Dialog Semiconductor

Female Speaker:

Good morning, ladies and gentlemen and welcome to the Dialog Semiconductor Q4 earnings call. My name is Holly and I'll be your call organizer today. I would now like to hand over to Jose Cano to begin today's call. Jose, the line is now yours.

Jose Cano:

Thank you and good morning. Thanks to everyone for joining us today. Our call is being hosted by Dr. Jalal Bagherli, Dialog CEO, and Wissam Jabre, our CFO. In a moment, I will hand you over to Jalal to talk through the company's performance for the fourth quarter and full year 2018. First of all, I must remind everyone that today's briefing and some of the answers to your questions may contain forward-looking statements. These statements reflect management's current views and there are risks associated with them. You can find a full explanation of these risks on page two of the investor presentation. The interim report and the press release can also be found on our website. I would now like to introduce Jalal who will run through the business review. Jalal? Over to you, please.

Jalal Bagherli:

Thank you and good morning to everyone on the call. Thank you for joining us. 2018 has been a transformational year for Dialog. In 2018, the business delivered another year of revenue growth, increased profitability, and strong cash flow generation. We are entering a new chapter for our business from a position of strength and with exciting opportunities in our target end markets.

Looking at slide number four, during the year we reached a landmark agreement with Apple, which we still expect to complete in the first half of this year. This agreement strengthened our long-time partnership while generating immediate value from certain PMIC technologies. Our competitive advantage and the success we've had with customers over the years has been built upon some fundamental pillars. Our deep expertise in mixed signal and power efficient IC's was the result of a sustained R&D effort over a number of years and is the foundation for the development of new products for the fast-growing segments we are targeting, such as IoT, mobile, automotive, and computing and storage. Our entrepreneurial culture and the way we work with our customers and partners are also part of our strength. Our relationships are highly collaborative, and our innovation effort is guided by the requirements of our customers, both in terms of applications and end markets.

Looking ahead, we are in a very strong position to leverage these strengths into new markets and customers. We have a strong balance sheet, which gives us the financial flexibility to pursue our growth strategy and create shareholder value over the long term.

Turning to slide five, let's take a close look at the key aspects of our growth strategy. Over the years, we have built a mixed signal product portfolio underpinned by our ability to work to the highest technical standards and develop leading edge products. Our goal is to continue to develop differentiated products with a strong focus on power efficiency, which we believe is becoming even more critical to our customers, as consumers demand increasing battery life for an array of "always-on" devices.

We have good relationship with the tier one OEM's in our sector and we are seeking to expand our technical collaboration with them with a broader range of mixed signal products. This also includes our largest customer, and we continue to work with them on a range of products across multiple platforms.

2018 was a very positive year in this area. Revenue for non-licensed technologies, that is all the products apart from the PMIC's for the phones, grew 75 percent and we are expecting a strong performance in 2019.

Finally, we will continue to extend our customer base and cross-sell, leveraging our products and expertise into a wider range of consumer applications, as well as automotive and computing storage. And there is plenty of fresh opportunities here. To give you a couple of examples, in the automotive space, there is increasing demand for efficient power management solution for infotainment systems and Bluetooth low energy, for key fobs and tire pressure monitors. There are also now increasing opportunities for CMIC's and backlight drivers.

In computing and storage, we have a number of design engagements with leading customers to provide custom PMIC solutions in next generation of game consoles, DSLR cameras, and solid-state drives. We see additional opportunities for BLE and CMIC's backlighting drivers. Our go-to-the-market strategy is fully aligned with this approach.

Let me remind you of the key points on slide six. There are two pillars to our go-to-market strategy. The first is to expand our customer reach with design-friendly products throughout distribution sales channels. In particular, our partners and sales teams are focused on capturing the radio everywhere growth in IoT; and pushing our CMIC offering through design workshops and seminars to the broader markets.

During February, we hosted several of these events across Europe and United States, where we continued to see strong interest in our technology. The CMIC enables customers to customize and integrate multiple analog, logic, and discrete components into a single chip fast. This is a value proposition every customer can exploit. It is simple and the perfect product for broader market distribution. This product line has shipped over 4 billion units since launch to date, and we see significant opportunities ahead. In 2018, revenue from CMIC's was up 24 percent year-on-year compared to 2017 revenue of 84.3 million dollars.

Second, we continue to cross-sell our complimentary product portfolio to customers. We have a broad and unique product offering and we have established strong positions in high-growth target end markets. Last week, we launched the latest member of the SmartBond family, and our most sophisticated Bluetooth low energy SoC yet. It is aimed at the IoT end market for applications with higher data processing requirements, such as high-end fitness trackers, advanced smart home devices, and virtual reality game controllers. Additionally, we are reaching new customers by leveraging our power management technologies and extended product portfolio into new areas such as gaming, solid state drives, and automotive.

