Western Digital Corporation (WDC) CEO Steve Milligan on Q1 2020 Results - Earnings Call Transcript

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FQ1: 10-30-19 Earnings Summary

Press Release *10-Q* *Slides*

EPS of $0.34 beats by $0.04 | Revenue of $4.04B (-19.65% Y/Y) beats by $114.09M

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Western Digital Corporation (NASDAQ:WDC) Q1 2020 Results Earnings Conference Call October 30, 2019 4:30 PM ET

Company Participants

Peter Andrew - IR

Steve Milligan - CEO

Mike Cordano - President and COO

Bob Eulau - CFO

Conference Call Participants

Aaron Rakers - Wells Fargo

Mehdi Hosseini - SIG

Karl Ackerman - Cowen

Mark Delaney - Goldman Sachs

Mitch Steves - RBC Capital Markets

CJ Muse - Evercore

Steven Fox - Cross Research

Sidney Ho - Deutsche Bank

Ananda Baruah - Loop Capital

Vijay Rakesh - Mizuho

Nehal Chokshi - Maxim

Operator

Ladies and gentlemen, thank you for standing by and welcome to Western Digital's First Quarter of Fiscal 2020 Conference Call. At this time, all participants are in a listen-only mode. After the speakers' presentation, there will be a question-and-answer session. [Operator Instructions]

I would now like to hand the conference over to your speaker, Mr. Peter Andrew. Please go ahead, sir.

Peter Andrew

Okay. Thank you and good afternoon everyone. Before we begin, let me remind everyone that today's discussion contains forward-looking statements including product development expectations business plans trends and financial outlook. Based upon management's current assumptions and expectations and as such does include risks and uncertainties. We assume no obligation to update these statements, please refer to our most recent financial report on Form 10-Q filed with the SEC for more information on the risks and uncertainties that could cause actual results to differ materially.

We will also make references to non-GAAP financial measures today reconciliations between the non-GAAP and comparable GAAP financial measures are included in the press release and other materials that are being posted in the Investor Relations section of our website.

With that, I'll now turn the call over to Steve Milligan, our CEO.

Steve Milligan

Thank you, Peter, and good afternoon everyone. Joining me today are Mike Cordano, President and Chief Operating Officer; and Bob Eulau Chief Financial Officer.

Before we discuss our results for the first quarter of fiscal 2020. I want to spend a moment talking about the other news we announced today, after a long and fulfilling career with Western Digital spanning two decades. I have informed our Board that I plan to retire as CEO. I will continue to serve as CEO until the Board has identified and appointed a successor.

Western Digital as a significantly different company than the one I first joined in 2002. We are more diversified, more resilient and much better positioned to capture the opportunities of today's evolving data marketplace.

Since my appointment as CEO western Digital has transformed from a storage component provider to a diversified, enabler of data infrastructure with the broadest portfolio in the industry, offering customers a powerful combination of hard drive storage and flash memory products.

We have successfully executed many key strategic initiatives including the company's acquisition of SanDisk, the integration of Western Digital, HGST and SanDisk as well as the extension and Western Digital's 19-year partnership with Kioxia. We now operate a powerful platform that uniquely positions us to provide new architectures and capabilities to manage the volume velocity and variety of data.

As we think about what comes next for our company. I believe now is the right time for Western Digital to begin the transition to its next phase of leadership. Serving as Western Digital CEO for the past 7 years has truly been one of the highlights of my career; I want to thank our team for their support and dedication.

I could not be prouder of what we have accomplished together and consider myself quite fortunate to have worked alongside such a talented team. In terms of next steps I look forward to continuing to work closely with the team. While the Board conducts to search for our next CEO.

Given our strong management team, we expect this transition to be seamless. For our shareholders, our employees and the customers that rely on our best-in-class service and products. Once my successor is on board, I will remain with the company in an advisory role until September 2020 to ensure a smooth transition. I will also continue to serve as a Director on the Western Digital Board for a transition period after my successor is appointed.

With that said, let me turn to our performance for this quarter. Fiscal 2020 is off to a good start. Revenue exceeded the guidance range we provided in July, in non-GAAP EPS was at the upper end of the range. The upside was driven primarily by the success of our capacity enterprise drives for the data center.

We are executing well on the Data Center utilizing the power of our portfolio. At the core of our success in this market is our industry-leading capacity enterprise hard drive solutions and the exceptional value we provide to our data center customers for their diverse storage needs.

During the quarter, we made two important announcements to further extend our product leadership. First, we introduced 16 and 18 terabyte CMR drives and 20 terabyte SMR drive all enabled by our energy assisted recording technology, these drives are expected the sample this quarter.

