

Dialog Semiconductor

Jose Cano:

Thank you. Good morning, and thanks, everyone, for joining us a little bit earlier today. Our call is being hosted by Dr. Jalal Bagherli, Dialog's CEO, and Wissam Jabre, our CFO. In a moment, I will hand you over to Jalal to talk through the company's first-quarter performance. First of all, I need to 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 2 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, Jose. And good morning to everyone. We started the year on solid footing, posting revenue above the midpoint of our guidance range, delivering record underlying gross margin and continued strong cash flow generation. First, let me outline some of the progress we've made since our Capital Markets Day in November, on Slide 4.

On 8th of April 2019, we closed the landmark agreement with Apple, which strengthened our long-term partnership, while generating immediate value for certain PMIC technologies. At the Capital Markets Day, we said that from 2018 through 2022, we expect a CAGR of between 30 to 35 percent for those products not covered by the licensing agreement, and this growth is to be front and loaded.

Revenue growth from our largest customer, excluding main PMIC licensed products, was up 92 percent year-on-year. Design win momentum is continuing there, and we are expecting revenue from new contracts to be realized over the course of the next three years.

One of the strategic initiatives in power management is to leverage our technology into the automotive and computing and storage end market. And there's plenty of fresh opportunities here. To give you a few examples, we have increasing customer engagement from multiple product lines, such as Bluetooth low energy and power management. For infotainment and ADAS power management alone, we have now over 30 design engagements, including customers in Japan and China, with approximately half expected to be in production by end of 2020 -- as well as multiple engagements in gaming consoles and solid-state drives in Japan.

In consumer IoT, we made good progress in three separate fronts. First, we've expanded our customer base organically, making encouraging progress in Connected Health with our Bluetooth low energy products, where we are currently engaged on projects with a number of Tier 1 pharmaceutical companies, developing applications such as insulin pens.

Second, we extended our Bluetooth low-energy offering with the launch of the latest member of the SmartBond family. To meet our customers' increasing requirements for wearables, we have doubled the processing power, doubled the battery lifetime, compared to its predecessor. It is by far one of the most advanced, feature-rich Bluetooth products we've developed to date.

Third, on 7th of March, we announced a definitive agreement to acquire FCI -- Silicon Motion's Mobile Communications product line -- for \$45 million. The acquisition provides Dialog with a rich portfolio of complementary connectivity-based products that includes Ultra-Low-Power WiFi SoCs and Modules -- which FCI began ramping production of in Q4 2018.

Turning to Slide 5, let's take a close look at the acquisition of FCI and what that business adds to our portfolio. FCI has a 100-strong engineering team based in South Korea, focused on the development of ultra-low power Wi-Fi SoCs. These SoCs are primarily targeting battery-operated IoT applications. This is part of our IoT strategy, to extend our product portfolio with complementary technologies, which create increasing value for our customers in high growth segments of our target end market.

Our customers increasingly expect us to meet a number of use cases. Adding low-power Wi-Fi to our product portfolio allows us to target more effectively an increasing number of smartphone applications, a high-growth segment of consumer IoT.

We are the number two player in Bluetooth low energy and adding low-power Wi-Fi to our portfolio will help us meet a wider range of customer requirements. Together with FCI, we can build our current product, offer a combination -- Bluetooth and Wi-Fi -- solutions, and continue to drive innovation and value for our customers. FCI is also the leader in mobile TV SoC, a long-standing business with a stable revenue stream and strong cash flow generation. FCI's product line reported approximately \$30 million in revenue in 2018, with an associated gross margin of approximately 51 percent.

The transaction is expected to close later in 2019. I would like to run through some further detail on FCI customers and technology on Slide 6.

The ultra-low power Wi-Fi SoC developed by FCI was built from the ground up, considering the requirements of battery-operated IoT applications. It enables the connection of IoT devices directly to the internet. Many of the smartphone applications used today still require an additional step before connecting. So, incorporating low-power Wi-Fi removes this step. There is a significant market opportunity available as the number of Wi-Fi enabled devices increases, with more objects becoming connected in your home. The mobile phone segment is already 90 percent Wi-Fi enabled, but penetration in the smartphone market is still in the low 20s.

Examples of the type of applications we are targeting are smart door locks, bells, with integrated security -- IP security camera, smart speakers, wearables and point-of-sale terminals. FCI has had early success with multiple customers in Asia and North America, and there is a significant opportunity for FCI to leverage the power of Dialog's sales and distribution channels to expand its customer reach, particularly with our existing Bluetooth low energy and CMIC customers.

