## TERADYNE

## Financial Results for Q4 2019 and Full Year 2019

Updated March 23, 2020 to reflect impairment of minority investment in RealWear

January 23, 2020


## SAFE HARBOR

This presentation contains forward-looking statements regarding Teradyne's future business pros pects, 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, and the impact of the U.S. export and tarifflaws. Such statem ents 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, or the impact of the U.S. 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. On May 16, 2019, Huawei and 68 of its affiliates, including HiSilicon, were added to the U.S. Department of Commerce Entity List under U.S. Export Administration Regulations (the "EAR"). This ac tion by the U.S. Department of Commerce imposed new export licensing requirements on exports, re-exports, and in-country transfers of all U.S. - regula ted products, software and technology to the designated Hua wei entities. While most of our products are not subject to the EAR and therefore not affected by the Entity Listrestrictions, some of our products arecurrently manufactured in the U.S. and thus subject to the Entity Listrestrictio ns. Compliance with the current Entity List restrictions has not significantly impacted our sales. Therehave been recent news reports that the U.S. Department of Commerce plans to modify the U.S. EAR to expand the scope of the regulations to include more products that would become subject to the Entity List res trictions relating to Huawei and the designated Huawei entities including HiSilicon. These modified regulations, if implemented as currently reported, would impact our ability to continue to sell certain products directly to Huawei and HiSilicon, both of which are significant Teradynecustomers. However, based on our understanding, these proposed modified regulations would not impact our sales to third party contract manufacturers used by Huawei and HiSilicon to manufacture and test semiconductor and other electronic devices. Because the business environment for Huawei is both fluid and uncertain, there a re also risks that Huawei and HiSilicon may have less demand for our products and/or may purchase products from our competitors who are not impacted by the U.S. regulations. Until these or any new regulations become public and effective, we will not know the extent of the impact on our business with Huaw ei and HiSilicon. However, it is possible that these modified regulations and any other additional regulations that may be implemented by the U.S. Department of Commerce or other government agency would have a material impact on our business and financial results. Important factors that could cause act ual results, earnings per share, use of cash, dividend payments, repurchases of common stock, or payment of the senior convertible notes to differ materially from those presently expected include: conditions affecting the markets in which Teradyne operates; decreased or delayed product demand from one or more si gni ficant customers; development, delivery and acceptance of new products; the ability to grow the Industrial Automation business; increased resea rch a nd development spending; deterioration of Teradyne's financial condition; the consummation and success of any mergers or acquisitions; unexp ected cash needs; insufficient cash flow to make required payments and pay the principal a mount on the senior convertible notes; the businessjudgment of the board of directors thata declaration of a dividend or the repurchase of common stock is not in the company's best interests; additional U.S. tax regul ations or IRS guidance; the impact of any tariffs or export controls imposed in the U.S. or China; compliance with trade protection meas ures or export restricti ons; theimpact of U.S. Department of Commerce or other government agency regulations relating to Huawei and HiSilicon; 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, 2018 and the Quarterly Report on Form 10-Q for the period ended September 29,2019. 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 pointin 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 datesubsequent to the date of this presentation.

## Business Update and Outlook

## Mark Jagiela, Teradyne President and CEO

## Q4'19 and 2019 Summary

All Business Segments' Revenue Grew Quarter on Quarter and Year on Year
2019 Sales of $\mathbf{\$ 2 , 2 9 5 M}$, Non-GAAP EPS of \$2.86


- Semiconductor strength in 4G, 5G and Memory Test
- System Test sales up 53\% from Q4'18 on Storage Test growth
- Full year 2019 Non-GAAP EPS of $\$ 2.86$ up
\$0.49/21\% from 2018
- Four year Non-GAAP EPS CAGR of 23\%
- Reduced diluted share count by 8\% in 2019 compared to 2018


## January 2020 Update

- Q4 Sales up $26 \%$ and non-GAAP EPS up $40 \%$ from Q4'18
- Full year 2019 sales up 9\%, Non-GAAP EPS up 21\% on Test strength in 4G/5G, Storage and Defense/Aerospace markets
- Industrial Automation (IA) below plan in 2019; grew $14 \%$ as reported, $12 \%$ proforma in face of global manufacturing slow down
- Expect 2020 SOC Test market to be \$3.1-3.4B, Memory Test market $\$ 650-750 \mathrm{M}$
- New product design wins will begin to ramp in 1 H -' 20
- IA long term growth rate expected to moderate to $20-35 \%$ CAGR, expect $25 \%$ in 2020


