Dialog-Semiconductor

Jose Cano:
Good morning, everyone. Thanks for joining us today. As usual, the call is being hosted by Dr. Jalal Bagherli our CEO and with Wissam Jabre our CFO.

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 in 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.

Jalal Bagherli:
Thank you, Jose. Good morning to everyone on the call.

We've delivered another excellent quarter of its record Q3 revenue alongside increased operating profit and strong cash flow generation. In line with our capital allocation framework, we continue to invest in growing the business both organically and inorganically and return cash to shareholders through our share buyback program. On the next few slides, I'd like to run through some of the investments in new opportunities and revenue growth. We have made. But before that, let me briefly remind you of our strategic approach. On Slide 4.

Our growth strategy and strong financial performance is the result of our focus on fast growing segments of our target end markets, coupled with operational excellence. With over 30 years of mixed signal expertise and world class power efficient IP, we are gradually expanding Dialog's product portfolio to meet a range of exciting new opportunities, building on our strong heritage in IOT and mobile, and leveraging our technology leadership in growing segments of automotive computing and storage market.

We are expanding our product portfolio and solidifying our position in key markets through a combination of organic investments and M&A. Our advantage of opportunities in a consolidating industry that enhance -- I'm sorry -- our strong balance sheet and cash flow generation allows us to take advantage of opportunities in a consolidating industry that enhance our competitive positioning in our target market. On Slide 5, let's cover two examples of investment in new product development. In IoT, we continue to increase our footprint with our Bluetooth low energy products, which delivered 51 percent year on year revenue growth in Q3. Consumer appetite for a growing range of connected devices remain healthy. We see a number of exciting opportunities to leverage are expanding product portfolio over the long term. Our latest product development in this area is SmartBond TINY which aims to connect the next billion IoT devices while lowering the cost of adding Bluetooth low energy functionality-based system without compromising performance.

Our Bluetooth offering has two distinctive categories built on our low powered credentials and the requirements of a wide range of customers and application, one category which offers scalable processing, expandable memory, high levels of security, and a rich set of peripherals. And a second category, which combines low power with the smallest footprint and the lowest system costs. SmartBond TINY fits into this second category.

We'll also see promising opportunities in the automotive sector. To address the increasing requirement in this market, we launched our first automotive grade, configurable, mixed signal ICI. This product provides large project, cause an accelerated time to market and brings flexibility and low latency to automotive electronics design. This automotive grade, CMIC joins our existing automotive product portfolio, addressing customer requirements, intelligent and vehicle infotainment, and advanced driver assistance systems. This new device is part of our strategic objective of bringing Dialog's low power IP into the CMIC, increasing his use cases and valued being our customer. This product is kind of being evaluated by several other customers and will contribute to the expansion of our customer base and strengthen our presence in IoT mobile computing and automotive.

In addition to organic investment in new product development, we are also investing in inorganic growth opportunities. In October, we acquired Creative Chips, expanding our product portfolio into the fast growing industrial IoT market. Let me take you through the key points of this acquisition on Slide 6. Creative Chips is a fabless mixed signal custom I see company focus on the European industrial and automotive market. The deal provides dialog with a broad product portfolio of industrial Ethernet for the industrial IoT and automotive market, a talented team of 65 engineers, and an impressive Tier 1 industrial customer base that has been built over 20 years.

Both Dialog and Creative Chips share knowledge and expertise in the design of mixed signal IT. And we are excited to welcome all Creative Chips employees to Dialog. The industrial IoT market is growing, and we expect this business to contribute to our growth strategy over the coming years. The transaction was closed on the 31st of October for a concentration of approximately $80 million, an additional contingent payment based on targets for 2020 and 2021 of approximately $23 million.

Let me cover a few additional points about Creative Chips customer base and technology on Slide 7. This acquisition gives us an entry point into this growing segment of IoT, adding an extensive IP library of products, which efficiently connects a large number of industrial IoT sensors to industrial networks. Additionally, Creative Chips has been working on an emerging line of IO Link standard products, which will be leveraged with Dialog's global sales, and distribution network, accelerate uptake of these solutions.

As you can see on this slide, its customer base is made up of Tier 1 names in the industrial German ecosystem. This group of customers would bring additional opportunities for Dialog products such as Bluetooth low energy and CMIC. Before handing over to Wissam, let me summarize on Slide 8 why we remain well positioned to create shareholder value.

