

## **【Samsung Electronics Q4 Earnings Call】**

Good morning.

This is Ben Suh, from investor relations.

Thank you for joining our earnings call for the fourth quarter of 2020.

Before we announce our fourth quarter results, I would like to invite President and CFO Yoon-ho Choi to share details on our shareholder return policy, regarding both the additional return for the period just ended last December, as well as for the new policy regarding the next term.

Now, I'd like to turn it over to our CFO.

Good morning,

This is Yoon-ho Choi, CFO of Samsung Electronics.

It is a pleasure to talk to our shareholders and market professionals in this call today.

As always, thank you for your continued support for Samsung Electronics and I wish you and your family good health.

The Board of Directors and executives are committed to enhancing shareholder value. With that, I would like to provide an update on two resolutions regarding our shareholder return policy that were approved by the Board today.

To fulfill our commitment for our shareholder return policy for 2018-2020,

The Board of Directors today approved a one-time, special cash dividend of 10.7 trillion won. This was calculated by deducting the regular dividend of 28.9 trillion won from 50% of 79.2 trillion won, which is the total free cash flow for the previous three-year policy term.

As a result of the joint efforts of our employees and stakeholders, including our partner companies amid numerous difficulties including COVID-19, we were able to deliver results that enable this special dividend.

This special cash dividend of 10.7 trillion won, or 1,578 won per share, will be paid out to shareholders together with the year-end regular dividend of 354 won per common share and 355 won per preferred share.

In April, shareholders of record as of end-2020 will receive 1,932 won per common share and 1,933 won per preferred share, after approval in March at the annual general meeting of shareholders.

Now I will move on to the shareholder return policy for the next term.

When considering the direction for the new policy, the Board of Directors reviewed various factors in depth, including ways to enhance shareholder value, the business environment, and our investment strategies and financial structure.

As you are aware, the global business environment has been and is still mired in unprecedented macro uncertainties caused by global trade conflicts and the spread of COVID-19, significantly decreasing visibility for our outlook.

Even under these circumstances, R&D investments as well as capital expenditures are expected to increase. This is due to intensifying competition especially in Foundry and increasing technology challenges.

And considering the dynamic changes in the industry landscape, we need to ensure we have the resources to execute on M&A activities to seize opportunities for growth.

For the period covering 2018-2020,

We changed our shareholder return policy with a focus on dividend, significantly increasing the regular dividend amount to enhance the predictability on the total shareholder return.

For the next term,

We will continue with this policy direction, and have decided to increase the annual dividend to 9.8 trillion won.

Regarding the shareholder return pool beyond dividends,

For the 2018-2020 term,

Uncertainties such as COVID-19 caused rapid changes in the external environment and kept us from executing an early return.

For this term, from 2021 to 2023,

We kept the shareholder return pool at 50% of the free cash flow generated over the three-year period.

That said, we will make a regular announcement each year, sharing the annual free cash flow to enhance clarity on the amount of additional expected return.

Also, if a significant amount of expected return has been generated, we will actively consider executing a portion of it at the close of each year's results.

Our Board Directors and executives are well aware of shareholder concerns over our increasing cash level over the last three years.

For 2021-2023, difficult business conditions and macro uncertainties are expected but we believe there are opportunities as well.

Market growth is accelerating with increasing digitization and technology advances.

Semiconductor, display, and mobile communication businesses will play crucial roles in such growth.

We will further enhance our leadership in the market for our established businesses, and at the same time strengthen the foundation for continued growth in emerging businesses.

For this, we will leverage our resources to increase strategic capital expenditures and execute M&A opportunities.

We ask for your support and understanding as we solidify our foundation for sustainable growth.

The Board of Directors and executives firmly believe that the most effective and reliable way to enhance shareholder value is through continued growth of the Company.

Therefore, on top of increasing our business competitiveness, we will do our best to enhance shareholder value with global level achievements in ESG and compliance that will enhance and grow our corporate value.

As always, we deeply appreciate your trust and support;  
And we look forward to more engagement with our shareholders and active communicate with the market.

We hope that you and those close to you stay strong and in good health.

Thank you.

Yes. Thank you, Mr. Choi. We will now have a Q&A session about the shareholder return policy that was just announced. As you know, we also have our full fourth quarter earnings conference call left that needs to follow the Q&A session.

## Q&A

<Q – Chang Won Chung >:

- My question is about the reason behind your decision to execute the remaining shareholder return in the form of a special cash dividend this time.

<A>:

- To determine the form of the return of the remaining portion, we considered multiple factors and market conditions at the time of execution. Given the current status of the stock market as well as uncertainties related with COVID-19 and low visibility in the industry environment, we determined that a cash dividend was the most effective way to return the capital.

Moreover, the number of our individual shareholders soared last year, so we decided that dividends allows us to assume social responsibility when governments around the world, including the Korean government, are doing their best to support people and revitalize the economy.

<Q – Ricky Juil Seo >:

- My question is about the M&A. There were no meaningful M&A activities during the previous 3-year period. Is there a particular reason why the company expects that there will be meaningful M&A during the period that has just started given the overall environment as well as where the global stock market currently stands?

<A>:

- For the last few years, we have been evaluating possible M&A opportunities

very carefully and have made significant progress in terms of preparation. Although it is difficult to pinpoint a specific timing due to uncertainties in the internal and external business environment, given the preparation, we are optimistic about meaningful M&A activities during this term.

<Q – J.J. Park >:

- The question is about the free cash flow payout level, which is at a 50% even for the new term. It seems that during the last term, cash levels at the company have been rising because the return was set at 50% of free cash flow. If the same 50% is kept, wouldn't cash continue to rise during this new period?

<A>:

- To answer your question, the level of cash increased during the last period mainly because we could not execute meaningful M&A activities. And continued increase in cash is also a concern in managing the company. As I mentioned, in addition to the increased strategic investment levels, we believe that M&A activity of a meaningful size is likely in the next 3 years' period, and we will do our best to reduce the risks associated with increasing cash.