## Fourth Quarter and Full Year 2019 Financial Results and First Quarter 2020 Guidance

Sanjay Mehta, Teradyne Vice President and Chief Financial Officer

## Q4’19 Non-GAAP Results

| \$s in millions, except EPS | Q4'18 Actual ${ }^{(1)}$ |  | Q3'19 Actual ${ }^{(1)}$ |  | Q4'19 Actual ${ }^{(1)}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sales |  | \$520M |  | \$582M |  | \$655M |
| Gross Margin | 59.6\% | \$310M | 59.3\% | \$345M | 58.5\% | \$383M |
| R\&D | 14.4\% | \$75M | 13.4\% | \$78M | 13.3\% | \$87M |
| SG\&A | 19.4\% | \$101M | 18.4\% | \$107M | 17.9\% | \$117M |
| OPEX | 33.8\% | \$175M | 31.8\% | \$185M | 31.2\% | \$204M |
| Operating Profit | 25.8\% | \$134M | 27.5\% | \$160M | 27.4\% | \$179M |
| Income Taxes (\& effective tax rate) | 15.0\% | \$20M | 17\% | \$27M | 17\% | \$30M |
| EPS |  | \$0.63 |  | \$0.77 |  | \$0.88 |
| Diluted Shares |  | 181M |  | 175M |  | 175M |

## Balance Sheet \& Capital Return

|  | Q4’18 <br> Actual | Q3'19 <br> Actual | Q4'19 Actual |
| :---: | :---: | :---: | :---: |
| Cash and Marketable Securities | \$1,205M | \$1,040M | \$1,016M |
| Inventory | \$154M | \$178M | \$197M |
| DSO | 52 Days | 56 days | 51 Days |
| Acquisition Earn-out Accruals ${ }^{(1)}$ | \$71M | \$18M | \$40M |
| Capital Additions | \$26M | \$37M | \$39M |
| Depreciation and Amortization ${ }^{(2)}$ | \$39M | \$40M | \$41M |
| Free Cash Flow ${ }^{(3)}$ | \$160M | \$162M | \$178M |
| $\int$ Buybacks | \$261M | \$122M | \$131M |
| Capital Return Dividends | \$16M | \$15M | \$15M |

(2) Includes depreciation, stock based compensation, amortization of acquired intangible assets and amortization of the non-cash convertible debt discoun
(3) Teradyne calculates free cash flow as: GAAP Cash flow from operations, excluding discontinued operations, less property, plant and equipment addi/n non-GAAP reconciliations.

## Q4'19 and 2019 Segment Summary



SemiTest Sales

| Semi <br> Product | $\$ 353 \mathrm{M}$ |
| :---: | :---: |
| Semi <br> Service | $\$ 86 \mathrm{M}$ |

Industrial Automation Revenue


## Teradyne Updated Non-GAAP Earnings Model

## Financial Model Update ${ }^{(1)(2)}$



2022E Updated Model Assumptions

| Metric | Old Model | New Model | Comment |
| :---: | :---: | :---: | :--- |
| IA Revenue CAGR | $30-40 \%$ off 2018 | $20-35 \%$ off 2019 | $14 \%$ growth as reported in 2019 <br> due to economic headwinds |
| Test Revenue CAGR | $3-5 \%$ off 2018 | $4-8 \%$ off 2019 | 9\% growth in 2019 |

[^0]
## Q1'20 Non-GAAP Guidance

| \$s in millions, except EPS | Q4'19 Actual ${ }^{(1)}$ | Q1'20 Guidance ${ }^{(1)}$ |
| :---: | :---: | :---: |
| Sales | \$655M | \$670M - \$710M |
| Gross Margin | 59\% | 57\%-58\% |
| OPEX | 31\% | 31\% - 30\% |
| Operating Profit | 27\% | 26\%-28\% |
| Net Interest \& Other Income | \$4M | \$1M |
| Effective Tax Rate | 17\% | 16\% |
| EPS | \$0.88 | \$0.86-\$0.96 |
| Diluted Shares | 175M | 174M |

## January 2020 Summary

- Q4 Sales up 26\% and non-GAAP EPS up 40\% from Q4'18
- Full year 2019 sales up 9\%, Non-GAAP EPS up $21 \%$ on Test strength in 4G/5G, Storage and Defense/Aerospace markets
- Industrial Automation (IA) below plan in 2019; grew $14 \%$ as reported, $12 \%$ proforma in face of global manufacturing slow down
- Expect 2020 SOC Test market to be \$3.1-3.4B, Memory Test market \$650-750M
- New product design wins will begin to ramp in 1H-'20
- IA long term growth rate expected to moderate to 20-35\% CAGR, expect 25\% in 2020
- Raised top end of non-GAAP EPS earnings model from \$4.00 to \$4.25 in 2022 to reflect latest Test and IA outlook
- Expect to repurchase a minimum of $\$ 250$ million of Teradyne shares in 2020 as part of $\$ 1 \mathrm{~B}$ repurchase authorization


