VISHAY INTERTECHNOLOGY
Q4 2018 Earnings Call Transcript
February 5, 2019, 9:00 a.m. ET

Operator:
Good morning. My name is (Amy), and I will be your conference operator today. At this time, I would like to welcome everyone to the Vishay Q4 2018 Earnings Conference Call. All lines have been placed on mute to prevent any background noise.

After the speakers' remarks, there will be a question and answer session. If you would like to ask a question, please press "star" then the number "one" on your telephone keypad. To withdraw your question, press the "pound" key.

Thank you. Peter Henrici, you may begin your conference.

Peter Henrici:
Thank you, (Amy). Good morning, and welcome to Vishay Intertechnology's Fourth Quarter and Year 2018 Conference Call. With me today are Dr. Gerald Paul, Vishay's President and Chief Executive Officer; and Lori Lipcaman, our Executive Vice President and Chief Financial Officer.

As usual, we'll start today's call with the CFO, who will review our fourth quarter and year 2018 financial results. Dr. Gerald Paul will then give an overview of our business and discuss operational performance as well as segment results in more detail.

Finally, we'll reserve time for questions and answers. This call is being webcast from the Investor Relations section of our website at ir.vishay.com. The replay for this call will be publicly available for approximately 30 days. You should be aware that in today's conference call, we will be making certain forward-looking statements that discuss future events and performance. These statements are subject to risks and uncertainties that could cause actual results to differ from the forward-looking statements. For a discussion of factors that could cause results to differ, please see today's press release and Vishay's Form 10-K and Form 10-Q filings with the Securities and Exchange Commission.

In addition, during this call, we may refer to adjusted or other financial measures that are not prepared according to generally accepted accounting principles. We use non-GAAP measures because we believe they provide useful information about the operating performance of our businesses and should be considered by investors in conjunction with GAAP measures that we also provide.

This morning, we filed a Form 8-K that outlines the various variables that impact the diluted earnings per share computation. On the Investor Relations section of our website, you can find a presentation of the fourth quarter 2018 financial information containing some of the operational metrics that Dr. Paul will be discussing. Now I turn the call over to Chief Financial Officer, Lori Lipcaman.

Lori Lipcaman:
Thank you, Peter. Good morning, everyone. I am sure that most of you have had a chance to review our earnings press release. I will focus on some highlights and key metrics. Vishay reported revenues for Q4 of $776 million, completing a year in which revenues exceeded $3 billion for the first time in the company's history. EPS was $0.69 for the quarter. Adjusted EPS was $0.58 for the quarter.

During the quarter, we continued to execute transactions in response to U.S. tax reform. We completed open-market repurchases to retire a significant portion of our outstanding convertible debentures, which were no longer tax efficient under the new U.S. tax law. All of the reconciling items between GAAP EPS and adjusted EPS are related to this early extinguishment of debt transaction or tax-related items. There were no reconciling items impacting gross or operating margins. I will elaborate on these transactions in a few moments.

Revenues in the quarter were $776 million, down by 0.7 percent from previous quarter but up by 15.2 percent compared to prior year. Gross margin was 28.3 percent. Operating margin was 15.4 percent. There were no reconciling items to arrive at adjusted operating margin. EPS was $0.69. Adjusted EPS was $0.58.

EBITDA was $146.5 million or 18.9 percent. Adjusted EBITDA was $155.8 million or 20.1 percent. Revenues in the year were $3,035,000,000, up by 16.7 percent compared to prior year. Gross margin was 29.3 percent. Operating margin was 16.0 percent. Again, there were no reconciling items to arrive at adjusted operating margin. EPS was $2.24. Adjusted EPS was

$2.12. EBITDA was $603.4 million or 19.9 percent. Adjusted EBITDA was $630.0 million or 20.8 percent.

Reconciling versus prior quarter, operating income Quarter 4 2018 compared to operating income for prior quarter based on $5 million lower sales or the same level, excluding exchange rate impacts, operating income decreased by $18 million to $120 million in Q4 2018 from $138 million in Q3 2018. The main elements were, Average selling prices had a positive impact of $6 million, representing a 0.7 percent ASP increase. This includes U.S. tariffs passed through to customers.

Volume decreased with a negative impact of $4 million, equivalent to a 0.7 percent decrease in volume. Variable costs increased with a negative impact of $10 million primarily due to U.S. tariffs and material prices. Fixed costs increased with a negative impact of $8 million primarily due to incentive compensation, repair and maintenance costs, trade shows and other onetime items. Inventory effect had a negative impact of $4 million.

Versus prior year, operating income Quarter 4 2018 compared to adjusted operating income in Quarter 4 2017, based on $102 million higher sales or $110 million higher, excluding exchange rate impacts, adjusted operating income increased by $38 million to $120 million in Q4 2018 from $82 million in Q4 2017.