Thank you very much, shareholders and investors. This completes our shareholder return policy Q&A, and we will move on to the regular earnings conference call.

This is Ben Suh again.

Now, let's begin our earnings call for the fourth quarter of 2020.

With me,

Representing each of the business units, are

Mr. Jinman Han, Executive Vice President of the Memory Global Sales & Marketing Office

Mr. Harry Cho, Vice President of the System LSI Marketing Team,

Mr. Shawn Han, Senior Vice President of the Foundry Marketing Team,

Mr. Kwonyoung Choi, Senior Vice President of Samsung Display,

Mr. Sungkoo Kim, Vice President of the IT and Mobile Business, and

Mr. Wonjun Song, Vice President of the Visual Display Business.

In addition, Mr. Tae Gyu Kang from Investor Relations is present on this call as well

Among the presenters, Mr. Harry Cho, Sungkoo Kim, and Wonjun Song are newly joining the IR presentation.

I would like to remind you that some of the statements we will be making today are forward-looking, based on the environment as we currently see it, and all such statements are subject to certain risks and uncertainties that may cause our actual results to be materially different from those expressed in today's discussion.

I will start with the results for the fourth quarter of 2020.

When I delivered my first earnings call as the new head of IR last year, newsflows on an emerging health risk were starting to increase. As we all know, that risk transformed into a global crisis and created an incredibly challenging environment for businesses and individuals alike. One year later, despite all efforts, we remain vigilant as the crisis is not yet behind us. Throughout this, our management and employees have done their utmost to overcome all obstacles, and as a result, I am pleased to report that we once again achieved solid results in this difficult environment.



Total revenue in the quarter declined 8.1% quarter-on-quarter to 61.6 trillion won, as solid growth in display revenue from strong OLED demand was outweighed by intensifying competition for our mobile business and CE division along with price declines for memory.

Compared to last year, total revenue increased by 2.8%, as component demand improved.

Gross profit decreased 3.2 trillion won sequentially to 23.7 trillion won, mainly due to results in the semiconductor business and IM division, and gross margin declined to 38.6%. Both gross profit and gross margin improved year-on-year, led by the display business.

SG&A expenses increased slightly sequentially and also as a percentage of sales mainly due to higher marketing expenses caused by intensifying competition.

Despite the display business's improved performance, operating profit was down 3.3 trillion won quarter-on-quarter to 9.0 trillion won due to weak memory prices, a sales decline and higher marketing costs for our finished products, and negative currency effects. Operating margin for the quarter declined to 14.7%.

On a year-on-year basis, both operating profit and operating margin increased, backed by improved conditions for the display and memory businesses.

I will now briefly review the results of each business unit.

In the Memory business,

Despite solid shipments mainly for mobile and consumer products, our results weakened sequentially due to continued ASP declines, currency headwinds, and initial costs associated with ramping up new fabs.

On a year-on-year basis, however, the business performed well, led by demand from the mobile segment.

For System semiconductor, orders from major global customers continued to rise, but profits declined sequentially as well as annually due to a weak US dollar.

In Display,

Earnings grew significantly quarter-on-quarter and year-on-year as utilization rates increased sharply for mobile panels and conditions improved in the large-panel market.

The mobile business saw its profits decline quarter-on-quarter due to a decline in sales and an increase in marketing costs; but was able to keep its earnings near last year's level thanks to continued cost structure improvements.

Network improved its performance by responding to domestic 5G expansion and global 4G and 5G expansions.

For the CE Division, despite another quarter of solid sales, mainly due to seasonality in developed countries, increased costs weighed on profitability. Regarding currency effects, significant weakness of the US dollar, euro, and some emerging currencies against the Korean won had a negative impact equivalent to approximately 1.4 trillion won quarter-on-quarter. The effects

were felt mostly in the component business, including semiconductor and display, as they are highly affected by the strength of the US dollar.

Next, I would like to share our business outlook.

In the first quarter, we expect overall profitability to decline, due to relative weakness in the memory and display businesses, despite strength in the mobile business with the early launch of the Galaxy S21 and new release of volume models.

For Memory,

While demand is expected to remain solid for mobile and recover for data centers, our results are likely to weaken due to currency effects and continued costs associated with new fab ramp-ups.

System LSI will increase supply of SoCs, CISs, and DDIs for flagship smartphones and the foundry business will expand mass production of EUV 5-nano SoCs and 8-nano HPC chips.

For Display,

We expect mobile panel earnings to decline considerably quarter-on-quarter but improve year-on-year due to increased demand for OLED.

The large panel business will continue the work to shift its business base to QD-technology.

The Mobile business should improve due to strong sales of flagship devices, including the Galaxy S21, and the launch of mass market models.

In CE, we expect to continue our solid performance with timely launches of new products and expansion of premium product lineups, even though sales are likely to decline amid weak seasonality.

Now let's move on to our full-year outlook.

Global demand is forecast to recover, although uncertainties, such as new waves of COVID-19 infections, are unlikely to ease.

The Component business will focus on accelerating the shift to next-generation node processes, strengthening cost competitiveness, and enhancing both product and technology leadership.

For Memory, we expect business conditions to improve in 1H based on continued demand from mobile and server. However, we expect global macro uncertainties, including currency movements, to continue to influence the business environment.

We will enhance cost competitiveness and market leadership by accelerating migration to 1z-nano DRAM and 6th-generation V-NAND, while also expanding application of EUV technology.

System SLI will actively address the markets for 5G SoCs and high-resolution sensors with differentiated products; and foundry will accelerate growth by expanding mass production of the 5-nano EUV process and diversifying application areas.