## Supplemental Information



## Annual Non-GAAP Results

| \$s in millions, except EPS | $2018{ }^{(1)}$ |  | 2019(1) |  |
| :---: | :---: | :---: | :---: | :---: |
| Sales |  | \$2,101M |  | \$2,295M |
| Gross Margin | 58\% | \$1,221M | 58\% | \$1,340M |
| R\&D | 14\% | \$302M | 14\% | \$322M |
| SG\&A | 19\% | \$391M | 19\% | \$435M |
| OPEX | 33\% | \$692M | 33\% | \$758M |
| Operating Profit | 25\% | \$529M | 25\% | \$582M |
| Income Taxes (\& effective tax rate) | 16\% | \$84M | 17\% | \$98M |
| EPS |  | \$2.37 |  | \$2.86 |
| Diluted Shares |  | 189 M |  | 175M |

# History of Balanced Capital Allocation 

Cumulative Capital Allocation Breakdown 2014-2019

|  | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Cumulative |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Buybacks | \$0M | \$300M | \$146M | \$200M | \$823M | \$500M | \$1,970M ${ }^{(1)}$ |
| Dividends | \$37M | \$51M | \$49M | \$55M | \$67M | \$61M | \$320M |
| Acquisitions | \$19M | \$283M | \$0M | \$0M | \$169M | \$80M | \$551M |
| Earn-out Payments ${ }^{(2)}$ | \$0M | \$0M | \$15M | \$1M | \$25M | \$35M | \$76M |
| Total | \$57M | \$633M | \$210M | \$257M | \$1,085M | \$676M | \$2,918M |
| Free Cash <br> Flow ${ }^{(3)}$ | \$323M | \$323M | \$370M | \$521M | \$370M | \$444M | \$2,351M |

[^1]
## Appendix | GAAP to Non-GAAP Reconciliation

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.

## Appendix | GAAP to Non-GAAP Reconciliation

## GAAP to Non-GAAP Earnings Reconciliation

(In millions, except per share amounts)

Net revenues
Gross profit GAAP
Inventory step-up
Gross profit non-GAAP
Income from operations - GAAP
Acquired intangible assets amortization
Restructuring and other (2)
Inventory step-up
Equity modification charge (1)
Income from operations - non-GAAP

Net income - GAAP
Acquired intangible assets amortization
Interest and other (3)
Equity modification charge (1)
Restructuring and other (2)
Pension mark-to-market adjustment (3)
Inventory step-up
Exclude discrete tax adjustments (4)
Non-GAAP tax adjustments
Convertible share adjustment (5)
Net income - non-GAAP (5)

GAAP and non-GAAP weighted average common shares - basic GAAP weighted average common shares - diluted

Exclude dilutive shares related to convertible note transaction Non-GAAP weighted average common shares - diluted (5)


## Appendix | GAAP to Non-GAAP Reconciliation

'(1) For the quarter ended September 29,2019 , selling and administrative expenses include an equity charge for the modification of Teradyne's retired CFO's outstanding equity awards to allow continued vesting and maintain the original term in connection with his July 17 , 2019
'(2) Restructuring and other consists of:

|  | Quarter Ended |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { December 31, } \\ 2019 \\ \hline \end{gathered}$ |  | September 29, 2019 |  | $\begin{gathered} \text { December 31, } \\ 2018 \end{gathered}$ |  |
| Contingent consideration fair value adjustment | \$ | (2.8) | \$ | (7.8) | \$ | 10.2 |
| Acquisition related expenses and compensation |  | 0.2 |  | 0.5 |  | 0.5 |
| Employee severance |  | 0.5 |  | 0.8 |  | 0.8 |
|  |  | (2.1) |  | (6.5) | \$ | 11.4 |

'(3) For the quarters ended December 31,2019 , September 29,2019 , and December 31, 2018, adjustment to exclude non-cash convertible debt interest expense. For the quarters ended December 31,2019 and 2018 , adjustment to exclude actuarial loss (gain) recognized under GAAP in accordance with Teradyne's mark-to-market pension accounting. For the quarter ended December 31,2019 , adjustment to exclude RealWear $\$ 15.0$ million investment impairment.
'(4) For the quarters ended December 31,2019 , September 29,2019 , and December 31,2018 , adjustment to exclude discrete income tax items. For the quarter ended December 31,2018 , adjustment to treat the $\$ 52$ million tax benefit related to the finalization of our toll tax charge as a discrete item.
'(5) For the quarters ended December 31,2019 and September 29,2019 , the non-GAAP diluted EPS calculation adds back $\$ 1.3$ million of convertible debt interest expense to non-GAAP net income and non-GAAP weighted average diluted common shares include 5.4 million and 3.6 million shares, respectively, related to the convertible debt hedge transaction.

