Q1 2019 Earnings Call

Company Participants

- Beatrice Russotto, Director of Investor Relations
- Hock E. Tan, President and Chief Executive Officer
- Thomas Krause, Chief Financial Officer

Other Participants

- Aaron Rakers, Analyst
- Craig Hettenbach, Analyst
- Edward Snyder, Analyst
- Harlan Sur, Analyst
- Harsh Kumar, Analyst
- John Pitzer, Analyst
- Ross Seymore, Analyst
- Stacy Rasgon, Analyst
- Timothy Arcuri, Analyst
- Toshiya Hari, Analyst
- Vivek Arya, Analyst
- William Stein, Analyst

Presentation

Operator

Good day, ladies and gentlemen, welcome to Broadcom Inc.'s First Quarter Fiscal Year 2019 Financial Results Conference Call. At this time, for opening remarks and introductions, I would like to turn the call over to Beatrice Russotto, Director of Investor Relations of Broadcom, Inc. Please go ahead, ma'am.

Beatrice Russotto {BIO 20827438 <GO>}

Thank you, operator, and good afternoon, everyone. Joining me today are Hock Tan, President and CEO; and Tom Krause, Chief Financial Officer of Broadcom. After the market closed today, Broadcom distributed a press release and financial tables describing our financial performance for the first quarter of fiscal year 2019. If you did not receive a copy, you may obtain the information from the Investors section of Broadcom's website at broadcom.com. This conference call is being webcast live and a recording will be available via telephone playback for one week. It will also be archived in the Investors section of our website at broadcom.com.

During the prepared comments section of this call, Hock and Tom will be providing details of our first quarter fiscal year 2019 results, guidance for fiscal year 2019 and commentary regarding the business environment. We will take questions after the end of the prepared comments. Please refer to our press release today and our recent filings with the SEC for information on the specific risk factors that could cause our actual results to differ materially from the forward-looking statements made on this call. In addition to US GAAP reporting, Broadcom reports certain financial measures on a non-GAAP basis. A reconciliation between GAAP and non-GAAP measures is included in the tables attached to today's press release. Comments made during today's call will primarily refer to our non-GAAP financial results.

So with that, I will turn the call over to Hock.

Hock E. Tan {BIO 1460567 <GO>}

Thank you, Bea, and thank you everyone for joining us today. So, we had a good start to fiscal 2019, growing 9% in our first fiscal quarter compared to the same period a year ago. The strength of our business model delivered another quarter of sustain revenues, strong earnings and then extremely strong free cash flow.

Our semiconductor business held up relatively well. Not surprisingly, our wireless business was down sharply and our storage business underperformed somewhat. However, these challenges were mitigated -- more than mitigated by our networking business, which grew double-digits year-over-year. In addition, we were very pleased to see that the broadband business have started to recover and stabilize in the quarter. In fact, putting in altogether, the semiconductor segment was actually up year-over-year in the first quarter, if you exclude the expected sharp decline in wireless.

Turning to infrastructure, this business, which include SAN switching, mainframe and enterprise software, delivered solid top-line results, benefiting from a very robust enterprise spending environment. The integration of CA onto the Broadcom platform is very well underway and we are confident that we can meet if not exceed in the long term and exceed the long-term revenue and profitability targets that we laid out for CA to you last year. In fact, renewals in our CA business have been strong this past quarter, and we believe we are on the dollar commitments from our core customers will continue to grow.

Many of our peers have commented that they are seeing a softening demand environment especially out of China. While we are experiencing the same demand dynamics, we have factored in much of this macroeconomic backdrop when we provided fiscal 2019 guidance last quarter. As a result, after solid start to the year, we are reaffirming our fiscal 2019 revenue guidance of $24.5 billion. Having said that, we expect our semiconductor business to bolster in the second fiscal quarter driven almost entirely by the seasonal drop in wireless. But looking to the second half, we are confident that semiconductor business will resume very meaningful growth. This will be driven by strong product cycles in both wireless and networking, coupled with a recovery in broadband. Infrastructure software on the other hand is expected to sustained throughout the year.

So, in summary, our diversification strategy is working and we are effectively managing the decline in wireless, as well as the broader semiconductor industry headwinds.

Now, let me turn over to Tom to provide you with more color on Q1.