For Display,

The Mobile panel business will continue to further differentiate our technologies and enhance cost competitiveness, while the large panel business will focus on laying a foundation for the new business via timely development of QD-display products.

For our finished products, we will continue to work to improve profitability by further strengthening premium lineups and operational efficiency.

The Mobile business will continue to focus on enhancing profitability by expanding smartphone sales and by improving our cost structure. Sales will be boosted by a strengthened flagship lineup, which includes the Galaxy S21 and foldable phones, as well as our 5G models for the mass market.

The Network business will continue to strengthen its global 5G business by exploring new business opportunities.

CE will strive to keep growing by expanding its premium lineup, which includes Neo QLED, Micro LED, and Bespoke products, while also executing marketing expenses efficiently, and strengthening online sales.

Now, I will address capital expenditures.

Capex in 2020 was approximately 38.5 trillion won, with 32.9 trillion won allocated to semiconductor and 3.9 trillion won to display.

For the semiconductor business, capex increased significantly year-on-year for both Memory and Foundry.

Memory investments concentrated on capacity expansions and advanced process migrations to address growing demand.

Foundry capex focused on capacity expansion in 5-nano EUV, for which orders are continuously rising.

Display investments also increased compared to last year, mainly for QD-display capacity and new technological processes for mobile panels.

Along with enhancing our business competitiveness, we are committed to creating environmental and social value, and I would like to share some of the efforts we made last year to strengthen governance of sustainability management.

First of all, the Corporate Sustainability Management Office, formerly under the Corporate Management Office, has been elevated and renamed the Corporate Sustainability Center. It is now overseen directly by a CEO, reflecting our goal to strengthen its role as the control center for the Company's sustainability management.

In addition, we established sustainability offices in each division to ensure sustainability is reflected throughout the lifecycle of all of our products and services, from the planning stage right through to after-service care.

Furthermore, the Sustainability Council, in which key executives formulate the Company's overall sustainability management strategies, was elevated and is now led by the CFO, increasing the priority of sustainability in the decision making of our top executives.

Meanwhile, we believe that product innovation is the bedrock of sustainable growth, and our ceaseless efforts to innovate were recognized at CES 2021, as 44 of the 173 awards we received at the event were CES Innovation Awards.

We will keep adding to our foundation of sustainability management by continuing to strengthen our response regarding ESG issues while also enhancing our financial performance.

I will now turn the conference call over to the gentlemen from each business unit to present fourth quarter performances and outlooks for their corresponding business segment. Thank you.

Good morning, this is Han Jinman from the Memory Global Sales & Marketing Office.

In the fourth quarter, Mobile demand grew considerably, building on an upward trend that started in the third quarter, and overall demand was strong backed by demand from data centers and PC. However, our earnings declined due to effects of a weakening dollar and initial cost associated with ramping up new lines.

In the case of DRAM, For Mobile, demand was strong because smartphone sales recovered to the level they were one year ago thanks to launches of new models by major customers and continued upticks in consumer confidence.

For Server, purchasing demand increased based on growing investments in data centers by cloud companies, and the trend for demand was solid as customers were finishing up inventory adjustments.

Although demand for PCs remained strong, mainly for Chrome books and Gaming notebooks, there were partial disruptions in Set Builds due to short supply of some components.

For Graphics, demand for graphic cards increased due to the release of new GPUs, while demand for game consoles has also been solid.

On top of that, graphics demand was bolstered for mining applications due to a rise in cryptocurrency prices.

We achieved solid shipments, because we actively addressed the continued



growth in mobile demand with proactive product-mix adjustments, and sales of consumer products such as TVs increased, due to growth in Home Entertainment culture.

Next, I will talk about the NAND market. For Mobile, demand has been solid due to an increase in demand centering on Chinese customers since the Huawei sanctions, as well as with growth in content-per-box.

For Server, Inventory adjustments at major OEM's in the fourth quarter alongside lingering effects of increased purchase by data centers in the first half contributed to somewhat weak demand in the quarter.

For Client SSD, Sales of low- to mid-priced laptops remained strong due to contactless activities, such as telecommuting and online education, and demand for new Game Consoles has also been solid.

We achieved a decent result for shipments by actively responding to Strong mobile demand and solid Client SSD demand.

Next, let me tell you about the outlook for the first quarter of 2021. We expect our profits to weaken compared to the previous quarter due to continued weakness in the dollar and ongoing initial costs associated with ramping up new lines.

For DRAM

in Mobile, based on the release of numerous new smartphones, and penetration of 5G through low-end and mid-range devices, we expect the

market to expand in earnest. However, various risks, such as currency effects and additional waves of COVID 19, require monitoring.

As for Servers, the demand seems to be improving with increased purchasing following inventory adjustments, mainly at datacenters, and expanded CAPEX.

For PCs, We expect demand to be solid As demand for laptops is likely to persist amid the ongoing need for contactless activities, and demand for Desktops, which had been shrinking, is also projected to recover in certain markets.

In the midst of continued market uncertainties, we will optimize our product mix to actively address demand across all applications, including strong demand from mobile and solid demand from PC and Server. At the same time, we will enhance cost competitiveness and market leadership by expanding our sales portion of 1z Nano DRAM and ensuring timely supply of the product to our customers.

In the case of NAND in the first quarter, For Mobile, despite the traditionally weak seasonality, Demand is likely to be solid Thanks to increasing demand from Chinese customers in particular And growing sales of 5G smartphones due to an expansion of 5G infrastructure mainly in major markets.

For Server SSDs, We think customers' inventory adjustments will continue, and datacenters will show gradual growth in demand due to the base effect of weak demand in the fourth quarter.

For Client SSDs, We expect demand to stay robust amid continuing demand for low-end to mid-range laptops, and rising content-per-box.

We will actively respond to increasing demand from mobile and from client SSD, and strengthen our technology leadership and cost competitiveness by increasing production of 6th generation V-NAND, which has already been on track.