Additionally, through our continued investments in heads, media and mechanical design. We began shipping an air based 10 terabyte drive providing significant benefits to our customers.

I am pleased to announce we commenced the initial revenue ramp of our MBME based enterprise SSDs to major hyper-scale and OEM customers during the September quarter. Efforts to qualify and ramp additional customers with our next generation products based on our 96 layer 3D flash technology are going well and should position us to further increase our participation in this important market.

Western Digital's ability to offer both hard drives and flash flash-based solutions differentiates us from our competitors and allows us to more strategically partner with our data center customers. Outside the data center the overall demand environment across the consumer, mobile, PC and retail end markets is solid.

Furthermore, we are seeing improving trends across our flash product portfolio and continue to believe that the flash industry has passed a cyclical trough. With the broad and growing product portfolio western Digital remains well positioned to benefit from the long-term drivers of the growth in value of data.

With that I will now ask Mike to share our business highlights.

Mike Cordano

Thank you, Steve and good afternoon. Before I get into my prepared remarks, I want to congratulate Steve on his upcoming retirement. I value and appreciate the partnership we have built together over the past decade and want to acknowledge Steve for his leadership and numerous contributions to Western Digital.

We have quite a bit of time and work to do between now and September of next year and look forward to working together to execute on our plans. As Steve mentioned, fiscal 2020 is off to a good start.

We had record hard drive exabyte shipments driven by the success of our capacity enterprise drive family. We also had record exabyte shipments in the flash as we benefited from demand elasticity in share gains and SSDs for PCs and notebooks.

In Data Center Devices and Solutions our capacity enterprise exabytes shipment growth was over 60% year-over-year, led by the ramp of our 14 terabyte drives. These drives now represent the majority of our capacity enterprise unit and exabyte shipments. Industry analysts expect the 14 terabyte capacity point to be the industry's highest volume product through the first half of calendar year 2020.

Building on our aerial density leadership and execution on mechanical design, we announced our plan to accelerate the introduction of our 9 platter energy assisted capacity enterprise drive platform.

This enables us to ship 16 and 18 terabyte CMR and 20 terabyte SMR drives on a unified platform, simplifying the qualification process and reducing the time to market for our customers.

We will be sampling all of these drives by the end of this quarter and we will commence volume shipments in the first half of calendar 2020. In addition, we began shipping a new 10 terabyte air-based product powered by our innovative air flow architecture, underscoring our aerial density and mechanical design leadership.

Given the strength of our capacity enterprise portfolio and the opportunities we see in this market. We now believe our exabyte shipment growth will exceed 40% in calendar year 2019, up from our prior estimate of 30%. In enterprise SSDs our NDME based products experienced a strong quarter of growth and we expect continued growth in the December quarter.

We are qualifying our next generation 96 layer product with additional customers, which positions us for further market share gains in calendar year 2020 and beyond.

We have a unique and sustainable competitive advantage within the data center built on strong customer relationships and a strong product portfolio. Our strategic position within this important end market will drive future revenue growth.

In Client Solutions revenue grew on a sequential basis, driven by an improving pricing environment and a seasonal increase in bit shipments. This quarter we began shipping 96 layer QLC based retail products and external SSDs.

The Trust and reputation of our brand and our customers preference for the performance and reliability of our solutions are key differentiators. In Client Devices the main contributor to our year-over-year decline was our decision to limit our participation in the mobile market.

On a sequential basis, we expect to ship more bits into the mobile market in the December quarter. In PCs and notebooks, we gained market share and client SSDs as our exabytes shipment growth exceeded 70% year-over-year.

Our bit production of 96 BiCS4 surpassed 64 BiCS3 during the September quarter. We are on track to commercialize BiCS4 across all our product lines by the end of calendar 2019. Our JV partner K1 fab and Western Digital executed well bringing the Yokkaichi fabs back to full production after the power outage limiting output reduction four exabytes.

Our flash supply is tight and we continue to believe that any excess inventory in the flash industry supply chain will be substantially reduced by the end of calendar 2019. We expect flash industry supply bit growth to be in the mid 20% range in calendar 2019. And in the low 30% range in calendar 2020.

In addition to continued growth in our existing flash portfolio and capacity enterprise markets, we see several new incremental growth opportunities. First, the launch of the next generation gaming consoles will be important events for the gaming industry and our flash business, we expect these new console to utilize high capacity flash storage to improve the gaming experience.

Second, we expect to expand our product portfolio and diversify our customer base for the mobile market with our UFS, eMMC and custom solutions. Finally our recent announcements of 3D flash products for the automotive and industrial markets will further expand our opportunities in these growing and more stable flash-based markets.