Before handing over to Wissam, I'd like to restate my confidence in the future of our business. We are entering a new chapter from a position of strength, with a strong team of highly skilled and dedicated employees, and healthy pipeline of customer engagements. Additionally, we have a strong balance sheet which gives us financial flexibility to pursue our growth strategy and

create shareholder value over the long-term. Wissam, over to you.

Wissam Jabra:

Thanks, Jalal. Good morning, everyone. First, let's take a closer look at revenue performance on slide eight.

Q4 2018 revenue of 431 million dollars was down seven percent year-on-year, and within the October guidance range. Excluding the contribution from Silego, year-on-year revenue for the group in Q4 2018 was 11 percent below the previous year, mainly due to the revenue decline in mobile systems. Our key growth products outside of mobile systems performed well during the quarter. Bluetooth low energy, audio, CMIC, rapid charge, and backlighting all grew year-on-year.

For the full year, revenue for the group was up seven percent year-on-year. While mobile systems was one percent below 2017, the combined revenue from AMS, connectivity, and automotive and industrial grew 36 percent year-on-year due to the contribution of Silego Technology, coupled with a strong performance of our growing products. This growth was generated by: the increasing market adoption of standard technologies such as Bluetooth low energy for consumer IoT products, the growing consumer demand for a better audio experience requiring more complex audio solutions, and the need for more efficient rapid charge technologies. As Jalal just pointed out, in 2018, revenue from CMIC's was up 24 percent year-on-year compared to 2017 revenue of 84.3 million dollars. This was ahead of the 15 percent we anticipated when we announced the acquisition in November 2017.

On the next slide, I would like to give you some additional color on our revenue performance in 2018. On slide nine, you can see the full year revenue broken down in the same way we showed it at the Capital Market Day in November. Three points I would like to highlight. First, revenue for each of the components is broadly in line with our original estimates. Second, if you look at the blue section of the chart, revenue from our largest customer, excluding main PMIC products, was up 75 percent year-on-year. And third, the combined revenue from AMS, connectivity, and automotive and industrial was up 36 percent year-on-year.

Moving on to slide 10, Q4 2018 underlying gross margin was 48.7 percent, up 10 basis points sequentially, and up 160 basis points year-on-year. This was mostly due to favorable product mix and lower costs. This led to an underlying gross margin of 48.3 percent for the full year 2018, 40 basis points above 2017, also the result of a favorable product mix and lower costs.

Let's now turn to slide 11 to cover operating expenses. Q4 2018 underlying operating expenses were 106.4 million dollars, down four percent from Q4 2017. This decrease was the result of lower G&A expenses. As a percentage of revenue, underlying opex in the quarter was up 90 basis points year-on-year. Underlying R&D expenses in Q4 2018 were slightly below Q4 2017. As a percentage of revenue, underlying R&D expenses were up 110 basis points.

-- year-on-year at 17.5 percent due to lower revenue in Q4 '18. We continue to invest in R&D programs that support new areas of revenue growth. Underlying SG&A expenses decreased by 9 percent over the same quarter last year to \$31.2 million. This decrease was mainly due to low-performance-based bonuses. As a percentage of revenue, SG&A was 20 basis points below Q4 2017 at 7.2 percent.

For the full year 2018, underlying operating expenses were up due to the consolidation of Silego into the group. Excluding this, underlying operating expenses decreased 3 percent year-on-year. As a percentage of revenue, operating expenses were broadly in line with 2017.

Moving onto slide 12 to run through profitability. In Q4 2018, underlying operating margin was up 70 basis points to 24 percent, while underlying operating profit was down 4 percent year-on-year mainly driven by the lower year-on-year revenue. For the full year 2018, underlying operating profit was up 9 percent, 2 percentage points faster than revenue growth, and operating margin was up 30 basis points to 19.5 percent. If you look at the chart showing the breakdown by business segment, in 2018 underlying operating margin for mobile systems and automotive and industrial remained strong, although slightly below 2017 at 24.2 percent and 35.9 percent, respectively.

Underlying operating profit in connectivity increased 19 percent to 17 million, and underlying operating margin improved 90 basis points to 11.4 percent. Advanced mixed signal benefited from the strong performance of the CMIC business in the first-year post-acquisition reaching an underlying profit of \$30.5 million dollars and an underlying operating margin of 13.3 percent. Lastly, corporate activities decreased 42 year-on-year to \$26.4 million.