Next, let's talk about the outlook for 2021.

Last year, the onset of the Pandemic caused numerous unexpected changes in applications. The smartphone market was hit hardest, while servers showed better-than-expected growth in demand in the first half.

PCs, led by laptops, were in strong demand throughout the year, influenced by the Stay-at-Home Economy all around the world.

This year, business activities that were delayed by COVID-19 are expected to start gathering momentum.

We expect Mobile demand to be robust, as demand for Set Builds from Chinese customers increases and content-per-box rises as 5G models expand their presence in low-end and mid-range lineups.

We expect server demand to pick up from weakness shown in the second half of last year thanks to impacts of resumed investments of datacenters and effects of new CPUs' launching in earnest.

In addition, we expect content-per-box for PCs to continue to rise, and demand for TVs to benefit from sporting events that were postponed until 2021.

Considering the demand from overall applications, we expect the DRAM market to turn around in the first half of this year.

Still, the pace of worldwide vaccination efforts and of an economic recovery are unclear at this point, amid other uncertainties such as geopolitical risks and a weak dollar.

Hence, we will keep monitoring demand for related fluctuations and maintaining flexibility in our product mix. Moreover, we will continue to strengthen both cost and product competitiveness with 1z Nano DRAM and 6th generation V-NAND.

We will also continue cooperating with major global customers, and proactively introduce next generation lineups to the IT Industry, that include products such as the world's first 1a Nano DRAM with Multi-step EUV and SSD implementing 7th generation V-NAND, which we will fully introduce to the solution biz market in the second half of this year.

Samsung will solidify our position as a trusted partner by continuing to focus on excellence in quality, cost competitiveness and customer relationships.

I wish you a year full of health and happiness.

Thank you.

Good morning, this is Harry Cho from the System LSI Business.

In the fourth quarter, demand for mobile-DDI and image sensor products increased due to the launch of smartphones by major customers and active expansion strategies of Chinese customers.

Earnings, however, declined due to effects of a weak dollar.

Yet, through the release of our first 5-nano SoC product, the Exynos-1080, we solidified our foothold to continue leading the market and expand our customer base.

For our outlooks,

In the first quarter, we expect demand to keep rising, mainly for mobile SoCs and related products, as major smartphone makers continue to expand their active sales strategy and launch new 5G smartphones.

We plan to expand our supply of 5G mobile processors and ultra-high-pixel image sensors in line with launches of new models of flagship and high-end smartphones in Korea and China.

In 2021, although external uncertainties will remain factors, such as the duration of the pandemic, we expect the market to recover backed by increased demand following aggressive expansion strategies at major smartphone manufacturers.

We will expand shipments centered on products with solid demand, such as 5G SoCs and high-resolution image sensors, to achieve sales growth in the double digits for the year.

Thank you

Good morning, this is Shawn Han from the Foundry Business.

In the fourth quarter, we achieved a new high for quarterly sales once again led by rising demand for 5G chips and image sensors from major mobile customers; and by increased demand for HPC chips. However, earnings declined due to currency effects caused by a weak dollar.

Positively, we proved our leading-edge process competitiveness with the timely design completion of 2nd generation 5-nano and 1st generation 4-nano mobile products.

In addition, we continued to strengthen our eco-system by maximizing outcomes of collaborations with partners, evidenced by our successful hosting of the first online SAFE 2020 Forum in October last year.

Turning to our outlooks,

In the first quarter, demand is likely to stay strong for all processes, from legacy to advanced, and we expect supply shortages to persist for the time being.

In response to strong demand for EUV 7-nano and below, we will continue to operate our lines flexibly, such as by increasing the portion of advanced processes.

In addition, we are continuing to strive to add to leadership in advanced processes by focusing on the development of 1st and 2nd generation 3-nano processes. On top of that, these processes will result in a significantly decreased carbon footprint thanks to their improved power efficiency.

In 2021, we expect the overall foundry market to continue growing due to increases in silicon content, driven mainly by acceleration of 5G expansion, and strong HPC market growth related to a continuation of telecommuting and online learning trends.

We plan to add to our foundation for growth by expanding our portion of global customers and by diversifying applications in HPC, network, and auto, through capacity expansions centered on advanced processes, to respond to customer demand in a timely manner.

Thank you

Good Morning, I'm Kwonyoung Choi from the business planning department at Samsung Display.

In the fourth quarter, the Display business recorded its highest ever quarterly earnings, thanks to an ongoing recovery in demand for major products such as smartphones and TVs, amid an economic rebound in the second half of 2020.

To be more specific, earnings in the Mobile Display business grew sharply quarter-on-quarter, amidst a gradual recovery of smartphone demand driven by an increase in utilization to handle surging demand from our major customers.

In the Large Display business, losses narrowed quarter-on-quarter, supported by steady demand and rising ASPs of TV and monitor panels led by the expansion of contactless services.

Next, let me share the outlook for the first quarter.

For the Mobile Display business, we expect earnings to decline quarter-on-quarter due to a decrease in demand from major customers.

However, utilization is projected to improve year-on-year as major customers widen adoption of OLED displays within their product lineups to align with the pace with 5G commercialization.

Meanwhile, the Large Display business preparing to launch QD Display products as scheduled while also continuing to fulfill LCD orders for some customers as planned.



Finally, I will share our outlook for the display market and the Display business's core strategies for 2021.

For the Mobile Display business, we expect demand to rise for OLED panels for high-end models and OLED penetration to increase in mid-range segments, driven by full-blown expansion of the 5G smartphone market alongside a recovery of smartphone demand.

We will further solidify our leadership in the OLED market by taking full advantage of such market conditions.

Moreover, we will further differentiate our technologies to brace for uncertainties caused by demand fluctuations under prolonged impacts of the pandemic and also aggressive market entry of competitors. At the same time, we will ceaselessly endeavor to diversify applications within areas such as Note, PCs, Tablets and automotives.