The success of Dialog starts with a core set of capabilities grounded, in deep mixed that expertise and power efficient technologies, which has become increasingly important in today's connected world. We are building on that strong foundation while sharpening our focus on fast growing segments of IoT, mobile, automotive, and computing and storage. The closed agreement with Apple positions Dialog for robust earnings and strong cash generation with visibility to 2022 as we continue to build new design engagements with our largest customer. And lastly, we're investing in the pursuit of our growth strategy while returning cash to shareholders. We have delivered a strong set of results and we are busy working on opportunities to further expand the business, which would generate revenue over the next three years. All of which gives me confidence that Dialog is well-positioned to create shareholder value over the long term.

Wissam, over to you, please.

Wissam Jabre:
Thanks, Jalal. Good morning, everyone. Let me take you through the key items of our financial performance on Slide 10. We will go into more detail shortly, but there are a few points I would like to make here. First, you see 2019 underlying revenue of $409 million was slightly above the high end of our July guidance range and up 7 percent year on year.

Second, our underlying gross margin was in line with our July guidance at 49.5 percent. Third, we delivered underlying operating profit of $103.8 million and underlying operating margin of 25.4 percent up 360 basis points from Q3 2018. And lastly, we generated strong free cash flow of $87 million during the quarter, up 10 percent year on year while continuing to invest in our business. Free cash flow margin was 60 basis points above Q3 2018. On the next slide, I would like to give you some additional color on our revenue performance during the quarter.

On the right-hand side, you can see the breakdown of the third quarter revenue. I'd like to highlight a few key points. First, if you look at the blue section of the chart, Q3 revenue from our largest customer, excluding main PMIC products doubled year on year. Design momentum continues in this part of the business, and we are expecting revenue from new contracts to begin over the course of the next three years. And second, our key growth products outside of our largest customer, continue to perform well and are attracting increasing interest from customers. The combined revenue from advanced mixed signal, connectivity and audio, excluding FCI, and the automotive products reported under custom mixed signal was up 8 percent year on year. And third, at the top of the 2018 bar, you can see the contribution from FCI and the license revenue. The star performer in the quarter was connectivity and audio, which was up 27 percent year on year due to improved demand for Bluetooth low energy products as a result of new product launches in fitness trackers and smart watches; the revenue contribution from the acquisition of FCI; and for a fourth consecutive quarter, strong revenue performance from new audio products targeting premium consumer headsets.

Advanced mixed signal was up 6 percent year on year, driven by growth in all three product categories, AC/DC charging products, LED drivers, and Configurable Mixed-Signal ICs. The main drivers of the strong group performance in the quarter compared to the midpoint of guidance range were the increasing volumes and content in several platforms our largest customer as well as the strong performance in connectivity and audio.
On a year to date basis, underlying revenue for the group was up 3 percent year on year $1,040 billion. We are delivering on our plan to expand the business with our largest customer outside that technology included in the licensing agreement and remain confident in the prospects of our key growth vectors. Turning to Slide12 to gross margin.

In Q3 19, underlying gross margin was in line with guidance at 49.5 percent, up 90 basis points year on year. The license revenue contributed positively to our gross margin performance by approximately 80 basis points. On a year to date basis, underlying gross margin was up 150 basis points compared to the same period last year. Mainly driven by lower manufacturing costs and product mix and including contribution from license revenue of approximately 60 basis points. Let's now turn to Slide 13 to discuss operating expenses.

Q3 2019 underlying operating expenses were $103.7 million, down 1 percent from Q3 2018 due to the lower R&D expenses, partially offset by the first-time consolidation of FCI into the group. As a percentage of revenue, underlying operating expenses in the quarter were down 180 basis points year on year to 25.4 percent in Q3 2019. Underlying R&D expenses in the quarter decreased 4 percent year on year to $72.1 million. As a percentage of revenue, R&D was down 190 basis points to 17.6 percent. Underlying SG&A expenses were up 6 percent year on year to $31.6 million, mainly due to the first-time consolidation of FCI into the group. But as a percentage of revenue SG&A was in line with Q318 at 7.7 percent. On a year to date basis, operating expenses were down 2 percent year on year, to $305.4 million. This was the result of lower R&D expenses, partially offset by the first-time consolidation of FCI into the group. Turning to slide 14 to cover operating profit and earnings per share.

In Q3 2019 underlying operating profit and margin improved year on year. Underlying operating profit was up 24 percent and operating margin was up 360 basis points to 25.4 percent. The increase in operating profit reflected higher revenue, lower operating expenses, and approximately $5 million of income from engineering contracts.