The main elements were; Average selling prices had a positive impact of $11 million, representing a 1.4 percent ASP increase, which includes U.S. tariff passed through to customers; volume increased with a positive impact of $50 million, representing a 14.6 percent increase, including the UltraSource contribution; variable costs increased with a negative impact of $11 million primarily due to U.S. tariffs; other variable cost inflation was offset by cost reduction and manufacturing efficiencies; fixed costs increased with a negative impact of $17 million primarily due to wage increases, incentive compensation, headcount and recruitment costs and acquisitions; exchange rates had a positive impact of $6 million.

For the full year, operating income for the year 2018 compared to adjusted operating income for the year 2017, based on $435 million higher sales or $393 million higher, excluding exchange rate impacts, adjusted operating income increased by $150 million to $485 million in 2018 from $335 million in 2017.

The main elements were; Average selling prices had a positive impact of $13 million, representing a 0.4 percent ASP increase, which includes U.S. tariffs passed through to the customers; volume increased with a positive impact of $193 million, representing a 14.3 percent increase, including the UltraSource contribution; variable costs increased with a negative impact of $11 million; wage and variable cost inflation were more than compensated by cost reduction manufacturing efficiencies.

However, U.S. tariffs and higher metal prices more than offset these savings; fixed costs increased with a negative impact of $50 million primarily due to wage increases, incentive compensation, plant fixed costs, R&D project costs and acquisitions; exchange rate had a positive impact of $6 million. Selling, general and administrative expenses for the quarter were $100 million, in line with expectations when excluding exchange rate impacts. For the year, selling, general and administrative expenses were $403 million.

For Quarter 1 2019, our expectations are approximately $103 million of SG&A expenses and approximately $405 million for the full year at constant exchange rates. The company did not repatriate any additional cash to the U.S. during Q4. But as you know, we did repatriate approximately $724 million net of taxes during the earlier periods of 2018.

Recall that while such amounts are no longer subject to U.S. federal taxes due to U.S. tax reform, they are subject to foreign withholding and other taxes and some state income taxes. We paid cash taxes of approximately $157 million in 2018 related to our repatriation program. There is approximately $300 million of additional earnings available for repatriation with taxes accrued. We are still evaluating the timing of such repatriation.

During 2018, we utilized much of the repatriated amounts to reduce the outstanding balance of our credit facility to 0, to repay certain intercompany indebtedness, and in Q4, to repurchase a significant portion of our convertible debentures on the open market. Our convertible debentures had certain tax attributes, which were no longer efficient after U.S. tax reform.

During Q4, we have repurchased convertible debentures with a principal amount of approximately $249 million, which represented about 87 percent of the debentures outstanding at the beginning of the quarter. This followed transactions in Q2, which had already reduced the principal amount outstanding of these instruments by $289 million. Of this $575 million principal amount of the convertible debentures that was outstanding at the beginning of 2018, only $37 million or 6 percent remained outstanding at the end of the year.

We continue to be authorized by our Board of Directors to repurchase additional convertible debt instruments and open market repurchases or through privately negotiated transactions, subject to market and business conditions, legal requirements and other factors. Such authorization does not obligate us to acquire any particular amount of convertible debt instruments, and it may be terminated or suspended at any time at our discretion and in accordance with applicable laws and regulations. The repurchased price for the debentures was bifurcated between their respective debt and equity attributes.

The retirement resulted in a pretax extinguishment loss of $9 million, which is primarily the result of reduced market interest rates since the initial issuances, which is a key assumption in bifurcating between debt and equity attributes. We recognized a U.S. GAAP tax benefit of $2 million related to the pretax extinguishment loss, which is also a reconciling item to arrive at adjusted EPS.

Furthermore, we've recognized a tax benefit of $21 million resulting from the extinguishment, reflecting the reduction in deferred tax liabilities related to the special tax attributes of the debentures. We had a total liquidity of $1.4 billion at quarter end. Cash and short-term investments comprised $764 million, and there are no amounts outstanding on our $640 million credit facility.

We have utilized substantially all of the cash repatriated to the U.S. during 2018. We are continuing to evaluate future repatriation of cash to the U.S. and how to most efficiently utilize revolving credit facility. The carrying value of our debt at year-end is $495 million, which is net of unamortized issuance costs of $15 million and includes $14 million remaining of the convertible debentures net of unamortized discount issued in three tranches and due by their terms in 22, 23 and 24 years, respectively, and $495 million of the new convertible notes issued in Q2, net of unamortized discount, due in 2025.

The principal amount or face value of the converts totaled $637 million, $600 million related to the new notes and $37 million related to the remaining debentures. As I said, no amounts are outstanding on the revolving credit facility at the end of 2018, but we expect to utilize the revolver to some degree in 2019.