Also, we will further fortify our technological excellence and cost competitiveness to add to our preparations for full-fledged growth of innovative Form Factors, including foldable and slidable displays.

For the Large Display business, we will develop QD display with its leading technologies as scheduled and build a stable customer portfolio to create a foundation for QD display to cement its place within premium product segments.

Thank you.

Good morning, this is Sung-Koo Kim from the Mobile Communications Business.

I would like to discuss the 4th quarter results, and the outlook for the IM Division.

In the 4th quarter of 2020, market demand increased quarter-on-quarter amid year-end seasonality and a gradual economic recovery.

For our Mobile Business, revenue decreased QoQ due to intensified competition in the year-end season.

Even though profits decreased QoQ due to an increase in marketing expenses, we maintained the double-digit operating profit margin thanks to improvements to our cost structure, including component standardization.

For the Network Business, we improved our performance QoQ as a result of 5G expansion in South Korea and 4G and 5G business expansion overseas, including North America.

Now, let me move on to the outlook for the 1st quarter of 2021.

As 1st quarter is a seasonally weak period for mobile, we expect market demand to decrease QoQ for both smartphones and tablets.

As for our Mobile Business, we expect to increase both revenue and profit as the early launch of the Galaxy S21 drives sales growth of flagship models

and increase in overall ASP. The release of new mass-market models will also contribute to the performance.

In particular, the Galaxy S21 series, announced on January 15th, will provide a more-innovative mobile experience with its superior performance and professional-quality camera that leverages AI technology along with a unique contour-cut design, and the addition of the S-Pen experience to the Galaxy S21 Ultra.

Along with the Galaxy S21, we are strengthening the Galaxy ecosystem even further with Galaxy Buds Pro, a true wireless earbuds that provide the best audio experience, and Galaxy SmartTag, which provides convenient and rich usability by expanding connected experience.

For the Network Business, we will continue with network roll-outs focusing on overseas markets, such as North America and Japan.

Now, let me move on to the 2021 annual outlook.

We expect market demand to recover to a pre-COVID level, amid a gradual economic recovery and full-fledged expansion of the 5G market.

As for our Mobile Business, we will strengthen our leadership in the premium segment by maximizing sales of the Galaxy S21 and by popularizing the foldable category, which includes Z Fold and Z Flip.

At the same time, we will work to increase overall smartphone sales by actively addressing replacement demand for 5G with our expanded lineup of

competitive 5G devices for the mass market.

We will also continue to strengthen our tablet and wearable business to add to our foundation for growth.

In addition, we will further extend the Galaxy ecosystem by collaborating with leading global partners, providing users with a more valuable experience to enrich their daily lives.

We will also continue our efforts to enhance our cost structure and operational efficiency to secure solid profitability.

For the Network Business, we will actively respond to 5G commercialization globally and continue to seek new business opportunities.

Thank you.

Good morning, everyone. I'm Wonjun Song from Sales and Marketing team of Visual Display.

First, I'd like to review the market conditions and our performance in Q4 in 2020.

The TV market in Q4 expanded quarter-on-quarter thanks to a strong release of pent-up demand in advanced markets during year-end peak season, even with unexpected risk factors such as an increase of COVID-19 cases and lock-downs.

We have continued to strengthen our competitiveness in contactless sales and preemptively addressed seasonal demand.

In particular, we tried to spread over peak season demand with earlier promotions given the potential for additional lockdowns amid 2nd waves of the pandemic.

Also, we expanded online sales and O2O services as social distancing policies caused offline consumption to shrink.

As a result, we improved our sales mix with expanded sales of higher value products like QLED TVs, super large screen TVs, and gaming monitors.

However, TV earnings decreased slightly year-on-year because of rising costs and intensifying competition during peak seasonality.

For Digital Appliances, although market conditions were quite unstable due to additional waves of COVID-19, demand increased slightly thanks to a recovery of economic activities in emerging markets, as government stimulus packages around the world took effect, as well as effects of the "stay-at-home" trend.

We achieved revenue growth in advanced markets as well as in emerging markets such as India and Latin America.

Profitability improved year-on-year as we implemented flexible peak-season promotions tailored to each region focusing on premium products.

Now, let us look at our outlook for Q1 and 2021.

As Q1 is considered off-season in the TV industry, demand is likely to fall Quarter-on-Quarter, but it should rise compared to last year.

We will strengthen cooperation with channel partners and kick off promotions tailored by region to maximize sales opportunities.

Also, we will successfully launch Neo QLED, offering a quantum leap in picture, design, and sound quality. And, we will improve our sales structure by prioritizing high value products such as super large screen TVs, Lifestyle TVs to secure profitability and drive growth.

For Digital Appliances in Q1, we expect the market to grow compared to last year. We will keep adding to growth momentum based on launching our innovative new premium line-ups and enhancing online marketing activities. Although the TV market in 2021 may fluctuate heavily due to the pandemic, it will probably stay around the same level year-on-year.

With the business experiences we gained in 2020 along with our global SCM competitiveness, we will continue to grow by implementing a sales strategy to respond flexibly to any changes in the market.

Also, we will continue to lead the market with our product innovations and tech-leadership as the industry leader.

Along with Neo QLED, we will offer consumers a great viewing experience through "MICRO LED" which is opening a new era of breathtaking picture quality.

And, we will also deliver new screen value by expanding sales of "Lifestyle TVs" that reflect various styles and tastes of consumers. Moreover, as we presented at the First Look event in January, along with our product innovation, we will continue our activities to protect the environment while also working on ways to improve accessibility of more consumers.

In 2021, the Digital Appliances market is projected to grow year-on-year, backed by a continued release of pent-up demand in advanced markets. We will continue efforts to increase sales of premium products, especially by expanding our Bespoke platform to other product categories and by launching them globally based on our SCM capabilities.

