CORPORATE PARTICIPANTS

Amnon Shashua, President and Chief Executive Officer

Moran Shemesh, Chief Financial Officer

Nimrod Nehushtan, Executive Vice President, Business Development & Strategy

Dan Galves, Chief Communications Officer

CONFERENCE CALL PARTICIPANTS

James Picariello, BNP Paribas

Joshua Buchalter, TD Cowen

Shreyas Patil, Wolfe Research

Tom Narayan, RBC Capital Markets

Dan Levy, Barclays

Joe Cardoso, JP Morgan

Ananda Baruah, Loop Capital Markets

Adam Jonas, Morgan Stanley

Chris McNally, Evercore ISI

PRESENTATION

Operator

Greetings and welcome to the Mobileye's First Quarter 2024 Earnings Call.

At this time all participants are in a listen-only mode. A brief question-and-answer session will follow the formal presentation.

As a reminder, this conference is being recorded.

It is now my pleasure to introduce your host, Dan Galves, Chief Communications Officer. Please, you may begin.

Dan Galves - Mobileye, Chief Communications Officer

Thanks Maria. Hello everyone and welcome to Mobileye's First Quarter 2024 Earnings Conference Call for the period ending March 30, 2024.

Please note that today's discussion contains forward-looking statements based on the business environment as we currently see it. Such statements involve risks and uncertainties. Please refer to the accompanying press release which includes additional information on the specific factors that could cause actual results to differ materially.

Additionally, on this call we will refer to both GAAP and non-GAAP figures. A reconciliation of GAAP to non-GAAP financial measures is provided in our posted earnings release.

Joining us on the call today as always are Professor Amnon Shashua, Mobileye's CEO and President, and Moran Shemesh, Mobileye's CFO. Also joining today for the Q&A session is Nimrod Nehushtan, Mobileye's Executive Vice President of Business Development and Strategy.

Thanks, and now I'll turn the call over to Amnon.

Amnon Shashua - President and Chief Executive Officer

Hello everyone and thanks for joining our earnings call.

From a revenue and income perspective, Q1 was fully aligned with the outlook we provided in January, and I am pleased that the inventory consumption is tracking as we expected. Based on information from our Tier 1 customers and our own analysis, we believe that 70% to 75% of excess inventory was consumed in Q1 this year. Adjusting for that, as well as some level of inventory growth in Q1 of last year, our volume growth of core ADAS would have been mid-single digits, which is very solid performance in the current environment.

In terms of business development and executing on our strategy, we continue to make meaningful progress across our portfolio. This starts with our eyes on, hands on ADAS business and extends throughout our advanced product data portfolio, including SuperVision, Chauffeur and Drive.

Starting with eyes on, hands on systems, or what we generally refer to as base and Cloud-Enhanced ADAS, our sustained success in this business has always been about providing incremental safety features to meet the constantly expanding regulatory and ratings requirements while leveraging scale and purposebuilt hardware to maintain a consistent overall cost to the automaker.

In Q1, we had our best ever design win quarter for base and cloud-enhanced ADAS, generating 26 million units of future projected volume across many OEMs and all key geographic regions. Design win activity (inaudible) so you shouldn't annualize this number, but we believe this should address any open questions on whether the excess inventory indicated some weakening of our position and opportunities for continued growth. It did not.

We believe a key driver of this elevated design win volume was the start of production of our next-generation high volume ADAS chip, the EyeQ6 (audio dropout). This system on-chip packs 4.4X the processing power of its predecessor the EyeQ4 into half the packaging size and supports many incremental safety and convenience features that are aligned with the global regulatory and NCAP safety rating roadmap for the next many years to come. This was accomplished without any material price increase to our customer or cost increase to Mobileye.

Turning to Mobileye's advanced product portfolio, we see three waves of future growth. Initially, eyes on, hands-free navigation on pilot through SuperVision; this system is in production now with more than

200,000 systems on the road and has customer wins that implies significant scaling over the next few years. For (inaudible) eyes off, we have Chauffeur for consumer-owned vehicles and Drive for network-deployed driverless vehicles. Each are still in development but have serious production wins that will begin to scale in 2026.

From a revenue per unit perspective we believe this product can accelerate our growth in a meaningful manner. For example, our future projected revenue from design wins in 2023 was \$7.4 billion. Approximately 40% of this future projected revenue was accounted for by SuperVision and 20% by Chauffeur, yet those products combined accounted for only 4% of the future volume.

Over the last 12 months, we have observed an increasing consensus among automakers that eyes on, hands-free across a broad operational (audio dropout) domain is a must-have feature to be competitive over the rest of the decade and beyond.

