

Financial Results for Q4 2018

January 24, 2019



SAFE HARBOR

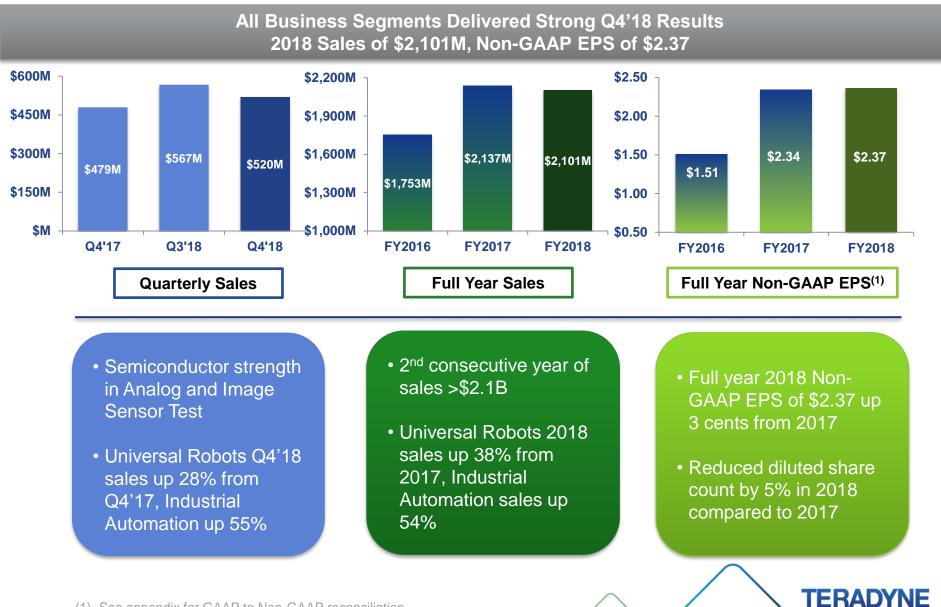
This presentation contains forward-looking statements regarding Teradyne's future business prospects, results of operations, market conditions, earnings per share, the payment of a quarterly dividend, the repurchase of Teradyne common stock pursuant to a share repurchase program, use of proceeds and potential dilution from the senior convertible notes offering, potential borrowings under a senior secured credit facility, and the impact of the U.S. tax reform, export and tariff laws. Such statements are based on the current assumptions and expectations of Teradyne's management and are neither promises nor guarantees of future performance, events, earnings per share, use of cash, payment of dividends, repurchases of common stock, payment of the senior convertible notes, availability of, or borrowing under, the credit facility, or the impact of the U.S. tax reform, export and tariff laws. There can be no assurance that management's estimates of Teradyne's future results or other forward looking statements will be achieved. Additionally, the current dividend and share repurchase programs may be modified, suspended or discontinued at any time. Important factors that could cause actual results, earnings per share, use of cash, dividend payments, repurchases of common stock, payment of the senior convertible notes, or borrowings under the credit facility to differ materially from those presently expected include: conditions affecting the markets in which Teradyne operates; decreased or delayed product demand from one of more significant customers; development, delivery and acceptance of new products; the ability to grow the Industrial Automation business; increased research and development spending; deterioration of Teradyne's financial condition; the consummation and success of any mergers or acquisitions; unexpected cash needs; insufficient cash flow to make required payments and pay the principal amount on the senior convertible notes; the business judgment of the board of directors that a declaration of a dividend, the repurchase of common stock or borrowing under the credit facility is not in the Company's best interest; additional U.S. tax regulations or IRS guidance; the impact of any tariffs or export controls imposed in the U.S. or China; and other events, factors and risks disclosed in filings with the SEC, including, but not limited to, the "Risk Factors" section of Teradyne's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 and the Quarterly Report on Form 10-Q for the period ended September 30, 2018. The forward-looking statements provided by Teradyne in this presentation represent management's views as of the date of this presentation. Teradyne anticipates that subsequent events and developments may cause management's views to change. However, while Teradyne may elect to update these forward-looking statements at some point in the future, Teradyne specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing Teradyne's views as of any date subsequent to the date of this presentation.