At the bottom of the slide, you can see the breakdown by business segment. Underlying operating profit for connectivity and audio was broadly in line with Q3 2018 at $5.4 million. This result included the first-time consolidation of FCI into the group. During the quarter, we continued to invest in our advanced mixed signal business, resulting in a lower underlying operating profit year on year. Underlying operating profit for custom mixed signal increased significantly to $88.7 million and the underlying operating margin improved to 31.9 percent. The increased operating profit was mainly due to the slightly higher revenue and lower operating expenses. And lastly, corporate delivered $3.5 million profit compared to a $3 million loss in Q3 2018. In addition to the ongoing license revenue, corporate cost decreased 8 percent year on year to $2.8 million.

On a year to date basis, underlying operating profit was up 31 percent year on year to $233 million, and operating margins improved by 480 basis points to 22.4 percent. The underlying effective tax rate in Q319 was 20.5 percent, down 50 basis points on Q318. Underlying diluted EPS in Q3 2019 was $1 and 13 cents, 33 percent above the previous year and growing at on at almost five times faster than revenue. On a year to date basis, underlying diluted EPS was $2 and 46 cents, up 34 percent year on year. From earnings, let's now turn to Slide 15 to take a closer look at the inventory and cash.

Inventory level was 20 percent below the previous quarter at $125 million, representing a sequential 29 day decrease in our days of inventory. During Q4 2019, we expect inventory value to remain broadly in line with Q319 and days of inventory to be slightly above. Cash flow from operating activities during the third quarter was approximately $97 million, up 12 percent from Q3 2018. This was due to higher cash generated from operations partially offset by higher income tax paid. Free cash flow for Q3 2019 was $87 million, up 10 percent year on year, mostly due to the higher cash flow from operating activities.

At the end of the third quarter, our cash and cash equivalents balance was $1.2 billion, a 3 percent increase sequentially. During the quarter we bought back 800,000 shares for an amount of $37 million. And since quarter end on 31 October, we purchased an additional 865,000 shares for an amount of $41 million. So far under this tranche, we have purchased 1,665,000 shares. As a reminder, this draft is for an amount of €125 million to €150 million and will run until the 5th of December. In summary, during the third quarter, we delivered

another solid set of results with revenue up 7 percent year on year, increased gross margin and operating profit. Our cash position continues to improve while we invested in growth of the business and return cash to shareholders. Before we open the call to questions, I would like to talk about the Q4 outlook. We anticipate the good report May 19 with revenue in the range of 350 to $370 million. At the midpoint, this will result in full year 2019 IFRS revenue of $1 billion 556 million and underlying revenue of $1 billion 410 million. Full year 2019 underlying gross margin is expected to be broadly in line with that achieved in the first nine months of the year. With that, I'd like to open the line for questions. Please open the line for questions.

Female Speaker:
As a reminder, ladies and gentlemen, to ask any questions today, please press star one on your telephone keypad and if you're joined by the web, it's a small flag symbol. The first question today comes from Achal --

Wissam Jabre:
Sorry, Erica [spelled phonetically], I need to make a quick correction on the guidance. The range is 350 to 390 with the midpoint of the $370 million. So, the guidance range for revenue is 350 to $390 million with a midpoint of 370 million. Thank you.

Female Speaker:
First question today comes from Achal Sultania from Credit Suisse. Achal, your line is now open.

Achal Sultania:
Thank you. Good morning Jalal, good morning Wissam. Just one question on the on the on the supplement business. I guess, how should we think about the content, at your largest customer from current levels going into 2020 and 2021? You already talk about some RFQs that you were already working on. You're talking about the ramp of some new high-volume contracts from second half of 2021. Can you give us whatever color you can on what's happening with the sub pmic or audio content with your largest customer? And then second one on the automotive side of things, you have been winning some incremental -- or at least you've been cooperating with the Renesas, and Xilinx on advanced driving systems infotainment. How big you think this opportunity could be? Like, are we talking about like tens of millions of dollars or could this actually become, like, $100 million business over time? And when can we actually start to see the product launches for this part of the market? Thank you.

Jalal Bagherli:
Thank you and good morning. So, the I think on the first question is to do with sub-pmics, so we expect increasing content as we go forward. You know, we've been saying for some time that, you know, the number of sub PMICs will grow in the phones and that continue to happen. And as you saw this quarter, we delivered, you know, 100 percent growth over the same sub-pmic as measured a year ago. So, you can see the amount of content is increasing. It's not as across the board, you know, in addition to phones and other products. The contracts that I've indicated in the press release we want is not purely for sub pmics, as we indicated, beginning much wider opening now to things like chargers, display and audio. And we've been winning some of those. Those contracts will kick in from second half of 2021. But that's the that's the commentary there. But the regular sub-pmics that we work on, they continue in the current phones and that and the next year as the gadget plays the new sub-pmics. So, that that continues. But the new contracts, high volume contracts, are for in

addition to new sub-pmics, there're also say other mixed signal products, which are high volume for phones, and they go into production from second half of 2021.