Before handing over to Wissam to cover the financial performance in Q2, let me summarize our Slide 7: why we are confident about the future of our business. The success of Dialog starts with a core set of capabilities grounded in deep mixed-signal expertise and power-efficient design, which has become increasingly important in today's connected world. We are continuing to

build on that strong foundation, while sharpening our focus on the 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 through 2022 -- as we continue to win new design engagements with them.

Our strong balance sheet gives us the financial flexibility to pursue our growth strategy, both through organic and inorganic investments, 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. First, let's take a look at an overview of our performance on slide nine. We will go into more detail shortly, but there are three points I would like to note here. First, Q1 2019 revenue of \$295 million was above the midpoint of our March guidance range, while down 11 percent year-on-year. Second, our underlying gross margin was 49.6 percent, 240 basis points above Q1 2018, and our highest on record. Third, we continued to deliver strong free cash flow of \$28 million during the quarter, while continuing to invest in our business. Our free cash flow margin was broadly in line with Q1 2018 at 9.5 percent.

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 first quarter revenue broken down in the same way we showed it at Capital Markets Day in November. Two key points I would like to highlight from this data. First, if you look at the blue section of the chart, as Jalal mentioned earlier, revenue from our largest customer -- excluding main PMIC products -- was up 92 percent year-on-year. Design win momentum is continuing, and we are expecting revenue from new contracts to be realized over the course of the next three years.

Second, the combined revenue from Advanced Mixed Signal, Connectivity and Automotive & Industrial -- and products not covered by the Apple licensing agreement -- was up 14 percent year-on-year. Our key growth technologies, outside of mobile systems, continued to perform well and attract increasing interest from customers. Despite challenging market conditions, revenue from CMICs was up six percent year-on-year. Revenue from new audio products more than doubled year-on-year, albeit from a low base, as consumer demands for a better audio experience requires more complex audio solutions. And market adoption of standard connectivity technologies -- such as Bluetooth low energy -- for consumer IoT products continues to increase. Demand for BLE products was softer during the quarter, partly due to the expectation of new product launches. In Q2 2019, we expect Bluetooth low energy to grow sequentially.

Finally, it is worth noting that while demand in China impacted volume across our rapid-charge products, we maintained a commanding market share in this segment. We expect market adoption of new charging technologies, like USB-PD Type C to accelerate in the second half of 2019.

Turning to Slide 11 to cover gross margin. Q1 2019, underlying gross margin was at a record

level of 49.6 percent, up 90 basis points sequentially and up 240 basis points year-on-year. This is our highest gross margin on record. In Q1 2019, there were non-recurring items that resulted in a positive impact of 80 basis points. The remaining year-on-year increase was mostly due to product mix and lower manufacturing costs.

Before moving into operating expenses, I'd like to remind you that we adopted IFRS 16 Leases, effective 1 January 2019. This had little impact to our Q1 2019 P&L, and you can find full details in Note 15 of the Q1 2019 interim report.

Let's now turn to Slide 12 to discuss operating expenses. Q1 2019, underlying operating expenses were \$103.7 million, down 1 percent from Q1 2018, due to lower R&D expenses. Underlying R&D expenses in Q1 2019 decreased one percent, compared to Q1 2018, to 72.3 million, mainly due to lower personnel costs. This also included \$2.4 million of headwind from higher amortization and lower capitalized development cost. Excluding this, underlying R&D expenses would have dropped by approximately 6 percent year-on-year.

We continue to invest in R&D programs that support new areas of revenue growth. Underlying SG&A expenses were in line with Q1 2018, at 31.4 million. As a percentage of revenue, SG&A was up 120 basis points from Q1 2018, at then 0.6 percent, reflecting lower revenue.

Finally, trailing 12 months' operating expenses as a percent of sales, we're slightly above Q1 2018 at 29.1 percent.

Moving on to Slide 13 to run through profitability. In Q1 2019, underlying operating margin was up 20 basis points to 16 percent, while underlying operating profit was down 10 percent year-on-year. Lower operating profit was mostly the result of lower revenue, partially offset by disciplined management of operating expenses. If you look at the chart showing the breakdown by business segment, underlying operating margin for mobile systems remained resilient at 20.3 percent. Underlying operating profits for advanced mixed-signals, and automotive, and industrial was 1.8 million and 1.1 million, respectively, both down year-on-year due to lower revenue.