Business Update and Outlook

Mark Jagiela, Teradyne President and CEO

Q4'18 and 2018 Summary



January 2019 Update

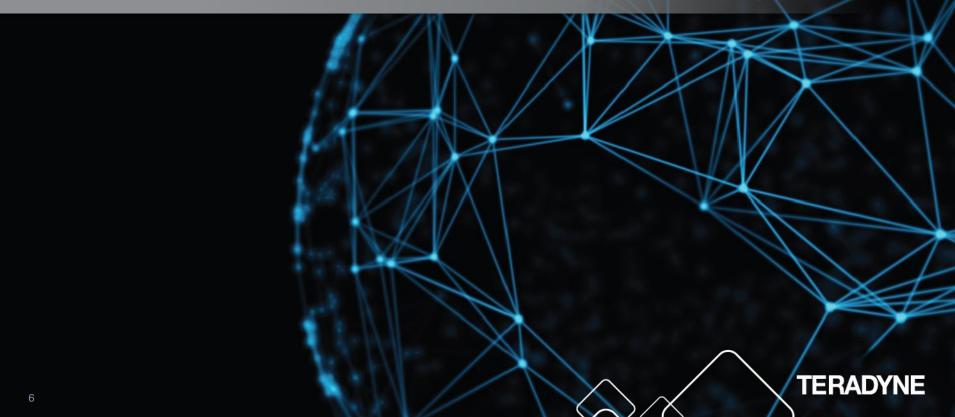
- Record Analog and Memory Test sales in 2018.
- Overall SOC sales approximately 17% lower in 2018 from 2017 on decreased Mobility Test demand.
- After 3 consecutive years of growth in the SOC market, expect a softer market in 2019.
- Expect 2019 SOC Test market to be \$2.3-2.7B, Memory Test market \$650-750M.
- Industrial Automation (IA) long term growth rate expected to moderate to 30-40% CAGR.
- Updated earnings model shifts \$3.50-\$4.00 non-GAAP EPS target from 2021 to 2022 to reflect latest Test and IA outlook.

TERAD

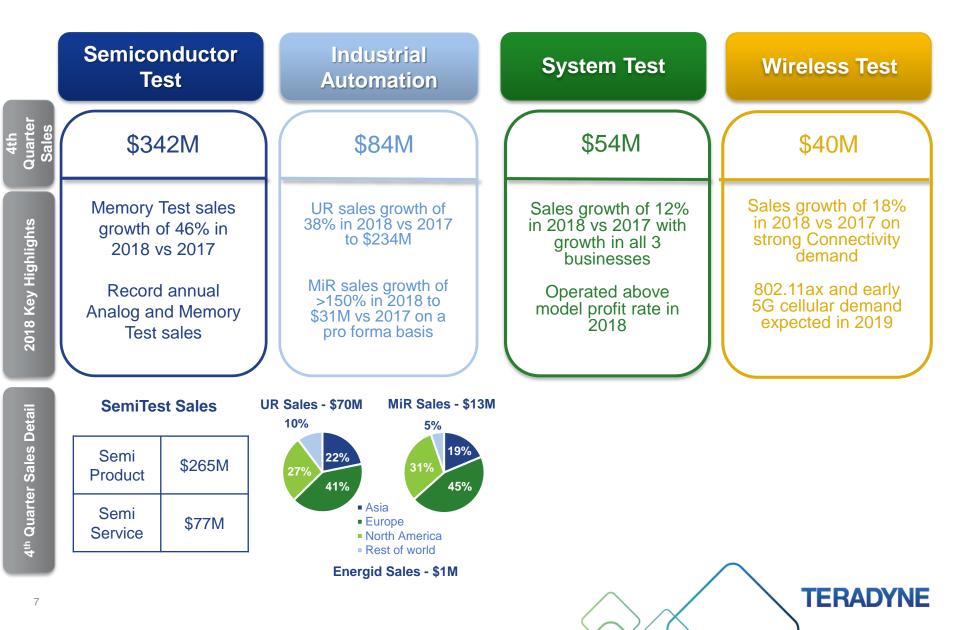
• Expect to repurchase \$500 million of Teradyne shares in 2019.

