKS management believes the presentation of these Non-GAAP measures is useful to investors for comparing prior periods and analyzing ongoing business trends and operating results. Please see the Appendix entitled "GAAP to Non-GAAP Reconciliations" at the end of this presentation for reconciliations of our Non-GAAP measures to the comparable GAAP measures.



Q4'19 Results & Highlights

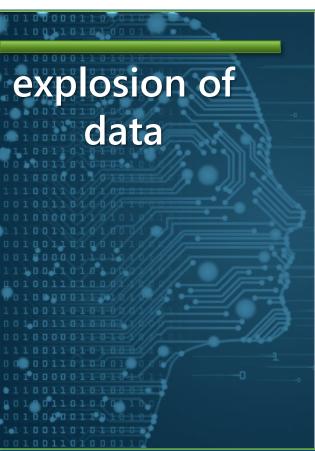
5.4821	Q3'19	Q4′19
REVENUE	\$462M	\$500M
NON-GAAP EPS	\$1.12	\$1.20
GAAP EPS	\$0.86	\$0.77



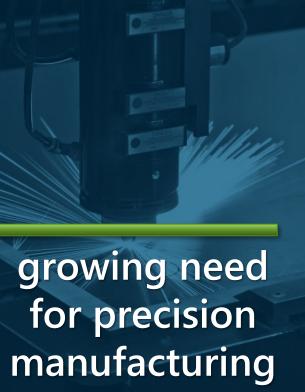
- Strong Semiconductor results across MKS portfolio (+22% Q/Q)
- Advanced Markets revenue declined slightly (-5% Q/Q) due to Equipment & Solutions, consistent with expectations

REVENUE
+16% Q/Q
+2% Q/Q
-12% Q/Q

Three Important Secular Trends Benefitting MKS







Q4 '19 Market Highlights

Semiconductor Market

REVENUE

\$272M

Q/Q GROWTH

+22%

Advanced Markets

REVENUE

\$228M

Q/Q GROWTH

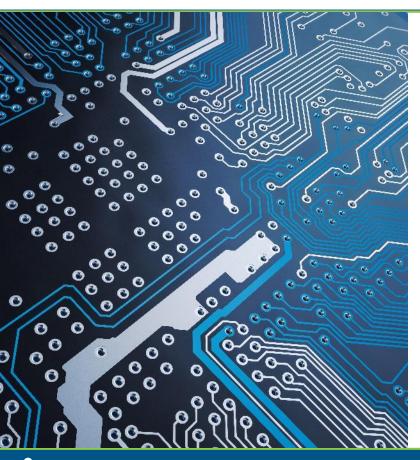
-5%

- Volume orders for RF Generators and Matching Networks related to prior design wins
- Strength in Plasma & Reactive Gas solutions in leading edge foundry nodes
- Design win in Pressure for a complex deposition application

- Laser demand across mulitiple markets, including Solar, Display, and PCB drilling
- Traction in Motion, design wins in Display,
 Semi Wafer Annealing & 5G Antenna testing
- Ophir Optics Long Range Continuous Zoom Lens named SPIE 2020 Prism Award finalist



Q4'19 Equipment & Solutions Update



- Progress on cost synergies more than \$13M in annualized savings achieved by Q4'19-end, out of the \$15M target (18-36 months post-closing.)
- Recognized revenue on sale of first HDI drilling tool.
- Shipped another beta system, now totaling 3 beta customers.