## Appendix | GAAP to Non-GAAP Reconciliation

Net Revenues
Gross profit GAAP
Inventory step-up
Gross profit non-GAAP
Income from operations - GAAP
Acquired intangible assets amortization
Equity modification charge (1)
Restructuring and other (2)
Inventory step-up
Income from operations - non-GAAP

Net income - GAAP
Acquired intangible assets amortization
Interest and other (3)
Equity modification charge (1)
Restructuring and other (2)
Inventory step-up
Pension mark-to-market adjustment (3)
Exclude discrete tax adjustments (4)
Non-GAAP tax adjustments
Convertible share adjustment (5)
Net income - non-GAAP (5)
GAAP and non-GAAP weighted average common shares - basic
GAAP weighted average common shares - diluted
Exclude dilutive shares from convertible note
Non-GAAP weighted average common shares - diluted (5)

| Twelve Months Ended |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \hline \text { December 31, } \\ 2019 \\ \hline \end{gathered}$ | \% of Net Revenues |  |  |  |  | $\begin{gathered} \hline \text { December 31, } \\ 2018 \\ \hline \end{gathered}$ |  | \% of Net Revenues |  |  |  |  |
| \$ 2,295.0 |  |  |  |  |  | \$ | 2,100.8 |  |  |  |  |  |
| \$ 1,339.8 | 58.4\% |  |  |  |  | \$ | 1,220.4 | 58.1\% |  |  |  |  |
| 0.4 | 0.0\% |  |  |  |  |  | 0.4 | 0.0\% |  |  |  |  |
| \$ 1,340.2 | 58.4\% |  |  |  |  | \$ | 1,220.8 | 58.1\% |  |  |  |  |
| \$ 553.7 | 24.1\% |  |  |  |  | \$ | 473.8 | 22.6\% |  |  |  |  |
| 40.1 | 1.7\% |  |  |  |  |  | 39.2 | 1.9\% |  |  |  |  |
| 2.1 | 0.1\% |  |  |  |  |  | - | - |  |  |  |  |
| (13.9) | -0.6\% |  |  |  |  |  | 15.2 | 0.7\% |  |  |  |  |
| 0.4 | 0.0\% |  |  |  |  |  | 0.4 | 0.0\% |  |  |  |  |
| \$ 582.4 | 25.4\% |  |  |  |  | \$ | 528.6 | 25.2\% |  |  |  |  |
| $\begin{gathered} \text { December 31, } \\ 2019 \\ \hline \end{gathered}$ | \% of Net Revenues | Net Income per common share |  |  |  | $\begin{gathered} \text { December 31, } \\ 2018 \\ \hline \end{gathered}$ |  | \% of Net Revenues | Net Income per common share |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| \$ 467.5 | 20.4\% | \$ | 2.74 | \$ | 2.60 | \$ | 451.8 |  | 21.5\% | \$ | 2.41 | \$ | 2.35 |
| 40.1 | 1.7\% |  | 0.24 |  | 0.22 |  | 39.2 | 1.9\% |  | 0.21 |  | 0.20 |
| 28.7 | 1.3\% |  | 0.17 |  | 0.16 |  | 13.1 | 0.6\% |  | 0.07 |  | 0.07 |
| 2.1 | 0.1\% |  | 0.01 |  | 0.01 |  | - | - |  | - |  | - |
| (13.9) | -0.6\% |  | (0.08) |  | (0.08) |  | 15.2 | 0.7\% |  | 0.08 |  | 0.08 |
| 0.4 | 0.0\% |  | 0.00 |  | 0.00 |  | 0.4 | 0.0\% |  | 0.00 |  | 0.00 |
| 8.2 | 0.4\% |  | 0.05 |  | 0.05 |  | (3.3) | -0.2\% |  | (0.02) |  | (0.02) |
| (22.6) | -1.0\% |  | (0.13) |  | (0.13) |  | (59.4) | -2.8\% |  | (0.32) |  | (0.31) |
| (16.7) | -0.7\% |  | (0.10) |  | (0.09) |  | (8.4) | -0.4\% |  | (0.04) |  | (0.04) |
| - | - |  | - |  | 0.11 |  | - | - |  | - |  | 0.04 |
| 493.8 | 21.5\% | \$ | 2.90 | \$ | 2.86 | \$ | 448.6 | 21.4\% | \$ | 2.39 | \$ | 2.37 |
| 170.4 |  |  |  |  |  |  | 187.7 |  |  |  |  |  |
| 179.5 |  |  |  |  |  |  | 192.6 |  |  |  |  |  |
| (4.9) |  |  |  |  |  |  | (3.2) |  |  |  |  |  |
| 174.6 |  |  |  |  |  |  | 189.4 |  |  |  |  |  |