What's new since the start of the year is that we have seen a diffusion of this interest from primarily premium brands to more mainstream brands. We have also seen additional prospects reach out to Mobileye due to challenges with their current direction, whether that was fully in-house development or collaboration with our competitors.

We now have design wins or are in advanced discussions with 14 OEMs, representing 46% of the industry production, as compared to 11 OEMs representing 37% of industry production at the end of 2023. We continue to make steady progress with more mature prospects we have been working with since mid to late 2023, and see the likelihood of converting a number of these during the second half of 2024.

In the aggregate, Mobileye is now bidding on RFQs representing a multiple of the approximately \$4.5 billion of pipeline revenue generated in 2023 from SuperVision and Chauffeur design wins.

There are several reasons for this significant expansion and interest, and I'll elaborate on five driving factors.

Number one, the public announcement by Volkswagen Group for their alignment with our SuperVision, Chauffeur and Drive products was very important, both in terms of a larger global OEM moving forward on these product categories with conviction, and an endorsement of our capability and ability to execute. As expected, the announcement led to incremental traction with other OEMs.

Number two, we believe that Mobileye has significant and somewhat unique advantages in delivering an optimal balance of performance and cost. Our SoC cost is a fraction of competing high end associates and very importantly, our SoC comes with a full software stack validated for production readiness with a proven record of quality. Moreover, REM enables geographic scalability at very low cost.

Overall, our eyes on, hands-off performance is best-in-class despite running on low-cost silicone and requiring many fewer sensors than competition.

Number three, as EyeQ6 High approaches production in mid-2025, we are now able to utilize late-stage SoC and ECU samples in testing. The software stack built to run on these next-generation ECUs include state-of-the-art novel artificial intelligence systems including end-to-end perception and end-to-end actuation running parallel for purpose of redundancy to the networks powering our current generation of SuperVision. Our target for the camera-based subsystem for perception is 1,000 hours of driving on highway roads without intervention, and our testing show that we are on the right path of achieving those targets. I would mention that those mean time between intervention targets are expected to be industry-leading at quite a large gap.

Number four, we believe that SuperVision provides a validated bridge to a true eyes-off system across a wide domain, which is seen by many OEMs as a true value driver long term. But the performance

requirements for eyes-off are really underappreciated by the public and also by certain OEMs who are throwing everything they have at an eyes-on system with seemingly no clear plan on how to boost mean time between failure from one safety intervention every few hours to one every hundred of thousands of hours.

Mobileye, on the other hand, has a unique methodology and offering including crowd-sourced mapping that boosts perception performance with other perception layers, a market-leading imaging radar to support our true redundancy concept, RSS and purpose-built efficient compute. These areas of vertical integration experience in our view are (audio dropout) several assets.

Number five, we have already seen an initial positive impact from Tesla's decision to double down FSD and robotaxi, which adds to the desire for other OEMs to have competitive offerings, but also is seen as an area where our legacy customers can utilize Mobileye's strength to introduce far-reaching intelligent driving systems.

Overall, I am very pleased with the progress of our technology and business building with OEMs. I look forward to more updates through the year and now turn the call over to Moran.

Moran Shemesh - Chief Financial Officer

Thank you Amnon, and thanks for joining the call everyone.

Before I begin, please be aware that all my comments on profitability will refer to non-GAAP measurements. The primary exclusion in Mobileye's non-GAAP numbers is amortization of intangible assets, which is mainly related to Intel's acquisition of Mobileye in 2017. We also exclude stock-based compensation.

Starting with Q1 results, they were closely aligned with the Q1 outlook we provided back in January. I'll provide a brief summary and then get into a bit more detail.

The severe year-on-year decline in the key metrics was almost exclusively isolated to EyeQ volumes which were impacted by the inventory correction. During the quarter we delivered 3.5 million EyeQ chips. In addition to these new shipments, our customers used a significant amount of EyeQ inventory to satisfy the demand for our product during the quarter.

The approximately 4.6 million units year-over-year decline which converted at our high gross margin essentially accounting for substantially all of the reduction in gross profit. Our COGS is nearly (inaudible). The fixed component is very minimal. The balance of the year-over-year decline in operating income was driven by some growth in operating expenses, but this was relatively minor. And our operating expenses do not flex with revenue as R&D spending is correlated with the execution of our advanced product strategy and is not impacted by short term fluctuation in revenue.

Beyond the volume decline, we also saw some modest decline in EyeQ ASD and gross margin related to mix.