Fourth Quarter and Full Year 2018 Financial Results and First Quarter 2019 Guidance

Greg Beecher, Teradyne Vice President and Chief Financial Officer



Q4'18 and 2018 Segment Summary



Q4'18 Non-GAAP Results

\$s in millions, except EPS	Q4'17	' Actual ⁽¹⁾	Q3'18 /	Actual ⁽¹⁾	Q4'18 Actual ⁽¹⁾		
Sales		\$479M		\$567M		\$520M	
Gross Margin	56.5%	\$271M	58.9%	\$334M	59.6%	\$310M	
R&D	15.0%	\$72M	13.6%	\$77M	14.4%	\$75M	
SG&A	18.3%	\$88M	17.7%	\$100M	19.4%	\$101M	
OPEX	<u>33.3%</u>	<u>\$160M</u>	<u>31.3%</u>	<u>\$177M</u>	<u>33.8%</u>	<u>\$175M</u>	
Operating Profit	23.2%	\$111M	27.6%	\$156M	25.8%	\$134M	
Income Taxes (& effective tax rate) ⁽²⁾	19.8%	\$23M	15.3%	\$24M	15.0%	\$20M	
EPS		\$0.46		\$0.71		\$0.63	
Diluted Shares		199M		187M		181M	

TERADYNE

(1) See attached appendix for GAAP to non-GAAP reconciliations

(2) Income tax rate in Q4'18 is lower than the full year estimate of 16% due to a cumulative catch up for the year recorded in Q4'18 to bring the YTD rate to 16%

Balance Sheet & Capital Return

	Q4'17 Actual	Q3'18 Actual	Q4'18 Actual
Cash and Marketable Securities	\$1,904M	\$1,324M	\$1,205M
Inventory	\$108M	\$155M	\$154M
DSO	52 Days	57 Days	52 Days
Acquisition Earn-out Accruals ⁽¹⁾	\$45M	\$61M	\$71M
Capital Additions	\$32M	\$18M	\$26M
Depreciation and Amortization ⁽²⁾	\$35M	\$37M	\$39M
Free Cash Flow ⁽³⁾	\$115M	\$223M	\$160M
Capital Return	\$48M	\$201M	\$261M
Dividends	\$14M	\$17M	\$16M

TERADYNE

(1) Q4'17 includes UR, Q3'18 and Q4'18 include UR and MiR

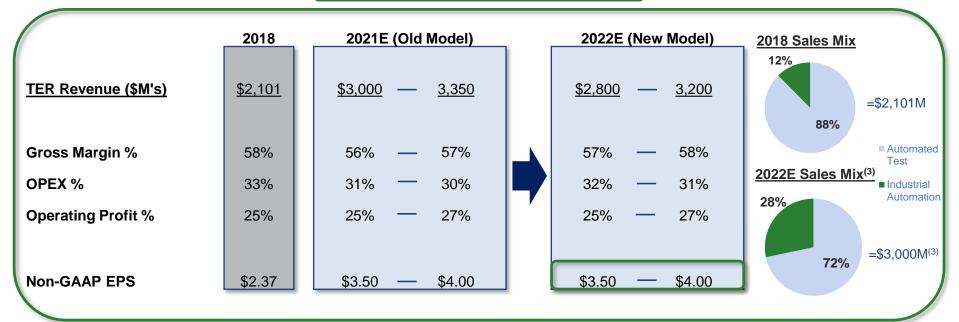
(2) Includes depreciation, stock based compensation, amortization of acquired intangible assets and amortization of the non-cash convertible rebt discount

(3) Teradyne calculates free cash flow as: GAAP Cash flow from operations, excluding discontinued operations, less property, plant and equipment additions;

see GAAP to non–GAAP reconciliations. Q3'18 free cash flow includes proceeds from government subsidy for property, plant and equipment.

Teradyne Updated Non-GAAP Earnings Model

Financial Model Update⁽²⁾



2022E Model Assumptions

- Test revenues grow at 3-5% CAGR from 2018 result of \$1,840M
- Industrial Automation revenues grow at 30-40% CAGR from 2018 result of \$261M
- 8% lower share count vs. 2021 model due to lower 2018 buyback price and additional year of buybacks

TERADYNE

- (1) See attached appendix for GAAP to non-GAAP reconciliations
- (2) Financial Model updated as of 1/24/19
- 10 (3) 2022E sales mix is at mid-point of model range

Teradyne OPEX History and Outlook

Annual Non-GAAP OPEX ⁽¹⁾										
2015 2016 2017 2018 2019LE										
Industrial Automation ⁽²⁾	\$14M	\$43M	\$62M	\$114M						
Test	\$514M	\$513M	\$509M	\$504M	•					
Variable Comp	<u>\$61M</u>	<u>\$53M</u>	<u>\$85M</u>	<u>\$74M</u>	-					
Total OPEX	\$589M	\$609M	\$656M	\$692M						

Test OPEX ~flat excluding changes in variable compensation tied to profitability levels

(1) See attached appendix for GAAP to non-GAAP reconciliations.