## Appendix | GAAP to Non-GAAP Reconciliation

|  | Twelve Months Ended |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { December 31, } \\ 2017 \end{gathered}$ |  | \% of Net Revenues |  |  |  |  | $\begin{gathered} \text { December 31, } \\ 2016 \end{gathered}$ |  | \% of Net Revenues |  |  |  |  |
| Net Revenues | \$ 2,136.6 |  | 57.3\% |  |  |  |  | \$ | 1,753.3 | 54.7\% |  |  |  |  |
| Gross profit - GAAP | \$ | 1,223.9 |  |  |  |  |  | \$ | $\begin{gathered} 959.6 \\ (1.0) \end{gathered}$ |  |  |  |  |  |
| Pension mark-to-market adjustment (1) |  | (2.8) | -0.1\% |  |  |  |  |  |  | -0.1\% |  |  |  |  |
| Gross profit-non-GAAP | \$ | 1,221.1 | 57.2\% |  |  |  |  | \$ | 958.6 | 54.7\% |  |  |  |  |
| Income (loss) from operations - GAAP | \$ | 530.0 | 24.8\% |  |  |  |  | \$ | (60.0) | -3.4\% |  |  |  |  |
| Acquired intangible assets amortization |  | 30.5 | 1.4\% |  |  |  |  |  | 52.6 | 3.0\% |  |  |  |  |
| Restructuring and other (2) |  | 9.4 | 0.4\% |  |  |  |  |  | 21.9 | 1.2\% |  |  |  |  |
| Pension mark-to-market adjustment (1) |  | (6.3) | -0.3\% |  |  |  |  |  | (3.2) | -0.2\% |  |  |  |  |
| Goodwill impairment (3) |  | - | - |  |  |  |  |  | 254.9 | 14.5\% |  |  |  |  |
| Acquired intangible assets impairment (3) |  | $-$ | - |  |  |  |  | $\begin{array}{r}83.3 \\ \hline \$ \quad 349.5 \\ \hline\end{array}$ |  | 4.8\% |  |  |  |  |
| Income from operations - non-GAAP | \$ | 563.6 | 26.4\% |  |  |  |  |  |  | 19.9\% |  |  |  |  |
|  |  |  | \% of Net Revenues | Net Income per Common Share |  |  |  | $\begin{gathered} \text { December 31, } \\ 2016 \\ \hline \end{gathered}$ |  | $\%$ of Net Revenues | Net (Loss) Income per Common Share |  |  |  |
|  | $\begin{gathered} \text { December 31, } \\ 2017 \end{gathered}$ |  |  | Basic |  | Diluted |  |  |  | Basic | Diluted |  |
| Netincome (loss) - GAAP | \$ | 257.7 | 12.1\% | \$ | 1.30 | \$ | 1.28 | \$ | (43.4) |  | -2.5\% | \$ | (0.21) | \$ | (0.21) |
| Acquired intangible assets amortization |  | 30.5 | 1.4\% |  | 0.15 |  | 0.15 |  | 52.6 | 3.0\% |  | 0.26 |  | 0.26 |
| Interest and other (4) |  | 12.4 | 0.6\% |  | 0.06 |  | 0.06 |  | 0.6 | 0.0\% |  | 0.00 |  | 0.00 |
| Restructuring and other (2) |  | 9.4 | 0.4\% |  | 0.05 |  | 0.05 |  | 21.9 | 1.2\% |  | 0.11 |  | 0.11 |
| Pension mark-to-market adjustment (1) |  | (6.3) | -0.3\% |  | (0.03) |  | (0.03) |  | (3.2) | -0.2\% |  | (0.02) |  | (0.02) |
| Goodwill impairment (3) |  | - | - |  | - |  | - |  | 254.9 | 14.5\% |  | 1.26 |  | 1.25 |
| Acquired intangible assets impairment (3) |  | - | - |  | - |  | - |  | 83.3 | 4.8\% |  | 0.41 |  | 0.41 |
| Exclude discrete tax adjustments (5) |  | 178.3 | 8.3\% |  | 0.90 |  | 0.89 |  | (4.5) | -0.3\% |  | (0.02) |  | (0.02) |
| Non-GAAP tax adjustments (6) |  | (12.8) | -0.6\% |  | (0.06) |  | (0.06) |  | (53.3) | -3.0\% |  | (0.26) |  | (0.26) |
| Netincome - non-GAAP | \$ | 469.2 | 22.0\% | \$ | 2.37 | \$ | 2.34 | \$ | 308.9 | 17.6\% | \$ | 1.52 | \$ | 1.51 |
| GAAP and non-GAAP weighted average common shares - basic |  | 198.1 |  |  |  |  |  |  | 202.6 |  |  |  |  |  |
| GAAP weighted average common shares - diluted |  | 201.6 |  |  |  |  |  |  | 202.6 |  |  |  |  |  |
| Exclude dilutive shares from converible note |  | (1.3) |  |  |  |  |  |  | - |  |  |  |  |  |
| Include dilutive shares |  | - |  |  |  |  |  |  | 1.8 |  |  |  |  |  |
| Non-GAAP weighted average common shares - diluted |  | 200.3 |  |  |  |  |  |  | 204.4 |  |  |  |  |  |