I'd like to bring up three points for the full year 2018. First, all our operating segments were profitable on IFRS basis. Second, for the first time all of four operating segments delivered double-digit underlying operating margin, and third, the combined underlying operating profit of advanced mixed-signal, connectivity and automotive, industrial reached \$59.2 million up 80 percent year-on-year. The combined underlying operating margin of these business segments was 14.4 percent, up 350 basis points over 2017. The underlying effective tax rate in 2018 was approximately 21.8 percent including a \$2.8 million charge relating to prior year items. Excluding this charge, the underlying effective tax rate was 20.8 percent in line with our internal expectations. Underlying diluted EPS for the quarter was 21 percent below Q4 2017 to \$1.06 due to the higher tax expense in Q4 '18. For the full year '18 underlying diluted EPS was broadly in line with a 2017 at \$2.90.

From earnings let's now turn to slide 13 to take a closer look at inventory and cash. Compared to Q4 2017 inventory value was 11 percent lower and days of inventory flat at 61 days. Compared to the previous quarter inventory value was slightly up, and days of inventory decreased by three days. During Q1 2019, we expect inventory value and days of inventory to increase from Q4 2018. At the end of Q4 2018, our cash and cash equivalents balance was \$678 million. Cash flow from operating actives during the fourth quarter was approximately \$97 million which decreased year-on-year mainly as a result of working capital movements. Free cash flow for Q4 '18 was \$82 million which was below the \$111 million achieved in Q4 '17. For the full year 2018, free cash flow increased by 12 percent year-on-year to \$230 million. Free cash flow margin was 15.9 percent 70 basis points above the full year 2017. The share buyback program that started in early November is still running, and the appointed bank continues to buy the shares. To date we haven't made any intermediate settlements.

In summary, during the full year 2018 we have delivered another set of solid results with revenue growth, margin improvement and strong free cash flow generation while investing in growing the business. Our key growth businesses performed well, and all our four business segments

achieved double-digit underlying operating margin.

Before we open the call to questions, I would like to talk about the Q1 outlook. We expect Q1 2019 revenue to be in the range of \$270 to \$310 million reflecting a slightly softer than typical seasonal trend, and a gross margin to be broadly in line with FY 2018.

For the full year 2019, there are three points to highlight. Revenue for the group is expected to decline from FY 2018 by single-digit percentage points. As previously communicated, revenue from main PMIC for our largest customer will decline over the next few years, and we anticipate the combined revenue of our remaining businesses to show strong year-on-year growth. As in previous years, we expect revenue to be second-half weighted, and finally gross margin for the group to be broadly in line with full year 2018. With that I will now ask the operator to open the calls for questions. Holly, over to you, please.

Female Speaker:

Thank you. As a reminder, ladies and gentlemen, to ask any questions, please press star followed by one on your telephone key pad now. Our first question today comes to the line of Mitch Steves of RBC. Mitch, the line [inaudible].

Mitch Steves:

Thank you very much for taking my question. So I actually wanted to focus on the bluetooth and rapid charging segment. You guys used to talk about that being a pretty material growth driver, so maybe you guys can provide an update first on the growth rate there and, secondly, how that would impact the gross margin lines on for it.

Jalal Bagherli:

So, hi. Good morning. So, Mitch, on the bluetooth low energy we had a very good growth year. This is the fourth year in a row where we are growing double digits, and the -- I believe the -- grew 21 percent for the year, so we're very happy with the rate that is growing and taking share in the new and equipments that IOT brings, so historically in the last three, four years we've been strong in things like proximity tags and fitness trackers. That continues, but we've added a number of new areas where bluetooth low energy is utilized and be going into production with things like accessories for tablets like pens. We are wearing those with the big brand name. That's shipping in volume.

We are in a number of electronic cards in China. We have a number of designs into automotive, tire pressure monitor sensors, but, you know, the area we really focused on in terms of going forward is not generating revenue today, but we started to engage with customers is the connected medical, connected health, and we have a number of engagements with top pharmaceutical companies to utilize a new device that will develop for this area, and this will be very, very low-cost, low-power device that helps with personal medical potentially disposable devices, insulin pumps, things for delivering drugs for diabetes, et cetera, and this is an area where we're working with a number of customers, as I mentioned. I expect the first of which will Start production in the second half of 2020, because it's a pharmaceutical drug — it did to take some time to go into production, but they last a long time at very high volumes, we expect. So that's one big area that we are focused. Automotive is another one. We mentioned the areas in terms of keyless entry as well as the tire pressure monitors. And of course we have continued expansion in things like smart home type application as well, with Bluetooth.