Revenue & Select Financial Measures

	Q4′18	Q3′19	Q4′19
Advanced Markets	\$226M	\$239M	\$228M
Semiconductor	\$235M	\$223M	\$272M
Revenue	\$461M	\$462M	\$500M
Non-GAAP Financial Measures			
Gross Margin	45.6%	44.3%	43.3%
Operating Margin	23.7%	17.6%	18.4%
Net Interest Expense	\$2	\$9M	\$8M
Income Tax Rate	21.4%	15.6%	18.6%
Net Earnings	\$84M	\$62M	\$66M
Diluted Earnings per Share	\$1.54	\$1.12	\$1.20
GAAP Financial Measures			
Gross Margin	45.6%	44.3%	43.3%
Operating Margin	20.4%	14.4%	13.2%
Net Interest Expense	\$2M	\$12M	\$8M
Income Tax Rate	21.4%	14.4%	22.6%
Net Income	\$72M	\$47M	\$43M
Net Income per Share	\$1.32	\$0.86	\$0.77

- Overall Q4'19 Revenue up +8% Q/Q
- Q4'19 Non-GAAP Gross Margin of 43.3%
 - Q/Q decline led by product mix, as well as seasonally softer Equipment & Solutions revenue
- Q4'19 Non-GAAP Operating Margin of 18.4%
 - Led by strong Revenue and Opex cost control
- Q4'19 Non-GAAP Net Interest Expense of \$8M
- Q4'19 Non-GAAP Tax Rate of 19%



Balance Sheet & Cash Flow

	Q4′18	Q3′19	Q4′19
Cash & Short-Term Investments	\$718M	\$475M	\$524M
Accounts Receivable	\$295M	\$328M	\$341M
Inventories	\$385M	\$463M	\$462M
Total Current Assets	\$1,464M	\$1,360M	\$1,434M
Total Assets	\$2,614M	\$3,355M	\$3,416M
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Total Debt	\$348M	\$886M	\$884M
Total Liabilities	\$741M	\$1,381M	\$1,393M
Stockholders' Equity	\$1,873M	\$1,974M	\$2,023M

Operating Cash Flow	\$135M	\$61M	\$77M
Free Cash Flow	\$109M	\$44M	\$58M

- Exited Q4'19 with \$524 million of cash and investments and \$100 million of incremental borrowing capacity
- Net leverage ratio <1.0x at the end of the quarter
- On January 24, 2020, completed another \$50M voluntary principal prepayment – 11th since loan origination in April 2016
- Cumulative effect of principal prepayments since ESI closing (February 1, 2019), along with our secured term loan repricing in Q3'19, reduces our annualized interest expense by over \$9 million, based on current interest rates



Q1 2020 Guidance

	Q4′19	Q1′20
Revenue	\$500M	\$495M - \$545M
Non-GAAP Financial Measures		
Gross Margin	43.3%	43.0% - 45.0%
Operating Expenses	\$124M	\$128M - \$136M
Operating Income	\$92M	\$85M - \$109M
Operating Margin	18.4%	17.0% - 20.0%
Interest Expense, Net	\$8M	\$7M
Tax Rate	18.6%	19.0%
Net Earnings	\$66M	\$63M - \$83M
Net Earnings per Diluted Share	\$1.20M	\$1.14M - \$1.49M
Diluted Share Count	55.4M	55.5M

- Semiconductor market expected to remain strong in Q1'20
- Advanced Markets expected to remain stable in Q1'20
 - Modest increase in Equipment & Solutions revenue expected in Q1'20
- Equipment & Solutions margins to improve, but to remain below normalized levels due to revenue volumes and product mix
- Q1'20 Operating Expense increase driven by seasonal increase in fringe expenses
 - Balance of year to remain consistent with estimated Q1'20 levels, given Q2'20 wage increases, and targeted R&D, SG&A investments