Thomas Krause {BIO 17978469 <GO>}

Thank you. Hock. Consolidated net revenue for the first quarter was $5.8 billion, a 9% increase from a year ago, and EPS came in at $5.55, an 8% increase from a year ago from a 441 million weighted average fully diluted share count. In addition, free cash flow was $2.03 billion or 35% of revenue. I would highlight free cash flow grew 39% year-over-year. The semiconductor solutions segment revenue was $4.4 billion and represented 76% of our total revenue this quarter. This was down 12% year-on-year on a comparable basis, but as Hock explained, the semiconductor segment was actually up slightly year-over-year in the first quarter excluding wireless.

Let me now turn to our infrastructure software segment. Revenue was $1.4 billion and represented 24% of revenue. SAN switching continues to perform extremely well. And as Hock mentioned, mainframe enterprise software is off to a good start.

Let me now provide additional detail on our financial performance. Operating expenses were $1.08 billion. Operating income from continuing operations was $3.05 billion and represented 52.7% of net revenue. Adjusted EBITDA was $3.24 billion and represented 55.9% of net revenue. This figure excludes $143 million in depreciation. Inventory decreased $50 million from the prior quarter. Similarly, semiconductor receivables were actually down, which is typical for Q1 even though receivables increased $352 million overall due to CA acquisition.

Total current liabilities excluding debt increased $2.5 billion due to CA, however, excluding CA total current liabilities excluding debt decreased meaningfully more than receivables, primarily due to the payment of our annual performance bonus in Q1. In addition, we spent $99 million on capital expenditures. As a result, we had record Q1 free cash flow from operations at $2.03 billion or 35% of revenue. This represents 39% growth in free cash flow from operations compared to Q1 of 2018.

I would note couple of things: one, fiscal Q1 is typically our seasonally weakest cash flow quarter, due to the annual performance bonus payment we make to our employees in the quarter that we accrue for throughout the prior fiscal year. In Q1, we paid approximately $530 million in APB cash bonuses to our employees. And second, I would also note that we accrued $723 million of restructuring integration expenses of which that includes $363 million of cash payments in the quarter.

In Q1, we returned $4.6 billion to stockholders, consisting of $1.1 billion in the form of cash dividends and $3.5 billion for the repurchase and elimination of 14.2 million AVGO shares. We ended the quarter with $5.1 billion of cash, $37.6 billion of total debt, 396 million outstanding shares and 451 million fully diluted shares outstanding.

Turning to our fiscal year 2019 guidance. As Hock discussed, we are reaffirming our full-year revenue guidance of approximately $24.5 billion, including approximately $19.5 billion from semiconductor solutions and approximately $5 billion from infrastructure software. IP licensing is not expected to generate a material amount of revenue. On a non-GAAP basis, operating margins are expected to be approximately 51%. Net interest expense and others expected to be approximately $1.25 billion. We do not contemplate any debt paydown in fiscal year 2019. The tax rate is forecasted to be approximately 11%. Depreciation is expected to be approximately $600 million. CapEx is expected to be approximately $550 million. And as a result , free cash flow from continuing operations is expected to be approximately $10 billion. And finally, stock-based compensation expense is expected to be approximately $2 billion.

As we outlined last quarter, we granted approximately 31 million of restricted and performance stock units as part of the multi-year grant that we'll vest over the next seven years. As a result, for modeling purposes, we would expect the fully diluted share count in the second quarter to be approximately 450 million. This excludes any stock repurchases. Similarly, for modeling purposes, we would expect stock-based compensation expense to be approximately $530 million in Q2. Looking forward beyond Q2, we would expect the share count, excluding any stock repurchases and elimination to remain relatively unchanged and the quarterly stock-based based compensation in the second half of 2019 to start to decrease slightly each quarter. We would expect stock-based compensation to level out of approximately $1.5 billion in 2021.

Now on the capital allocation. Our capital allocation strategy remains the same. We plan to maintain the current quarterly dividend payout of $2.65 per share throughout the year, subject to quarterly Board approval, which means, we plan to payout over $4 billion in cash dividends in fiscal 2019. In addition, we remain committed to buying back and eliminating a total of $8 billion of stock in fiscal 2019.

That concludes my prepared remarks. During the Q&A portion of today's call, please limit yourselves to one question each, so we can accommodate as many analysts as possible. Operator, please open up the call for questions.

Questions And Answers

Operator

Thank you. (Operator Instructions) Our first question comes from Harlan Sur with JPMorgan.