On the rapid charge, we maintain a very large market share. We are up in terms of high tenths of a percentage in 2018 but, you know, our market share is hovering in the 60 percent plus for rapid charge segment of the travel adapters. We are transitioning from not only managing the various protocols for rapid charge which different mobile companies use, more and more towards the USBPD in 2019. So we have the first users of that already in Japan. All of the Japanese operators are already using our USB-PD for travel adapters, and we see that happening next in Korea and China customers. So very pleased with both of those.

I think another area which is related to this, which you didn't mention but I'd like to highlight, is the backlight display drivers, which is where we started from a very small base, but we have some very, very unique technology. We acquired some portfolio also from AMS, and we now have a number one market position in this area. This allows very fine control over backlight of large screens so you can have a very good dynamic range for regions of the screen to make vivid pictures despite the ambient light, et cetera, and this is used for 4K T.V., HDTV, large screens, but coming down to mid-size T.V.s, and we are pretty much across all the major worldwide T.V. manufacturers with this. But this technology is very promising to take us also into micro-LED type products of the future, and that could then apply to things like notebooks and tablets and ultimately phones as well. So these are areas where I would highlight as very high-growth for us going forward.

Mitch Steves, RBC:

Thank you. And then just one follow-up in terms of 2020. There's a pretty wide range in terms of the revenue aspects that are out there for the street. So if I were to look at the consensus 2020 numbers for revenue, is that essentially, I guess, in line or, I guess, in the ballpark of expectations for you guys? I just want to make sure that the out year revenue numbers roughly model what you think it'll be.

Jalal Bagherli:

I mean, we would be really happy to be able to predict 2019. 2020 is a little bit out, and these are, you know, consumer trends. If you really mean 2020 as opposed to 2019, I don't think I can go out to 2020 today. You know, what I've said are products which have legs over a number of years in terms of growth. So both Bluetooth, both high-end -- sorry, high-speed charging, backlight drivers, these are brand new technologies that last a number of years and continue to grow and take market share. In addition, we have Silego products which are growing. Last year they grew 24 percent, and they continue to deliver high growth, and there's a big market yet to be captured. So we have a lot of engines of growth which I have no doubt in 2020 will also have an impact, but I can't give you a number projection for 2020 today.

7	K	1	α		1	
IN.	/1 つ	ı I 👝	\n	22	ker	٠
1 V	10		171	$-\alpha$	$\kappa \omega$	

Got it.

Female Speaker:

Our next question today comes from the line of Andrew Gardiner of Barclays. Andrew, your line is now open.

Andrew Gardiner:

Good morning, guys. Thanks for taking the question. Perhaps just to follow up on that last one in terms of some of the growth drivers. Jalal, you highlighted the growth of Silego being materially ahead of what you guys had anticipated at the time of acquisition. What -- can you sort of speak a bit more about what you would attribute that positive surprise to? Is it sort of the end market in general? Has the integration gone smoother? Are you synergies? Just a bit more detail around CMIC portfolio would be helpful as well.

Jalal Bagherli:

Okay. Thank you, Andrew, and good morning to you, too. I think the Silego products is kind of a new departure for us in a sense because it is, you know, programmable and is more of a -- it can be more of a mass market type product in addition to the work we do with the tier one customers directly. You know, relative to other products it's much easier to put to the field through distribution and the remnants work. So there are some areas where it's kind of new for us and unexpected in terms of, you know, estimating the percentage of growth. But as a baseline though, as the product, because it can go on any electronic PCB board, basically for any equipment, and soak up analog, digital, discrete into a nice little package at a comparable comparative cost, it has a lot of applications. But I think probably what we underestimated is ease of use and the stickiness of the software. When you provide the software to designers, they continue to design new chips with it, because it is relatively simple to use. It's very fast. The complexity of the device is not very high, so the turnaround of design is also fast, and it helps.

And I think what we indicated originally in terms of growth was 15 percent, which was very respectable growth based on historical trends of the business as a standalone business, because we weren't sure how it would pan out or to what speed we could integrate the product and promote it as part of Dialog. But I think the integration has gone very well, but I think the scale of the Dialog operation in terms of having access, for example, a lot more in Asia helped a lot and in Europe helps a lot. So all of those have contributed towards growth. But you know, really the product is unique in the sense of there is no competition apart from discrete, single, individual devices. And if you need some space, and if you need some repeatability and ease of use for a designer and a last-minute change, I don't think Silego has a competitor. So it's a good device, and it was introduced at the right part.