I will now turn the call over to Bob for details on our financial performance.

Bob Eulau

Thanks, Mike. I also want to congratulate Steve on his upcoming retirement and look forward to helping to enable a seamless transition to the next CEO. I'm pleased to announce the revenue for the September quarter exceeded the high end of the guidance range we provided in July and non-GAAP earnings per share came in at the high end of the range.

Revenue for the September quarter was $4 billion. This was up 11% sequentially as we experienced growth in Data Center Devices and Solutions and client Solutions. Revenue was down 20% year-over-year as we faced a tough compare tough comparable quarter in fiscal 2019, by end-markets Data Center Devices and Solutions revenue increased 20% sequentially and 6% year-over-year due to the success of our capacity enterprise drives for the data centers.

Please recall that a year ago based on discussions with our customers we predicted that in the second half of calendar 2019. We would return to growth in capacity enterprise. We are experiencing that predicted rebound now. On a sequential basis client solutions revenue grew 18% on seasonally stronger flash bit shipments and a stronger flash pricing environment.

Client Solutions revenue declined 4% year-over-year primarily due to reduction in hard drive TAM. Client Devices revenue was up 1% on a sequential basis and decreased 39% year-over-year. The year-over-year decline was a result of our decision to scale back flash bit shipments to the mobile market, flash price declines and a reduction in the hard drive TAM.

By product category, flash revenue was $1.6 billion, up 8% sequentially and down 36% year-over-year. Flash ASPs were flat and bit shipments were up 9% sequentially. Hard drive revenue was $2.4 billion, up 13% sequentially and down 3% year-over-year, average price per hard drive was $81. Exabyte shipments were up 23% sequentially, hitting a new record level.

As we move on to costs and expenses; please note all my comments will be related to non-GAAP results unless stated otherwise. Gross margin for the September quarter was 24.8% with a flash gross margin of 19.3% and our hard drive gross margin of 28.5%. We completed all of our cost of revenue reduction activities we outlined in January, resulting in a decrease of more than $100 million in quarterly spending.

The hard drive gross margin was up slightly from the June quarter and we expect the December quarter gross margin to be approximately 30% as we fully realize the benefits of the cost reduction efforts.

Flash, gross margin was up on a sequential basis as we benefited from a better flash pricing environment. K1 fab cost was $64 million higher than expected. Excluded from the cost of revenue was a $68 million charge related to the power outage.

Operating expenses were $767 million. Adjusting for a normal 13 week quarter operating expenses were below the $740 million run rate target. During the quarter we completed all of our operating expense reduction efforts announced in January.

In addition, once we complete the exit of our storage systems business, we should start to see an approximately $25 million per quarter reduction in operating expenses beginning in the March quarter.

Operating cash flow for the September quarter was $253 million and free cash flow was $294 million. Capital expenditures, which include the purchase of property, plant and equipment and activity related to flash ventures on our cash flow statement were inflow of $41 million.

As previously noted, we are benefiting from the timing of the funds flowing back and forth between us and the joint venture. From a full fiscal year, we continue to expect capital expenditures that will flow through our cash flow statement to be under $500 million.

Total capital expenditures, which include our portion of joint venture leasing and self operating funding is expected to be similar to last fiscal year between $2.5 billion and $3 billion. In the September quarter, we distributed $147 million in dividends to our shareholders. We paid down debt by $319 million which included an optional $250 million debt pay down. As our cash generation continues to improve.

Our first priority will be to reinvest in the business to maximize long-term shareholder value. After paying our dividend our next priority will be to reduce our debt. At the end of the quarter we have $3.2 billion in cash and cash equivalents, our $2.25 billion revolver remains unused and our gross debt outstanding was $10.4 billion.

Total inventory dollars were flat on a sequential basis, but higher than projected as a joint venture fab recovered faster than expected. This resulted in a sequential increase in flash inventory, particularly at the end of the quarter while hard drive inventory declined about

$100 million sequentially.

Moving on [Technical Difficulty] with the guidance. So again this is non-GAAP guidance and as follows. We expect revenue to be in the range of $4.1 billion to $4.3 billion. We expect gross margin to be approximately 25% to 26%. Please note that this range includes approximately $75 million in costs associated with the K1 fab.

Operating expenses are expected to be between $750 million and $770 million above the $748 million run rate target due to higher variable compensation spending. We expect interest and other expense of $85 million and we expect the tax rate to be 26% plus or minus 2 points. As a result of this detailed guidance, we expect earnings per share between $0.45 and $0.65 assuming approximately $302 million in fully diluted shares.