No principal payments are due until 2025. Additionally, the company will adopt the new U.S. GAAP leasing standard, effective January 1, 2019. We expect that this will add approximately

$90 million to $100 million of right-of-use assets and an equivalent amount of lease obligation liabilities to our balance sheet. We are continuing to evaluate adoption of this new standard.

The convertible debenture repurchases, completed during 2018, will have a favorable impact on our tax rate going forward. Due in large part to the unusual tax benefit related to the settlement of some of the convertible debentures, our U.S. GAAP tax rate was negative 2 percent for Quarter 4 and 17 percent for the full year.

As we disclosed at year-end 2017, we changed our permanent reinvestment assertion regarding unremitted earnings in certain key countries and have accrued appropriate incremental foreign taxes to repatriate those amounts. Our U.S. GAAP tax expense for the quarter and year-to-date periods includes adjustments to remeasure the deferred tax liability related to those incremental foreign taxes payable upon repatriation, such as foreign currency effects. A similar remeasurement will occur quarterly until such amounts have been repatriated. That remeasurement adjustment was a benefit of about $3 million in Q4 and a net benefit of about $10 million for the full year 2018.

During 2018, we also recorded adjustments to the provisional amounts recorded in 2017 related to the enactment of the U.S. tax reform as permitted by SEC Staff Accounting Bulletin 118. The measurement period under SAB 118 has now expired. Q4 includes no additional adjustments, but the full year included $25 million additional tax expense.

Our normalized effective tax rate, which excludes these unusual tax items, was approximately 26 percent for the year. This mathematically yield a rate of 22 percent for Quarter 4. We expect our normalized effective tax rate for 2019 to be approximately 26 percent to 27 percent. We continue to be impacted by the new GILTI tax, the new BEAT tax and the limitation on deductibility of some of our interest expense.

We'll continue to evaluate the provisions of the new U.S. tax law. We may further adjust our financial and capital structure to reduce our effective tax rate. Our consolidated effective tax rate is based on an assumed level and mix of income among our various taxing jurisdictions. A shift in income could result in significantly different results. Total shares outstanding at quarter end were 144 million. The expected share count for EPS purposes for the first quarter 2019 is approximately 145 million. This reflects a significant convertible debt repurchase transactions completed in Q4.

For a full explanation of our EPS share count and variables that impact the calculation, please refer to the 8-K we filed this morning. Cash from operations for the quarter was $150 million. Capital expenditures for the quarter were $104 million. Free cash for the quarter was $93 million. For the year, cash from operations was $259 million. Capital expenditures were $230 million, split approximately, for expansion, $131 million; for cost reduction, $25 million; for maintenance of business, $74 million.

Proceeds from the sale of property and equipment were $55 million for the year, which primarily represents the sale of our former manufacturing facility in Santa Clara, California. We have leased back the property under a short-term arrangement to raise the buildings, and accordingly, we had deferred recognition of any gain on this transaction.

The short-term lease expires upon the earlier of 15 days after demolition is complete or June 30, 2019. Free cash generation for the year was $84 million. The year 2018 includes $172 million cash taxes paid related to tax reform of $15 million and cash repatriation of $157 million. Vishay has consistently generated in excess of $100 million cash flows from operation to each of the past 23 years and greater than $200 million for the last 16 years. Backlog at the end of Quarter 4 was at $1,497,000,000 or 5.8 months of sales. Inventories decreased quarter-over-quarter by $17 million, excluding exchange rate impacts.

Days of inventory outstanding were 80 days. Days of sales outstanding for the quarter were 46 days. Days of payables outstanding for the quarter were 34 days, resulting in a cash conversion cycle of 92 days. Now I will turn the call over to our Chief Executive Officer, Dr. Gerald Paul.

Gerald Paul:
Thank you, Lori, and good morning, everybody. Without any doubt, 2018 for Vishay has been one of its most successful years ever, showing further substantial improvements of the financial performance. Like in 2017, we also, in 2018, were carried by a partially extreme level of demand in virtually all market segments. We kept increasing manufacturing capacities and raised the output of most of our product lines considerably. We continue to do so for several lines of strategic importance.

Vishay, in 2018, achieved a gross margin of 29 percent of sales versus 27 percent in 2017, adjusted operating margin of 16 percent of sales versus 13 percent the year before, GAAP earnings per share of $2.24 versus a loss of $0.14 in 2017 and adjusted earnings per share of $2.12 versus $1.43 in the prior year.

We, in 2018, generated free cash of $84 million, and this includes the taxes paid for cash repatriation of $157 million. The fourth quarter was principally in line with our performance of the entire year. We achieved a gross margin of 28 percent of sales, adjusted operating margin of 15 percent of sales, GAAP earnings per share of $0.69 and adjusted earnings per share of $0.58.