Q - Harlan Sur {BIO 6539622 <GO>}

Good afternoon, and congratulations on the solid quarterly execution. Hock, on the strong double-digits year-over-year momentum in your data center networking and compute acceleration segment, you've been shipping your new Tomahawk 3 switching platform now since the second half of last year. I think Google's using it for 200 gig, we hear Amazon is going to transition to 400, we're hearing good things from Baidu, Tencent and all of the cloud guys. Additionally, you're ramping compute acceleration ASICs into some of the big cloud guys as well. Question is, do you anticipate continued double-digit year-over-year growth for the full year here for the networking business as the pipeline here appears fairly strong?

A - Hock E. Tan {BIO 1460567 <GO>}

Very good question, Harlan. And now that listening to you, you really got me going. Yes, in networking and it's broader than just data centers, but let's start with data centers, Tomahawk 3, which is the 12.8 terabit, top of the rack switch, has just barely started production shipments. In fact, we do expect to -- we are fully expecting the ramp of Tomahawk 3 as part of the broader data center scale out with 400 gig pipes in the connect so to speak, to really start just about right now. In fact, our Q2 -- fiscal Q2 and progressing up to the rest of the end of the year as more and more on the names you mentioned in type of cloud jumping and expand and upgrade, I would say data centers simply because as you know, expanding the capacity of data centers and pipes is the simplest way to decongest -- to minimize or mitigate congestion control in this huge data centers in this large cloud guys.

So there is a broad refreshing and upgrading of data centers among these cloud guys. One area is mentioned Tomahawk 3 shipping, which is just starting this quarter in the significant volumes, was also not so perhaps obvious, but it's is very real for us is the fact that in order to run 400-gigabit per second throughput pipes, you need interconnect -- fiber optic interconnects that are build and dedicated in that area, that's a very high-tech products, which we are very deeply engaging and that brings the content by a multiple factors in this data center. And then as you expand the top of the rack switch, I can't resist saying, you need to connect data center to data center, what you called DCI inter-connectivity. And the approach that has been taken, which we are also very engaging with multiple OEMs while supporting the cloud base, is obviously coherent fiber optic connection at 400 gig and we believe we are very much in the lead on that area as well.

So these are product lines with product cycles we are seeing that are continuing the impetus of double-digit growth in networking. And it extends more than that. In routing, we are going to be launching and ramping our new generation router, Jericho2, probably in Q3 of our fiscal year and that's going into edge routing, core routing among the service providers, especially the telecom guys. We starting to see the preparation in that happening. So, yes, we feel very good about the net -- about networking and ability to sustain the level of growth we have been seeing.

Q - Harlan Sur {BIO 6539622 <GO>}

Thank you. Hock.

Operator

Thank you. Our next question comes from Ross Seymore with Deutsche Bank.

Q - Ross Seymore {BIO 20902787 <GO>}

Hi, guys. Wanted to echo my congratulations. Sticking on the formerly called wired category, Hock, you mentioned that the -- I think you said the broadband space had stabilized and recovered. Can you talk a little bit about the product cycles that will be driving demand in that segment and any geographic color, product cycle color would be helpful?

A - Hock E. Tan {BIO 1460567 <GO>}

Sure, Ross. Yes. In broadband, happy to say, finally half of the thing recovered and a big part of the driving the recovery is cable modem, video delivery DOCSIS as they call it 3.1. We're seeing implementations across multiple carriers, service providers of DOCSIS 3.1. So that's very good. One, we're also seeing of course is in gateway access, which is a big part of Broadcom among many carriers too, is that the new generation of DSL, digital subscriber line, as they need to expand capacity and throughput and go to what we call the next-generation G.fast or 35b and we're seeing a lot of that in Europe, some in North American carriers too, but what's also equally interesting is, and as they go to the last mile into households, what we are also seeing is adoption of wireless connectivity or what we all call Wi-Fi.

And what we're seeing now is, as we see these wide gateways whether it's cable modem, DOCSIS 3.1 or digital subscriber line, we are seeing, especially in the back half of the year, enterprises and more and more service providers, telecoms, start to attach the next generation Wi-Fi, Wi-Fi 6 on to those gateway. And in Wi-Fi 6, I am very, very pleased to note that we are very much in the lead in having developed and productize whole suite of products that perfectly address towards those enterprise and service providers and that -- but most of that will be only shipping we believe in the second half of the year, but fiscal and both calendar. And we're looking forward to seeing that happen, but it's a very nice product cycle that will continue -- that will basically push the recovery of our broadband business.