On the second question, automotive the -- so, we have a broad segment approach to automotive in terms of a lot of different products being qualified to add to our portfolio. So, for example, we announced the CMIC recently qualified for automotive. We are working on some backlight display drivers that have the digital dashboard in cars. So, but your question is specifically on the PMIC which comes from our strengthening processor support using power management, but that that is actually going quite well. We have now over 45 engagement on PMICS and sub-pmics in the infotainment and ADAS system. A lot of these are in Japan and China. And some are actually already in production. So, we started to see revenue from that is going to be small because each infotainment system isn't that huge volume driver and it takes time to get the full volume. So, it certainly is an opportunity we think of in terms of tens of million by next year. And I think we will definitely be aiming to release new product to take us towards 100 million say four or five years out. It's not in the in the short term, but we're definitely on track. Especially as we release other products that I mentioned, like Bluetooth pmics and display drivers as well as cmics for the automotive, hopefully that answers your question.

Achal Sultania:
Thank you.

Female Speaker:
Next question today comes from Andrew Gardiner from Barclays. So, please go ahead, Andrew. Your line is now open.

Andrew Gardiner:
I think that might be me. Can you hear me?

Jalal Bagherli:
Good morning.

Andrew Gardiner:
Morning. So, I had another one on the sub-PMIC side, I suppose the -- everything related to Apple outside of the license agreement. The fact that that revenue grew 100 percent in the quarter, and you're also highlighting the strength of the designing activity, is that -- it feels from your commentary that that's going to be better than you'd anticipated in terms of win rates and outlook. So, I'm just wondering how we should be thinking of that into next year and beyond, given the 30 to 35 percent guidance you've given it without over the long term.

Jalal Bagherli:
Right. I think, you know, we do want to stick with the 30, 35 percent guidance and we just have to double our effort to grow everything else fast. We have -- we are doing better with the new contracts, as you indicated. They tend to -- you know, these are contracts that are starting to work on the chip. So, it be nine months to a year before the chip is out and it takes another year of qualification. So, this is why I've been very specific about the new revenue starting in second half of 2021, for the models that will been launched then. So -- but, you know, we've had other products under development which barely contribute to 2020. So, but yes, we are very pleased with the range of contracts awarded -- or designs I should say,

awarded to us. And they contain very high-volume business of phones. And as we get more clarity, we will share more. But right now, the -- you know, and also indicated in our press release that, you know, since beginning of the year, we are -- we have one equivalent of or something approaching a billion dollars' worth of custom chip contracts from all customers.

Obviously, a lot of it comes from our largest customer. But we wanted to cross also with other customers. That's separate from our IoT products, separate from our power conversion and the other standard products that we ship. So, we're very pleased with the amount of custom opportunities that's coming our way. And we still got another quarter to add to that billion.

Andrew Gardiner:
Great. If I could ask another one on gross margin perhaps for you, Wissam, you know, another area where you guys have been doing better than anticipated. If I recall this time last year, you were still talking with 47, 48 percent over the long term. We're clearly now solidly in the 49, near 50 percent range for this year. Is there any reason why? Things should change as we look into 2020 and 2021, be it pricing, make manufacturing any reason to throw you off from the current 49 to 50 percent range?

Jalal Bagherli:
Good question. Well, we -- as we indicated since the beginning of the year, we were helped by some good manufacturing cost, but also the product mix has been very favorable. And so, going forward from these levels, I don't expect anything to throw itself off. Obviously, we continue to focus on our manufacturing costs internally and driving costs down and efficiencies and all these good things. And also, as the product mix continues to rotate towards the high growth businesses, the fact that the higher gross margin that we see, which is basically not the anything [inaudible] detracts from where we are today.

Andrew Gardiner:
Okay. That's great. Thank you very much.

Female Speaker:
Thank you. As a reminder, it's star one to ask a question, and the next question today comes from Mitch Steves from RBC. So, Mitch, your line is now open.