(2) Commencing from date of acquisitions. UR June 12th, 2015 onwards, Energid February 26th, 2018 onwards,

MiR April 25th, 2018 onwards

Q1'19 Non-GAAP Guidance

\$s in millions, except EPS	Q4'18 Actual ⁽¹⁾	Q1'19 Guidance ⁽¹⁾
Sales	\$520M	\$460M - \$490M
Gross Margin	60%	58%
OPEX	34%	38% - 40%
Operating Profit	26%	17% - 20%
Net Interest & Other Income	(\$1M)	\$3M
Effective Tax Rate ⁽²⁾	15%	16%
EPS	\$0.63	\$0.39 - \$0.47
Diluted Shares	181M	177M

(1) See attached appendix for GAAP to non-GAAP reconciliations.

12

(2) Income tax rate in Q4'18 is lower than the full year estimate of 16% due to a cumulative

catch up for the year recorded in Q4'18 to bring the YTD rate to 16%

TERADYNE

January 2019 Update

- Record Analog and Memory Test sales in 2018.
- Overall SOC sales approximately 17% lower in 2018 from 2017 on decreased Mobility Test demand.
- After 3 consecutive years of growth in the SOC market, expect a softer market in 2019.
- Expect 2019 SOC Test market to be \$2.3-2.7B, Memory Test market \$650-750M.
- Industrial Automation (IA) long term growth rate expected to moderate to 30-40% CAGR.
- Updated earnings model shifts \$3.50-\$4.00 non-GAAP EPS target from 2021 to 2022 to reflect latest Test and IA outlook.

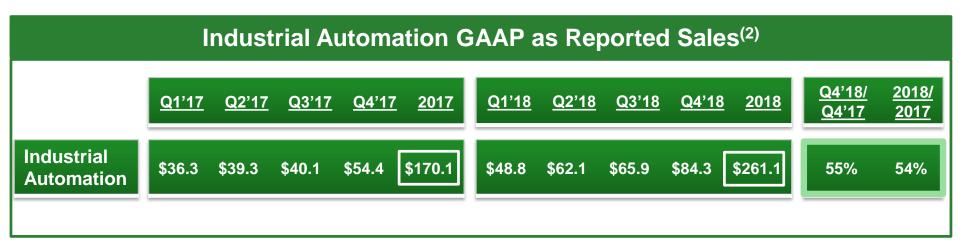
TERAD

• Expect to repurchase \$500 million of Teradyne shares in 2019.

Supplemental Information



Industrial Automation⁽¹⁾ Growth



	Industrial Automation Pro Forma Sales ⁽³⁾											
	<u>Q1'17</u>	<u>Q2'17</u>	<u>Q3'17</u>	<u>Q4'17</u>	<u>2017</u>	<u>Q1'18</u>	<u>Q2'18</u>	<u>Q3'18</u>	<u>Q4'18</u>	<u>2018</u>	<u>Q4'18/</u> <u>Q4'17</u>	<u>2018/</u> 2017
Industrial Automation	\$38.7	\$43.6	\$44.0	\$60.2	\$186.5	\$55.4	\$63.3	\$65.9	\$84.3	\$268.9	40%	44%

TERADY

- (1) Industrial Automation includes: Universal Robots acquired June'15, Energid acquired Feb'18 and MiR acquired Apr'18
- (2) GAAP as reported sales includes Universal Robots, Energid from time of acquisition (Feb'18) and MiR from time of acquisition (Apr'18)
- (3) Pro forma sales include results from Universal Robots, MiR and Energid pre and post acquisition dates

Annual Non-GAAP Results

\$s in millions, except EPS	20	17 ⁽¹⁾	2	018 ⁽¹⁾
Sales		\$2,137M		\$2,101M
Gross Margin	57.2%	\$1,221M	58.1%	\$1,221M
R&D	14.4%	\$307M	14.3%	\$302M
SG&A	16.3%	\$349M	18.6%	\$391M
OPEX	<u>30.7%</u>	<u>\$656M</u>	<u>32.9%</u>	<u>\$692M</u>
Operating Profit	26.5%	\$565M	25.2%	\$529M
Income Taxes (& effective tax rate)	17.8%	\$101M	15.8%	\$84M
EPS		\$2.34		\$2.37
Diluted Shares		200M		189M

TERADYNE

(1) See attached appendix for GAAP to non-GAAP reconciliations.