With that I will now turn the call over to the operator to begin the Q&A session. Operator, we'll now take our first question.

Question-and-Answer Session

Operator

[Operator Instructions] Our first question comes from Aaron Rakers with Wells Fargo.

Aaron Rakers

Yeah, thanks for taking the question. And Steve, congrats on the retirement has been great working with you. Two questions if I can, real quick. So first of all I guess one of the things that stands out a little bit is the capacity shipment number on flash up only about 9% sequential. By my math that's up maybe high single digits on a year-over-year basis.

So can you talk a little bit about, it seems like the product portfolio is in a great position and ramping client SSD, capacity shipments were strong. I'm just curious of why we, it seems to be a little bit muted. As far as the capacity shipment trends and flash. And what's your expectation going into the December quarter for capacity ship?

Mike Cordano

So Aaron, let me address that. So the primary reason for that is really the point that I made and Bob made in our comments is we did not participate in a substantial way in the mobile marketplace in the quarter just completed. So that's the primary driver of bit shipment in the quarter.

Steve Milligan

And Aaron, recall - this is Steve. Recall, that that lack of participation in the mobile market was by choice. From our standpoint given that the profitability levels for that segment of the market, we're not at all attractive.

Aaron Rakers

Okay, fair enough. And then as a second question on near capacity enterprise drives in the slide deck. You know that you now expect the overall the market to quote unquote approach 30% year-over-year growth. I think last quarter you talked about growth meaningfully exceeding that 30% level. I know you guys are talking about north of 40% growth in your capacity shipments.

But what's changed over the last quarter, is there have been a bit of a softening in terms of your expectation. I guess, going into the December quarter. What's really driving that change of growth expectations?

Mike Cordano

So, Aaron I think for us, we actually updated our performance on the year. We originally had stated last quarter, we'd be north of 30% for us. We updated that guidance north of 40. We're actually seeing strength in exabyte consumption across the capacity enterprise segment.

Now the other thing that's happening for us is more unique is the power of the 14 terabyte product is doing quite well. And obviously we are gaining market share in that segment that's showing up on an exabyte basis.

Aaron Rakers

It is under constraints in the market, which is tempering the overall market, the industry expectation?

Steve Milligan

No, I think we would suggest the industry will grow at north of 30, we will grow at north of 40 and again that's all up from our last outlook on both numbers.

Aaron Rakers

Okay, fair enough. Thank you.

Operator

Thank you. Our next question will come from Mehdi Hosseini with SIG.

Mehdi Hosseini

Yes, thank you. And Steve good luck with your next endeavor and was very nice working with you. Moving on to questions. Just to follow up. It's very helpful when you talk about exabyte shipment guide, especially for the near-line and as you look into the next year, how do you see that exabyte shipment target changing and again this is for 2020 versus 2019 and how should we think about the mix of the near line exabyte as a percentage of the overall exabyte shipment for Western Digital.

Mike Cordano

Yeah, so let me just comment specifically capacity enterprise. We would expect for 2020, our current outlook is about 35% year-over-year growth. So continued strength year-over-year and so we don't split out total HDD exabyte growth, we don't specify them.

Steve Milligan

And by the way many then 35% is consistent with our longer term expectations.

Mike Cordano

Sure. You kind of pre-into my prepared question as by saying that you didn't participate in the mobile segment as it relates to your NAND shipment and there is a debate as to what happens to that inventory in the channel reserved mobiles segment, as you look into the March quarter.

So with that as the background, how do you see the supply and demand in NAND looking into the March quarter and I'm not asking for a guide. I just want to better understand your view you didn't participate in the market and in that context, how do you see your prices trending into March quarter.

Steve Milligan

Yeah. So we'll take that maybe we first off, as we indicated, we believe that we passed the trough in terms of the flash cycle. In the overall inventory situation is improving and other words supply is getting much more aligned to demand, and we would expect that largely for ourselves and for the industry as we exit the December quarter that things will be fairly imbalanced now when you move into the March quarter.

And let me actually broaden that question a bit, when you move into the first half of the year. One of the things that we have to keep in mind is that we will see a typical seasonal decline in terms of from a demand perspective. Supply is relatively linear.

And so we will have to just like we do largely every year in terms of the calendar cyclicality, we'll have to manage through that, but then as we move to the back half of the year where we will see.

And this is the back half of calendar year a calendar year 20, we will see that begin to flip demand will begin to improve and we will see rather than modest improvement in our financial results that we've been saying, we should see an accelerating improvement in our performance from a financial perspective, as we move into the back half of calendar 2020.

