

#### **Kyocera Corporation**

# Outline of Q&A on Financial Presentation for the Six Months Ended September 30, 2018 (Held on October 31, 2018)

## [Assumptions Behind Financial Forecasts]

- Q: Is it correct that Kyocera's assumed exchange rate for the second half of the fiscal year is 100 yen to the U.S. dollar? Also, can you tell us what impact a one yen fluctuation in exchange rate will have on results?
- A: We have not revised our initial full-year assumed exchange rate forecast of 105 yen to the dollar and so estimate rate for the second half will be of 100 yen to the dollar on calculation basis, though this is a conservative estimate. A one yen fluctuation against the U.S. dollar would impact sales revenue by approximately 400 million yen per month and 4.8 billion yen for the full year. Profit before income taxes would be impacted by around 100 million yen per month and 1.2 billion yen for the year.
- Q: What assumptions did you make when devising the forecast for parts used in semiconductor processing equipment for the second half? Also, what kind of risk are you facing aside from seasonal adjustments in terms of future demand trends for multilayer ceramic capacitors (MLCCs)?
- A: The market for logic-related semiconductor processing equipment is relatively favorable, so the lithography-related sector is expected to actually slightly exceed projections rather than decline. There is not much movement in etching-related equipment, however. We have made conservative estimates for the second half in light of these circumstances. In MLCCs, although smartphones accounted for the majority of demand until recently, we have been getting an increasing number of inquiries regarding MLCCs for automotive and 5G base station application. Rather than the risk of downturn, we expect an upswing in these sectors.

# [Contribution of Merger and Acquisition Activities]

- Q: Can you tell the extent to which merger and acquisition activities conducted in the previous fiscal year will contribute to results this fiscal year? In addition, what synergies have emerged with companies acquired? I think some of them were acquired more than a year ago?
- A: This fiscal year we expect acquired companies through merger and acquisition activities conducted in the previous fiscal year to contribute approximately 100 billion yen to sales revenue for the fiscal year, which is around 5% in profit ratio. In terms of synergistic effects, we will use the same sales channels in the power tool and pneumatic tool businesses that we

acquired as our existing businesses in our industrial tool business. AVX Corporation ("AVX"), a U.S. subsidiary, has acquired an automotive sensor business. This has enabled us to supply total solutions, which has helped lift the automotive business as a whole. AVX has also acquired an antenna business mainly for mobile phones, which has served to enhance the mobile phone business.

# [Capital Policy]

- Q: Doesn't the current stock price provide a good chance to conduct a share buyback? Can you tell us again your thoughts on how flexibly you want to execute your capital policy?
- A: We will continue to look into the possibility going forward. We plan to significantly increase capital expenditures and R&D expenses relative to past years and do not intend to greatly increase financial assets, which will include examining the feasibility of a share buyback.

## [R&D Initiatives]

- Q: It appears that Kyocera will work on the Internet of Things (IoT) among other areas at the Minato Mirai Research Center, but which business will you focus software development on? Will you sell software itself in the medium term? Or will you strengthen software development in order to expand the IoT business?
- A: Software sales are handled in part by Kyocera Communication Systems Co., Ltd. (KCCS), but the new facility will conduct research into advanced driver-assist systems (ADAS) and IoT-related areas with a focus on developing software to market in conjunction with hardware. As an example, with automotive cameras it is necessary to use artificial intelligence (AI) for recognition technology. For the IoT, we are interested in creating business that covers the entire IoT spectrum, from sensors to communications modules and analytical software.
- Q: Are you targeting any Al-related ventures or embedded software companies in future merger and acquisition activities?
- A: We don't have any projects along those lines at the moment but will look into the possibility if the opportunity arises.
- Q: Are Kyocera's corporate divisions taking charge of biosensor development, or is R&D being handled by individual divisions?
- A: We established the Medical Development Center as one of our corporate divisions last fiscal year and this facility handles biosensor-related development. The Life & Environment Group includes a medical business and we are conducting research associated with this business.

#### [Further Pursuit of Kyocera Group Synergies]

Q: Can you tell us your thoughts on future management style with regard to the relationship between AVX and Kyocera?

A: AVX is an independently listed company and the top executives of both companies gather for management meetings about five times a year. With regard to collaboration, as an example, AVX and Kyocera have shared technologies relating to capacitors in the past. AVX acquired an antenna business in the previous fiscal year and Kyocera is also planning to make use of the technology from this new entity. We intend to promote even greater collaboration with AVX going forward.

# [Semiconductor Components Group]

- Q: Ceramic packages for optical communications is facing difficult market conditions, however, I think investment in 5G infrastructure is going to begin. Can you tell us the preparations you are making in response to future demand and the improvements you are forecasting?
- A: We are currently in a drop-off period prior to the introduction of 5G. With 5G set to get underway around next fiscal year, we are in the process of constructing a new facility for the Semiconductor Components Group at the Kagoshima Sendai Plant, which will also include handling ceramic packages for optical communications. We aim to drive growth in this area from next fiscal year and beyond.
- Q: Can you tell us your outlook for ceramic packages for next fiscal year? It appears that the market is growing for cameras embedded in mobile phones. Does that mean Kyocera's ceramic packages for CMOS image sensors will also see growth? Similarly, can you tell us your forecast for ceramic packages used in optical communications? I think alternative technologies to ceramics exist, so can you explain the risk involved here?
- A: We have received a number of inquiries regarding ceramic packages for CMOS image sensors for next fiscal year. We plan to introduce equipment to increase production at the Kagoshima Sendai Plant. There is little doubt that ceramics will be used for some part of 5G infrastructure, which offers an excellent business opportunity for Kyocera. There is also the risk that ceramics won't be used for certain parts though.