In addition to disclosing results that are determined in accordance with GAAP, Teradyne also discloses in this presentation and on the earnings call non-GAAP results of operations that exclude certain income items and charges. These results are provided as a complement to results provided in accordance with GAAP. These non-GAAP performance measures are used to make operational decisions, to determine employee compensation, to forecast future operational results, and for comparison with the Company's business plan, historical operating results and the operating results of the Company's competitors. Management believes each of these non-GAAP performance measures provides useful supplemental information for investors, allowing greater transparency to the information used by management in its operational decision making and in the review of the Company's financial and operational performance, as well as facilitating meaningful comparisons of the Company's results in the current period compared with those in prior and future periods. A reconciliation of each available GAAP to non-GAAP financial measure discussed in this presentation is contained in the following slides and on the Teradyne website at www.teradyne.com by clicking on "Investors" and then selecting the "GAAP to Non-GAAP Reconciliation" link. The non-GAAP performance measures discussed in this presentation may not be comparable to similarly titled measures used by other companies. The presentation of non-GAAP measures is not meant to be considered in isolation, as a substitute for, or superior to, financial measures or information provided in accordance with GAAP.



GAAP to Non-GAAP Earnings Reconciliation

. . .

(In millions, except per share amounts)

			Quarte	r Ended		
	mber 31, 2018	% of Net Revenues	September 30, 2018	% of Net Revenues	December 31, 2017 (1)	% of Net Revenues
Netrevenues	\$ 519.6		\$ 566	.8	\$ 479	4
Gross profit GAAP and non-GAAP	\$ 309.5	59.6%	\$ 333	.7 58.9%	\$ 270	9 56.5%
Income from operations - GAAP Acquired intangible assets amortization Restructuring and other (2)	\$ 112.3 10.6 11.4	21.6% 2.0% 2.2%	\$ 143 11 1		\$ 94 7. 9	4 1.5%
Income from operations - non-GAAP	\$ 134.3	25.8%	\$ 156	.4 27.6%	\$ 111.	0 23.2%

			Net Income per Common Sha	are				Net Ir per Comn	ncome non Share			Net Ir per Comn	come Ion Share
	nber 31, 018	% of Net Revenues	 Basic	Diluted	_	September 30, 2018	% of Net Revenues	Basic	Diluted	ember 31, 2017	% of Net Revenues	Basic	Diluted
Net income - GAAP	\$ 143.8	27.7%	\$ 0.80	\$ 0.79	ş	120.0	21.2%	\$ 0.65	\$ 0.63	\$ (105.9)	-22.1%	\$ (0.54)	\$ (0.54)
Acquired intangible assets amortization	10.6	2.0%	0.06	0.06		11.1	2.0%	0.06	0.06	7.4	1.5%	0.04	0.04
Interest and other (3)	3.3	0.6%	0.02	0.02		3.3	0.6%	0.02	0.02	3.2	0.7%	0.02	0.02
Restructuring and other (2)	11.4	2.2%	0.06	0.06		1.7	0.3%	0.01	0.01	9.0	1.9%	0.05	0.05
Pension mark-to-market adjustment (3)	(3.5)	-0.7%	(0.02)	(0.02)		0.3	0.1%	0.00	0.00	(3.8)	-0.8%	(0.02)	(0.02)
Exclude discrete tax adjustments (4)	(52.9)	-10.2%	(0.30)	(0.29)		0.3	0.1%	0.00	0.00	184.4	38.5%	0.94	0.94
Non-GAAP tax adjustments	0.3	0.1%	0.00	0.00		(3.4)	-0.6%	(0.02)	(0.02)	(2.9)	-0.6%	(0.01)	(0.01)
Convertible share adjustment	 -	-	 -	-	_		<u> </u>	-	0.01	 -	-	-	-
Net income - non-GAAP	\$ 113.0	21.7%	\$ 0.63	\$ 0.63	5	133.3	23.5%	\$ 0.72	\$ 0.71	\$ 91.4	19.1%	\$ 0.47	\$ 0.46
GAAP and non-GAAP weighted average common shares - basic	179.0					185.7				196.0			
GAAP weighted average common shares - diluted	181.5					190.5				196.0			
Include dilutive shares	-					-				3.0			
Exclude dilutive shares related to convertible note transaction	 (0.9)					(3.1)				 -			
Non-GAAP weighted average common shares - diluted	 180.6				_	187.4				 199.0			



Appendix | GAAP to Non-GAAP Reconciliation

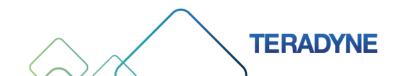
(1) Certain prior period amounts were reclassified to conform with the first quarter 2018 adoption of new accounting guidance for the presentation of pension and post retirement costs.