SuperVision was pretty strong in the quarter. We delivered 39,000 units compared to 25,000 units in the year-ago period. This was (inaudible) expectation. The miss was due to timing. We continue to see the first half delivery totaling around 770,000 units, in line with our initial expectation, but with Q1 slightly higher than expected, Q2 slightly lower. SuperVision gross margin improved somewhat in Q1, both sequentially and year-over-year. The more meaningful increase into the low 40 range is expected in Q2 as close to 100% of our volume will be with the new low-cost domain control.

On an overall blended gross margin basis, the lower than normal percentage was related to the fact that SuperVision was around 20% of revenue in Q1 compared to an average of 6% in 2023 calendar year. While SuperVision volume grew year-over-year, the mix of SuperVision was exaggerated by the temporary

reduction in EyeQ volume in the quarter, which will return to a more normalized level in Q2 and even moreso in the back half.

Despite the operating loss, operating cash flow was modestly positive in the quarter. One item to note here is that we are (inaudible) balance sheet inventory roll sequentially. This has nothing to do with inventory as the Tier 1 customers. Our balance sheet inventory rose modestly due to low shipment in the quarter and the need to maintain somewhat steady purchasing of EyeQ chips over the course of the year. By the end of 2024, we would expect our balance sheet inventory to be consistent with the 2023 year end figure.

Looking ahead, we believe that the inventory conception process is on track. At this point the vast majority of Q2 volume is based on binding purchase orders from our customers. There is always some level of uncertainty regarding timing of late quarter shipments, but we are comfortable in projecting approximately 7.4 million units, up more than 100% as compared to Q1.

Based on our own analysis and information from our customers, we expect that inventory at our Tier 1 customers will be back around normal levels by end of Q2.

Please note that we may not continue to give as much specification of quarterly unit volume outlooks, but giving the unusual cadence of this year we feel it is worthwhile.

We expect gross margin to move higher to around 67% and for operating expenses to continue to grow steadily on a sequential basis.

Overall, our revenue and adjusted operating income expectation for Q2 are well aligned with the current analyst consensus.

In terms of the full year guidance, it is unchanged from the outlook we provided on January 25. From a volume perspective, we are assuming 31 million to 33 million EyeQ shipments, and 175,000 to 195,000 SuperVision shipments in 2024.

On the EyeQ side, the mid point of our guidance implies around 21 million units in the back half. This is supported by regularly updated indications from our customers which have been quite stable over the last couple of months. It also appears to be reflective of the true level of demand in the back half of 2024, based on our own analysis of OEM production forecasts. If we isolate (inaudible) system for the single-chip EyeQ business, we expect it to be down slightly in 2024 on a year-over-year basis, consistent with our view in January. The modest weakening in vehicle mix that impact us somewhat in 2023 is expected to continue in 2024. This is compared to a very rich mix we saw in 2021 and 2022 due to overall automotive industry production constraints. Higher priced chips or cloud-enhanced ADAS and other advanced programs are providing an offset, but we do not view this tailwind as very material in 2024 as cloud-enhanced ADAS volumes are still not a meaningful portion of the total, and the base of vehicles paying us annual REM related license payments continue to build.

On the SuperVision side, these volumes can be more difficult to precisely predict given that we are currently only on five models that are all in the EV space, which has been in a period of volatility. The increase in volumes in the second half of 2024 versus the first half of 2024 is supported by several factors, including, number one, the recent mid-cycle refresh of ZEEKR 001, which caused a significant uptick in demand. Number two, incremental scaling of ZEEKR 001 volumes in Europe. Number three, an additional version of the ZEEKR 009 with enhanced features. Number four, the start of Polestar 4 deliveries in Europe and the U.S. in the second half. And number five, continued ramping of Smart #1 and Volvo EM90 volumes.

On a total company basis, we expect average system price to rise to approximately \$55 in 2024 from \$53 in 2023, based on SuperVision growth. We expect gross margin in the range of 67% to 68% range for the remainder of the year based on current expectations for the mix of SuperVision and EyeQ revenue. We continue to expect adjusted operating expenses to grow approximately 25% on a year-over-year basis as

we execute on our advanced product portfolio in preparation for substantial numbers of SuperVision, Chauffeur and Drive product launches in upcoming years.

We continue to believe that our operating expenses in the near and long term should be structurally lower than we expected as of a year ago, and that OpEx percentage growth in '25 and beyond should be significantly lower than in 2024.

Lastly, in terms of tax rate, we continue to assume a non-GAAP effective tax rate of 15% and 17% for 2024 in comparison to 11% in 2023.