92.1

18.4%

\$ 109.2 \$ 81.3 \$

17.6%

\$ 545.7 \$ 343.6

18.1%

26.3%

	Q4'18	Q3'19	Q4'19	2018	2019		Q4'1	8	Q3'19	Q4'19	2018	2019
Gross profit	\$ 209.8	\$ 205.0	\$ 216.3	\$ 979.5	\$ 830.4	Interest expense	\$ 3	3.9	\$ 13.5	\$ 8.8	\$ 16.9	\$ 44.1
Acquisition inventory step-up (Note 2)	_	_	_	_	7.6	Amortization of debt issuance costs (Note 4)	(0.7	3.1	0.2	3.9	5.1
Non-GAAP gross profit (Note 15)	\$ 209.8	\$ 205.0	\$ 216.3	\$ 979.5	\$ 838.0	Non-GAAP interest expense	\$ 3	3.2	\$ 10.4	\$ 8.6	\$ 13.0	\$ 39.0
Non-GAAP gross margin (Note 15)	45.6%	44.3%	43.3%	47.2%	44.1%							
						Net income	\$ 7	1.6	\$ 47.4	\$ 42.7	\$ 392.9	\$ 140.4
Operating expenses	\$ 115.7	\$ 138.2	\$ 150.2	\$ 485.4	\$ 610.6	Acquisition and integration costs (Note 1)	4	4.2	2.1	1.8	3.1	37.3
Acquisition and integration costs (Note 1)	4.2	2.1	1.8	3.1	37.3	Acquisition inventory step-up (Note 2)		—	_	_	_	7.6
Fees and expenses related to term loan (Note 3)	_	0.6	0.1	0.4	6.6	Fees and expenses related to term loan (Note 3)		—	0.6	0.1	0.4	6.6
Amortization of intangible assets	10.7	17.0	17.1	43.5	67.4	Amortization of debt issuance costs (Note 4)	(0.7	3.1	0.2	3.9	5.1
Restructuring and other (Note 5)	0.2	1.6	2.3	4.6	7.0	Restructuring and other (Note 5)	(0.2	1.6	2.3	4.6	7.0
Gain on sale of long-lived assets (Note 6)	_	(6.8)	_	_	(6.8)	Amortization of intangible assets	10	0.7	17.0	17.1	43.5	67.4
Asset impairment (Note 7)		_	4.7		4.7	Gain on sale of long-lived assets (Note 6)		—	(6.8)	_	_	(6.8)
Non-GAAP operating expenses (Note 13)	\$ 100.6	\$ 123.7	\$ 124.2	\$ 433.8	\$ 494.4	Asset impairment (Note 7)		_	_	4.7	_	4.7
						Windfall tax (benefit) expense on stock-based compensation (Note 8)	((0.2)	0.3	(0.3)	(8.2)	(2.2)
Income from operations	\$ 94.1	\$ 66.8	\$ 66.1	\$ 494.1	\$ 219.8	Tax reform adjustments (Note 9)		_	_	(2.9)	(0.6)	(0.1)
Acquisition inventory step-up (Note 2)	_	_	_	_	7.6	Tax on MKS subsidiary distributions (Note 10)	(2	2.2)	_	_	(5.0)	_
Acquisition and integration costs (Note 1)	4.2	2.1	1.8	3.1	37.3	Tax cost on the inter-company sale of an asset (Note 11)	(0.5	_	5.4	0.5	5.4
Fees and expenses related to term loan (Note 3)	_	0.6	0.1	0.4	6.6	Tax effect of pro-forma adjustments (16)	(1.5)	(3.7)	(4.8)	(4.7)	(23.4)
Restructuring and other (Note 5)	0.2	1.6	2.3	4.6	7.0	Non-GAAP net earnings (Note 12)	\$ 84	4.0	\$ 61.6	\$ 66.3	\$ 430.4	\$ 249.0
Amortization of intangible assets	10.7	17.0	17.1	43.5	67.4	Non-GAAP net earnings per diluted share (Note 12)	\$ 1.	54	\$ 1.12	\$ 1.20	\$ 7.83	\$ 4.52
Gain on sale of long-lived assets (Note 6)	_	(6.8)	_	_	(6.8)	Weighted average diluted shares outstanding	54	1.4	55.2	55.4	55.0	55.1
Asset impairment (Note 7)		_	4.7		4.7							

Dollar amounts and weighted average shares outstanding in millions.