Mitch Steves:
Thanks for taking my question. I wanted to kind of mix of the business I thought the next to the business style. Did you continue to do some acquisitions here and there? And also, talk about, it looks like the mix is actually going to improve in terms of gross margin profile from prior questions. So, if I look at assets and you guys look at them in the future, is that now our criteria, that gross margin expansion? If you guys going to go into a new area, what would you still be interested in that are similar margin profile to the corporate average?

Jalal Bagherli:
So, thank you for the question Mitch. I think, you know, clearly, we want to improve our gross margin with every opportunity we have. This is this is given, right. But, you know, in acquisition be we look at things which are accretive to our margins, but sometimes, they are not at the point of acquisition, but then we only then get attracted to the acquisition, if you have a clear roadmap that they can see that those margins can be improved over a reasonable

period of time, for example, using our cost base. So, when you buy a start-up that typically don't have the same purchasing power. So, their margin may be lower than our corporate margin. But you know, if the understanding is that the quality of the product is good, pricing is good, but the manufacturing cost would benefit from what Dialog can negotiate or can supply, then clearly, that that is something that we see as added value for us to do so. So, we don't reject an asset just because of that offer, slightly lower margin than, say, our corporate average, provided we have the ability to improve it.

Mitch Steves:
I think this in terms of, like, the directions you guys have gone, you've got to do business, you can do some other small sub sectors as well. So, I guess broadly, what do you guys think? What are the kind of the main verticals or end markets you think would fit best for the company?

Jalal Bagherli:
So, you know, are key components of the business historically has been mobile and that continues to be the largest part of the business. But, you know, you've taken a lot of steps, practical steps in terms of diversification to add other sub-segments. The segments we have focused on, we talked about automotive earlier on, but that's a that's a push internally to qualify and release products that we already have into automotive. They -- you know, they get better margin and better lifecycle in terms of revenue. We are also seeing new products for automotive, so that will take some time to bear fruit. We're already seeing some of the revenue, but it'll be some time before it is noticeable in terms of revenue contribution. The other areas we've talked about is industrial. So, we have some industrial business. But with the Creative Chips acquisition, they are firmly into industrial automation, a clear IIoT for industrial type segments that we are focused on. We think that will be a building block for further building in that in that part of the market, which is much more stable in terms of revenue under on the long-term basis and the profitability as well. So, if you look at all our products outside the, communication or mobile, the margins tend to be better. And as this shift, the ratio that is that would provide this a positive backdrop, positive tailwind, to our profitability going forward.

Mitch Steves:
Thank you very much.

Female Speaker:
The next question we have comes from Sandeep Deshpande from JP Morgan. So, Sandeep, please go ahead.

Sandeep Deshpande:
Hi. Thanks for letting me on. Two quick questions, if I may. I mean, you still do have quite a lot of you know, main-pmic, the revenue from me on your major customer. As that rolls off, I mean, just, you know, in response to the earlier response on gross margin, I mean, would we not expect your gross margin to rise? Because, I mean, historically, your gross margin from the consumer market has been much weaker than you on the market -- the other markets that you are exposed to. So, as to the next couple of years, those revenues fall off. I mean, I would expect your gross margin to rise. Maybe you can make a comment on that. Then the second question is regarding this Creative Chip acquisition. I mean, can we understand, I mean, what kind of industrial chips that are you getting into and what kind of

intellectual properties that the company brings, as well as what do you plan to integrate in there such as to expand that portfolio? Because this does seem like a very promising area over the next three, four years as IIoT has particularly some of your wireless technologies like Bluetooth, et cetera, whether any of them will be of use in in those markets.

Jalal Bagherli:
All right. Hi Sandeep. So, you know, again, I don't want to project forward. You know, this is this is really a Q3 discussion mostly. You're right. Our main PMIC revenue will be declining, as we've indicated, and you guys have modeled. However, I also point out that our sub-pmics business is growing very fast and they tend to have very similar margins. So, either one goes down, the other one is going up. So, there's, like, some offsetting effect, if you will. Nonetheless, as I said, as the ratio changes over the years, over the next two years, the ratio of products with the more -- higher gross margin relative to high, you know, volume custom business where the margins are usually pressured, changes. And that provides us with a tailwind in terms of margin improvement. And that's what we hope to see.

But, you know, today we're not going to talk about next couple of years, specifically. This guide next year, if you want, on the creative ships. You know, it's the company over 20 years of history in the German industrial market with industrial customers and I think some of the customers I mention under the slides - very, very good names. As I said, a long working history of custom mixed signal design. They target industrial automation, [unintelligible] controllers, you know, Ethernet, to connect within the industrial machine to computers and to the cloud over time. So, it's a very promising area. It is not a consumer business. So, you know, the type of cyclicality that you see there, will not be here. There'd be more water falling effect revenue as you harvest new projects and new revenue streams.