Thank you, and we will now take your questions.

Operator

Thank you.

Our first question comes from James Picariello with BNP Paribas. Please proceed with your question.

James Picariello - BNP Paribas

Good morning everybody, or good evening, good afternoon.

Amnon Shashua - President and Chief Executive Officer

Hey, James.

James Picariello - BNP Paribas

Just on the gross margin guide, was it declared that it's 67% to 68% as the range through the remainder of the year, or was that a full year number for gross margins?

Moran Shemesh - Chief Financial Officer

Yes. This was for the remainder of the year. I believe I also mentioned the full year that it's approximately 67%. But this quarter, of course, was lower due to mix of SuperVision. As I mentioned, SuperVision was 20%, so it's not a representative gross margin.

James Picariello - BNP Paribas

Correct. So my follow-on question, can you just confirm the—and apologies if I missed it—the SuperVision shipment number in the first quarter? Then can you just walk through for OpEx, what drives the somewhat material step up through the remainder of the year on the OpEx side to get to the 25% year-over-year OpEx growth? Thanks.

Moran Shemesh - Chief Financial Officer

Yes. In the first quarter, we delivered 39,000 units, and I also said we are expected to deliver 70,000 for the first half for SuperVision unit, and the rest of the year, again, is on track with our guidance.

As for the OpEx, so the main bucket for increase is headcount, headcount to support our activities, our design wins and the new advanced programs that's approximately \$100 million of headcount growth and some compensation inflation.

The other element is R&D related to headcount, again to support the advanced program, EyeQ6, EyeQ7, LiDAR, radar and also software related to design new programs building the hardware. All these R&Ds are around maybe \$80 million or \$90 million, but offset with some higher NRE reimbursement, mainly related to our new programs and also related to Drive, that offset some of this amount. We also have approximately \$20 million or \$30 million as a result of occupancy, the new campus and other sites, including depreciation. These are the main drivers for cost increase and our OpEx increase in 2024.

Operator

Our next question comes from Joshua Buchalter with TD Cowen & Company. Please proceed with your question.

Joshua Buchalter - TD Cowen

Hey guys, thank you for taking my question. For my first one, any more details you can provide on the 14 advanced engagements, and in particular, the incremental three that you added in the quarter, whether by geographic mix, drivetrain and perhaps most importantly, any updates on timelines to conversion for the advanced engagements?

Nimrod Nehushtan - Executive Vice President, Business Development & Strategy

I'll take this. In general, we have been making steady progress with our activities, as mentioned, and the increase comes from a mix of geographies, European, American and also in Asia. The progress we're making is in three fronts, on commercial front, technical fronts and also on the legal front in order to make sure that all aspects related to these agreements are addressed, and we continue to expect to make -- to get to a convergence within the second half of the year. I just want to maybe refer you to the Volkswagen partnership, which took us between a year and 1.5 years to conclude, we do see shorter timeframes in the existing engagements. I still think that second half of the year will be a good point in time to start to see more convergence there.

Joshua Buchalter - TD Cowen

Thank you for that. For my follow-up, I just wanted to ask about the EyeQ6L. Obviously, some good initial design win metrics there. Can you maybe spend a minute or two talking about what are the features that customers can use on the 6L? And also, how are you able to, I guess, extract incremental ASP from the part? Because I assume—you mentioned the ASP doesn't change all that much. I guess I was a bit surprised given you're moving from 28-nanometer to 7-nanometer on that chip, so that should allow for a good amount of performance uplift. I'd just be curious to hear about some more details on the engagements there in core ADAS as EyeQ6L becomes a more meaningful part of the mix over time. Thank you.

Amnon Shashua - President and Chief Executive Officer

Okay. The ASP is driven by the functional bundle and not the process node of the chip. The bundles are increasing due to regulatory expansion and also NCAP rating expansion. Many of these programs also—programs that we win also include cloud-enhanced. Right now, the programs that we won in Q1 have a similar ASP to the existing generation, but we do see a drive towards higher bundles, which would increase ASP. But the big ASP jump comes from the advanced product portfolio, the SuperVision, Chauffeur and Drive. Any ASP increase in base ADAS is really incremental.

Nimrod Nehushtan - Executive Vice President, Business Development & Strategy

I just want to make one follow up to that, just to reinforce, is kind of historically, each generation, the goal is really to provide incremental features that allow the OEMs to meet regulatory and NCAP requirements without changing the price, so this has really been kind of our strategy over time. Obviously, the higher

performance gives you the potential for increased bundles which can drive higher ASP, but in general, what we're trying to do is kind of keep pricing and keep cost the same for each successive generation but provide incremental features.