Mike Cordano

Mehdi, I will just give you some numbers to work with there. We talked about low '30s on supply bit growth. We would expect demand for the calendar year to be slightly above that.

Mike Cordano

Great. Thank you.

Operator

Thank you. Our next question comes from Karl Ackerman with Cowen.

Karl Ackerman

Good afternoon. Thank you for taking my questions. And Steve again congrats on your retirement and best of luck in your future endeavors. Two questions if I may. Taking mobile for a moment, you referenced that mobile margins have not been attractive for the last two quarters but is that because you don't have captive DRAM.

I guess, how important is that, is it for you to have either captive DRAM or a new long-term supply agreement for DRAM and you contemplate your competitive position in smart phones over time.

Steve Milligan

Yeah, let me answer that. So let me delineate mobile. So there is the discrete and component part of mobile and then there is the MCP which includes DRAM. I think, strategically, we do not see MCP is a long-term strategic place for us to operate. We're focusing our…

Operator

Ladies and gentlemen, please standby. Speaker?

Steve Milligan

Yes. Sorry, can you hear us now?

Operator

Yes, we can.

Steve Milligan

Okay, let me back up and repeat that. I don't know where we dropped off. Our mobile market participation let me break into two components. One is the MCP business that includes DRAM, the second is discrete and component participation in mobile end-use applications.

Strategically we've moved away from product investment in MCP and over the longer horizon. It's not an area of product focus for us. So when we talk about participation is that, for us the discrete business which we chose for economic reasons to minimize our participation as we had higher value places to put our bets. So we see that sequentially improving and the economics in mobile improving along with other segments of the market.

Karl Ackerman

That's helpful, Mike. As my follow-up shifting gears to gross margins for a moment. Clearly you and your peers are operating well below normalized run rates in NAND. At the same time so I think your outlook for hard drive gross margins are good. But still a little bit below where we were roughly a year ago.

I guess we'll be exit of the systems business or areas of the systems business be the primary driver for gross margin improvement in hard drives, and I guess how do we think about the margin implications from the incremental disk and heads on those higher capacity drives. Thank you.

Steve Milligan

Yeah, so I'll address that. And then Bob and Mike can join in and add any additional color. So the first thing is the exiting in the system business will have no material impact one way or the other on our gross margins. So if you look at our hard drive gross margins. I mean, let's be clear about that. Our hard drive gross margins, although good levels are not where we want them to be.

We want those hard drive gross margins to be north of 30% in the low 30% range. We are still dealing with some of the cost overhang of exiting our [indiscernible] manufacturing facility. That is now behind us. And so we should see our drive margins improve into that low 30% range as we exit this the December quarter and then obviously, our intent is to sustain and possibly improve that over a period of time.

Flash, gross margins are clearly not where we want them to be. They are improving albeit at a slow rate. We would continue to expect as we see this sort of ripple through the market because different customers started at different levels, different market started at different levels.

The pace of that improvement is not linear for all of those aspects. But we'll continue to see steady improvement in our flash margins this quarter and then into subsequent quarters. And as I indicated earlier, we expect that improvement to improve at a improved rate at a better rate as we move into the second half of calendar 2020.

Karl Ackerman

Thank you, gentlemen.

Operator

Thank you. Our next question comes from Mark Delaney with Goldman Sachs.

Mark Delaney

Yes, good afternoon. Thank you for taking the question. I have follow ups around gross margins and maybe versus to better understand the outlook for NAND and that it get the guiding for margins to improve somewhat, next quarter. You sort of understand around ASPs on a like-for-like basis, if you can give more color on what you're assuming there given the comments about a cyclical bottom?

Steve Milligan

Yeah, I can start. And first of all, I want to remind you on the NAND side. We do have a headwind with the K1 startup costs and bringing up that fab and we are beginning production there. But there is probably in the neighborhood of 3.0 headwinds that we're faced with on the NAND side. And as we've ramped volume, then obviously the margins will improve everything else being equal.

So in terms of a flash overall as we get to equilibrium between supply and demand, we're definitely expecting that the pricing will get better as we move through 20. Mike or Steve was saying. So I think it will take a little bit of time to work through that, but I think we're going to be a good price.

Mark Delaney

Okay. Thanks, Bob. And then my follow-up was on the hard drive gross margin again along the lines of the prior questioning. I have been under the impression that for the December quarter, hard drive gross margins could hit 30% especially given the upside that the company has seen the near line business, which I think typically runs at least 30%, if not higher.

Is there anything in terms of increased headwinds around gross margins of the company has seen in the December quarter. This maybe keeping hard drive gross margins under 30% or was kind of the wrong impression about the ability to hit 30% with my previous expectations for the December.