So, we're very hopeful on this, of course, as a small company. But, you know, as we projected in our press release, we expect 25 percent growth over the next few years per annum, based on designs that already developed and designed in for key customers of them. But interestingly, their expertise also is applicable to other aligned segments. For example, they have opportunities and indeed some business in automotive as well in Germany, but also potential in Asia in both industrial and automotive ASICs. The reason we are interested in this is because I think is it is in part of the market, which is kind of neglected by a lot of semiconductor companies as they moved down to much bigger type focused businesses because industrial by nature is a more fragmented type of industry and it takes time to build a nice large or growing revenue stream. And we think we have the basis of that. I'm going to be adding to it. And, you know, people have moved on to just focusing on the standard products, but there is a gap in the market for people who can provide custom mixed signal chips of the longevity that we talk about these products some of which last 16 to 20 years in production. So very, very different to what we've been doing in mobile, like 18 months to three-year lifecycle.

Sandeep Deshpande:
Just one follow up, Jalal, on that. I mean, is it that you're going to do this market like Creative has been doing with -- or with asics, or do you think you're going to make standard products? Because, you know, historically you have done asics for some particular customers, but you haven't done asics across the board for lots and lots of customer.

Jalal Bagherli:

Right, I mean, you know, the asics usually comes with a return on investment analysis, so we don't do asics lightly. It's got to pay for itself because, you know, typically you have to you have to invest resources up front for something to come or years later. And so, it's but interesting, you've seen in our latest results, we're moving more and more towards prepayment by customer, towards engineering effort before we take on that, so that's lowering our rates because there's more skin in the game by those customers. So, we tend to shift towards that model, they have to be, you know, so confident in their design that they are happy to pony up upfront some contribution towards design cost. And, you know -- but as I say, you have to then also model a longer cycle of revenue relative to, say, consumer business. So, you take into account five, seven, 10 years sometimes of revenue generation from a design to make a buck, you know, provided those are there, provided it is differentiated, and we get a good gross margin. We are absolutely interested in expanding the business in this area and Creative will give us the platform to build up.

Sandeep Deshpande:
Thank you.

Female Speaker:
As a reminder, it's still to a few questions. My next question today comes from Christoffer Wang Bjrnsen from DNB Markets. So, Christopher, please go ahead.

Christoffer Wang Bjrnsen:
Yes. Thanks for taking my call. Can you hear me?

Jalal Bagherli:
We can hear you.

Christoffer Wang Bjrnsen:
Great, super. Yes. Also, congrats on a great growth in the Bluetooth business. If you could comment a bit on what was driving the acceleration in growth from [unintelligible]. Also, we notice that you lost the copy in the product refresh, I [unintelligible], which have regularly shipped 26 million units. [unintelligible] would that be a headwind for? And another question on the [unintelligible], could you comment on how important the new Cortex M33 [spelled phonetically]. If it hadn't been for the revenue growth during the quarter. And also, it would be helpful if you could remind us of what base that 1 percent [unintelligible]. Those are my first two questions, if we could start there.

Jalal Bagherli:
Right. So, on the low energy Bluetooth, we are continuing our growth and taking market share and you can see it in our numbers. I don't think many companies are reporting 51 percent growth on a quarter. So clearly, they have to be taking market share in a market that's growing around 20 percent. The business growth drivers that are helping us this year in general, but also Q2 to Q3 are fitness bands. So, these started in China with our customers there. As you know, we're now in the fourth generation of Xiaomi fitness trackers, fitness bands, and that that's growing really significantly. Very healthy growth. But also, we announced that we are inside the latest release, the first release of Samsung Fitness Band, as well, so they released two and we're on both of those. Also, I think under previous calls we've alluded to being in accessories, things like pens or tablets, and phones, and that's going really well as well. And you know, we are in a really broad range of projects. You

mentioned Tile, so we're not there in the latest version, but we are an older version. But generally, I don't think that volumes is now moving the needle for us. We have much bigger volume drivers with year-end equipment. And for an example of that is what the just released that the TINY [spelled phonetically] that we announced this week, which is a really, really low cost, low power device designed for disposable, including disposable end-equipment. So, this goes into, for example, medical stuff like, you know, insulin pens that you throw away after you use, as well as connecting sensors and other things. We already have design being done on this brand-new product. Multiple design means, for example, in things like, you know, solar calculators, to digital watches in addition to this end and target market, which is the connected medical. So, we're very, very happy with the progress in our low energy Bluetooth, and we'll continue to expand. We do have also a vision which is qualified for automotive business and that will help us in things like tire pressure monitors as well as key fobs that are coming in a couple of years. So, not only we have short term, but also, we have mid-term and longer term in markets that we have designed in.