Operator

Our next question comes from Shreyas Patil with Wolfe Research. Please proceed with your question.

Shreyas Patil - Wolfe

Hey, thanks so much for taking the questions. Maybe just firstly, as we think about SuperVision profitability, I think you're indicating a low 40% gross margin by the second quarter, I believe, and the long-term target is closer to 50%. How should we think about the progression towards that long-term target over the next few quarters or even beyond?

Amnon Shashua - President and Chief Executive Officer

We are on track of increasing the gross margin. We have a second-generation domain controller, which is now in production and on the road, and in few months will completely replace the Generation 1 of domain controller, and that increases the gross margin considerably. The future products with the EyeQ6 are also designed with the gross margin approaching our target of 50%. We are converging.

Shreyas Patil - Wolfe

Okay. Then maybe this is a bit of a longer-term question, but I'm curious how you think about some of the trends that we see in markets like China, for example, with some of the automakers seemingly willing to invest and deploy quite expensive systems but to kind of own the data or try and develop the software inhouse. I know you've talked before about the challenges those automakers will have in terms of scaling outside of China. I'm curious if you see that as a risk inside China if more automakers are willing to pursue those approaches, albeit at a more expensive cost to what SuperVision can deliver. Do you see potentially automakers in other regions working on internal systems as well in a similar way? Thanks.

Amnon Shashua - President and Chief Executive Officer

Our view also historically is that competition is good because it creates more demand for those high-end solutions. In-house development in China exists. We work hand-with-hand with those OEMs, so some car models are in-house development, some car models are Mobileye equipped. But all the models you see out there are eyes on systems. Now, with eyes on systems, what wins at the end of the day is cost versus performance. No one will pay higher cost for the same performance.

Mobileye's SuperVision system is about 50% of the cost of competing systems. Some of those systems have three LiDARs; we have a SuperVision without any LiDAR. It's not necessary to have LiDAR in our SuperVision system. So when you look at it (inaudible), it is for an eyes on system, it is cost needs to move performance and not first performance and then cost, and we have a great advantage there.

Another advantage we have in China is our rapid expansion of REM. This allows to enable hands-free driving also in urban settings. We are going to launch in, I think, next month or in the next six weeks the first urban Drive in Shanghai, which is going to be deployed on all the 200,000 vehicles that are currently on the road. This is going to be a really industry-leading experience, and then we can expand throughout China quite quickly. This is something that if you don't have the crowdsource technology to do that, it's very, very difficult to scale high-definition maps over across urban areas.

Then comes the next generation, which is eyes off. None of our competitors have a concrete plan on how to get to an eyes-off system. Mobileye is the only company, only supplier that has eyes off production

programs and not only one; multiple production programs, especially with a leading company like Audi, which also generates volume, not only credibility.

I think putting everything together, the kind of competition we see in China is not a risk. We see this as an advantage because it puts pressure on other OEMs, also outside of China, to deploy these kinds of advanced systems.

The in-house development outside of China, we see that declining considerably. Many OEMs that made the announcement of in-house developments have taken a step back and we are starting to have serious engagement on adopting SuperVision and so forth.

Nimrod Nehushtan - Executive Vice President, Business Development & Strategy

If I may follow up, I think what's important for us in this dynamics in China is that it's in evidence that when OEMs seek for differentiation, autonomy is kind of the most important aspect for them to invest and to ensure that they have a competitive product. While some OEMs lean towards in-house development with expensive systems and investing significant capital, it still says that they believe that autonomy will be the key differentiator in the future for them. This was recently supported also by statements that Tesla made in their earnings call earlier this week that this is going to be kind of the next big thing for OEMs who seek to kind of escape from the price challenges that today are kind of ruling the world in China. We see this as a very important development because it solidifies our long-term perspective and most OEMs we expect will lean towards competitive products with short time-to-market with competitive cost and with the best-in-class performance and know that they need to compete within the next couple of years. We believe we have the product that best suits this need at this point in time.

This is what stands behind the increase in the amount of engagements we've had in the last quarter.

Shreyas Patil - Wolfe

Thanks.

Operator

Our next question comes from Tom Narayan with RBC. Please proceed with your question.