Q - Ross Seymore {BIO 20902787 <GO>}

Thank you.

Operator

Thank you. Our next question comes from Timothy Arcuri with UBS.

Q - Timothy Arcuri {BIO 3824613 <GO>}

Thank you. Hock, I'm wondering how you handicap Huawei and I believe that they're kind of mid single-digit customer right now and we're hearing a lot of evidence that they may be double ordering impossible sanctions. So, I'm kind of wondering how you think about that and how you handicap that for the full-year guidance? Thank you.

A - Hock E. Tan {BIO 1460567 <GO>}

I probably know as much as you do seriously in terms of what's available, publicly available and what's -- and the concerns and issues overhanging broadly Chinese exporter, China and, what the specific high-tech companies at Huawei from China. They are good customer and they buy products, which obviously helps their products being competitive in the global export market and I hope they continue to do so. But certainly the overhang of that is something that we are closely monitoring and are very concerned about. But as far as specific things you're mentioning, I'm not able to basically comment on it simply because I don't know.

Q - Timothy Arcuri {BIO 3824613 <GO>}

Okay, Hock. Thanks so much.

Operator

Thank you. Our next question comes from Vivek Arya with Bank of America.

Q - Vivek Arya {BIO 6781604 <GO>}

Thanks for taking my question. Actually, a quick clarification on a question. I believe Hock you mentioned software could sustain throughout the year, that suggest annualized closer to $6 billion rather than the $5 billion, I think you had before, and if that is the case, shouldn't profit margins be higher than what you had? And then the question, Hock, there has been some more consolidation in semis and video acquiring Mellanox. Was just curious, how you think if at all there is an impact on Broadcom and even if there isn't how you just think about the M&A environment in semis? Thank you.

A - Hock E. Tan {BIO 1460567 <GO>}

Okay. You got two questions. Yes, very clever. Let me try to answer. Let me start with the second one, its easier. I mean, as I say, we have done quite a bit of acquisitions in very strong assets in the semiconductor space and that's obviously there is something we continue to look at, because obviously semiconductors is a core area for us. And, but you also know, we're not necessarily limiting ourselves to that. We'll look towards the broader area of technology, software and appliances as Brocade would be considered. And while we continue to be interested in the semiconductor space and they still targets and will be continued to be very thoughtful and timely in terms of the time -- in terms of how we approach those acquisitions.

And if observe our behavior over the last several years, we tend to do it in a very measured -- on the measured pace simply because it's important and in fact, it is critical on any acquisition we make that we can integrate it very, very well. And that's what we are doing with CA right now and we're right in the thick of it, as you notice in the numbers we are going through, as we drive down and to generate the kind of business model we expect to get out of CA.

Turning on to the next question you asked, which is -- which that leads to software. Yes, it's turning out to be a very, very nice deal for us. We actually are seeing for core customers and as you recall, we have differentiated customers of CA between very core large customers, which -- who consumes both mainframes and enterprise distributed software as opposed to much smaller long tail of non-core customers. And we look at those core customer that we are focusing on up to about, at least one quarter now -- now today more than one quarter of going through selling, renewal and adoption of our software.

We feel that the business model has been extremely -- our business model has been extremely successful. I mean the growth, as we see of dollars that we get through renewals and expansion of huge foot bringing in those core customers is pretty -- is surpassing our expectations; its gone double digits but that's only three months, so we are still at early stage and we'll continue to push that. But as we have also made certain announcements on at least one or maybe two deals we have done on our new PLA model of both mainframe and enterprise based software. And this has been very well received in the marketplace by our core customers and we are hopeful is something that makes so much sense that will expand -- we expect to see more and more of these significant transactions occurring as we move forward through the rest of the year. All right?

Operator

Thank you. Our next question comes from John Pitzer with Credit Suisse.

Q - John Pitzer {BIO 1541792 <GO>}

Yes, good afternoon guys. Thanks for letting me ask the question. I'll echo my congratulations on the results. Hock, relative to the full-year guide, it does imply like many of your semi peers some pretty meaningfully above seasonal growth half on half on the semi solutions business. And I think you did a good job on some of the prior questions specific to data center and broadband access of some of the bottoms up product cycles that are driving that. I'd be curious -- I'd be helpful if I get your sort of views on wireless and how that progresses throughout the year and how you should -- how you're thinking or how we should be thinking about your content this year versus dependency on units this year within the wireless?