I think the other thing is we've taken it more into the consumer market, into more phones and consumer headsets and things that maybe it wasn't in the original portfolio so much, and that also has a higher gross rate in comparison to their steady state, to the standalone companies. So I think all of those have helped, but I think that the other thing I would highlight is we still got a lot of the world that don't know anything about Silego, so we're holding a lot of seminars around the world. As I explained, we had seminars in Europe in February, which was very successful. For the first time we had these seminars. Before that, you know, in the earlier part of last year, we did seminars in Asia. So in new year we've done that in Europe and as we speak we just finished a number of seminars in the U.S., actually, across San Diego, San Francisco, and San Jose. So it's good attendance, a lot of interest, and I think a lot of uncharted waters in the sense of people not knowing about this product. As they get introduced there's a lot of enthusiasm. So I expect this type of growth, maybe not 24 percent this year, but certainly it will be a strong double-digit growth that's [unintelligible].

Andrew Gardiner:

Okay. Sounds good. Also, just a quick one for you, Wissam, if I could. You've continued to deliver strongly than anticipated gross margins really over the last couple of years. Now, you mentioned in '18 clearly the business mix improved a little bit. You know, Apple was slightly less within the mix it seems. But you're guiding flat at this high level again. As the custom work with Apple declines within the mix, and why wouldn't you continue to have that sort of tailwind in terms of favorable mix and for gross margins to continue to expand gradually?

Jalal Bagherli:

I think that's a good question. I mean, you know, Wissam you may want to cover that, but also the top line there's a difference, right, Andrew? Last year we grew 7 percent despite the decoupling partially. So this year we're saying, you know, there would be a single-digit decline. So there's that pressure. But please comment.

On the actual gross margin improvements, Wissam.

Wissam Jabre:

Yeah, absolutely. Thanks, Andrew. So the improvement, as you noted, are primarily based on a couple of things, the product mix and the manufacturing cost. As you very well know and as we've indicated in the past, we have several initiatives every year to continue to optimize the cost, improve more yields, lower test times, and so on and so forth. And so those were not stopped. We'll continue to do new initiatives as they come and as new products come on

production. But, you know, as we guide, we typically look at a balanced view of what we know at the time we're guiding, and so this is what the guidance is based on. It's based on the information we have now, but that doesn't mean that we're not in the background continuing to work hard at improving the cost structure. We were, as Jalal mentioned, helped a little bit last year also with the increased revenue and the mix, the positive mix. This year we do have a bit of headwind on the revenue side, and so that has to be factored in also within what we guide our margin.

Andrew Gardiner:

Understood. Thanks, guys.

Female Speaker:

Our next question today comes from the line of Stefane Houri [spelled phonetically] of Oddo BHF. Stefane, please go ahead.

Stefane Houri:

Yes, hello. A few questions on my side if I may. The first one would be about your guidance for 2019. Basically, you're guiding for single-digit decline, which is pretty wide. So what are the difference in I/O and the assumptions that you may make on the guidance that will be minus nine or a guidance that will be minus two? That's the first question. And the second question is, when you look at your slide nine, it seems that some of the growth you're expecting going forward is based on M&A, or new products. So, and you have a lot of cash at this moment. So can you help us understanding if you think it would be more with M&A or with new products? Thank you.

Jalal Bagherli:

Okay. So on the guidance, I think, you know, the issue probably to consider is the current environment as well, the trends in 2019. Given the softness we've seen in the last few months in the China mobile market, we don't know how long that lasts. I think, you know, hopefully this will recover. So we have to be mindful, and it, you know, that could be sort of one the variables. The other variable is, although we are decoupling sort of over time from the p-mix in the Apple products specifically, their volume gyration has an impact. So it's, you know, those are the things that, you know, give us, if you like, room for thinking about the range between, as you call it, two to nine.

But, however, we have a number of growing businesses that counter those. It just is very hard to predict all of those, and those growing businesses are, you know, as I said, just explained in the previous answer, they're growing really well, and -- but, you know, it's hard to know the exact percentage of growth depending on the, you know, economy, generally economy, because these are all consumer-driven products. Depending on the U.S.-China thing goes, the sentiment is. So we've got to be cautious in terms of managing our OpEx, et cetera, and this is the range that we think is prudent to work with. And I think it is appropriate for the company through this, the transition of, you know, moving from our largest customers to a large extent and into REOT [spelled phonetically] and computing and other new areas for us, which are harder to estimate. So I think it's a balanced analysis that leads us to that thinking.

Stefane Houri:
Okay. And about the long-term plan and the confusion -
Jalal Bagherli:
Yeah, the long-term plan -
Stefane Houri:

Jalal Bagherli:

Of the new product?

Yeah, I think, you know, given that we've projected that as a revenue for 2022, I don't think there would be a lot of products that would generate that size of revenue, you know, by the time we create them, market them, and the customer qualifies them and goes to production. So most of that, if you like, the top of that column on the slide nine has always meant to be and still continues to be representing our M&A activities. There will be some new products that will kick in there, but majority of that would come from external acquisition.