Let me talk about the economic environment. As I said, the economic environment during 2018 again has been excellent and turned out to be even better than in 2017, which, for our industry, already has been a very good year. The high market demand continues to exceed available capacities in general, which gave the opportunity for more stable pricing.

Backlog climbed to record levels. Lead times were very long for many product lines. Towards the end of the year, there were increasing signs of a normalization as supply started to catch up with demand. Book-to-bill ratios went below one, slightly below one. Still, market conditions overall remained stable, and sales and backlogs continue at historically high levels.

Coming to the regions. All regions principally did very well throughout the year. Business conditions in the American market continued their steady improvement, driven by healthy macroeconomic – economics but supported also by distribution increasing inventories.

The business in Europe had another excellent year, with automotive and in particular, industrial markets, continuing strong. 2018 also has been a good year in Asia, but some concerns were there over the impact of U.S. tariffs burdening increasingly the industrial segment of the Chinese business. Talking about distribution. Worldwide distribution also in 2018 enjoyed quite excellent business conditions. Worldwide POS grew another time by 14 percent year-over-year.

Also, orders on distribution continued extremely strong for the year. They were 20 percent over 2017. There was some weakening of the orders on distribution in the fourth quarter. Inventories, the distributors during the year grew substantially. Inventory turns of distributors reduced to 2.9 in Q4 as compared to 3.5 in prior quarter and to 3.6 in the fourth quarter of 2017. Some detail, in the Americas, inventory turns were 1.9 after 2.3 in Q3 and 2.1 in prior year; in Asia, 3.7 after 4.5 in Q3 and 4.9 in prior year; and in Europe, 3.3 after 3.8 in Q3 and 3.9 in prior year. So principally, distribution continues strong, but some inventory correction is becoming more likely.

Automotive also, in 2018, has been the main driver of growth in our industry. Growth in electronic content assures increasing volume of components despite a flat vehicle production in 2018. Driver-assist systems for the at-work projects, new LED technology as well as e-mobility in general continue to fuel new business. Industrial markets remain at historically strong levels.

Drivers are factory automation, infrastructure programs, alternative energy and IoT censoring. There's also a strong improvement of the energy sector, oil and gas. Some concerns exist to industrial in China. Telecom markets continue to show a mixed picture. Smartphones are declining, but fixed telecom starts to accelerate due to the introduction of 5G. Computing markets remain weak, with PC volume declining. We see profitable growth in mil aerospace and medical markets, and we expect this to continue steadily.

Coming to the business development. In Quarter 4, sales, excluding exchange impacts, came in slightly above the midpoint of our guidance. We achieved sales of $776 million versus $781 million in prior year versus $674 million in prior year – the first one was, vis-a-vis, prior quarter. Excluding exchange rate effects, sales in Q4 were flat versus prior quarter but up versus prior year by $110 million or 16.5 percent. Bills in the year 2018 were $3.035 billion versus $2.599 billion in 2017, an increase of 14.9 percent, excluding Ex rate effects. Sales in 2018 included $17 million from the UltraSource acquisition.

Book-to-bill in the quarter was 0.94, 0.90 for distribution after 0.80 in the third quarter, 0.98 for OEMs after 1.15 in Q3, 0.91 for actives after 0.87, 0.96 for passives after 1.02, 0.76 for the Americas after 1.06, 0.90 for Asia after 0.69, and 1.11 for Europe after 1.16. Some normalization is apparent in Asian distribution, especially at semiconductors.

Backlog in Q4 decreased slightly to 5.8 months from 6.0 months in Q3, 6.4 months in actives and 5.2 months in passives. There were increasing prices across the board, 0.7 percent up versus prior quarter and 1.4 percent up versus prior year. Tariff errors are included in these numbers. For actives, it went – prices went up by 0.5 percent versus prior quarter and by 1.4 percent versus prior year. And for passives, prices were up by 0.9 percent versus prior quarter and by 1.4 percent versus prior year. Some highlights of operations.

In 2018, we were able to more than offset the negative impacts on the contributive margin by cost reduction and by innovation. SG&A costs in the fourth quarter came in at $100 million, in line with expectation when excluding exchange rate effects. Exchange – SG&A costs for the year 2018 were $403 million, $28 million or 7.5 percent above prior year at constant exchange rates, besides general inflation, mainly due to higher bonuses, higher R&D spending and the UltraSource acquisition.

Manufacturing fixed costs in the fourth quarter came in at $130 million above expectations, mainly due to higher repair and maintenance costs. Manufacturing fixed costs for the year 2018 were $510 million, $23 million or 4.8 percent above prior year at constant exchange rates. All this is a consequence of general inflation, of substantial increased manufacturing volumes and of the UltraSource acquisition.