Steve Milligan

Let me, because I get kind of this one I feel strongly about. We will -- we are intent is to have gross margins north of 30% for our hard drive business this quarter, the December quarter. And so there is no headwind at present, of course, there can be things that will happen. But there's nothing at present that indicates that we won't hit that level.

Mike Cordano

And the other thing I would add, Marc is, if you look out over time we expect more and more growth in terms of capacity enterprise will become a bigger percentage of our overall mix and that will help the margins go up as well.

Mark Delaney

Got it. That's it, thank you very much. And Steve good luck with your future endeavors.

Steve Milligan

Thank you.

Operator

Thank you. Our next question comes from Mitch Steves with RBC Capital Markets.

Mitch Steves

Hey guys, thanks for taking my question. I think on the folks a, just on the gross margin kind of the NAND inflection. I think a lot of people looking for kind of like $0.80 or even $1 for in December quarter guide you the improving memory environment.

So I guess maybe can you help us at least understand how you guys think at the inflection in terms of how much leverage, you're going to get on the gross margin side, if we look out, let's say 3 or 4 quarters. And I'm trying to understand the comment about how you're going to see a more material inflection in the back half for calendar '20?

Steve Milligan

So a couple of things. Let me talk about the dynamics in the current period. We talked about. So when we look at where we started from all end markets in flash were not created equal relative to pricing and margin. We also noted that mobile was a inferior performing segment for us. We are taking more of that on this quarter, as a percentage of the total. So that is having a bit of a headwind, relative to the flash margin in the current quarter.

To Steve's comments earlier on 2020 we see supply demand in pretty good shape as we come into 2020. But the normal seasonality of the year we got to make sure we're managing through that in a cautious way and we expect that is a year moves on. As we head towards the middle of the year in the back end that will continue to improve in the rate of margin improvement in flash will accelerate in the back half of the year.

Mitch Steves

Okay. And then in terms of the NAND gross margin is that go back to like '30s in the back half of 20. I mean, just any sort of rough metric would be helpful?

Steve Milligan

Well, we are, I mean, let me be clear on this we're not providing guidance beyond what we've done in terms of flash gross margins. But I'll tell you where we need to get to and where we want to get to is back to where flash gross margins are in that 40% range.

That that's a margin level that we view as attainable over a period of time and it's also a margin level that we believe is required to get sufficient return on the capital that we are investing in this business. So that's where we want to head to.

Mitch Steves

Okay. That's very helpful. Thank you.

Operator

Thank you. Our next question comes from CJ Muse with Evercore.

CJ Muse

Yeah, thanks for taking the question. I guess another question on gross margins. Specific to the NAND side, can you quantify the K1 fab costs in the September quarter. I think you said $75 million in the December quarter and how we should think about that progressing into 2020. And then I guess as a second question there on the flash bit side, it looks like implied in there. Given these costs roughly bit growth of only 10% or so in the quarter.

So it looks like you're really growing about 19%, 20% for the year versus many of your competitors who are suggesting low '30s for the industry and so I guess is that a function of just deciding not to want to play in the mobility side, is it a function of not having the right bids or is there something else. Thank you.

Steve Milligan

Now, let me, let me address the last question first. In terms of us growing and first off, the big growth that we're seeing from a demand of revenue perspective is consistent with previous expectations. It hasn't changed and by the way, one of the things that you have to keep in mind is that we took a meaningful amount of production offline starting earlier this year. Independent of the power outage because we saw the oversupply conditions well, we saw it coming.

And we saw that situation being let's just call it untenable and so we were reducing our bit output from a supply perspective to help offset that growth that unnecessary growth from a supply perspective that created the substantial price decline that we in the industry realized in the back half of ' 18 and also into 2019.

Mike Cordano

So I ask Bob to address. So CJ in terms of the September quarter that we just finished the K1 costs were at $64 million and what I said in the guidance as we expect in the December quarter. That will be in the neighborhood of $75 million. We think they will start to come down from that point in time. But this is, I mean this is new production capacity we're putting in place, it becomes a part of our fixed cost over time.

Bob Eulau

Yeah C.J one other comment I'll make is when you think about this on a bit share comparative basis when you think about it from a bit capacity output basis. Obviously, we continue to remain in the same proximity a ratio to others. So this was simply us choosing to not produce very low margin product for the as reasons [indiscernible]

CJ Muse

It makes sense. Thank you.

Operator

Thank you. Our next question comes from Steven Fox with Cross Research.

Steven Fox

Excuse me. Good afternoon and sorry for another gross margin question, but maybe…

Steve Milligan

We have to start banning gross margin question.