Christoffer Wang Bjrnsen:
Thank you, that's helpful. And then a follow up question, first of all, [unintelligible] revenue today? And then my next question is the [unintelligible], but more from a strategic point of view, you have in the Bluetooth business today you have -- let's say you have I think, you know, [unintelligible] and a lot of these customers [unintelligible]. [unintelligible] but how are you kind of thinking about that market get and how do you [unintelligible] going into that market? How would you get to an opportunity of maybe ten dollars per unit?

Jalal Bagherli:
Okay. I mean, if somebody got $10 opportunity per Bluetooth, that's good luck to them, but they don't see that in high volume like this. We have very clear view of the markets we're serving. So, the Bluetooth, by the way, is more than a dollar because ours is more sophisticated. It's got double arm caused one to run Bluetooth stack and the other one runs the customer an application. So, they tend more to be in the $1.30-$1.40 type range. The latest one, the issues which I talked about, the Tiny, that's a single core, very, very low cost for disposable. That would be that's just released, so not in our revenue yet. That that would be a lot lower ASP. But it goes into massive high-volume type end equipment. In terms of the new markets, obviously we will create modules which are more expensive than selling chips because we can pack other components, antennas, and deliver a module rather than a single chip. But that's typically a lower volume and it's for people who don't have the expertise to design using a chip by themselves. So, the module in those designs. Also, bear in mind that we added in Q1 an IoT wi-fi line for our business, so we will be looking to also couple up the very, very low energy wi-fi and Bluetooth into similar modules or technologies and over time integrate into the roadmap. So, many of our customers want to have both because in some cases you want Bluetooth for connectivity to watches, sorry to phones, smartphones and tablets. Wi-Fi directly connects the wi-fi router. So, you bypass an intermediary if you want to just go to the cloud. So, the both helpful for different applications. And I think you have to be a little bit focused on those. I mean, look, can be what other radios are becoming popular that would complement our portfolio in the future.

Christoffer Wang Bjrnsen:
Just one quick one for me. Sorry --

Jose Cano:
A very quick one, please. We need to do we need to allow time --

Christoffer Wang Bjrnsen:
Yeah. So, there has been -- yeah, there's been there's been some effort even from Apple on ultra-wideband and you've seen Amazon rolling in this new Amazon [unintelligible] that they've launched. You see any opportunities or threats within these new kind of wider technologies being, now, focused on by the big customers in New York.

Jalal Bagherli:
Now we see that I was complimented because they used for different applications and they coexist in many of the applications of Exelon, so I don't they're not a replacement for Bluetooth. You know, for example, you use Bluetooth for provisioning. You would use GWB for translating data. So those are two different end applications or end use within the same application. So, the same thing, as I mentioned in Bluetooth on Wi-Fi, you can use both in many of the end equipment for different reasons. So, we see that as complement.

Christoffer Wang Bjrnsen:
Thank you for taking all my questions.

Jalal Bagherli:
All right.

Female Speaker:
Next question today comes from David O Connor from Exane BNP Paribas. So, David, please go ahead. Your line is now open.

David O Connor:
Great. Thanks for taking my question. Good morning, gents. One or two from my side so first of all Jalal, you talk about design wins starting in the second half, 2021. Can you talk a small bit about both even the visibility in 2020, next year and what you designed for the first half of next year?

Jalal Bagherli:
Great question. We have a lot of designs of going to production in 2020. So, what I was referring to was specifically new contracts we won in this quarter, which will start design now, and by definition that will end up in products by customers, which are released in the second half of 2021. So, we have a very specific set of high-volume applications that to be won this quarter. This wasn't the general comments, but all new contracts starting 2021. And it was very specific on those three parts that we won in this quarter.

David O Connor:
Okay, but first, for the second half of next year, what have you got in the pipe for then?

Jalal Bagherli:
We will tell you at the beginning of the year in the guide for 2020. So, you know, we've been telling you, not you, but you know, all the market, you know, for the last 12 months, regarding the projects, that those contracts that start in 2020. So, I don't think there's anything different to what we said. Every quarter we are working on new ICs and depending on the start time, they come out and they target products for the customer that goes into production 18 months later. So, we've been working on the 2020 products for some time.