Underlying operating profit in Connectivity increased from a low base to \$5.3 million, and underlying operating margin improved to 17.1 percent, compared to 1.2 percent in Q1 2018. The combined underlying operating margin of Advanced Mixed-Signal, Connectivity, and Automotive, and Industrial was 20 basis points higher than Q1 2018. And lastly, corporate costs dropped by approximately two-thirds, year-on-year, to \$3.8 million.

Underlying effective tax rate -- in Q1 2019 -- was approximately 20.5 percent, down 50 basis points on Q1 2018. Underlying diluted earnings per share for the quarter was 49 cents, eight percent below Q1 2018.

From earnings, let's go to Slide 14 and take a closer look at inventory and cash. Compared to the previous quarter, inventory value increased four percent sequentially, representing a 33 percent increase in our days of inventory. During Q2 2019, we expect inventory value to increase from Q1 2019, in line with seasonal trends and days of inventory, to remain broadly in line with Q1

2019. At the end of Q1 2019, our cash and cash equivalence balance was \$690 million. Cash flow from operating activities during the first quarter was approximately 42 million, 16 percent below Q1 2018, mainly due to working capital movements and timing of income tax payments.

Free cash flow for Q1 2019 was \$28 million, down 12 percent year-on-year. Free cash flow margin was broadly in line with Q1 2018, at 9.5 percent.

The share buyback program that started in early November is still running, and the appointed bank continues to buy share for up to €150 million.

In summary, during the first quarter, we have delivered another set -- another solid set of results with revenue above the midpoint of our guidance range, record gross margins, and strong free cash flow generation, while investing in growing the business.

Before we open the call to questions, I would like to talk about the Q2 outlook. Our guidance is favorably impacted by the recently-completed license and asset transfer transaction with Apple. As you have seen in the press release, in our Q2 revenue guidance, there is a material difference between IFRS and underlying, and it's driven by a one-off license revenue. In Q2 2019, we anticipate IFRS revenue to be in the range of \$438 million to \$478 million. This includes one-off license revenue of approximately \$145 million, which will also impact Q2 2019 IFRS gross margin.

Q2 2019 underlying revenue is expected to be in the range of \$293 million to \$333 million, including approximately \$6 million of ongoing license revenue. Q2 2019 underlying gross margin is expected to be flat to slightly above Q1 2019. Additionally, in Q2 2019, we expect approximately \$9 million of non-recurring engineering income, relating to the Apple transaction, within other operating income. In line with our March guidance, FY 2019 underlying revenue is expected to decline from FY 2018 by single-digit percentage points, and to be second-half-weighted. We now expect full year 2019 underlying gross margin to be above that achieved in full year 2018.

Operator, please open the line for questions.

Operator:

Thank you. Ladies and gentlemen, please press star, followed by one, on your telephone keypad if you have a question. If you have joined online, then you can click on the flag icon to ask a question. Our first question on the phone comes from Andrew Gardiner from Barclays. Andrew, please go ahead.

Andrew Gardiner:

Good morning, guys. Thanks for taking the question. So, one main question -- I note -- just a quick follow-up on the license payment, if that's all right. So, the second quarter you're calling underlying revenue to be up quarter-on-quarter -- sort of flat to our quarter-on-quarter. That's above the normal seasonality we've seen for the last few years. Can you just talk about the drivers that you're seeing within the end markets that is leading to that? And then, quickly, on the licensing payment, you -- Wissam, you described the sort of one-off elements in the second

quarter. Can you just confirm that that is -- it's not impacting cash indeed? That, you know, the 600 million payment already sort of is related to some of that one-off licensing that you're now seeing in the second quarter. Thank you.

Jalal Bagherli:

All right. Let me take the first question. Good morning, Andrew. The -- so, we are indeed guiding for a higher Q2 over Q1, sequential increase. And by the way, we expect the second half to be also higher than the first half, as we've said in the guidance. The reason for sequential increase is essentially, you know, Q1 -- I think this was well sign-posted by everybody, not just us -- was pretty soft particularly in the mobile market, and particularly in China. I think those effects are wearing off, and I think towards the end of the quarter, we started to see better take-up. And indeed, the flow that we see today, it indicates that we'll have a stronger Q2.