Total employment at the end of 2018 was 24,115, 4.6 percent up from prior year, of course, the consequence of broad capacity increases. Excluding exchange rate impacts, inventories in the quarter were reduced by $17 million, raw materials went down by $7 million and WIP and finished goods by $10 million. Inventory turns in the fourth quarter slightly improved to a good level of 4.5. In the year 2018, inventories increased by $57 million, raw materials by $20 million and WIP and finished goods by $37 million. Inventory turns for the entire year were at a good level of 4.5.

Capital spending in 2018 was $230 million versus $170 million in prior year, close to our expectations. We spent $131 million for expansion, $25 million for cost reduction and $74 million for maintenance of business. For 2019, we expect CapEx of approximately $190 million, in accordance, of course, with the requirements of our markets and our Growth Plan.

Talking about cash flow. We generated, in 2018, cash from operations of $259 million, including $157 million cash taxes for cash repatriation versus $369 million in prior year. We generated, in 2018, free cash of $84 million, including, again, $157 million cash taxes for cash repatriation versus a free cash generation of $200 million in 2017. Vishay another time has lived up to its reputation as an excellent and as a reliable producer of free cash, also in times of much higher-than-normal CapEx.

Coming to our main product lines, starting with resistors and inductors. Vishay's traditional and since years, most profitable business, continues to grow steadily. With resistors and inductors, we enjoy a very strong position in the industrial, auto, mil and medical market segments. Sales in Q4 were $262 million, up by $11 million or 4.5 percent versus prior quarter and up by $50 million or 23 percent versus prior year, excluding exchange rate impacts. The acquisition of UltraSource contributed $5 million in the quarter.

Year-over-year, resistors and inductors grew remarkably, from $839 million in 2017 to $1,012,000,000 in 2018 or by 18 percent, again excluding exchange rate impacts. UltraSource contributed $17 million year-over-year. Book-to-bill in Q4 was 0.94 after 1.02 in prior quarter. Backlog decreased slightly from 5.2 to 5.0 months, still extremely high backlog. Gross margin in the quarter came in at 32 percent of sales after 34 percent in prior quarter. Gross margin was impacted by inventory reduction, higher repair and maintenance costs and the less favorable product mix.

Gross margin for the year 2018 was at fairly excellent 33 percent of sales, up from 30 percent the year before. Inventory turns in the fourth quarter improved to a good level of 4.4 as compared to 4.4 for the entire year 2018. Prices went up by 0.4 percent versus prior quarter and by 0.5 percent versus prior year. UltraSource proves to be a successful and profitable acquisition, strengthening further our position in thin film networks.

Coming to capacitors. Our business with capacitors is based on a broad range of technologies with a strong position in American and European market niches. We enjoy increasing opportunities in the fields of power transmission and of electro cars, namely in Asia, respectively, in China in particular. Sales in the fourth quarter were $131 million, 14 percent above prior quarter and 26 percent above prior year, again, without exchange rate effects.

Year-over-year, capacitor sales increased significantly, from $384 million in 2017 to $466 million in 2018 or by 19 percent, excluding exchange rate impacts. Book-to-bill ratio in Q4 was 1.02 after 1.03 in the previous quarter. Backlogs remained at a very high level of 5.6 months. Gross margin in the quarter increased to 25 percent of sales after 23 percent in prior quarter, of course, positively impacted by increasing volumes.

Gross margin for the year 2018 was at 23 percent of sales, up from 20 percent in 2017. Inventory turns for capacitors in the quarter increased to 3.8 as compared to 3.7 for the entire year. Also in capacitors, prices went up by 1.9 percent in prior – vis-a-vis, prior quarter and by 3.3 percent, vis-a-vis, prior year. There are numerous opportunities for growth for this product line, especially in Asia.

Coming to Opto products. Vishay's business with Opto products consists of infrared emitters, receivers, sensors and couplers as well as of LEDs for automotive applications. Sales in the quarter were $66 million, 14 percent below prior quarter and 4.5 percent below prior year, which excludes exchange rate impacts. Some segments of the Opto business currently suffers – suffer from weakness – some weaknesses in the Chinese consumer market. Year-over-year, sales with Opto products went from $284 million to $290 million. They're actually flat year-over-year when excluding exchange rate impacts. Book-to-bill in the fourth quarter was 0.75 after 0.88 in the prior quarter. Backlog remained at a very high level of 5.1 months.

Gross margin in the quarter were at somewhat disappointing 29 percent of sales after a fairly outstanding third quarter with 36 percent. All this due to lower volume and the less favorable product mix. Gross margin for the year 2018 for Opto products came in at an excellent level on the other hand of 35 percent of sales as compared to 34 percent in prior year. Good inventory turns at Opto of 4.9 in the fourth quarter as compared to 5.1 turns for the entire year.