## Appendix | GAAP to Non-GAAP Reconciliation

Net Revenues

## Gross profit - GAAP

Inventory step-up
Pension mark-to-market adjustments (1)
Gross profit - non-GAAP
(Loss) income from operations - GAAP Goodwill impairment (2)
Acquired intangible assets impairment (2)
Acquired intangible assets amortization
Restructuring and other (3)
Pension mark-to-market adjustments (1)
Inventory step-up
Income from operations - non-GAAP

Net (loss) income - GAAP
Goodwill impairment (2)
Acquired intangible assets impairment (2)
Acquired intangible assets amortization
Restructuring and other (3)
Pension mark-to-market adjustments (1)
Interest and other (4)
Inventory step-up
Exclude discrete tax adjustments (5)
Tax effect of non-GAAP adjustments
Net income - non-GAAP

GAAP and non-GAAP weighted average common shares - basic GAAP weighted average common shares - diluted

Include dilutive shares
Non-GAAP weighted average common shares - diluted

| Year Ended |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \text { December 31, } \\ 2016 \\ \hline \end{gathered}$ | \% of Net <br> Revenues |  |  |  |  | $\begin{gathered} \text { December 31, } \\ 2015 \\ \hline \end{gathered}$ |  | \% of Net <br> Revenues |  |  |  |  |
| \$ 1,753.3 |  |  |  |  |  | \$ | 1,639.6 |  |  |  |  |  |
| \$ 959.6 | 54.7\% |  |  |  |  | \$ | 915.6 | 55.8\% |  |  |  |  |
|  |  |  |  |  |  |  | 1.6 | 0.1\% |  |  |  |  |
| (1.0) | -0.1\% |  |  |  |  |  | 8.3 | 0.5\% |  |  |  |  |
| \$ 958.6 | 54.7\% |  |  |  |  | \$ | 925.5 | 56.4\% |  |  |  |  |
| \$ (60.0) | -3.4\% |  |  |  |  | \$ | 243.0 | 14.8\% |  |  |  |  |
| 254.9 | 14.5\% |  |  |  |  |  | - | - |  |  |  |  |
| 83.3 | 4.8\% |  |  |  |  |  | - | - |  |  |  |  |
| 52.6 | 3.0\% |  |  |  |  |  | 69.0 | 4.2\% |  |  |  |  |
| 21.9 | 1.2\% |  |  |  |  |  | 5.1 | 0.3\% |  |  |  |  |
| (3.2) | -0.2\% |  |  |  |  |  | 17.7 | 1.1\% |  |  |  |  |
| - | - |  |  |  |  |  | 1.6 | 0.1\% |  |  |  |  |
| \$ 349.5 | 19.9\% |  |  |  |  | \$ | 336.4 | 20.5\% |  |  |  |  |
|  |  |  | Net (Loss per Com |  |  |  |  |  |  |  |  |  |
| $\begin{gathered} \text { December 31, } \\ 2016 \\ \hline \end{gathered}$ | \% of Net Revenues | Basic |  | Diluted |  | $\begin{gathered} \text { December 31, } \\ 2015 \end{gathered}$ |  | \% of Net Revenues | Basic |  | Diluted |  |
| \$ (43.4) | -2.5\% | \$ | (0.21) | \$ | (0.21) | \$ | 206.5 | 12.6\% | \$ | 0.98 | \$ | 0.97 |
| 254.9 | 14.5\% |  | 1.26 |  | 1.25 |  | - | - |  | - |  | - |
| 83.3 | 4.8\% |  | 0.41 |  | 0.41 |  | - | - |  | - |  | - |
| 52.6 | 3.0\% |  | 0.26 |  | 0.26 |  | 69.0 | 4.2\% |  | 0.33 |  | 0.32 |
| 21.9 | 1.2\% |  | 0.11 |  | 0.11 |  | 5.1 | 0.3\% |  | 0.02 |  | 0.02 |
| (3.2) | -0.2\% |  | (0.02) |  | (0.02) |  | 17.7 | 1.1\% |  | 0.08 |  | 0.08 |
| 0.6 | 0.0\% |  | 0.00 |  | 0.00 |  | (5.4) | -0.3\% |  | (0.03) |  | (0.03) |
| - | - |  | - |  | - |  | 1.6 | 0.1\% |  | 0.01 |  | 0.01 |
| (4.5) | -0.3\% |  | (0.02) |  | (0.02) |  | (4.9) | -0.3\% |  | (0.02) |  | (0.02) |
| (53.3) | -3.0\% |  | (0.26) |  | (0.26) |  | (18.5) | -1.1\% |  | (0.09) |  | (0.09) |
| \$ 308.9 | 17.6\% | \$ | 1.52 | \$ | 1.51 | \$ | 271.1 | 16.5\% | \$ | 1.28 | \$ | 1.27 |