Female Speaker:

Our next question today comes from the line of Achal Sultania of Credit Suisse. Achal, please go ahead.

Achal Sultania:

Hi, good morning. Two questions. First is on the advanced mixing. The margins in that business has obviously seen a significant improvement this year. It used to be 4, 5 percent, and now it's almost 13 percent. I'm just trying to understand, is it all driven by the Silego acquisition, or we're also seeing some level of underlying improvement in the old power conversion business? And then secondly, like if I look at the customer engagement that you have with your largest customer, obviously you had the main p-mix and the sub p-mix business last year. How should we think about the level of engagement for this year and next year? Obviously, the main p-mix goes away, but how should we think about the resub [spelled phonetically] p-mix part or the companion charge of this business part for the next couple of years? Any further on that would be helpful. Thanks.

Jalal Bagherli:

Okay. Do you want to take the first piece?

Wissam Jabre:

Yeah, let me comment on the --

Jalal Bagherli:

Possibility of the AMS highly driven. Yeah.

Wissam Jabre:

And so, Achal, while the big chunk of the improvement came from the CMIC side, we also saw improvement and margins on the power conversion side. So both sides of the business have performed better in 2018 when compared to 2017. But yeah, the larger impact came from the CMIC side.

Achal Sultania:

Just on that point, is it fair to assume that, like the CMIC business is doing like 20 percent plus EBIT margins right now? Would that be a fair assumption?

Wissam Jabre:

Well, I probably don't want to give a quantitative number. What I would say is it's performing better that we anticipated on profitability and better than what we indicated when we first consolidated the business. There's also one factor to be noted on the power conversion side. With the addition of backlighting, that also is a good product that helps us improve both gross margin and obviously by that operating margin as well. So there are a few dynamics in the AMS business that are at work to improve margins.

Achal Sultania:

Okay, thanks.

Jalal Bagherli:

Okay, I'm going to take your second question, which was customer engagement with our largest customer. So I think the level of engagement remains high. We have still a number of things working on their projects, and we get constant flow of new opportunities to bid for. We win some. We lose some, like any other customer, because these are, you know, not, you know, if they are sub p-mix, we have a very high win rate. If it's other areas, we have to compete with other incumbents, but the positive thing is we're getting access to opportunities in charging, in display, and also in audio subsystems, which we did not have access to before. It was purely p-mix. So it's much more diverse in that sense, and -- but, you know, we have to deliver competitive solutions to win, and in terms of time, scale, quality, and the pricing. So the relationship is very positive. We have underpinned that, and we have very good levels of engagement for the next, I think -- we have new products that are going to production this year and the next year already which we've completed, and we're working on products for beyond that. So there's a number of products, actually, for 2020 and 2021 that we are engaged with working on. So it really hasn't been a major change since what we explained at the capital market in terms of relationship. It remains the same.

Achal Sultania:

Okay. Thank you. Thanks a lot.

Jalal Bagherli:

You're welcome.

Female Speaker:

Our next question today comes from the line of Adithya Metuku of Bank of America Merrill Lynch.

Female Speaker:

[unintelligible], please go ahead.

Adithya Metuku:

Good morning, guys. Two questions. Firstly, just on -- I just want to get a better understanding of what you're assuming in terms of iPhone and iPad units or units going to your largest customer in 2019 when you guide for single-digit declines. And secondly, I just wondered if you could comment a bit on the Energous partnership. You know, there were recently some articles around Vivo using them potentially in some upcoming products. So, any color there, and any color on how you expect revenues to ramp from this partnership would be very helpful. Thank you.

Jalal Bagherli:

All right. Good morning. So, beyond the -- I don't think I can comment on the units of iPhone and iPad. It's -- you know it's forward-looking stuff. We never do, we never will. Nobody else does, including people who sell those [laughs]. So, what I plan to do is what we explained the deal does, which is our PMICs, which are, you know, going to those products. As we said, we have two out of three of the phone platforms in September '19 for the first time. Before, it was always all platforms, but the last September -- sorry, September '18.

Last September, we got reduced to two out of three, and because of the deal that we announced in November, going forward, any new designs of phones, any new phones that come out in 2019 and beyond, will not have new Dialog PMICs inside. Right? Because they design their own. However, we also said that there would be sub-PMICs. So, going forward, those phones will no longer carry PMICs, but the old phones continue to sell and ship and of course we ship our PMICs. But over time, that decoupling with phones will take place in terms of the amount of revenue we're reliant on. It gets less and less.