Steven Fox

Yeah, I know last one. Let me get this in. So in terms of just the mix impact on NAND gross margins, can you maybe talk a little bit about what's going on, how mix is affecting the gross margin guidance for the current quarter versus what you just reported NAND gross margins and then along similar lines, you mentioned some incremental growth next year from things like next generation gaming and industrial.

Can you talk about their mix impact on gross margins? And if I did I get it in one more given what you said about the first half of the calendar year, are you able to at least hold gross margins around current levels or based on what you do with where you choose to put your bids or do we backtrack a little? Thank you.

Bob Eulau

Well I'm going to address the last question first. We would expect that our profitability levels certainly from a margin percentage standpoint will continue to modestly improve as we move into the first half of the year.

Mike Cordano

Okay. And back to the mix. Let me just reiterate within the flash business, we're taking on a greater proportion mobile business this quarter, which is a margin drag and is dampening our sequential margin performance, to some degree. On the flash side and then Bob also talked about the fact startup. So those two things are affecting the flash margin in this quarter.

When we go into 2020 certainly a number of the new markets are good bit consumers the gaming business, we think that that is going to be not only a good consumer of bits but at reasonably attractive margins and industrial and automotive are even better yet relative to margins and more stable non-cyclical.

Steve Milligan

And yeah -- Bob already indicated that the K1 costs are kind of a 3-point drag and then if you neutralize for mix. I think that we would all be seeing a much more satisfying increase in our flash margins when you neutralize for those two items. And I think that's important for all of us to keep that in mind, the trajectory is in the right direction. It's just that there are other moving parts that tend to mask those improving trends.

Steven Fox

Got it. And Steve congrats on all your accomplishments at Western Digital. Thanks.

Operator

Thank you. Our next question comes from Sidney Ho with Deutsche Bank.

Sidney Ho

Okay, great, thanks. Maybe one more question on this, on the flash side, I know you talk about few times about strategically walking away from the mobile mix, can you remind us your mix within the NAND flash business today and how do you think that will change a year from now. Is there more tailwinds coming from this mix change in mix, and what are the areas that have better margins of worth more than the average for the business?

Steve Milligan

So we don't specifically disclose the ratio of flash participation. But I can give you some color on relative performance, certainly the areas a big investment for us that we emphasize our own where we want to grow our participation. So enterprise SSD fast growing higher overall margins than the average over time. Industrial embedded both similarly situation in the higher margins.

Good growth rates and then ultimately certain segments of mobile over time are attractive and we're focused on those. Hence our UFS product investment, so the higher end higher performance part of that marketplace. So we put a big emphasis on quality of revenue and seeking out those higher margin more stable end markets and those will be examples that we're focused on.

Sidney Ho

Great. My follow-up question; I'm sure you welcome a hard drive question. The last earnings call, you talked about introducing 16 terabyte CMR and as 18 terabyte SMR. But you ended up launching a higher capacity about two months later, can you talk about why you made that change in the roadmap and what kind of feedback are you getting from your customers so far?

Steve Milligan

Yeah. So the reason that we made that decision and it's actually quite simple is that we, we made faster progress in terms of our 9 platter platform than what we had previously anticipated. And so the advancements that we were making from a mechanical perspective allowed us to pull in that platform sooner than what we anticipated, which was favorably received by our customers from a market place perspective, which I'll ask Mike to elaborate on.

Mike Cordano

Yeah. And I think a number of dimensions of this. Obviously, it gets them to 18 and 20 terabyte sooner than they would have otherwise. So the TCO benefit when you combine cost per bit with the other elements like slot tax because you know you eliminate some slots required and also the quality that we deliver with our products, the whole economic equation is better and then we talked about, we get a multi platform qualification.

So for them their ability to qualify a single platform that covers all of those configurations is both a simplifying of their efforts on cost reduction of their efforts and it gets us to market earlier. So all positive trends from the customers' perspective and getting to that new 18 terabyte CMR in 20 terabyte SMR capacity earlier is a big value.

Operator

Thank you. Our next question comes from Ananda Baruah from Loop Capital.

Ananda Baruah

Hi, thanks guys for taking the questions. And Steve, congrats as well for me, I know we have a little more time with you, but it's certainly been, I do have a gross margin question guys. But I'm going to start with the hyperscale question just provide some the leaf here. So first a clarification, the comment earlier in the Q&A about 35% growth for calendar ' 20 year-over-year was that your hyperscale outlook for calendar ' 20 or was that another.

Steve Milligan

No, that's -- yeah that's total capacity enterprise. So hyperscale and OEM consumption of that class together.