Part -- outside the mobile and the IoT, we mentioned, for example, our connectivity products -- I said so -- bear lower also in Q1. Part of that was because, you know, some of the products we're targeting also go to production in Q2, start production in Q2. And we have a higher expectation of revenue in Q2 for also our connectivity. And so, one effect was mobile, China, with things like USBPD; second was IoT connectivity, which is more related to product launches.

Wissam Jabre:

Let me cover the second part -- or your second question, Andrew. The license revenue in the second quarter is a result of the accounting treatment of the transaction with Apple. It is not additional cash. It is part of the \$600 million -- on the transaction. It's just a part of how we're accounting for it. Our accounting hasn't yet -- is still not finalized. And we will be providing more details, hopefully, at the end of Q2, with a bit more clarity. But yes, that's not impacting cash; it's mostly a result of the accounting treatment.

Andrew Gardiner:

All right. Just -- thanks very much, guys.

Operator:

The next question comes from Sandeep Deshpande from J.P. Morgan. Sandeep, please go ahead.

Sandeep Deshpande:

Yeah. Hi. Can we -- I mean -- understand how this 145 million one-off that you are also reporting in Q2 -- is this also some kind of accounting treatment associated with this thing? And how we should be looking at this whole transaction, going forward, because it's slightly confusing me, about the cash generation from these different parts of it. That's the first point. The second point I have is on the business mix itself. I mean, Apple is declining as a percentage of your sales going forward. And with that, I would express your gross margin continues to grow year-on-year for multiple years, given that, historically, for most suppliers, Apple's gross margin is -- gross margin of products sold to Apple is lower. So, would that be a correct way of looking at it?

And thirdly, with regard to the new Apple product, I mean, is there going to be -- you know, you talked about doubling that revenue from Q1-18 to Q1-19. Is there new design wins ramping up

into the second half of this year, and is that non-PMIC Apple revenue -- or mini-PMIC Apple revenue continuing to grow at these sort of rates? Thank you.

Jalal Bagherli:

Okay. So, maybe I'll answer the last two questions, and then Wissam will answer your cash generation question, the last thing -- if that's okay. So, I think you're talking about the Apple declining, and will the gross margin be growing? I think the business we have with Apple is -- you know, gross margin is in line with what you would expect in a mobile market because of the volume. But I think a more probably better way of putting it is, as we diversify into IoT -- automotive and others -- we expect the gross margin of the product portfolio to improve. So, I think that assumption would be valid if the proportion of non-mobile revenue continues to grow more than the mobile revenue.

So, your last question was in terms of new Apple products. Absolutely. We have products going to production, actually, late Q1. We have products coming in terms of sub-PMICs. We indicated that -- a while back -- the sub-PMICs continue to go to production with the new phones and new other products throughout the year. So, yes, this is not the revenue from old products that we're reporting; these are constantly refreshed with new parts and we're getting new designs such as to work on, as we've indicated in the press release. So, this is why we indicated, on the Capital Markets Day, such a strong confidence in the sub-PMIC and other PMIC business portion to grow 30, 35 percent plus, per year, on average, over the course of 2018 to 2022. But we also indicated that it would be front-loaded. So, we expect a lot of growth in the early years. And as we then get to larger numbers that the growth will decelerate, but there will still be growth.

Wissam Jabre:

And Sandy, for the first question, maybe I'll talk a little bit conceptually about how the accounting works. Given that it's still not final, I'd rather not talk about the exact numbers. So the way to think of it is if you recall, the transaction had the two elements. It had the \$300 million that for license and employees and asset transfers, and another \$300 million that relate to the pre-payment. So the first \$300 million that relate to the license and asset transfer will be accounted for into really three main categories. One is as part of the asset transfers; we do have also design centers that are transferring and so those would have a certain value allocated to them. And the way -- the way it works is that we will be in Q2 recording a gain on the sale of assets depending on what that value is minus the cost basis.

The second category will be a one-off license revenue, which is what we're calling out that's really constituting the main difference between our IFRS revenue and underlying revenue in the second quarter. And then the third category would be an ongoing license revenue which is what we're including the small portion that's included in our underlying revenue. And that is -- that is expected to last for a few years. And so this is really how to think of the accounting. As I said, we will be providing additional details as the accounting is finalized, but at this point, we wanted to make sure that you guys have enough information for Q2 to model it correctly.

Sandeep Deshpande:

Thank you Wissam.