Also we will achieve sustainable growth by strengthening our online and B2B businesses and executing efficient marketing strategies that are tailored to conditions in each region.

Thank you.

Thank you. That sums up the fourth quarter results presentations. Before we move on to the Q&A session, I would like to share several data points in key business areas. Considering the heightened macro uncertainties, we will not be providing annual guidance at this time.

For DRAM in the fourth quarter, our bit growth was about 10% and ASP declined in the upper single digit range. In the first quarter of 2021, we expect market bit growth to decline by a percentage in the mid single digits and we expect to perform slightly better than market.

For NAND, in the fourth quarter, our bit growth was in the upper single digit percent range while ASP declined by just over 10%. In 1Q, market bit growth is likely to be around 10% and our bit growth should be around that level as well.

For the Display Panel business in the fourth quarter, the OLED portion of sales was in the mid-80% range, and OLED sales volume growth was in the early 50% range.

In the Mobile business in 4Q, sales volume was around 67 million units for handsets and 10 million units for tablets. The blended ASP, including tablets, was USD 205; and the smartphone portion of handset sales volume was in the low 90% range.

For 1Q, we expect q-q shipments to increase for handsets, but decline for tablets; and we expect blended ASP to rise compared to the previous quarter. The smartphone portion of handset sales should stay in the low 90s.

In the TV business, sales volume increased in the low single digit range in the fourth quarter, and we expect 1Q shipments to decline in the high 20% range.



## Q&A

<Q – Sei Cheol Lee >:

I have few questions on the memory side.

- The first is about the DRAM. I think competitors have also been providing positive guidance for the DRAM market condition this year. And recently, the spot prices have been rebounding, raising the expectation that perhaps the DRAM prices will be able to rebound during the first quarter.

Within that context, can you share with us your outlook on DRAM supply as well as price for first quarter as well as this year on a full year basis? In particular, I think many people are expecting that compared to the strong demand recovery, the increase in supply would be limited, this is even indicating some expectations of maybe -- of another big cycle coming on, similar to what we saw in 2017 to '18. Can you share us your views about such expectations?

- Second question continues with the memory side. When we look at what the competitors have been announcing in terms of their earnings and the market, the investors' responses to this, I think there is some concern building in the market of possible double booking on the mobile side and maybe an inventory adjustment coming towards the second half of this year. When I talk to the mobile side, there seems to be some inventory that's already built up.

I recall that the company did a very good job in responding to the demand volatility that happened in the 2014 or 2018 timing when there was some trade-related tensions. Given that experience, how is the company planning or preparing to respond to the concerns about mobile high inventory and adjustments?

<A>:

- To answer your question about the DRAM outlook, I think it's best to address that by application.

First of all, regarding the server, we think that there will be solid demand as it seems customers have completed their inventory adjustments and some of the investments that were postponed from last year are being resumed. Also, from the second quarter, in the case of servers, there will be demand related with a new server CPU that is being introduced. So that will be another driver of server-related DRAM demand. And so overall, the server-side demand outlook looks bright.

For the mobile applications, we expect that the demand will increase given the fact that consumer sentiment is improving, and there is a rollout of 5G infrastructure especially around the key countries. And also, 5G is being adopted on a wide range of mass tier models.

So given the solid demand outlook for the key applications, we are expecting that the DRAM ASP would turn around to an increasing trend during the first half of this year.

But that said, there is still a lot of risks and uncertainties, including possible resurgence of COVID-19 and unresolved geopolitical risks. So this would be risks and possibilities for demand fluctuation going forward. And so we advise caution to those who are anticipating, for example, a big cycle similar to what happened in 2017 and '18.

To answer your second question about mobile demand, about the possibility of mobile customers having double-booked, that is also a possibility that we are carefully monitoring.

That said, our basic assessment of the current mobile market is that even though, yes, there is some demand increases from the Chinese OEMs especially after the

sanction against Huawei, we do still see demand growth from the base effect against last year when the mobile market contracted quite significantly due to COVID-19. And also, we do see strong build demand in the market as 5G is going to be rolled out in a larger scale this year. And so given these factors, we do see that there is sufficient momentum behind mobile demand overall.

Given that, one variable that we are carefully watching and monitoring is the issue of the supply issue of other semiconductor products that's being caused by overall foundry supply shortages. This is a global issue. There is a possibility that the shortage of other semiconductor part may impact mobile demand, and so we're carefully watching how that plays out.

<Q – Nicolas Gaudois >:

- The first one relates to the Foundry business. There has been, first of all, quite a bit of discussion around Intel outsourcing, including last week from Intel itself. Could you please update us on what it means as an opportunity for Samsung Foundry?

In addition, there was also recently a media report on Samsung considering foundry investment in the United States. And one of the backdrop of that is the likeliness of a chips act coming through. I'm wondering if you're actually reviewing those plans right now and if you could elaborate on anything more specific in terms of options there.

- Secondly, regarding the smartphone business, Galaxy S21 came out with reduced pricing compared to Galaxy S20 in spite of going 5G across the board, which may clearly support volumes, but how should we think about this from a profitability perspective for the high-end smartphone segment in 2021 compared to 2020.

<A>:

- To answer your first question, even though we're not able to comment details of specific customers, we do think that Intel's decision to outsource, from the entire foundry market perspective, will lead to increasing the overall foundry market size. And our position is to actively respond and capture the increasing HPC demand by continuing to gain leadership in the cutting-edge nodes and also providing differentiated solutions.

Regarding investments, including building a fab in the U.S., no decisions have been reached yet. One of the requirements of our Foundry business is to meet customer demand in a timely and efficient manner when demands are placed. And so actually, studying ways of gaining and securing the production capacity, by nature of the Foundry business, is something that we go through on a routine basis. And so as part of that routine review, we continuously study ways of operating our sites in the most optimized manner, including the sites in Giheung, Hwaseong and Pyeongtaek as well as the site in Austin.