A - Hock E. Tan {BIO 1460567 <GO>}

Somehow I knew this was going out and come up somehow, someway, someplace. I truly know if you did that. Yes, I know. I should note that because that product cycle in wireless is in all our views -- this is mine, very predictable. And we will see that happen in our Q3 -- fiscal Q3, Q4 of this fiscal '19, it will. We are already starting production in our wafer sets, which has longer product cycle on FBARs in some of our products. And we will see for one of better word because it's so seasonal and it's very significant, a sharp bounce back, which brought -- add to mine our confidence that our full year guidance is something that's going to happen very similar. And that in the second half, we see that meaningful -- you correctly pointed out somewhat double-digit growth in the semiconductor -- in our business.

As I mentioned in the answer to earlier questions, data center especially networking which -- we have a whole slew of new product cycles will generate a big part of that double-digit growth so we will -- in my view, wireless as it has happened in the past and in this particular year perhaps the difference between this coming year '19 versus '18 is simply two things. One is, we're probably going to get better share as mentioned that before. And secondly, content increase, it always happens, year after year as I mentioned.

As an example in Wi-Fi, you will see Wi-Fi 6; Wi-Fi 6 is not just in enterprise and access gateways in service providers, we are seeing Wi-Fi 6, the new generation 802.11ax in handsets and that drives -- I call it strong content increase as the increased amount of bands in the FBAR that we constantly see as basically wireless continue to proliferate in various areas of the world continue to expand the amount of bands content in this next generation form.

So all that is going to drive a bounce back with perhaps that we increased content for our products. As far as volume is concerned, yes, I will probably be as uncertain as you are, how much the volume would be. But regardless, it's -- there is a lot of mitigating factors and biggest part of it is pure content increase.

Q - John Pitzer {BIO 1541792 <GO>}

That's helpful, Thanks Hock.

Operator

Thank you. Our next question comes from Stacy Rasgon with Bernstein Research.

Q - Stacy Rasgon {BIO 16423886 <GO>}

Hi, guys. Thanks for taking my question. So, understanding the confidence on the semi ramp, your guidance also implies the infrastructure software business has to decelerate pretty materially as we go through the year. I mean, it seems like right now in Q1, the CA business must have already been hitting pretty close to the $3.5 billion kind of annualized run rate that you were talking about, that was a few years out. So, I guess like what drove the strength of CA in Q1 and why does that business decelerate -- have to decelerate so markedly as we go through the rest of the year in order to fit into the guidance that you provided?

A - Thomas Krause {BIO 17978469 <GO>}

Hi, Stacy, it's Tom. I think one element is we don't want to get into the details between CA and the SAN switching, but now we're taking a conservative approach. It's just the first quarter out of the gate. There are three quarters to go. As Hock mentioned, we are actually pretty equivalent surprised with the number of ELA and PLA opportunities that we see in the pipeline and a lot of our success in terms of growing the dollars that each of these accounts is going to be driven by our ability to convert those into wins, but so far so good. So I think we're going to take this one quarter at a time, but for now, given that we're only one quarter into the year, we feel very comfortable reaffirming guidance on the top line and of course, we feel comfortable with the operating profit as well as the cash flow expectations going forward.

Q - Stacy Rasgon {BIO 16423886 <GO>}

But you said CA would sustain through the rest of the year. So does that mean that Brocade has to like come down a lot or is it just like overall conservatism within in the number?

A - Thomas Krause {BIO 17978469 <GO>}

Well, Stacy, what we said is that the software -- the Infrastructure software segment will continue to sustain throughout the year. That's our expectation. But we are taking a conservative approach relative to the overall outlook for that.

Q - Stacy Rasgon {BIO 16423886 <GO>}

But if it sustains, wouldn't you be at $5.6 billion for the year and instead of $5 billion?

A - Thomas Krause {BIO 17978469 <GO>}

I'll leave that to you, Stacy, to figure out.

Q - Stacy Rasgon {BIO 16423886 <GO>}

Okay, thank you guys. Thank you.

Operator

Thank you. Our next question comes from Toshiya Hari with Goldman Sachs.

Q - Toshiya Hari {BIO 6770302 <GO>}

Thank you for taking the question. Hock, I had a question on 5G as it relates to your wireless business. Based on preliminary discussions with your customers, what sort of content uplift are you expecting in your wireless business as 5G is inserted going forward? And from a timing perspective, do you think, is it more of a 2020 dynamic when 5G starts to move the needle or is it 2020 and beyond? Thank you.