Tom Narayan - RBC

Thanks for taking the questions. The first one is kind of high level. You mentioned the Tesla announcement this week or in recent weeks seems to be a pivot towards more on the robotaxi front. Certainly, FSD is a big driver of that, their Version 12, but I guess the question, it seems like from talking to them, there's a reluctance to engage in this Level 2-Plus, but for some reason now there's this movement towards potentially a Level 4 as a proof of concept. When a consumer sees the Level 4 that they believe in it more, see the robotaxis on the road, maybe then it's a halo effect on autonomy in general. I guess the question is, do you agree with them that maybe that the robotaxi, the Level 4 side of things, even some far distant thing, maybe this is pulled forward a little bit, and it's a proof of concept that could potentially be a catalyst for Level 2-Plus. Or do you view these two things as completely separate animals?

Amnon Shashua - President and Chief Executive Officer

Well, Tesla's FSD is Level 2-Plus. They call it now FSD Supervised but this is a Level 2-Plus. We are all in favor of Tesla accelerating the robotaxi plans because we have also robotaxi in production with Volkswagen on the ID.Buzz coming out in 2026. Any uplift in the demand for robotaxis is also an uplift for us.

Now, whether they could introduce robotaxi using only cameras, we are kind of skeptical, but no, we don't know what they're going to introduce. Maybe they'll introduce a robotaxi with additional active sensors, not only camera.

We believe that eyes-off systems—rather than calling this robotaxi, let's call it eyes-off systems because eyes off means that you can drive autonomously on selective type of roads, not necessarily on every type of road. It's still a great value. Eyes-off system, which is our Chauffeur product line has a great value proposition. We also believe that in time, it will even overtake the Level 2-Plus in terms of volume, but we see that as something for the next decade in terms of the volume ramp. SuperVision is this decade and eyes-off would be, in terms of scaling and overtaking Level 2-Plus, we see that as something for the next decade. But we'll be very happy to be proven wrong and to have this accelerated.

Tom Narayan - RBC

My quick follow-up: the 14 OEMs you're talking to, obviously five of them you've already won, and there's three new ones. There's SuperVision, the regular SuperVision where you've won, and there's obviously the kind of more lite version of SuperVision. Just curious, of those 14 OEMs you're talking to outside of the ones you've already won, are the majority of those the regular kind of SuperVision or are those different kind of varieties, kind of a SuperVision Lite product? How do you think about that on that distribution?

Nimrod Nehushtan - Executive Vice President, Business Development & Strategy

Well, first of all, the question is, it's a mix between SuperVision, Chauffeur and SuperVision Lite. It's kind of a very balanced mix, I would say. What we see is that OEMs are trying to build their vehicle lines such that some of the vehicle lines will have a full SuperVision or Chauffeur or both, and then maybe the bulk of the volumes will have instead of just a front camera, will have a SuperVision Lite type of system, which has five cameras and five radars or six cameras and five radars, but still offers very advanced functions compared to the base ADAS we have today, which will improve their competitiveness in the low-cost cars, will offer new value propositions to consumers, but at controllable costs. This kind of lives in parallel to the SuperVision and Chauffeur, which will be for other car lines. This is what we see in our engagements with OEMs. And This, for us, really kind of changes the way we're looking into base ADAS in the future because we actually think it will potentially diverge to two streams. One will continue to be low end, front camera only, just to become the lowest cost possible with regulation. In addition to that, we see a growing demand for SuperVision Lite as the next generation for the base ADAS segment, let's say. It's kind of an extension and it coexists next to SuperVision. That's what I was looking for.

Dan Galves - Mobileye, Chief Communications Officer

Yes. Just to clarify, most of the engagements, the vast majority of the engagements are including discussions around multiple of these products. Just like the Volkswagen Group design win.

Operator

Our next question comes from Dan Levy with Barclays. Please proceed with your question.

Dan Levy - Barclays

Hi. Good morning. Thank you for taking the questions. I wanted to start with a question on Volkswagen now that that's more publicly known. Maybe you could just give us a little more on the parameters of the program? What's the software versus hardware components? How much of this is actually using your domain controller? What's the extent of the functionality that's going to be enabled, the regional split? Then in the release, I think there was some commentary that at some point VW would eventually use in-house solutions. Maybe you could just comment on, I guess, the stickiness of your agreement with them, or is this maybe a bridge solution for them?

Amnon Shashua - President and Chief Executive Officer

In terms of the parameters of the deal with the Volkswagen Group, Mobileye is in the position of a Tier 1 supplier, so we're responsible end-to-end for the hardware, and we have other Tier 2 suppliers working with us, for example, for the parking systems. We are a full Tier 1 supplier. I don't expect us to be a full Tier 1 supplier in many additional programs, but for this program we are a full Tier 1 supplier, so we are responsible for the entire system end-to-end. That includes the perception—in terms of software, the perception, the driving policy, the control. There's a DXP component to fine tune and customize the driving experience to each brand.