In '19 -- I think by September '19, that will be a lot of PMICs which will be a lot less and -- but the sub-PMICs -- you know the ASPs are a lot than PMICs. The effect is -- you know, continues to be a declining revenue in terms of phones. Tab [spelled phonetically] units are strong, as, I think, as an end [spelled phonetically] equipment in the new tabs are popular. We are in those, and we'll see what 2019 brings. There are potential refresh cycles in '19 that we will be party to should they happen, and I think over time, however, we see again that anything with the main PMICs, because of the deal we announced, will be going inside.

So, over a period of time -- this is why the chart we have on page nine, which we showed on capital market day -- and this is an update with the 2018 figures in it -- shows a decline between 2017/2018 to 2022, and there's an orange section, which the main PMICs, which are going to zero by 2022. So, over a number of years, you get Apple phones, pads, watches, et cetera, down to zero for the main PMICs. So, we are on that trajectory that we discussed.

On the other side, the same chart shows a blue piece, which is the other products, like sub-PMICs, like ODO chargers, others that we expect to grow over time and become a significant portion by itself by 2022. So, that's all I think I can comment on. On the Energous --

Adithya Metuku:

[unintelligible] just on the Energous partnership?

Jalal Bagherli:

Yeah, the Energous partnership -- you know, we provide the -- if you like, the -- how do I -- I guess we provide the product manufacturing and marketing part of that partnership. They do the front-end system design, the technology, the engagement with the customer in terms of getting into new areas. It's progressing -- you know, in our mind, from an engagement point of view, it's progressing really well.

So, there's a number of good consumer brands that we are jointly approaching, because, you know, we have good relationships, and we have positioned the Energous products -- it's a complex product, because, you know, it's not something you decide to use and then just buy the chips, and it will work. It has to be designed into a system, in a broader sense, including antennas, you know, getting approval from regulatory authorities of many countries.

So, it's not the -- it's not a simple solution in that sense, but it's a very elegant solution relative to all the other charging -- wireless charging solutions that exist out there, and they have their own issues. So, I think that the solution is comparative, it's very elegant, and it solves real consumer application. So, I'm aware of three, four large engagements that are ongoing. Vivo that you mentioned is one, and, you know, they've been working Vivo for some time, and Vivo is planning to use that capability in a phone, and that's what they're jointly working on.

And should that progress, clearly, we will be supplying the chips, because the chips come from Dialog at the end in terms of shipment to the end customer. And as I said, there are probably three large sort of companies like that in engagement and many others in the pipeline, but I think -- I recommend if you have interest in that to listen to the, you know, earnings results, because I can't expand on another company's, you know, prospects of revenue as a public company. So, that's as much as I can say.

I don't -- you know, we have not planned beyond what we've said before, which is, you know, for 2019. It would be some amount of, if you like, low-volume shipment to innovative customers, first-time users, et cetera, who are trying things. We don't expect large volume in 2019. In fact, we have shipped already some units, but we're talking thousands. They're not millions. If the Vivo or any of the large consumer names indeed go forward, I would expect that to be in 2020, and it would be in the millions of units. So, hopefully that gives you some indication.

Adithya Metuku:

Thank you. Very clear.

Female Speaker:

Our next question today comes from the line of Sébastien Sztabowicz of Kepler Cheuvreux.

Please go ahead, Sébastien.

Sébastien Sztabowicz:

Yeah, hello. Thanks for taking my questions. Could you provide a little bit of color on your OPEX project for 2019? And also, could you make an update on the partnership you have with [unintelligible] on PMIC and how you appear [spelled phonetically] with the results from the partnership so far? Thank you.

Wissam Jabre:

Okay, Sébastien. This is Wissam. Let me start maybe by some comments on OPEX for 2019. I mean, I wouldn't necessarily want to guide the OPEX or make very detailed comment on our budget, but what I will say is, as we've indicated in the past, the -- probably the key driver for OPEX in 2019 will be the timing of the completion of our agreement with -- the deal with our largest customer, because that will drive and annualize the approximately \$35 million of OPEX decline.

So, the way to think of it is we could anticipate after the deal closes to see around \$9 million of reduction in our OPEX on a quarterly basis going forward. Having said that, obviously we continue to manage our operating expenses very tightly, as you probably have seen some good management even in [unintelligible] Q4 '18 and the full year '18, and so that's the extent of [unintelligible] what I could say on the OPEX at this time.

Jalal Bagherli:

Okay, on the second question, we're a little bit unsure whether you meant MediaTek, because we haven't had a partnership from -- with MediaTek for a good three, four years.

Sébastien Sztabowicz:

Sorry, it was the transferees [spelled phonetically] for Spectrum [spelled phonetically].

Jalal Bagherli:

Okay, so I thought that might be the case, the Spectrum [laughs].

Sébastien Sztabowicz:

[laughs] [unintelligible].