A - Hock E. Tan {BIO 1460567 <GO>}

Very good interesting question. And you're asking areas of very vast uncertainty here, but my sense of it is, you will start to see a little bit of it in 2020, but it will be only a small part. I think it's 5G as it impacts content in components in the handsets, high-end smartphones, I may add, will only really impact in a big way I think beyond 2020. 2020 will see some start, but the attach rate, for one of better word to use, is going to be not that high, but you're right, beyond 2020 as 5G comes in and you probably heard -- seen that the amount of content, especially for way the affects us on our analog FBAR. And here in this case, as those FBAR content attaches more and more to antenna and various other parts of the phone will be quite significant, but not so in 2020.

Q - Toshiya Hari {BIO 6770302 <GO>}

Thank you.

Operator

Thank you. Our next question comes from Craig Hettenbach with Morgan Stanley.

Q - Craig Hettenbach {BIO 6185428 <GO>}

Yes, thank you. Just a question for Tom on the back of a strong gross margin upside in the quarter. Can you talk about just trends you're seeing in gross margin for the core semiconductor business and then software and just how we think about expectations through the year?

A - Thomas Krause {BIO 17978469 <GO>}

Sure, Craig. You can see the gross margins are exceptional, well over 70% in the quarter. A lot of that is driven by including CA in the business. But you're right, the semiconductor business continues to increase from a gross margin perspective, mix helps as wireless comes down, we benefit as I think you know from the rest of the portfolio and semis being a add or above the corporate average, but I think looking out longer term, we've talked about this a lot, we continue to see the opportunity to improve gross margins, which directly trend the course into our operating margins in our free cash flow conversion. So, we see that continuing.

Q - Craig Hettenbach {BIO 6185428 <GO>}

Got it, thanks.

Operator

Thank you. Our next question comes from Harsh Kumar with Piper Jaffray.

Q - Harsh Kumar {BIO 3235392 <GO>}

Hi, guys. First of all, congratulations, exceptional execution. I wanted to follow up on the gross margin question, maybe for Tom. They stepped up quite dramatically. On one of the field trips, I think you had mentioned that it really takes an acquisition about a year to hum and really produce results. So, question is, did you capture the vast majority of CA benefits very quickly in 1Q or is the best from CA sort of reserve for the back half and later on?

A - Thomas Krause {BIO 17978469 <GO>}

No, I mean, I think is you might be able to sort of look through the numbers, we're still not fully optimized around CA, we're only one quarter in. So you've seen some meaningful improvement in profitability for the company that includes CA, but when you look specifically gross margins, it's a number of elements within the CA business tied to gross margins, primarily services as well as support and so we've taken some actions to improve gross margins and improve the P&L in general, one in particular as we announced the deal with HCL and have outsourced a lot of our service activity to HCL going forward for the CA business. But as we continue to work through our model, which is really driving these PLAs we talked about, we see the opportunity to continue to get better returns on our investment, which includes improving our gross margins going forward. So, we would expect them continuing to improve not just this year, but really, over the long term.

A - Hock E. Tan {BIO 1460567 <GO>}

If I could add to, on CA, we continue to go through transitions, and you're right, it takes at least a year for us to so called hum. In the case of software companies, I believe it will take longer because these are contractual commitments, probably closer to two years, but it will get there -- but the biggest -- I think a big part other than the fact that we're combining software and hardware now and and CA in the software infrastructure software deal transitioning its improvement and as Tom said, just one quarter, but expect to see more reductions and these are not just cost of goods sold but down below the line operating expenses as we go through it better. For Q1, it is very critical to -- thing that is product mix, wireless is down and the other products are humming along, semiconductor products, and remember year-by-year nature of a product life cycles in those semiconductor products, we have always have an opportunity to expand by delivering more value to our customers, expand our gross margin around 50 to 100 basis points on just it's natural cadence. That and makes, I think is adding a lot of tailwind to our improvement in gross margin.

Operator

Thank you. Our next question comes from Edward Snyder with Charter Equity Research.