(2) Restructuring and other consists of:

		Quarter Ended		
		September	December	
	December 31,	30,	31,	
	2018	2018	2017	
Contingent consideration fair value adjustment	\$ 10.2	\$ (0.8)	\$ 6.0	
Employee severance	0.8	1.7	1.8	
Acquisition related expenses and compensation	0.5	0.8	•	
Impairment of fixed assets	-	-	1.1	
Other	<u> </u>		0.1	
	\$ 11.4	\$ 1.7	\$ 9.0	

(3) For the quarters ended December 31, 2018, September 30, 2018 and December 31, 2017, adjustment to exclude non-cash convertible debt interest expense and adjustment to exclude actuarial (gains)losses recognized under GAAP in accordance with Teradyne's mark-to-market pension accounting.

(4) For the quarters ended December 31, 2018, September 30, 2018 and December 31, 2017, adjustment to exclude discrete income tax items.



	ember 31, 2018	% of Net Revenues	 December 31, 2017 (1)	% of Net Revenues
Net Revenues	\$ 2,100.8		\$ 2,136.6	
Gross profit GAAP	\$ 1,220.4	58.1%	\$ 1,221.5	57.2%
Inventory step-up	0.4	0.0%	-	-
Gross profit non-GAAP	\$ 1,220.8	58.1%	\$ 1,221.5	57.2%
come from operations - GAAP	\$ 473.8	22.6%	\$ 525.3	24.6%
Acquired intangible assets amortization	39.2	1.9%	30.5	1.4%
Restructuring and other (2)	15.2	0.7%	9.4	0.4%
Inventory step-up	 0.4	0.0%	 -	-
Income from operations - non-GAAP	\$ 528.6	25.2%	\$ 565.2	26.5%

Twelve Months Ended

			Net Income per Common Sh						Net In per Comm		re
	ember 31, 2018	% of Net Revenues	 Basic	Dilu	ted	ember 31, 2017	% of Net Revenues	E	Basic	Dilu	uted
Net income - GAAP	\$ 451.8	21.5%	\$ 2.41	\$	2.35	\$ 257.7	12.1%	\$	1.30	\$	1.28
Acquired intangible assets amortization	39.2	1.9%	0.21		0.20	30.5	1.4%		0.15		0.15
Interest and other (3)	13.1	0.6%	0.07		0.07	12.4	0.6%		0.06		0.06
Restructuring and other (2)	15.2	0.7%	0.08		0.08	9.4	0.4%		0.05		0.05
Inventory step-up	0.4	0.0%	0.00		0.00	-	-		-		-
Pension mark-to-market adjustment (3)	(3.3)	-0.2%	(0.02)	- E	(0.02)	(6.3)	-0.3%		(0.03)	1	(0.03)
Exclude discrete tax adjustments (4)	(59.4)	-2.8%	(0.32)	- E	(0.31)	178.3	8.3%		0.90		0.88
Non-GAAP tax adjustments	(8.4)	-0.4%	(0.04)	- E	(0.04)	(12.8)	-0.6%		(0.06)	1	(0.06)
Convertible share adjustment	-	-	-		0.04	-	-		-		0.01
Net income - non-GAAP	\$ 448.6	21.4%	\$ 2.39	\$	2.37	\$ 469.2	22.0%	\$	2.37	\$	2.34
GAAP and non-GAAP weighted average common shares - basic	187.7					198.1					
GAAP weighted average common shares - diluted	192.6					201.6					
Exclude dilutive shares from convertible note	(3.2)					(1.3)					
Non-GAAP weighted average common shares - diluted	 189.4					 200.3					



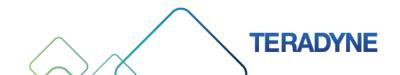
(1) Certain prior period amounts were reclassified to conform with the first quarter 2018 adoption of new accounting guidance for the presentation of pension and post retirement costs.