Very low price decline, no price decline versus prior quarter and 0.5 percent prices down versus prior year. We remain very confident for this line growing steadily and also profitably in the future, mainly in the segment of sensors. And we expect the business to be back to more historical growth levels by the mid of this year.

Diodes. Diodes for Vishay represents a broad commodity business, where we are the largest supplier worldwide. Vishay offers virtually all technologies as well as the most complete product portfolio. The business has a very strong position in the automotive and industrial market segments and keeps growing steadily and profitably since years. Sales in the quarter were $177 million, 4.7 percent below prior quarter but 12 percent above prior year, again without exchange rate effects.

Year-over-year sales with diodes increased from $620 million to $713 million, a growth of 14 percent, excluding exchange rate impacts. Book-to-bill ratio in Q4 was 0.83 after 0.86 in the third quarter. There is some normalization, mainly in Asian distribution. The backlog reduced slightly to a still very high level of 6.7 months from 6.8 months in prior quarter, and the lead times for diodes are still long. Gross margin in the quarter came in at 26 percent of sales as compared to 29 percent in the third quarter, which has been a record. There were some impacts from the lower volume.

Gross margin in the year 2018 grew to a fairly excellent level of 28 percent of sales, a further increase from 27 percent in prior year. Inventory turns remained at very satisfactory – at a very satisfactory level of 4.7 as compared to 4.8 for the whole year. There were price increases, 1.2 percent versus prior quarter and plus 3.7 percent prices up versus prior year. The impact of the price errors for tariffs included. We continue to expend for diodes' critical manufacturing capacity as fast as we can.

Finally, we come to MOSFETs. Vishay continues to be one of the market leaders in MOSFET transistors. MOSFETs, over the last years, developed a strong and growing position in automotive. Sales in the quarter were $139 million, 3.2 percent below prior quarter but remarkable 15 percent above prior year without exchange rate impacts. Year-over-year sales with MOSFETs increased from $468 million to $548 million by 16 percent without exchange rate impacts.

It was a strong book-to-bill ratio in Quarter 4 of 1.08 after 0.88 in the third quarter. There are continued shortages of supply at MOSFETs. Despite a still very high level of 6.3 in Q3, backlogs increased further to 6.7 months, lead times are long in general. Gross margin in the quarter for the MOSFETs were at 26 percent of sales as compared to 27 percent in the third quarter. Gross margin in the year 2018 grew to a fairly excellent level of 27 percent of sales, coming from 23 percent in 2017, despite the negative impacts from the U.S. tariffs.

They are very satisfactory inventory turns of 4.7 in the quarter as compared to 4.7 for the entire year. Price decline for the MOSFETs has been reduced quite dramatically, minus 0.1 percent versus prior quarter and minus 0.4 percent versus prior year. We continue to be very confident concerning future growth of MOSFETs, in particular, driven by automotive applications. And we continue to expend internal and foundry capacities for the MOSFETs.

Let me summarize. We, in the year 2018, again, enjoyed remarkably good economic conditions in all geographies, in virtually all market segments and at most of our customers. Our decision – our strategic decision, may I say, to focus on automotive and industrial has paid off. Having been disciplined again in terms of fixed costs, while further improving efficiencies, we exploited these good conditions of the year 2018 to the full extent. 2018 was the second-best year of Vishay's entire history, the best since the peak year 2000.

We have tangible reasons to believe that our product portfolio as well as our quality of our products continue to satisfy also the most demanding market expectations. Within the last two years, we have increased our manufacturing capacities for critical products very substantially and continue to work on our responsiveness to even higher market demands. We feel prepared to face all future challenges of our demanding but growing markets.

We believe in the – in a long-term growth of our electronics business and the continuation of a good business environment also in 2019. Vishay continues to operate, as you all know, under very solid financial conditions. We increased shareholder value by raising dividends and by buying back convertible debentures. For the first quarter of 2019, we, at present exchange rates, guide to a sales range of $730 million to $770 million at gross margins of 28 percent to 29 percent of sales. Thank you. Peter?

Peter Henrici:
Thank you, Dr. Paul. We will now open the call to questions. (Amy), please take the first question.

Operator:
Certainly. Your first question comes from the line of Harlan Sur with JPMorgan.

Harlan Sur:
Yes. Thank you. Good morning. Great job on the quarterly execution. (Morning) and good job on the (inaudible) results as well. Dr. Paul, Q1 is typically a seasonally stronger quarter sequentially for the team. I know you are seeing a weakness in Asia and China like many of your peers, but is the sub-seasonal trend primarily focused on auto and industrial? And are there any other geographies or end markets which are showing some seasonal trends as well?