- To answer your second question about the Galaxy S21, while developing and preparing the Galaxy S21, one of our focuses was on improving the cost structure by finding the optimum product specification and also increasing standardized and common parts, which has been one of the consistent policies that we have been implementing.

Also, at the same time, we have been raising the efficiency in the overall process, starting from the development, manufacturing and logistics. And so in terms of sales, given the fact that we've launched the model earlier in the year than before and also, we're offering it at a very competitive price, we do expect there to be increase in volume, which will give us additional economies of scale. And at the same time, we are expecting that the higher-priced models within the S21 series will be accounting for a larger share of the entire volume so that we will

have a more attractive product mix and delivering us solid profitability.

<Q – Dongwon Kim >:

I have 2 questions.

- First question is about the NAND. As people are expecting the DRAM prices to rebound during the first half, I think that is leading also to expectations of the NAND market also stabilizing and possible price rebound happening in the second half of this year. So in that context, can you share with us the company's outlook for NAND both on the demand and supply side for 2021?

- Second question is about the Mobile business. About the foldable form factor, I think there are more people expecting the company to launch new foldable models. Can you share with us some more details about your foldable lineup and your mid- to long-term strategy regarding this form factor?

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- To answer your first question about the NAND outlook, and I think same as DRAM, even the NAND market, overall demand seems to be very solid this year for all applications. First of all, with servers and mobile demand continuing to -- or expected to continue growth overall this year, we're seeing increase in content -- NAND content on PCs. And also, we see -- we are expecting that even enterprise PC demand would gradually increase as the economy recovers. So overall, the demand side looks positive.

Now as the demand expectations are solid, depending on the supply side, the production side of the industry, there is some possibility of some imbalances happening during the year. If such imbalances happened in the market, as we mentioned during the presentation, our priority is to be -- is to maintain our relationship with the customers as a trusted supplier by sufficiently responding

to changes in the demand.

- To answer your question about the foldable model lineup, in 2021, we will continue to strengthen our Z Fold and Z Flip lineup with the aim of popularizing the foldable form factor. In the case of the Z Fold, it will solidify its positioning in the superpremium segment by especially highlighting the usability it offers with a large screen, for example, for entertainment or productivity cases. For the Z Flip, that will aim to satisfy and target the needs of the millennials as well as female users with its differentiated stylish design and also competitive prices. Also, in addition to these product launches, we will focus on expanding the foldable ecosystem by actively reflecting the feedback of users of previous foldable models and also increasing the strategic cooperation with strategic partners so that we're able to provide a higher level of completeness of the product and also better consumer experience.

In terms of a mid- to long-term product lineup strategy, even though I cannot disclose the details of our future product road map, we do have several form factors designs currently that we're working on in the pipeline. And we will be unveiling them to the market once we have a sufficient level of product completeness and also able to provide a satisfying level of usability and quality.

<Q – Hyunwoo Doh >:

I'll ask 2 questions.

- First question is about the semiconductor, about the investment plans and the approach that the company has for both DRAM and NAND. As memory supply situation seems to be improving, I think there are some in the market that are expecting the company to invest more. Others are saying no, the company will focus more on profitability. Can you share with us your basic approach to investments in Memory business this year?

- Second question is about the Display business. I think we're noticing some new applications emerging, for example, foldable and other IT applications. Can you share with us details about the company's plan on how to capture these new application opportunities?

<A>:

- To answer your question about our investment approach, as you know, it has always been our consistent approach to investment to first carefully study and monitor the supply-and-demand situation in the market and to align our investments with what we see in the market.

And so when we look at the demand side of the memory market, even though there are still factors that may have short-term volatility on the demand, we have always thought that on the mid- to long term, there is drivers for solid growth in the memory market on the demand side. And so based on this mid- to long-term outlook, as we have emphasized, in order to prepare for the positive mid- to long-term fundamental demand, we have continued on preemptively investing on the infrastructure while executing the equipment investments flexibly depending on the market situation.

And since you've mentioned profitability, our basic approach -- our target profitability is a profitability that is sufficient enough for us to continue our investments to prepare for future demand. Gone -- having gone through rapid demand and supply, the fluctuations and also rapid price fluctuations, we have reached the position that rapid increase in memory prices overall has a more negative impact on the IT ecosystem. And so our mid- to long-term investments as well as supply will be kept in line or aligned to the demand growth.

- You've asked -- your second question was about the Display business and the foldable and IT and another application, how we plan to capture this. If I answer

your question, first, from a macro perspective, I think, especially as we went through COVID-19 and more people started to work from home and study from home, there has been an increase in the overall digital experience and digital demand. I think during the past year, the users of these digital devices have become more diverse. We have children and the older people using it. Also, this digital transformation is expected to pick up pace as the 5G communication technology is rolled out further. So as we are going -- we are expecting to see a rapid increase in IT-related needs that we have not seen before. And also, these diverse IT devices will be used in very different use cases.

And so as more people are communicating on noncontact or online basis and there's more services being used, we will -- our goal in terms of our foldable and OLED display offering is to provide differentiating experiences for these different use cases. And so to go into the specifics, currently, we have 2 types of foldable offerings, the Flip and the Fold or the book type. We will be adopting new technologies into the foldable offering so that we're able to further solidify our positioning in the premium segment. And also, this year, we'll be focusing on expanding our customer base as well as the end applications or products that the foldable displays are adopted into.

Also, in addition to the foldable, there have been laptops that are adopting OLED displays. OLED displays have an advantage in terms of response speed and also the ability to express real black. And so compared to other display technologies for computers and laptops, it is especially being found attractive by people who are using, for example, gaming or video applications on their laptops. And so we will continue to focus on supplying our OLED displays for high-end laptops.