(2) Restructuring and other consists of:

	 Тw	elve Months Ended	
	ber 31, 118	Decemb 201	,
Employee severance	\$ 8.7	\$	3.8
Acquisition related expenses and compensation	4.6		-
Contingent consideration fair value adjustment	1.0		7.8
Other	0.9		1.0
Impairment of fixed assets	-		1.1
Property insurance recovery, net	-		(4.3)
	\$ 15.2	\$	9.4

(3) For the twelve months ended December 31, 2018 and December 31, 2017, Interest and other included non-cash convertible debt interest expense. For the twelve months ended December 31, 2018 and December 31, 2017, adjustments to exclude actuarial gains recognized under GAAP in accordance with Teradyne's mark-to-market pension accounting.

(4) For the twelve months ended December 31, 2018 and December 31, 2017, adjustment to exclude discrete income tax items.



GAAP to Non-GAAP Earnings Reconciliation

(In millions, except per share amounts)

				Net (Loss) Income per Common Share			
	Year Ended December 31, 2016		% of Net Revenues	Basic			Diluted
Net (loss) income - GAAP	\$	(43.4)	-2.5%	\$	(0.21)	\$	(0.21)
Goodwill impairment		254.9	14.5%		1.26		1.25
Acquired intangible assets impairment		83.3	4.8%		0.41		0.41
Acquired intangible assets amortization		52.6	3.0%		0.26		0.26
Restructuring and other		21.9	1.2%		0.11		0.11
Pension mark-to-market adjustments		(3.2)	-0.2%		(0.02)		(0.02)
Interest and other		0.6	0.0%		0.00		0.00
Inventory step-up		-	-		-		-
Exclude discrete tax adjustments		(4.5)	-0.3%		(0.02)		(0.02)
Tax effect of non-GAAP adjustments		(53.3)	-3.0%		(0.26)		(0.26)
Net income - non-GAAP	\$	308.9	17.6%	\$	1.52	\$	1.51
GAAP and non-GAAP weighted average common shares -							
basic		202.6					
GAAP weighted average common shares - diluted		202.6					
Include dilutive shares		1.8					
Non-GAAP weighted average common shares - diluted	r	204.4					
5 5							



	Q4'17		Q3'18 Q4'18		24'18	Q1'19 Low Guidance		Q1'19 High Guidance		
-	<u>\$'s</u>	% of sales	<u>\$'s</u>	% of sales	<u>\$'s</u>	% of sales	% of :	sales	% c	of sales
GAAP Operating Expenses	\$176	37%	\$190	34%	\$197	38%	43	%	4	41%
Intangible Asset Amortization	-\$7	-2%	-\$11	-2%	-\$11	-2%	-39	%		-3%
Restructuring and Other	-\$9	-2%	-\$2	0%	-\$11	-2%	0%	6		0%
Pension MTM	\$0	0%	\$0	0%	\$0	0%				
Non GAAP Operating Expenses	\$160	33%	\$177	31%	\$175	34%	40	%	:	38%
		Q4'17		Q3'18	C	4'18	20	17	20	18
	\$'s	%	\$':		\$'s	<u>%</u>	<u>\$'s</u>	<u>%</u>	<u>\$'s</u>	%
GAAP Income Tax	\$204	_	\$2		-\$33	-29%	\$267	51%	\$16	3%
Exclude discrete tax adjustments	-\$184	-188%	\$0	0%	\$53	48%	-\$178	-34%	\$59	13%
Tax effect of non-GAAP adjustments	\$3	3%	\$3	3 2%	\$0	0%	\$13	2%	\$8	2%
Effect of Higher Non-GAAP PBT		-3%		-2%		-3%		-2%		-2%
Non GAAP Income Tax	\$23	20%	\$2	4 15%	\$20	15%	\$101	18%	\$84	16%
Q4'18:					011	9 Guidance:			Low En	d High Ei
GAAP net interest and other income		-\$1.1				P Operating Profi	t as % of Salas		<u>14%</u>	<u>u nigi Ei</u> 17%
Exclude non cash convertible debt interest		-\$0.2				cquired intangible			<u>3%</u>	
Non-GAAP net interest and other income		-\$1.3				GAAP Operating			<u>3%</u> 17%	<u>3%</u> 20%
Q1'19 Guidance										
GAAP net interest and other income		-\$0.7			<u>Q1</u>	'19 GAAP Guidand	e Diluted Share	<u>s</u>		<u>180</u>
Exclude non cash convertible debt interest		\$3.2			Exc	clude dilutive shar	es from conver	tible note	<u>-3</u>	
Non-GAAP net interest and other income		\$2.5			Q1	'19 Non-GAAP Gu	idance Diluted	Shares		177