202.6
2.6
$\begin{array}{r}202.6 \\ 1.8 \\ \hline 204.4\end{array}$
213.3
213.3

## Appendix | GAAP to Non-GAAP Reconciliation

GAAP Operating Expenses Intangible Asset Amortization Restructuring and Other CFO Equity Modification
Non GAAP Operating Expenses

## GAAP Income Tax

Exclude discrete tax adjustments
Tax effect of non-GAAP adjustments
Effect of Higher Non-GAAP PBT
Non GAAP Income Tax


| Q4'19 |  |
| :---: | :---: |
| $\mathbf{\$ ' s}$ | $\frac{\%}{}$ of sales |
| $\$ 212$ | $32 \%$ |
| $-\$ 10$ | $-1 \%$ |
| $\$ 2$ | $0 \%$ |
|  | $0 \%$ |
| $\$ 204$ | $31 \%$ |


| Q1'20 Low Guidance Q1'20 High Guidance |  |
| :---: | :---: |
| $\frac{\% \text { of sales }}{33 \%}$ | $\frac{\% \text { of sales }}{31 \%}$ |
| $-2 \%$ | $-2 \%$ |
|  |  |
| $31 \%$ | $30 \%$ |


| 2018 |  |
| :---: | :---: |
| $\frac{\$ \mathbf{S}}{}$ | \% of sales |
| $\$ 747$ | $36 \%$ |
| $-\$ 39$ | $-2 \%$ |
| $-\$ 15$ | $-1 \%$ |
|  |  |
| $\$ 692$ | $33 \%$ |


| 2019 |  |
| :---: | :---: |
| $\mathbf{\$ ' s}$ $\%$ of sales <br> $\$ 786$ $34 \%$ <br> $-\$ 40$ $-2 \%$ <br> $\$ 14$ $1 \%$ <br> $-\$ 2$  <br> $\$ 758$ $33 \%$${ }^{2} \%$ |  |


| Q4'18 |  |
| :---: | :---: |
| $\underline{\$ ' s}$ | $\underline{\%}$ |
| $-\$ 33$ | $-29 \%$ |
| $\$ 53$ | $48 \%$ |
| $\$ 0$ | $0 \%$ |
|  | $-3 \%$ |
| $\$ 20$ | $15 \%$ |


| Q3'19 |  |
| :---: | :---: |
| $\underline{\$ ' s}$ | $\underline{\%}$ |
| $\$ 16$ | $10 \%$ |
| $\$ 8$ | $5 \%$ |
| $\$ 4$ | $2 \%$ |
|  | $-1 \%$ |
| $\$ 27$ | $17 \%$ |


| Q4'19 |  |
| :---: | :---: |
| $\underline{\$ ' s}$ | $\underline{\%}$ |
| $\$ 24$ | $15 \%$ |
| $-\$ 1$ | $-1 \%$ |
| $\$ 8$ | $5 \%$ |
|  | $-1 \%$ |
| $\$ 30$ | $17 \%$ |


| 2018 |  |
| :---: | :---: |
| $\underline{\$ ' s}$ | $\underline{\%}$ |
| $\$ 16$ | $3 \%$ |
| $\$ 59$ | $13 \%$ |
| $\$ 8$ | $2 \%$ |
|  | $-2 \%$ |
| $\$ 84$ | $16 \%$ |


| 2019 |  |
| :---: | :---: |
| $\underline{\$} \mathbf{s}$ | $\underline{\%}$ |
| $\$ 58$ | $11 \%$ |
| $\$ 23$ | $4 \%$ |
| $\$ 17$ | $3 \%$ |
|  | $-1 \%$ |
| $\$ 98$ | $17 \%$ |

## Q4'19:

| GAAP net interest and other income | $-\$ 22.7$ |
| :--- | ---: |
| Exclude RealWear investment impairment | $\$ 15.0$ |
| Exclude actuarial losses | $\$ 7.7$ |
| Exclude non cash convertible debt interest | $\$ 3.5$ |
| Non-GAAP net interest and other income | $\$ 3.5$ |
|  |  |
| Q1'20 Guidance | $-\$ 2.5$ |
| GAAP net interest and other income | $\$ 3.5$ |
| Exclude non cash convertible debt interest | $\$ 1.0$ |


| Q1'20 Guidance: | Low End |  | High End |
| :--- | :---: | :---: | :---: |
| GAAP Operating Profit as \% of Sales |  | $24 \%$ |  |
|  | $26 \%$ |  |  |
| Acquired intangible asset amortization | $\underline{2 \%}$ |  | $\underline{2 \%}$ |
| Non-GAAP Operating Profit as $\%$ of Sales | $26 \%$ |  | $28 \%$ |
|  |  |  | $\underline{180}$ |
| Q1'20 GAAP Guidance Diluted Shares |  |  | $\underline{-6}$ |
| Exclude dilutive shares from convertible note |  |  |  |
| Q1'20 Non-GAAP Guidance Diluted Shares |  |  |  |