Last year, we -- there were 4 models that were launched with our OLED displays. This year, we're expecting that to increase by more than twofold. And we will also be increasing the customer base for our OLED IT displays so that we will be



able to, this year, achieve increase in sales volume as well as continue to grow.

<Q – S.K.Kim >:

I ask 2 questions.

- The first question is for the semiconductor, the memory side. It's about your road map. You would have heard that recently some competitors, for example, one competitor adopted the 1-alpha node on the DRAM side, and also, a Korean competitor had announced 176-layer V-NAND. Can you share with us the meaning of these announcements by competitors?

The reason I'm asking about your road map is because despite the positive outlook for the market environment for the first quarter, I think your stance today has been more of a conservative stance. For example, mentioning the possibility of continued impact from the new line ramp-up. And so is there a possibility of reading that this may hint the gap -- the technology gap between you and the competitors narrowing than before? So in that context, can you share with us your detail about the DRAM and NAND road map going forward?

- Second question is about the mobile, the 5G equipment business. Last year, there was the contract with Verizon on the 5G equipment side. This year, overall, the 5G rollout is expected to continue. Can you, first of all, share with us your outlook on 5G network businesses and markets? And are there specific regions where you are expecting to win additional orders for your 5G network business?

<A>:

- To answer your first question about our technology competitiveness, in the case of DRAM, as we mentioned during the last conference call, the DDR5 is currently preparing for mass production without any issues, and we're currently going through marketing activities by cooperating with a key chipset company.

Also, as we have continuously emphasized, we have successfully applied multi-step EUV for the first time in the world on 1a, which is the fourth-generation DRAM in the early 14-nano ranges based on our differentiated EUV know-how and ecosystem.

And so this year, we're planning to produce the 1a node with EUV starting from this year, which will give us continued strength in terms of cost competitiveness, quality and performance.

Also, I would like to mention the High-K Metal Gate process. We have already developed the High-K Metal Gate process from 2017 for the DRAM operation. We've -- actually have experience of applying the High-K Metal Gate technology in the high-end graphic products and supplying to customers. So based on our experience of having applied High-K Metal Gate processes, we have already built the know-how, and we are planning to maintain our technology advantage by applying the technology not only on graphic products but other key products.

To give you an update on our NAND, our single-stack sixth-generation V-NAND has already completed ramp-up. And this year, we will be scaling up production. Also, in the next generation, that's the seventh-generation V-NAND, we are planning to adopt double stack for the first time. This will give us the advantage of having the smallest stack height in the industry. And on top of that, by using the know-how we have accumulated working with single stack, we are expecting that we will maintain outstanding cost competitiveness even with multi stack after seventh-generation V-NAND.

Also, regarding applications, I think on the server side, there is continuous expansion on the high-capacity, high-density TLC SSD market. And so we will be actively supplying the high-density, high-reliability products with 8 terabytes or more in order to capture this market demand.

On the mobile application side, we are noticing that the high-density MCP

products of 128 gigabytes and more are being adopted, not only on the flagship but also towards the high- and midranges. And so we will be offering our 512-gigabit sixth-generation V-NAND product that has the cost competitiveness, the best cost competitiveness in the industry in order to expand our positioning in the value market.

- Regarding your second question about the 5G network business, as you know, in 2020, due to COVID-19, a lot of the 5G and 4G network projects were postponed in key countries, but the U.S. went through or started a C-band auction last December. And also, this year, during the fourth quarter of this year, we are hearing that there will be resumption of frequency auctions, for example, in countries like India. And so we do see business opportunities appearing throughout this year.

And so we are currently in 5G trials with major carriers around the world using our 5G technology. And also, we're continuing to explore new business opportunities in areas such as Latin America and Europe.

<Q – Kyung Min Kim >:

I have 2 questions.

- First question is about the NAND market. It seems that the weak price -- the soft price in the NAND market will continue for some time being. In that context, does Samsung have any plans of pursuing consolidation in the industry?

- Second question is, for the TV side, this year, we're hearing not only Samsung but also other competitors are planning to launch mini LED TVs. Can you share with us the competitive -- the differentiating advantage and also the strategy of Samsung's Neo QLED product, which I understand would be the mini LED TV?

<A>:

- To answer your first question, we do not have any plans of pursuing an artificial consolidation as part of our NAND strategy. Also, I think we believe that, that is not something that will happen just because we push for it either.

As to -- once I can clarify our position towards the NAND business, it is basically to leverage our technology leadership to continuously gain and strengthen our undisputed cost competitiveness and to actively meet and satisfy customer demand.

- You've asked about -- as to your second question, you asked about our Neo QLED. And the Neo QLED is the next-generation display that embodies our innovative technology capabilities that are at a totally different dimension from the existing QLED. For example, it embodies the Quantum Mini LED, which has a smaller cell size and is able to therefore control the light in a more precise manner. Also, the Neo QLED adopts the Quantum Matrix technology, which can actually deliver the highest level of contrast in the industry and also is able to express black details with this ultraprecision control technology.

In addition, the Neo QLED uses the Neo Quantum Processor that consists of 16 neural networks and has better AI upscaling performance so that the content -- or excuse me, the picture quality and the sound is optimized depending on the content and the viewing area.

In addition to these cutting-edge technologies, we have adopted the Infinity One Design that makes the Neo QLED slim but also to be in harmony with its surrounding environment. Also, we have noticed that many people are now using the TV for home training and home office and other in-home activities. So we have adopted and have included various smart functions into the Neo QLED TV.

And so the Neo QLED actually enables the perfect premium TV experience in

terms of all dimensions: picture quality, sound, design as well as the smart functions. And we will be highlighting these differentiating strengths of Neo QLED as we promote the product to consumers.

That completes our conference call. Thank you very much for staying with us. Also, once again, we wish for the health and happiness of everyone close to you. Thank you.