GAAP to Non-GAAP Reconciliation of First Quarter 2019 guidance:

GAAP and non-GAAP first quarter revenue guidance:	\$4	60 million to	0	\$490 million
GAAP net income per diluted share	\$	0.31	\$	0.39
Exclude acquired intangible assets amortization		0.06		0.06
Exclude non-cash convertible debt interest		0.02		0.02
Tax effect of non-GAAP adjustments		(0.02)		(0.02)
Convertible share adjustment		0.01		0.01
Non-GAAP net income per diluted share	\$	0.39	\$	0.47

TERADYNE

- Teradyne determines non-GAAP operating cash flow ("Free Cash Flow") by adjusting GAAP cash flow from operations
 excluding discontinued operations, less property, plant and equipment additions. Free cash flow is considered a non-GAAP
 financial measure. Teradyne believes that free cash flow, which measures our ability to generate cash from our business
 operations, is an important financial measure for use in evaluating Teradyne's financial performance. Free cash flow should
 be considered in addition to, rather than as a substitute for, income (loss) from continuing operations or net income (loss)
 as a measure of our performance and net cash provided by operating activities as a measure of our liquidity.
- Teradyne believes it is important to view free cash flow as a measure that provides supplemental information to Teradyne's entire statement of cash flows.
- Although other companies report their free cash flow, numerous methods may exist for calculating a company's free cash flow. As a result, the method used by Teradyne to calculate free cash flow may differ from the methods other companies use to calculate their free cash flow.
- The following table sets forth a reconciliation of free cash flow, a non-GAAP financial measure, to net cash provided by
 operating activities, a GAAP measure, which we believe to be the GAAP financial measure most directly comparable to
 free cash flow.

	<u>Q4'17</u>	<u>Q3'18</u>	<u>Q4'18</u>
GAAP Cash Flow From Operations, Excl Disc Ops	\$147	\$241	\$186
Less Property, Plant and Equipment Additions net of Gov't Subsidy	-\$32	-\$18	-\$26
Non-GAAP Operating Cash Flow ("Free Cash Flow")	\$115	\$223	\$160



	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
GAAP Operating Expenses	747	696	1,020	673
Less Goodwill Impairment Charge		-	(255)	-
Less Intangible Asset Impairment		-	(83)	-
Less Intangible Asset Amortization	(39)	(31)	(53)	(69)
Less Restructuring and Other	(15)	(9)	(22)	(5)
Pension Mark to Market Adjustment			2	(10)
Less Equity Modification Charge				-
Non GAAP Operating Expenses	692	656	609	589
	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
IA GAAP Operating Expenses	153	93	84	28
Less Intangible Asset Amortization	(32)	(24)	(25)	(14)
Less Restructuring and Other	(7)	(7)	(16)	-
IA non GAAP Operating Expenses	114	62	43	14
	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Test GAAP Operating Expenses (1)	594	603	936	645
Less Goodwill Impairment Charge		-	(255)	-
Less Intangible Asset Impairment		-	(83)	-
Less Intangible Asset Amortization	(7)	(7)	(28)	(55)
Less Restructuring and Other	(9)	(2)	(6)	(5)
Pension Mark to Market Adjustment		-	2	(10)
Less Equity Modification Charge				-
Test Non GAAP Operating Expenses (1)	578	594	566	575

	<u>FY 2017</u>
GAAP Opex % of Revenue	32.6%
Less Intangible Asset Amortization & Restructuring and Other	<u>1.9%</u>
Non-GAAP Opex % of Revenue	30.7%
	<u>FY 2018</u>
GAAP Opex % of Revenue	35.5%
Less Intangible Asset Amortization & Restructuring and Other	<u>2.6%</u>
Non-GAAP Opex % of Revenue	32.9%
	32.970



2021/2022 Model EPS Reconciliation

Net (loss) income - GAAP Acquired intangible asset amortization Non Cash Convertible Debt Interest Net income - non-GAAP

Net Income per Common Share Diluted	Net Income per Common Share Diluted
\$ 3.39	\$ 3.89
0.05	0.05
 0.06	0.06
\$ 3.50	\$ 4.00