Non-GAAP income from operations (Note 14)

Non-GAAP operating margin (Note 14)

												2018				2019	
		Q4'	18			′	Q4'19					Provision				Provision	
		(ber	nefit) for			r	(benefit) for			Р	Pre-Tax	(benefit) for	٢	Pr	re-Tax ((benefit) for	, "
	Pre-Tax	. In	ncome		Pre-Ta	iax	Income			lr	ncome	Income	Tax Rate	In	come	Income	Tax Rate
	Income	. 7	Taxes	Tax Rate	Incom	me	Taxes	Tax Rate	GAAP	\$	481.0	\$ 88.1	1 18.3%	\$	177.8	\$ 37.4	4 21.1%
GAAP	\$ 91.	.1 \$	19.5	21.4%	\$	55.2 \$	\$ 12.5	22.6%	Acquisition and integration costs (Note 1)		3.1	_	-		37.3	_	
Acquisition and integration costs (Note 1)	1	4.2	_			1.8	_		Acquisition inventory step-up (Note 2)		_		-		7.6	_	. 7
Fees and expenses related to term loan (Note 3)		_	_			0.1	_		Fees and expenses related to repricing of term loan (Note 3)	i)	0.4	_	-		6.6	_	
Amortization of debt issuance costs (Note 4)	0.	7	_			0.2	_		Amortization of debt issuance costs (Note 4)		3.9	_	-		5.1	_	
Restructuring and other (Note 5)	0	0.2	_			2.3	_		Restructuring and other (Note 5)		4.6	_	-		7.0	_	
Amortization of intangible assets	10.	7	_			17.1	_		Amortization of intangible assets		43.5	_	-		67.4	_	
Asset impairment (Note 7)		_	_			4.7	_		Gain on sale of long-lived assets (Note 6)		_	_	*		(6.8)	_	
Windfall tax benefit on stock-based compensation (Note 8)	, -	_	0.2			_	0.3		Asset impairment (Note 7)		_	_	-		4.7	_	
Tax reform adjustments (Note 9)		_	_			_	2.9		Windfall tax benefit on stock-based compensation (Note 8)	,	_	8.7	2		_	2.2	
Accrued tax on MKS subsidiary distributions (Note 10)	-	_	2.2			_	_		Tax reform adjustments (Note 9)		_	0.6	غ		_	0.1	
Tax cost on the inter-company sale of an asset (Note 11)	-	_	(0.5)			_	(5.4)	,	Accrued tax on MKS subsidiary distributions (Note 10)		_	5.0	J		_	_	, !
Tax effect of pro-forma adjustments			1.5				4.8	_	Tax cost on the inter-company sale of an asset (Note 11)		_	(0.5)	(د		_	(5.4)	,)
Non-GAAP	\$ 106.	.9 \$	22.9	21.4%	\$	81.4 \$	\$ 15.1	18.6%	Tax effect of pro-forma adjustments			4.7	1			23.4	,
									Non-GAAP	\$	536.5	\$ 106.1	1 19.8%	\$	306.7	\$ 57.7	7 18.8%
		Q3'	19						•				-				• 1

		<u> </u>	, ,,	
Pr	e-Tax	(be	nefit) for	
In	come	- I	ncome	Tax Rate
\$	55.4	\$	8.0	14.4%
	2.1		_	
	0.6			
	3.1		_	
	1.6		_	
	17.0		_	
	(6.8)		_	
	_		(0.3)	
	_		3.7	_
\$	73.0	\$	11.4	15.6%
		2.1 0.6 3.1 1.6 17.0 (6.8)	Pre-Tax (be Income Incom	Income Income S 55.4 \$ 8.0 2.1

Dollar amounts in millions.