Gerald Paul:
Well, we are projecting it either relatively strong Quarter 1, but your observation is right. It's slightly below the fourth quarter. We do expect some normalization in – especially in Asian distribution based on the inventory level we see there.

Harlan Sur:
Backlog coming down a little bit slightly, right? Probably because your lead times are maybe coming in a bit. I'm just wondering if you could just comment on the level of cancellations.

Gerald Paul:
Now, still as you said, backlogs are extremely high. For the history of our business, I'm – for a long time in this business, I practically have never seen such long – such high backlogs and such long lead times. But of course, as to be expected, as demand basically will be caught by the capacity sooner or later, and this is ongoing.

You have to expect that for some time, there is a book-to-bill which is below one because the backlogs are – were partially inflated, there's no question, which not necessarily has to do anything with the EBITDA sales we achieve. You know that the backlogs were partially artificially inflated. I think we discussed it all along.

Harlan Sur:
Yes, thank you for that insight. And just my last question, more on kind of a forward-looking basis. Strong results so far with your Asia growth and expansion plan. I think you guys highlighted a 19 percent CAGR over the past, I think, four or five years. What are the plans this year to increase either sales, marketing and engineering resources in these regions? And outside of auto, what are the other end markets that you guys are targeting in Asia?

Gerald Paul:
Yes. For sure, automotive remains to be an important part of our activities. And I believe that we added a lot of resources there, local resources, and I believe that for the time being, it's efficient, at least for the time being. Very important for us, of course, is also industrial. As a matter of fact, industrial for Vishay is the bigger market, which we serve. And we want to continue to serve the better.

It's a very much diversified market as you know. And we have to penetrate it even better in Asia. We're on the way, there's no question, we're on the way. And by the way, in this regard, we didn't – we shouldn't disregard auto completely. We believe that especially MOSFETs have a great future in automotive, our MOSFETs. It's one of our key programs for the years to come.

Operator:
Your next question comes from the line of Shawn Harrison with Longbow Research. Shawn, your line is open.

Shawn Harrison:
Wanted to get into the book-to-bills a little bit and just particularly the Americas coming down substantially, probably a book-to-bill we haven't seen in seven or eight years. And wondering if that was just backlog correction. Or is there something else going on in North America? Because typically, this earning season Asia spend really the weak point. We haven't seen that type of, I guess, book-to-bill commentary out of the Americas for any companies.

Gerald Paul:
Shawn, it's my real conviction, what we see is the backlog correction. We haven't seen such, maybe for a long time, such low book-to-bill ratios, but we have never seen, at least I cannot remember, so high backlogs – such high backlogs. So I think it is clearly a normalization. The POS runs nicely, theme is to runs nicely, especially in the United States.

Shawn Harrison:
OK, that's very helpful. Is there an expectation with the capacity you're adding and maybe peers are adding that you'll start to see these backlogs get to a more normalized level in the back half of 2019? Or do you think that you'll still have some extended backlogs for the next 12 months?

Gerald Paul:
I believe in the normalization of the backlog in the course of the year. But having said this, of course, we are. We were investing for more capacity, and we are continuing to invest for more capacity. We want to have the opportunity, also, going forward, to react to spikes of demand. And this nice growth, which we have seen since 2017, was eating up really our capacity reserve. So we have to do something in order to be a viable supplier also going forward. So we continue to invest but not across the board, we of invest, of course, in critical lines.

Shawn Harrison:
And then lastly, if I may. I know a lot of annual price discussions happen either late in the fourth quarter or during January. Do you expect the benign or even positive pricing environment you've seen for the past few quarters to persist throughout 2019 based upon your pricing discussions?

Gerald Paul:
2019 is a long time for us. But as a matter of fact, I would say, going forward, at least foreseeably, I would see a relatively stable pricing to continue.

Operator:
Your next question comes from the line of Matt Sheerin with Stifel. Matt, your line is open.

Matthew Sheerin:
Yes, thank you and good morning. Dr. Paul, just questions relative to your commentary on inventories. The book to – the distribution of the inventories, sounds like they're up somewhat. It was interesting that your book-to-bill and distribution actually went up from Q3 when it went down in all other areas except for semiconductors. So I want to kind of reconcile that. But do you think the distributors are now reacting to lead times and you will see a quarter or multi-

quarter correction there?

Gerald Paul:
I think we have to distinguish between cancellation of orders, which should have never been given that we are given out of – the reason was whether long lead times and real reduction of inventory. I believe the normalization of the backlogs has already started despite the orders we saw in Q4.

I'm pretty sure that this normalization will simply continue. The question is, and this relates very much to the development of POS, obviously, what decisions will be take mainly by the Asian distributors to reduce maybe some inventory. We expect some inventory reduction, as I said, in the first quarter sales number we guided to.