GAPP to Non-GAAP Reconcilistion of First Quarter 2020 guidance:

```
GAAP and non-GAAP fourth quarter revenue guidance:
GAAP net income per diluted share
    Exclude acquired intangible assets amortization
    Exclude non-cash convertible debt interest
    Exclude non-cash convertible debt inter
    Tax effect of non-GAAP adjustr
    Convertible share adjustment 
```

| \$ | 3670 million |  | \$710 million |
| :---: | :---: | :---: | :---: |
|  | 0.75 | \$ | 0.85 |
|  | 0.05 |  | 0.05 |
|  | 0.02 |  | 0.02 |
|  | (0.01) |  | (0.01) |
|  | 0.05 |  | 0.05 |
| 3 | 0.86 | \$ | 0.96 |

## Appendix | GAAP to Non-GAAP Reconciliation

- 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 import ant 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 en tire 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 differfrom 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.

|  | Q4'18 | Q3'19 | Q4'19 | $\underline{2014}$ | $\underline{2015}$ | $\underline{2016}$ | $\underline{2017}$ | $\underline{2018}$ | $\underline{2019}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GAAP Cash Flow From Operations, Excl Disc Ops | \$186 | \$199 | \$216 | \$492 | \$413 | \$455 | \$626 | \$477 | \$579 |
| Less Property, Plant and Equipment Additions net of Gov't Subsidy | -\$26 | -\$37 | -\$39 | -\$169 | -\$90 | -\$85 | -\$105 | -\$107 | -\$135 |
| Non-GAAP Operating Cash Flow ("Free Cash Flow") | \$160 | \$162 | \$178 | \$323 | \$323 | \$370 | \$521 | \$370 | \$444 |

## Appendix | GAAP to Non-GAAP Reconciliation

2022 Estimated GAAP Operating Expenses as a \% of Sales Less Intangible Asset Amortization as a \% of Sales 2022 Estimated Non-GAAP Operating Expenses as a \% of Sales

| FY 2022 Low | FY 2022 High |
| :---: | :---: |
| 33\% | 32\% |
| 1\% | 1\% |
| 32\% | 31\% |

2022 Estimated GAAP Operating Profit as a \% of Sales Add back Intangible Asset Amortization as a \% of Sales 2022 Estimated Non-GAAP Operating Profit as a \% of Sales

| FY 2022 Low | FY 2022 High |
| :---: | :---: |
| 25\% | 27\% |
| 1\% | 1\% |
| 26\% | 28\% |

2022 Estimated GAAP Diluted EPS
Add back Intangible Asset Amortization
Add back Non Cash Convertible Debt Interest
Convertible share adjustment
2022 Estimated Non-GAAP Diluted EPS

2022 Estimated GAAP Diluted EPS (Old)
Add back Intangible Asset Amortization
Add back Non Cash Convertible Debt Interest
Convertible share adjustment
2022 Estimated Non-GAAP Diluted EPS

| FY 2022 Low |  |  |  |  |  |  | FY 2022 High |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\$ .18$ |  | $\$$ | 3.87 |  |  |  |
| $\$$ | 0.09 |  | $\$$ | 0.10 |  |  |  |
| $\$$ | 0.07 |  | $\$$ | 0.07 |  |  |  |
| $\$$ | 0.15 |  | $\$$ | 0.21 |  |  |  |
|  | 3.50 |  | $\$$ | 4.25 |  |  |  |


| $\$$ | 0.07 |
| :--- | :--- |
| $\$$ | 0.08 |
| $\$$ | 0.13 |
| $\$$ | 4.00 |

MiR's revenue increase for the period January 1, 2019 to December 31, 2019 compared to the period April 23,2018 to December 31 , 2018 is $84 \%$. MiR's pro-forma revenue increase for the period January 1, 2019 to December 31, 2019 compared to the period January 1, 2018 to December 31, 2018 is 43\%.

Industrial Automation GAAP revenue increase for the period January 1, 2019 to December 31, 2019 compared to the period January 1, 2018 to December 31, 2018 is $14 \%$. Industrial Automation's pro-forma revenue increase for the period January 1, 2019 to December 31, 2019 compared to the period January 1, 2018 to December 31 , 2018 is $12 \%$.


[^0]:    (1) See atta ched a ppendix for GAAP to non-GAAP reconciliations
    (2) Financial Model updated as of 1/23/20

    10 (3) 2022E sales mixis at mid-point of model range

[^1]:    (1) 60.8 million shares repurchased at an average price of $\$ 32.38$
    (2) Earn-Out payments flow through both financing and operating sections of the cash flow statement.
    (3) Teradyne calculates free cash flow as: GAAP Cash flow from operations, excluding discontinued operations, less property, plant and equipment additions net of gov't subsidies; see GAAPto non-GAAP 5 reconciliations.