Ananda Baruah

Thanks for that. And could you update for us. You have an updated view on what this cycle might look like this hyperscale cycle might look like. Now, I think you made some comments the last couple of quarters.

Steve Milligan

Yeah, I think the only thing we can say as we continue to see strength of the cycle. End of the first half of 20. I don't think we want to go any beyond that that supported in the 35% year over year growth parameters. So we don't see enrolling over yet. No.

Ananda Baruah

And the, any sense, if the incremental strength is pro in for this year it's been a little bit stronger than we thought is pull into this year your -- point to sustainability as we move kind of move into the March quarter.

Steve Milligan

So it would point to sustainability end of the first half of the calendar year '20.

Ananda Baruah

Okay, that's great. And then just quickly on the flash gross margin. So as we think about the different layers of the headwind that could roll off, it sounds like there is the mobile and that 300, sorry the K1 doing the basically spread, but it sounds like as you participate more mobile of the headwinds will diminish sort of incoming quarters before we get the inflection in few quarters, will the K1 cost with the 300 basis points headwind. Will that also kind of gradually roll off until we get into September quarter?

And then whether the other levers that will also contribute to the gradual expansion in margin before we get into the second half of next year. I just don't want to miss anything. I want to make sure I'm understanding it appropriately. Thanks.

Steve Milligan

Yeah. So I'll start with the K1 question. So right now I mean we're just beginning production in that fab and so it will be a gradual improvement in absorption over the next few quarters and eventually it will be fully absorbed and have a cost structure. Similar to what we experienced elsewhere.

Mike Cordano

Yeah, I think the other drivers are really looking at the individual segments. And as I talked about, we are continuing to expand the product portfolio and increased participation and let's call it higher quality revenue segments like enterprise SSD and other sort of high-end mobile marketplaces as we progress into 2020. So think of it is customer and product mix improvements as well.

Operator

Thank you. Our next question comes from Vijay Rakesh with Mizuho.

Vijay Rakesh

Yeah, hi, thanks guys, congrats Steven, and good luck with your next endeavors. Just on the flash side. I was wondering going back on the gross margin, and that's the last question here, if you could look at, you said you're trying to exit the mobile segments but wondering as you look at first half, do you expect to step up as exit some of this mobile segments in what kind of margin improvement should expect on the flash side with as you move more into the SSD, or less price sensitive markets and same question is on that, sorry go ahead.

Steve Milligan

Well, I was going to respond to that. I'm sorry. But, so let me clarify. We have not exited from the mobile market, we chose not to participate in segments of that market for a period of time because the margins, it was not, it made and made no economic sense. Okay. As we see the pricing environment in that market. Begin to stabilize and improve consistent with improving supply and demand dynamics, we will be increasing our participation in that market starting this quarter.

Vijay Rakesh

Got it. And on the hard to strive side you've got talked about 16 and trade, but can you give us some color of how, when you expect to ramp some of those products as you go through 2020. Thanks.

Mike Cordano

Yeah. So obviously we said we're sampling those in the current quarter and we expect to ramp that in the first half of calendar ' 20 so that's in the not too distant future.

Operator

Thank you. And our final question today will come from Nehal Chokshi with Maxim.

Nehal Chokshi

Thank you. Just for verification purposes here or education purposes. What is the NAND flash industry typically seasonally peak in terms of bit demand from a monthly perspective?

Steve Milligan

Well, I mean this selling a answer. It's the old adage that the best quarter of the year is October, November and December, it's around that time but I don't know, literally which month.

Nehal Chokshi

Okay. And so, Mike, I think you made a comment that the exabyte loss from the power outage turned out to be 4 exabyte, 6 exabytes but you still expect that the excess inventory industry wide would be flushed out by the end of this year. So given that lower exabyte loss, have you seen better demand and expected over the past three months.

Steve Milligan

So I think in general, our bit consumption of demand has been at or a well above what we thought. So our comments were we thought. By the end of the year the industry inventories would be substantially improved and we stand by that.

Nehal Chokshi

And what's been the driver of that better-than-expected demand for the NAND Flash bits?

Steve Milligan

I think we've seen generally speaking, some a little bit better mix in terms of capacity per unit. And I think some of the end markets are a little more robust than maybe we originally expected, including mobile.

Nehal Chokshi

Alright, thank you.

Operator

Speakers I'm showing no further questions in the queue, I'd like to turn the call back over to management for any closing remarks.

Peter Andrew

All right. Thank you for joining us today. I would also like to extend a thank you to all of our employees, customers and business partners. We look forward to a successful year together. Have a great rest of the day.

Operator

This concludes today's conference call. Thank you for joining. You may now disconnect.