	Q4'18	(Q3'19	C	Q4'19	2	2018	2019	
Net income	\$ 71.6	\$	47.4	\$	42.7	\$	392.9	\$ 140.4	ļ
Interest expense, net	2.2		12.3		7.8		11.2	38.7	7
Provision for income taxes	19.5		8.0		12.5		88.1	37.4	ļ
Depreciation	9.2		10.2		11.7		36.3	41.3	}
Amortization	10.7		17.0		17.1		43.5	67.4	Į.
EBITDA (Note 16)	\$ 113.2	\$	94.9	\$	91.8	\$	572.0	\$ 325.2	
Stock-based compensation	5.3		5.8		7.2		27.3	28.2)
Acquisition and integration costs (Note 1)	4.2		2.1		1.8		3.1	37.3	}
Acquisition inventory step-up (Note 2)	_		_		_		_	7.6	;
Fees and expenses related to term loan (Note 3)	_		0.6		0.1		0.4	6.6	;
Restructuring and other (Note 5)	0.2		1.6		2.3		4.6	7.0)
Gain on sale of long-lived assets (Note 6)	_		(6.8)		_		_	(6.8	3)
Asset impairment (Note 7)	_		_		4.7		_	4.7	7
Other adjustments			_		_		0.7	3.4	ļ
Adjusted EBITDA (Note 17)	\$ 122.9	\$	98.2	\$	107.9	\$	608.1	\$ 413.2)
Operating cash flow	\$ 135.4	\$	60.6	\$	77.3	\$	413.8	\$ 244.5	,
Purchases of property, plant and equipment	(26.1)		(16.5)		(19.1)		(62.9)	(63.9))
Free cash flow	\$ 109.3	\$	44.1	\$	58.2	\$	350.9	\$ 180.6	<u>;</u>

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	Low Gu	ıida	nce	High Guidance							
An	nount	Pe	r Share	An	nount	Pe	r Share				
\$	45.6	\$	0.82	\$	65.6	\$	1.18				
	16.8	\$	0.30		16.8	\$	0.30				
	0.8	\$	0.01		0.8	\$	0.01				
	2.4	\$	0.04		2.4	\$	0.04				
	2.3	\$	0.04		2.3	\$	0.04				
	(4.8)	\$	(0.09)		(5.0)	\$	(0.09)				
\$	63.1	\$	1.14	\$	82.9	\$	1.49				
			55.5				55.5				

Dollar amounts and weighted average shares outstanding in millions.



GAAP net income Amortization Deferred financing costs Integration costs

Restructuring and other costs Tax effect of adjustments (Note 18) Non-GAAP net earnings

Estimated weighted average diluted shares outstanding

Non-GAAP financial measures adjust GAAP financial measures for the items listed below. These Non-GAAP measures should be viewed in addition to, and not as a substitute for, MKS' reported GAAP results, and may be different from Non-GAAP measures used by other companies. In addition, these Non-GAAP measures are not based on any comprehensive set of accounting rules or principles. MKS management believes the presentation of these Non-GAAP measures is useful to investors for comparing prior periods and analyzing ongoing business trends and operating results.

Note 1: Acquisition and integration costs during the three and twelve months ended December 31, 2019, three months ended September 30, 2019 and the three and twelve months ended December 31, 2018, related to our acquisition of Electro Scientific Industries, Inc. ("ESI") which closed on February 1, 2019. In addition, during the twelve months ended December 31, 2018, we reversed a severance accrual of \$1.1 million related to our acquisition of Newport Corporation in April 2016.

Note 2: Cost of revenues during the twelve months ended December 31, 2019 includes the amortization of the step-up of inventory to fair value as a result of the ESI acquisition.

Note 3: We recorded fees and expenses during the three and twelve months ended December 31, 2019 and the three months ended September 30, 2019, related to Amendment No. 6 to our Term Loan Credit Agreement dated as of April 29, 2016 (as amended, the "Term Loan Credit Agreement"), which included the fifth repricing of our secured term loan and a consolidation of the two existing tranches into one tranche with a maturity date in February 2026. We also recorded fees and expenses during the twelve months ended December 31, 2019 related to Amendment No. 5 to our Term Loan Credit Agreement. We recorded fees and expenses during the twelve months ended December 31, 2018 related to previous repricings of our secured term loan.