Wissam Jabre:
You're welcome.

Operator:
The next questions comes from Achal Sultania from Credit Suisse. Achal, please go ahead.

Achal Sultania:
Hi. Good morning everyone. Just a question on gross margins for Wissam maybe. I think that if I look at Q1, you had 80 basis points of one-off benefit in your Q1 margins. Q2 will have a benefit from the \$6 million licensing. If I take those two numbers out -- benefits out -- it still seems that you are talking about a gross margin decline of about 100bps unless your gross margin is up sequentially in Q2. So given that revenue is actually rising sequentially, just trying to understand why your gross margin guidance are not higher in Q2. Thank you.

Wissam Jabre:
Thanks, Achal, good question. So you know in Q1 we did call out the 80 basis points to non-recurring, so if you exclude that out of the 49.6 percent underlying gross margin we ended with around 48.8 percent. And this was driven -- as I noted on the call or in the prepared remarks by - - mostly by the mix and the manufacturing cost. And so, on the mix we did mix to a slightly older -- more older products that help us that sort of help expand a little bit out of gross margin. As well we sold lower content of the pub conversion business with the China Headwind which, as you guys know, typically has slight below gross margin and our corporate average. And so that helped us.

We did also improve manufacturing costs and we did see that our ASBs tended to be more resilient. So what we're guiding for Q2 is flat to slightly above including around this \$6 million of license revenue. And you know, I'm -- you know, I wouldn't want to sort of go into whether it's flat or slightly above. And, this is why the guidance had that. And so, you could make the assumption that the underlying business I would say is still -- look, I'm not going to -- I'm not going to call it flat, but nonetheless you can assume it's more or less flat. I don't know if that helps.

Achal Sultania:
Just to understand it correctly, like you're basically assuming some headwind from product mix going into Q2? That is precisely what's causing the variability.

Wissam Jabre:
No that's not -- that's not what I'm saying. I'm saying if you adjust for the 80 basis points, you could assume that the business is more or less flat, the gross margin, sorry, is more or less flat into Q2.

Jalal Bagherli:
Yeah. In the commentary, actually, we pointed out 80 basis points of roughly like a one-off positive in Q1. So if you remove that and you're still flat that means that, you know, we are actually improving the mix so but we end up with flat from a numerical point of view in Q1.

Achal Sultania:

Yeah. Okay. Thanks, Wissam. Thanks Jalal.

Operator:

The next question comes from Mitchell Steves from RBC. Mitchell, please go ahead.

Mitch Steves:

Yes, can you hear me?

Jalal Bagherli:

Yes, Just about.

Mitch Steves:

Okay good. Yeah, so I actually wanted to turn the conversation a bit to the operating margin line. So even though the gross margins are pretty stable here, I think it's pretty difficult to figure out what the run rate on back end, considering you guys are going to go through a transition with Apple. So is there any way you could walk us through how the employee count should look like post Apple? If there's any sort of change you guys need to make? Or if this is kind of the steady state quarterly APAX we should expect over the next couple years?

Wissam Jabre:

That's a good question. If you recall when in prior calls we did indicate and say clearly that the impact of the transaction itself would be around \$35 million lower annualized APAX, which, you know would be estimated at around \$8 to \$9 million per quarter on a run rate basis. So the transaction closed on April 8th. So you would expect to start seeing benefit from the lower APAX run rate in the second quarter. And this started the -- basically, the second quarter to the tune of around let's say \$6 million or so. We do have a bit of headwind from slightly lower capitalized -- capitalization of development costs of around maybe \$2 million. And so this is how I would think transitionally Q1 to Q2 on the R&D side I would estimate benefit of around \$4 to \$5 million. On an ongoing basis, as I said, the impact of the transaction itself is around \$9 million on a quarterly basis. So that, you know, starting Q3 from the transaction we should see about \$9 million benefit, or lower APAX going into Q3 and Q4.

Mitch Steves:

Okay just to clarify that, so basically if I were to assume that the operating margin expanded greater than the gross margin this year, would that be a fair assumption?

Wissam Jabre:

-- yes to some extent I would say it is a fair assumption, especially in the second half, obviously with the seasonal trends of the business, you'd expect the operating margin to expand more than the -- more than the -- more than the gross margin. Keep in mind, though, that we're also calling out for the second quarter an NRE, and so that should help the operating margins quite a bit. But I'm talking, my comments were excluding NRE, that specific NRE.