In terms of the comment about them at some point moving to an in-house development, I think that was on the table for many, many years. They have a software division called CARIAD and that software division is still in operation, in full force, and at some point, maybe they will be able to deliver the kind of system that we deliver, but we believe that the stickiness of our systems are very, very strong.

The validation required to reach the very high levels of the performance of SuperVision are enormous. The validation required for eyes-off is beyond anything that the industry has experienced so far, so I believe the stickiness is very strong.

Do you have something to add?

Nimrod Nehushtan - Executive Vice President, Business Development & Strategy

Yes. If I mad add a little bit more color. First of all, the partnership we announced includes SuperVision, Chauffeur and Drive, as Amnon mentioned, and it's going to be deployed overall in 17 floor models, and it includes most of the brands in the Volkswagen Group, the premium brands, Audi, Porsche, Bentley, Lamborghini and so on. But just to maybe sharpen the stickiness aspect, this partnership addresses the existing architecture or the next-generation architecture that Volkswagen plan to launch in 2026 onwards. There is kind of a plan to deploy specific car models that are allocated today with this product for many years to come after the start of production. Their in-house activity that still exists today is for a future architecture that maybe in some point in time will mature. It includes many other things that they're working on, but it's not that it will replace our product in case it will mature. It will live in a different architecture on different cars some part in the future in case it will indeed materialize.

In terms of the stickiness, once it reaches production, there are many, many cars that will be deployed with this for many years after the series production.

Dan Levy - Barclays

Great. Thank you. Then as a follow-up, I wanted to go to some of your China commentary, and I think some time ago, you noted that ZEEKR was offering a free 12-month trial of highway SuperVision. I don't know if you could provide any feedback. Is there any way to get a sense of what the take rate is going to be in the future of this functionality? Is this something where you have confidence that this could be a fairly high take rate or even maybe a standard fit throughout the ZEEKR lineup or ZEEKR version 001?

Amnon Shashua - President and Chief Executive Officer

We are in discussions with ZEEKR to make it really a standard fit rather than a take rate type of functionality because of the rising competition in China. I believe the convergence would be that it will be standard fit.

Dan Levy - Barclays

Thank you.

Operator

Our next question comes from Samik Chatterjee with JP Morgan. Please proceed with your question.

Joe Cardoso – JP Morgan

Hi. Thanks for the question. This is Joe Cardoso on for Samik. Maybe a follow-up on the OEM engagements myself. You guys have shown good progress moving from 3 to 14 OEMs now; production now covering 46% versus 9% a year ago. Just curious, when you think of the headroom that you have left to go after, like how would you characterize it? Have your views relative to, let's call it, a ceiling change relative to six, nine months ago or even a year ago, given the developments in the ecosystem and now that you're approaching 50% of production, at least in kind of the engagements that you have already under your peripherals? Thank you.

Nimrod Nehushtan - Executive Vice President, Business Development & Strategy

Yes. I think that there is a flywheel effect that we are seeing in which the more we have engagements with OEMs and the more we announce partnerships with OEMs, the more it builds our credibility on these advanced product line. We are also more prepared today, let's say, in terms of our business development activities and supporting 14 engagements in parallel, and we have the capacity to support this. We have the capacity to support even more than this.

What happened last year are multiple factors as Amnon laid out at the beginning. Number one, competition in China and also outside of China is moving towards this hands-off as the next differentiators for cars. Number two, we build our credibility. More announcements kind of helps us to reinforce our position as leaders in this front. I think we know more today about what needs to be done in order to secure these engagements after a year-long negotiation with one of the biggest car companies in the world. I think this is what stands behind this increase.

Also, this is kind of the adoption curve where today, what's interesting, as Dan mentioned, is that we are working with kind of the early majority and the middle-of-the-pack type of OEM, not just the innovators of the market today on these engagements, which kind of shows us that in 26/27 timeframe, these hands-off products will become very available in terms of the amount of OEMs that launch them.

Joseph Cardoso – JP Morgan

Maybe just a quick follow-up, or my second question, rather. Just wanted to touch on the destocking situation. It sounds like you've made great progress. Can you just talk to maybe some of the changes or processes that you have put into place to improve your visibility around inventory at your customers and how they're tracking or working today? Thanks for the questions.

Moran Shemesh - Chief Financial Officer

Yes. I think we actually discussed it in the last call that this is a situation that we haven't experienced before, so we did put some processes in place.