Note 4: We recorded additional interest expense during the three and twelve months ended December 31, 2019, three months ended September 30, 2019 and the three and twelve months ended December 31, 2018, related to the amortization of debt issuance costs related to our Term Loan Credit Agreement and our ABL Credit Agreement dated February 1, 2019, as amended on April 26, 2019.

Note 5: Restructuring costs during the three months ended December 31, 2019 resulted from the pending closure of a facility in Europe. Additional restructuring costs recorded during the twelve months ended December 31, 2019 and the three months ended September 30, 2019 consisted primarily of severance costs related to an organization-wide reduction in workforce, the consolidation of service functions in Asia, and the movement of certain products to lower cost regions. In the twelve months ended December 31, 2019, we also recorded a legal settlement from a contractual obligation we assumed as part of our acquisition of Newport Corporation. Restructuring costs during the twelve months ended December 31, 2018 were primarily comprised of severance costs related to transferring a portion of our shared services functions to a third party, as well as the consolidation of certain shared service functions in Asia. We also recorded environmental costs during the twelve months ended December 31, 2018, related to an Environmental Protection Agency-designated Superfund site, which we acquired as part of our acquisition of Newport Corporation.

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Note 6: During the three months ended September 30, 2019 and twelve months ended December 31, 2019, we recorded a net gain on the sale of two properties in Boulder, CO and three properties in Portland, OR.

Note 7: During the three and twelve months ended December 31, 2019, we recorded an impairment charge related to a minority interest investment in a private company.

Note 8: We recorded windfall tax expenses (benefits) during the three and twelve months ended December 31, 2019, three months ended September 30, 2019 and the three and twelve months ended December 31, 2018, on the vesting of stock-based compensation.



Note 9: We recorded tax adjustments resulting from additional guidance provided by tax authorities and the enactment of tax reform.

Note 10: During the three and twelve months ended December 31, 2018, we recorded adjustments to tax accruals related to distributions of MKS subsidiaries.

Note 11: We recorded taxes on the inter-company sales of assets during the three and twelve months ended December 31, 2019 and 2018.

Note 12: Non-GAAP net earnings and Non-GAAP net earnings per diluted share amounts exclude acquisition and integration costs, amortization of the step-up of inventory to fair value, fees and expenses related to our secured term loan, amortization of debt issuance costs, restructuring and other costs, amortization of intangible assets, a gain on the sale of long-lived assets, an asset impairment, windfall tax adjustments related to stock compensation expense, tax reform adjustments, accrued tax on subsidiary distributions, tax costs on the inter-company sale of an asset and the related tax effect of these adjustments to reflect the expected full year effective tax rate in the related period.

Note 13: Non-GAAP operating expenses exclude acquisition and integration costs, fees and expenses related to our secured term loan, amortization of intangible assets, restructuring and other costs, a gain on sale of long-lived assets and an asset impairment.

Note 14: Non-GAAP income from operations and Non-GAAP operating margin percentages exclude acquisition and integration costs, the amortization of the step-up of inventory to fair value, fees and expenses related to the repricing and amendment of our secured term loan, restructuring and other costs, amortization of intangible assets, a gain on the sale of long-lived assets and an asset impairment.

Note 15: The Non-GAAP gross profit amount and Non-GAAP gross margin exclude the amortization of the step-up of inventory to fair value.

Note 16: EBITDA excludes net interest, income taxes, depreciation and amortization of intangible assets.

Note 17: Adjusted EBITDA excludes stock-based compensation, acquisition and integration costs, the amortization of the step-up of inventory to fair value, fees and expenses related to the repricing and amendment of our secured term loan, restructuring and other costs, a gain on the sale of long-lived assets, an asset impairment and other adjustments as defined in our Term Loan Credit Agreement.

Note 18: Non-GAAP adjustments are tax effected at applicable statutory rates resulting in a difference between the GAAP and Non-GAAP tax rates.