Yeah, most of that stuff is ready, but there are new applications are also being developed. But you know, the later you get in the year, the products that you work on will fall into 2021 cycle. That's a solid.

David O Connor:
Got it. And then maybe you have one more follow-up on the, as mentioned, the 1 billion in lifetime and win. How do you think about that in terms of new [unintelligible] versus new versions of existing chips?

Jalal Bagherli:
I think they're all new products, I don't think -- I don't know. It's hard to determine, you know. Remember, they -- when somebody designs a brand-new phone. You know, there is this visit was very hard to start replacing an old part because there is no old part, we're starting from zero. So, in some respects, some functionality of the old would be replaced, but there's always new functionality added. So, there isn't a direct line that I can point to. So, the context I'm talking about, if you had -- what you mean is, it sub-pmics as opposed to new? I would say roughly about 40 percent would be brand-new products, which are not sub-PMICs in other areas of mixed signals. As indicated, we are diversifying our business in addition to power into other mixed signal activities. So, I would say about 40 percent are brand new in the sense that they've got nothing to do with power management, so in other mixed signal activities. And 60 percent are new power management related parts that are in development. Does that answer your question?

David O Connor:
Yes, that's very helpful. Thank you, Jalal.

Jalal Bagherli:
You're welcome

Female Speaker:
Final question today comes from Adithya Metuku from Bank of America. Adithya, please go ahead. Your line is now open.

Adithya Metuku:
Good morning, guys. Two questions. Firstly, just on fast charging. Given the information today, how do you see that developing over the next year or so? It seems like almost all of these new handsets are coming with fast charging. So, I just wanted to get a sense of that. Secondly, I just wondered if you could give a little bit of color on how your LED driver business is doing, and what we should think about that business going forward. Thank you.

Jalal Bagherli:
Adi, I didn’t hear the second question. What was the question about, sorry?

Adithya Metuku:
Just the LED driver --

Jalal Bagherli:
Oh, LED. Okay, okay. Sorry. Yeah, that's fine. All right. Yeah, that's fine. So, on the fast charging business, you're right. Your first question. So you're right that the penetration of fast charging in smartphones have expanded. You've got a lot of mid-range phones now with

fast charging as they come onto the market. You know, we have a pretty large share of this market and we've shown some growth this quarter as well. But remember, the volume increase doesn't necessarily, I guess, translate linearly into revenue increase just because of price erosion, there's a lot of competitors from Asia coming onto the scene as well. So, we tend to try and target more complicated, more sophisticated or higher end type products. So, in the last, I would say, six months we've been focusing on higher wattage. So, even though we are shipping high volume from 18 watts, 22 watts type adaptors, a lot of our activity in terms of new product development for the customer is being shifted to more like 30 watts, 40 watts is the latest that we're looking at and even 55, 60 watts type adapters are driving, if you like, the next wave of technology. And we have excellent, you know, controllers for those high-power type devices. But that's kind of the change, if you like, that's happening for us. And that means we can maintain a reasonable margin while maintaining a large share with both existing and new parts.

In the second question, LED drivers, so I want to clarify, this is LED backlight drivers, it's not LED drivers as such. But the backlight drivers, very specific, is a string of LEDs, which are very tightly controlled, finely controlled I should say, that means that you can you can, you know, turn the strings on and off with very precise accuracy of which ones are on and off. And we're talking thousands of LED driving in some applications, for example, like car headlamps, but where we're shipping today, is the TV's, digital TVs that needs higher resolution or higher dynamic range, I should say. And we basically got pretty much every brand name of TV using our backlog drivers currently. That you could mention, in Korea, in China, in Japan, and Taiwan, which are feeding the rest of the world with the TV. So, we are in every single brand from 75 range to 65- and 55-inch TVs with the big nice screens, where you want to control the zoning of the light. That's all using Dialog products, which is number one in that market. And it continues to grow. But I think the excitement for future is where you can take this application and we're very confident that they can use it in automotive is one category that we are looking, the digital dashboard, we have some traction there. The headlamp is another one, which we actually got an engagement with, a major headlamp auto maker. And another area is more consumer Tablets and related to phone activity, which we see some early traction at the moment. And we're hoping some of those will turn into much larger volume drivers for backlog drivers, which is a unique technology.

Female Speaker:
We have no further questions; I'll hand it back over to you.

Jose Cano:
Thank you, Breika. I just thank everyone for attending the call today as usual. And you have any further questions, please don't hesitate to contact. Thank you.

[end of transcript]