Q - Edward Snyder {BIO 2498283 <GO>}

Thanks a lot. Hock, I'd like, if we could maybe touch back on wireless -- this rebound, you're going to see in the second half of the year, I understand you're going to year-over-year issue here because we kind of heard last year, but this is flattening out units, this sounds like it's going to be a much stronger rebound than normal just on content alone. I mean, correct me if I'm wrong, but you've got three big areas that you're playing with just in handsets alone. Of course, you standard broad business which covers everything but 2.4 gig, you're doing more products and the congestion area now. I know you're doing Teleflex is in that problems getting much more acute over the next year, especially as 5G comes on.

But the WiFi, 802.11ax, like you mentioned not only enterprise, but we are seeing that in handsets and isn't it the case that you've got a big lead over of your closest competitor Qualcomm here. So should we expect, one, to see a bigger rebound just on content; two, for maybe this to have more legs than we otherwise expect to begin next year units are initiated given Wi-Fi itself is being deployed this and you play strong that it should last longer shouldn't?

A - Hock E. Tan {BIO 1460567 <GO>}

Ed, we love all your comments, but I want to be laid down very -- straight down the center simply, would see a rebound, my view is a normal rebound and is a normal rebound and while content increases, it's not really over the top by that much either, but don't forget comparing it against last year is relatively an easier compare. So, we do see -- we definitely see a rebound and there will be a good rebound, but it will not be an extraordinary rebound. I just want to emphasize that, just your normal rebound, that's not hard to compare year-on-year against last year versus second half fiscal '19, the fact that there will be an improvement.

Q - Edward Snyder {BIO 2498283 <GO>}

Okay. Great. Thanks.

Operator

Thank you. Our next question comes from Aaron Rakers with Wells Fargo.

Q - Aaron Rakers {BIO 6649630 <GO>}

Yes. Thanks for taking the question and also congratulations on the quarter. A lot of questions on the wired and wireless has been asked, but I wanted to ask about the storage business. The storage business, I think you've mentioned was up -- I don't know if you framed how much in this quarter, but I'm curious on kind of similar questions as prior, what kind of things are we to be focused on in that piece of the business over the next couple of quarters and how do you assume that can grow through the course of this year? Thank you.

A - Hock E. Tan {BIO 1460567 <GO>}

Okay. Aaron, very good interesting question. In storage, we have a mixed bag here. A lot of it -- not all of it -- but a lot of it relates to hard disk drives. And as you know, hard disk drive's nothing to yell over these days. And we see that no different from the others, our mitigating factor here is that most of our hard disk drive -- in fact, all our hard disk drive component sales goes to near-line, all basically, and data centers. We don't do -- we do relatively less in PCs, desktops or mobile. So, we do see the impact of it being weak but not as extreme as, obviously, the industry is saying. So, that helps mitigate it. But that's not a real variant.

Where we see a hopefully better new product cycle coming in is the fact that tied to storage is, especially on flash SSDs is PCI Express. Second of the year, we see pushing a strong push in the marketplace on PCI Express gen-4. We have a lead on it. And we see a lot of interesting opportunities related to that lead in storage or even the lead in (inaudible) in upload computing from the viewpoint of machine-learning, GPU to GPU connectivity. But it's also related to storage. And that push PCI Express Gen-4 is what's quite interesting in storage over the next -- well, I should say over the rest of this year, especially the second half. All right?

Q - Aaron Rakers {BIO 6649630 <GO>}

Thank you.

Operator

Thank you. Our next question comes from William Stein with SunTrust.

Q - William Stein {BIO 15106707 <GO>}

Great. Thanks for taking my question. Hock, if you cut through the end markets and look instead at the business on a geographic basis -- I'm well aware that when you ship to one region, there may not be consumption in that region. China's a big export economy, certainly. But can you talk to the pace of demand that you're seeing in China as best you can tell it, in particular, relative to inventories there? Thank you.

A - Hock E. Tan {BIO 1460567 <GO>}

Good question. No surprise. Across the regions, as far as I'm concerned, China is the weakest. And we all see that. We all know that. And I'm talking domestic demand products that are -- our products ship to those regions used in that region indigenously. And it's the weakest region. It also has collateral impact, we see, to some extent on certain sectors in Japan and certain sectors in Europe. Less so in the US, but broadly -- so, China has an impact beyond just the region, itself, China. It also impacts to a couple other regions. But North America continues to be quite decent. And that's what helps us mitigate this overall macroeconomic situation.

Operator

Thank you. Ladies and gentlemen, thank you for participating in today's question and answer session as well as today's call. This does conclude the program. You may all disconnect. And have a wonderful day.