Jalal Bagherli:

So -- yeah, so we completed chips for them a year or so ago, and they've been designing it into their platforms, 4G platforms, and promoting it. So, we have some shipments in Q4 for one of the parts, and I think we did make an external announcement on an Indian operator, Indian phones, that uses our products alongside their platform. So, that was the announcement we made. I think, you know, in line with the other guys in China, they're probably not in the, you know, strongest position right now in terms of mobile markets.

So, I think we will have more shipments this year, but, you know, I don't expect it to be a major contributor. And we, you know, post the chips that we've designed; we haven't continued that partnership, so we have not created any more chips probably close to over a year now, and we don't expect to, because our resources are now focused on other things. But I think the chips we have designed have life, have legs, and they will generate some revenue over the next two years

in 2019 and 2020 because they go on two or three 4G platforms that they're promoting. They tend to be smaller players who used those platforms, in Southeast Asia and India.

And as I said, we have one Indian operator -- I think Miramax [spelled phonetically] Phones -- that was using it and -- sorry, Micromax -- and there will be others to come, but we don't expect a big material, you know, impact on our results.

Sébastien Sztabowicz:

Okay, thank you.

Female Speaker:

Our next question today comes the line of Robert Sanders at Deutsche Bank. Robert, please go ahead.

Robert Sanders:

Yeah, good morning. I just wanted to come back to the new business with Apple. At the time of the carveout, you said that you'd been awarded a broad range of new contracts for power management, audio, and charging, and today you sounded like you were saying it was a bit more of a competitive situation against, presumably, TI, Sirius, and AMS. So, I'm a bit confused about how much of your growth at the [unintelligible] -- at your largest customer is actually kind of locked in, and how much is kind of TBD, so I'd love to get some color on that.

The second thing is on the number of sub-PMICs we should expect to see in platforms at your largest customer, and could we see that increase in 2020 when we see rear-facing [spelled phonetically] 3D sensing? And then the third thing is -- actually, is just on these products you've developing. Are they more kind of merchant solutions, so -- or do they [unintelligible] IT? I guess I'm thinking here, do you have the option to sell the sub-PMIC or charging ICs, for example, to other Tier 1 [spelled phonetically] OEMs? Thank you.

Jalal Bagherli:

Hi, Robert. So, I think -- I don't think I want it to sound differently, just that I think you need to think about the designs with any clients in this market. Nobody has a lock-in for four years or five years on anything, right? So, what we said was, at the time of the carveout, we had a number of contracts awarded to us, and that is the case, and this is what I said earlier. We are finishing off some 2019/2020 products, so those are the ones that are awarded, but it's a continuous thing.

So, when you come to the next season of awards for other products, you have to bid, and if it is sub-PMIC, we have a strong position because that's where we've been in common, we have all the technologies, and we can create derivatives [spelled phonetically] fast. If there are new areas for us, like ODO, display, or charging, clearly there are comparatives who have been incumbent, and we have to fight to get those. It's just normal business, and I think that continues.

But the positive is we never had access to these; now we do have, and because of that visibility, we can create IP ahead [spelled phonetically] to position ourselves in a competitive situation. So, I think it's consistent with what we said at the time of carveout. Could they increase in 2020? Absolutely. I think, you know, we have confidence in terms of the number of sub-PMICs increasing in phones, tablets, and Macs [spelled phonetically]; in some cases, number of parts; in

other cases, increasing content of the parts that we have.

So, one way or the other, we see increase, and that's reflected in those blue projections that are in slide nine of the capital market day. That's where we see the sub-PMIC growth from proliferation of the numbers, as well as content in terms of the new areas that I mentioned. So, those are the two out of the three questions. The third question was -- you were asking whether these are merchant solutions or custom. Everything we do for this customer for power, audio, et cetera, is custom-designed, so by themselves they -- we don't sell those to anybody else.

The underlying libraries and technologies clearly get used in a number of products for everybody, so other customers can also use them, but there isn't -- we don't -- you know, we don't sell standard parts in terms of PMICs and mixed-signal products that I mentioned to our largest customer.

Robert Sanders:

Got it.

Jalal Bagherli:

Okay.

Female Speaker:

We currently have no further questions registered on the phone lines, so I'd like to hand back to the speakers for any further remarks today.

Jose Cano:

Thank you so much. Just a reminder, everyone, that if you guys have any other questions, just to contact the FTI [spelled phonetically] team or me, and we'll help you with anything. Apart from that, thank you very much for joining today.

Male Speaker:

Thank you all.

Jalal Bagherli:

[unintelligible].

Female Speaker:

Ladies and gentlemen, that does conclude today's call. Thank you very much for joining and enjoy the rest of your day.

[end of transcript]