Matthew Sheerin:
And I appreciate that you – your visibility is probably somewhat limited, although you do have strong backlog. But as you look past this quarter, which looks like to be somewhat below seasonal, do you think it will come back to seasonal levels, where you'll be up sequentially in the June quarter or is it too early to tell?

Gerald Paul:
It's early to tell but we don't know to which extent. First of all, I think the environment remains friendly. This is our basic conviction. We do not see a slowdown in reality of the electronic applications. We believe in a good year 2019. The remainder is the question to which extent inventories will be really effect by distribution.

They are relatively high, as you've seen, as you heard. The turns are not so high at this point. So that could be indeed that some inventory correction will take place beyond any correction of the orders only of the backlog. But I don't think it will be very severe. I would suspect that the second half of the year will be very normal, would be good, and the first half not bad so to speak.

Matthew Sheerin:
OK, and your take on automotive market, where we've seen competitors talk about production down this year but still good content. So how do you think about those markets for Vishay?

Gerald Paul:
Mainly, the major European suppliers, which are big customers of ours, they gave us annual contracts, which show substantially higher volumes. And they can be wrong, of course, but in the past have practically never been wrong since the year 2000.

So just judging it from the demand, which we get from these two large customers, you know them, makes me confident that I will not see, at least based on the growing electronic content, which you said, I don't see a breakdown of the electronic volume in automotive. In fact, it continues to grow.

Operator:
Your final question comes from the line of Ruplu Bhattacharya with Bank of America. Ruplu, your line is open.

Ruplu Bhattacharya:
Hi, thank you for taking my questions. Dr. Paul, maybe first on Opto. The margins were down this quarter, and you talked about some weakness in the China consumer market. But you also said that you expect some of that market to come back in the mid-2019 timeframe. So ...

Gerald Paul:
I said ...

Ruplu Bhattacharya:
Go ahead.

Gerald Paul:
Excuse me, sorry. I said, Opto will come back. In fact, we believe the weakness, which we have seen now in some consumer parts of the Chinese business, will remain to a degree. But other products will – which grow fast, sensors in particular, will then support the growth. The problem is, we have capacity shortages there.

By mid of the year, the division forecasts to have enough capacity that these growing segments can really support the overall growth at that Opto. But we expect this consumer applications to remain relatively weak for some time. But overall, we believe that Opto will be – will come up again based on other products they already have, just based on capacity expansions in the second half of the year.

Ruplu Bhattacharya:
Got it, got it. And then maybe, just on – you have more cash now in the U.S. Can you talk about your priorities for use of cash by max versus – you've done an acquisition, but anymore thoughts on M&A, just general use of cash going forward?

Lori Lipcaman:
Ruplu, this is Lori. First of all, we don't have a great amount of cash in the U.S. I think I mentioned that we spent substantially all of the cash that we repatriated during the year 2018 in 2018.

Ruplu Bhattacharya:
And so the remaining $300 million that you have outstanding, do you plan to repatriate that within – in 2019? Or is there any time frame for that?

Lori Lipcaman:
At this point in time, we haven't established exactly when we will repatriate that. But we're evaluating it. And we – yes, we don't a final decision on exactly when we will bring that money back to the U.S.

Ruplu Bhattacharya:
OK. OK, and my last question is, overall there's been a lot of discussion on the call on the backlog and on inventories normalizing and maybe having an inventory correction. Backlog still is like high overall at 5.8 months. In general, when you think about the quality of the backlog, I mean, are you confident that this backlog is real and versus how much double ordering is happening? Do you think that this backlog can sustain growth for the next couple of quarters?

Gerald Paul:
Ruplu, I mean, if the backlog normalizes, it doesn't hurt me, and no – it doesn't hurt us, as a matter of fact. What but would hurt more is, of course, a major inventory correction. As a matter of fact, what we look at is the 13 weeks' shippable backlog. This contains – of course, this doesn't contain fluff normally. It can also be cancelled theoretically, but this is much more solid.

And I can assure you, for the next 13 weeks, I see no negative at all, no correction in our activity level required. So as a matter of fact, backlog normalization will take place, but this hasn't, to be honest with you, nothing to do with the sales necessarily. But what would have impact on the sales is an inventory correction. But at this point in time, even I cannot see that. We are very careful for the first quarter. So – and there will be some but nothing major, I believe.

Operator:
There are no further questions. I will turn the call back over to the presenters for closing remarks.

Peter Henrici:
Thank you, (Amy). This concludes our fourth quarter conference call. Thank you for your interest in Vishay Intertechnology.

Operator:
This concludes today's conference call. Thank you for your participation. You may now disconnect.

END