Mitch Steves:

Got it. Thank you.

Wissam Jabre:
You're welcome.

Operator:
Robin Brass from Hauck & Aufhäuser has the next question. Robin please go ahead.

Robin Brass:
Yes, good morning. Two questions both from me. First is the current acquisition pipeline. I mean after the acquisition of Silicon Motion. Can you give us at least some indication how your short list of companies you might look at look like? Or is there anything planned also maybe for summer? And secondly also distribution of cash, from the AGM you got permission to buy back up to 15 percent of shares and you mentioned you want to buy back shares going forwards. What can we expect here?

Jalal Bagherli:
Good morning. So let me take the first one. So yeah, we are -- we haven't closed the FCI acquisition yet. So we have signed the agreement, we're waiting for the regulatory clearance which should happen a little later in 2019, so we expect that to be done. Indeed, we are also looking at a number of other deals or targets in the pipeline.

So I think they tend to be small to medium-sized type of companies as we've indicated before and, you know, includes also like carve out like FCI was a carve out of another company, in this case Silicon Motion. So the markets, you know, we can -- we still find targets, and at any point in time, we look at three to four targets. But, you know, it does take rigorous analysis to decide, you know, a particular target is what we're looking for. They tend to be in mixed-signal technologies; they tend to be in either mobile or IOT or automotive, not surprising because these are the areas we've indicated in our capital market day we are focusing to grow. So, we're trying to add to the portfolio in those areas. So, that's all I can comment at this point.

Wissam Jabre:
And under cash or the shared buyback question, the -- we did -- maybe I'll reiterate that we -- the shared buyback tranche that we announced early November of up to \$150 million is being executed, and the broker is buying shares as we go. This one is expected to terminate on May 21st, so we'd expect a few days after that to finalize incentive.

At the AGM, we did request additional approval of up to 15 percent of the share capital of the company for the next -- for this current year, and so, as we said, we do intend to launch another tranche as this one concludes. But in terms of size and timing, in terms of maturity, we would be assessing that as it concludes, and we'll be, obviously, communicating it through our -- you know, after we discuss with our board what the right amount and maturity is.

Robin Brass:
Okay, thank you.

Operator:

The next question is from Adithya Metuku from Bank of America Merrill Lynch. Please go ahead.

Adithya Metuku:

Good morning, guys. Actually, most of my question have been answered, but just a quick follow-up. I saw in your press release about some audio chips you're supplying into the Huawei FlyPods. I just wondered if you could give us a bit more color on what exactly these chips and the indication as to how big this opportunity could be as you look at this market expanding and, indeed, free wireless market expanding over the next few years. Thank you.

Jalal Bagherli:

Good morning. So, yeah, I think we've been talking about our audio digital processing pod before in the context of professional headset technology. So, we've expanded the portfolio into consumer -- high-end consumer pod, and these are chips that, you know, have the SD cores, plus a bunch of other interfaces, processing power to do A&C, and also, they kitted with our low-power codecs, analog codecs.

So, we supply that for headsets increasingly. So, Huawei is one of the early adopters of that technology, and I think the opportunity is big. We just have to work through, as a newcomer into that market, through the various processes and show our value add. In addition to the audio processing chips that go into those headsets, we also, interestingly, have CMIC products going into those headsets, so for that headset alone, we've got three different products, and we are launching this with other headset makers.

Some adopt, you know, the audio processing; some adopt the audio and the CMIC, so it varies. But certainly, it's a growth area for us. It's hard to project the exact value for it, but as headsets also become a must-have accessory and get packed in the box with the phone, the volumes start to increase. I note that the one we announced is for a very high-end product, Huawei phones, so it's not necessarily a very big volume, but it's a good entry point to a consumer mobile application for audio chips, and we expect the follow-on designs that we get would be for much higher volume and mid- to high-end.

Adithya Metuku:

On -- just a quick follow-up. What is the TAM in a pair of headsets, as in for two earbuds?

Jalal Bagherli:

What is what? Sorry.

Adithya Metuku:

What is the content you get in two of these earbuds?

Jalal Bagherli:

The content in the sense of what it does? Or you mean price?

Adithya Metuku:

In terms of ASB.

Jalal Bagherli:

I think the -- yeah, I mean -- okay, I can talk about average. I can't talk about specific customers. So, with the audio processing chips in our retail, we sell those in the dollar-and-a-half to two-dollar range, and then audio codecs are typically 40, 50 cents, and CMICs are typically about 30 cents.