#### [Electronic Devices Group]

- Q: The MLCC business appears to be progressing extremely well. Can you tell us both the market-related factors and Kyocera's unique initiatives that have led to this? Also, can you tell us how sustainable these favorable conditions are with reference to next fiscal year?
- A: While the major premise for MLCCs is a favorable market, we take the initiative with development of small and high-capacitance components that enables us to get ahead in this area. I think we have grabbed what we can in terms of market share on the back of the favorable conditions and I believe the initiatives we have executed have contributed to about the same extent. We have already made progress in talks for next fiscal year and will need to make capital investment in order to keep pace with the number of requests we have received. For that reason, we will continue increasing production.

- Q: Since AVX handles MLCCs for the automotive sector, what area does Kyocera handle for MLCCs? Also, is growth in MLCCs being posted in the ADAS or powertrain sector?
- A: Kyocera has starting to see growth in MLCCs in both the automotive and 5G sectors. Since automotive parts don't get replaced all that often, demand for new applications has been strong in the automotive sector. That includes solid demand for MLCCs for ADAS as well.

# [Communications Group]

- Q: Although the telecommunications equipment business returned to profitability in the second quarter, it has been flipping between growth and loss over the years, so it's hard to know if the recent return to profitability signals the end of structural improvements or not. What are your thoughts on this?
- A: Structural reforms will be completed in the fourth quarter for the telecommunications equipment business. The effects of the reforms started to emerge in the first half, serving to reduce loss in North American operations. With a return to profitability in the second quarter, we expect to continue posting gains in the second half as well. However, there is also risk of downswing since the business doesn't generate a profit ratio of 10% or 20%. Going forward, our strategy will be to expand IoT-related business. The spread of the IoT will be difficult without providing all-in one solution; that is, not only modules but also sensor and data analysis. For that purpose, we will start relevant research in the second half of the fiscal year.

#### [Document Solutions Group]

- Q: About the construction of new facilities in this segment, what is your outlook for growth in volume of equipment next fiscal year and how will the new facilities help to reduce costs?
- A: On a volume base, equipment sales have been increasing by just under 10%. We will aim for growth at this level even as we shift toward a paperless society. In terms of the effect of cost-cutting measures, personnel costs have been slashed to one-tenth of previous costs at the toner factory following automation. Although we haven't been able to aggregate the figure for the automated OPC drum facility, the number of personnel has been cut by 90%. This doesn't necessarily mean that personnel costs will also be cut to one-tenth because we also have overhead costs to deal with, but we will definitely be able to make big strides in achieving cost reductions. We have also started to experiment with automation of the assembly line for the equipment itself. We are confident that this will translate into significant cost reductions for the Document Solutions Group as a whole.

# [Life & Environment Group]

Q: Kyocera plans to conduct structural reforms in the solar energy business to make improvements heading into next fiscal year through site consolidation and cost reduction. What progress has been made in the first half of the fiscal year and what factors have led to the downward revision?

- A: Site consolidation was all but completed as of October 2018. Although the effects of this are projected to emerge in the second half, the market has slowed more than expected in the residential and commercial sectors for Feed-in Tariff (FIT)-related projects in particular, and this was a major factor behind the downward revision. Purchase prices under the FIT system have decreased to the point where very little business feasibility remains, and as a result, we have shifted to projects concerning self-consumption and the selling of renewable energy. That doesn't mean that all FIT-related projects will suddenly disappear, but the self-consumption and electric power selling areas are expected to yield greater results around the year after next. It might be difficult to return to profitability next fiscal year, so we are targeting 2020 to achieve this goal.
- Q: Business loss in the Life & Environment Group was 6.4 billion yen in the first half with a loss of 10.6 billion yen forecast for the second half. I presume profit will improve in the second half on the back of structural reforms in the solar energy business. What are your expectations here? Also, what measures will you take next fiscal year assuming demand drops further?
- A: Costs relating to site consolidation will be recorded in the third quarter. We forecast an improvement in profit in the fourth quarter. We have instructed sales representatives to try to secure orders for next fiscal year in anticipation of lower costs brought about by automation and other efforts, in light of the fact that results this term have decreased more than expected. I am confident that we will not post a loss next fiscal year as we have this year since we have secured orders at over 80% of our capacity. Not all of these orders have been finalized, but we are moving ahead with major talks regarding self-consumption with leading users. We are also taking other steps to remedy the situation.
- Q: What is the cost of the site consolidation for the solar energy business that will be recorded in the third quarter?
- A: We forecast loss in the Life & Environment Group in the third quarter to account for around two-thirds of the loss in the second half due in part to the cost of the site consolidation.

#### Cautionary statement

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