Adithya Metuku:

Understood. Thank you.

Operator:

As a reminder, if you have a question, please press star, followed by one, on your telephone keypad. If you have joined the call online, then please click on the flag icon. We have another question from Sébastien Sztabowicz from Kepler. Sébastien, please go ahead.

Sébastien Sztabowicz:

Yeah, you know, thanks for taking my question. On the Bluetooth low-energy business, could you tell us a little bit what the pace was of decline in the first quarter, and should we understand that in Q2 you could already be back to your on-year [spelled phonetically] goals in the second quarter, or if just to [unintelligible]?

And also, on the Bluetooth low-energy market, you know, target the market to go in the 19 percent tranche to the next couple of shares, while having in mind that the previous target was more Bluetooth low-energy market going in the mid-twenties -- could you speak -- what was the reason behind this slide [unintelligible] in Bluetooth low-energy forecast? Thank you.

Jalal Bagherli:

Okay, I'm not aware -- I'm not familiar with the forecast you're talking about. Is that a market study you're talking about, or --

Sébastien Sztabowicz:

Yeah, the market forecast [unintelligible]. It was more 24, 25 percent goals.

Jalal Bagherli:

Right, right. Okay, so I can comment from what I -- what we see around them with the market services. So, the -- I think the Bluetooth low-energy is a very, very strong portfolio for us. So, Q1 was purely seasonal- and product-related reasons for being down, meaning that some product launches will take place in Q2 rather than Q1. It was shifted back up a month, and that's the only reason. We retain our view on the strength of the market and our participation in the market, so we expect the growth here, and in half -- Q2, we'll be very strong sequentially to Q1.

I don't want to, you know, give you my statistics versus other years, because Q2 hasn't happened yet, but in terms of versus Q1, I can -- you know, I can easily see that we will beat that and much, much more. And in the second half also, we expect higher growth because we already have designs, very, very high-volume designs that are -- that will be going into production in Q3.

So, we have high confidence that our Bluetooth continues to have growth.

So, we look at it on an annual basis because, you know, quarterly product launches sometimes happen, sometimes they get shifted by a month or two, but the fundamentals remain very strong, and we see the market for us to be growing in the 20-percent-plus range rather than below.

Sébastien Sztabowicz:

Okay, thank you. And one additional question on the one-off licenses that you will record in Q2. With respect [unintelligible] very big, sizable one-off licenses beyond Q2 2019, or if -- will you be more recording those when you -- I would say another way -- like, as a transfer [unintelligible]?

Wissam Jabre:

So, Sébastien, the one-off license for Q2 is related to the license and asset transfer agreement with Apple, and I don't expect that to go beyond Q2.

Sébastien Sztabowicz:

Okay, thank you.

Female Speaker:

Our next question is from David O'Connor from Exane BNP Paribas. David, please go ahead.

David O'Connor:

Good morning, gentlemen. Thanks for taking my question. Maybe just one clarification, really, on the Apple business, the design win momentum that you spoke about there. Just to clarify, the -- so, the existing sub-PMIC business performance, the ASB for the next cycle -- is that what you would expect? Can that reset to the previous level? That's my first question. And then also, this design momentum -- is that really related to the existing business wins you already had, or is there something additional there? Thank you.

Jalal Bagherli:

There is. Good morning. So, I think the ASB varies by sub-PMICs. I think I've given a range before on this call. So, some of them are in the 50-, 60-cent, some are in the 25, 30-cent. We have multiple sub-PMICs. It's not one. So, that's the answer for the first question. But is it -- is this similar to what we've had before? From a silicon complexity price ratio point of view, yes. So, I mean, if they're smaller, obviously the ASB would be lower.

But in terms of proportionality, yes, it is a similar range of pricing. In terms of momentum, yes, we do not put momentum on a press release if this is on old products. We're talking about new design wins and new opportunities that come our way to bid for. That's what we're talking about. So, the momentum continues. We are landing new designs every quarter.

David O'Connor:

That's helpful. Thank you.

Operator:

There are no further questions on the phone, so I'll hand over back to you, Jose.

Jose Cano:

Thank you. I'd like to thank everyone for joining us today, and as usual, if you guys have any other questions, please don't hesitate to contact a member of the FTI team. Thank you.

[end of transcript]