For this year, I can say, for Q1 we actually based on global production, actual production and ADAS fitment rates production per OEM, we've actually analyzed the gap between what we actually shipped in Q1 and what we would expect to ship if we didn't have the inventory issue. That gives us kind of the comfort—and also looked, of course, at the year-over-year growth to see that it makes sense.

We did the same exercise for the full year. So for the full year, taking again, the expected global volume, which looks pretty good, so it's increasing for our top customers. Looking at Q3/Q4 and the outcome that

we get compared to our customers' order indications for Q3/Q4, we get to approximately similar numbers, which is encouraging in that aspect. It's a step-down analysis versus the orders indications.

In terms of receiving data or some visibility for our customers, we get some verification from them, but only indication. We don't have full visibility to that. But with the process we have in place for the top down, we can, again, verify the data that we receive and have actually a comparison between the two to make sure we are aligned with expectations.

Operator

Our next question comes from Ananda Baruah with Loop Capital Markets. Please proceed with your question.

Ananda Baruah - Loop Capital Markets

Hey, yes, guys. Thanks for taking the questions. Just two quick clarifications for me, if I could. The first was, you guys commented on expecting mix to normalize into the second half of the year. I guess the clarification is, is it back to mid-single-digit SuperVision, or will it look something different, sort of given the SuperVision ramp? Then I have a quick clarification follow-up as well.

Amnon Shashua - President and Chief Executive Officer

I think the issue that we have with inventory is not related to SuperVision.

Moran Shemesh - Chief Financial Officer

Yes.

Amnon Shashua - President and Chief Executive Officer

It's related to EyeQs. SuperVision is on track.

This quarter, the volume we shipped—39,000—it was above expectation, but we believe that the number for the first half of the year would follow our guidance, which is about 70,000. The full guidance of the year we have, the remaining second half is according to the guidance we gave at the beginning of the year.

Ananda Baruah – Loop Capital Markets

Then for the second clarification is around ASP. This may just be me mishearing what was said or not hearing completely, but I heard on the one hand ASP for 2024 being \$55, up from 2023. Then I thought I also heard another comment about 2024 ASP being down year-over-year. So just...

Moran Shemesh - Chief Financial Officer

Yes. The \$55 versus \$53, that takes into account the mix of SuperVision and EyeQ. SuperVision of course, is a higher ASP as we are also the vendor for the hardware, so the ASP is significantly higher. Again, overall ASP of \$53 or \$55 in 2024 is mainly driven by the mix of SuperVision revenue as a percentage of the total revenue. Again, it's much higher in the segment.

As for EyeQ ASP—and that was my comment. The EyeQ ASP was lower in Q1 specifically. We don't believe this ASP represents the normal ASP for this year. For Q1, we shipped only 3.5 million chips, so the mix obviously has changed. For example, if some of the low-cost programs in China became a higher percentage out of this 3.5 million chips, then the ASP is lower. So it's very volatile in such a quarter when

we deliver only 3.5 million chips. We do expect an increase in Q2 and Q3 of the ASP for EyeQ. It's about \$0.40 or \$0.50.

On the total year, yes, we expect EyeQ ASP to go down as it did in 2023, approximately \$0.50, \$0.75 year-on-year, continuing the normalization of the mix as compared to a very rich level that we had in 2021 and 2022. This had a modest impact in 2023 and we expect a similar impact in 2024 on a full year basis.

Ananda Baruah - Loop Capital Markets

Very helpful. Thank you. Appreciate that.

Operator

Our next question comes from Adam Jonas with Morgan Stanley. Please proceed with your question.

Adam Jonas - Morgan Stanley

Well, first, I just want to share my thoughts to the Mobileye team and the community and people of Israel during the ongoing situation and (foreign language).

Amnon, seven months ago you posted on LinkedIn that Tesla decision to adopt an end-to-end generative Al approach to full self-driving to train neural networks was—I'm quoting—neither necessary nor sufficient for full self-driving programs. Do you still feel the same way today, Amnon?

Amnon Shashua - President and Chief Executive Officer

Yes, indeed. Now in my prepared remarks, I mentioned that on the EyeQ6, we're going to have end-to-end both perception and actuation, and that does not contradict the point that we made. The Tesla end-to-end is the sole technology. Our end-to-end is just one engine on top of multiple engines in order to create a decomposable system that is explainable, that is modifiable, that you can explain what it does to the regulatory bodies, that you can customize the driving experience for OEM. If you look at some of our competitors like Waymo, they have the same view that there's a very, very strong reliance on the neural networks, on data-driven networks, language models, but at the end of the day, it needs to be a system that is designed to be explainable and modifiable. We're not against end-to-end. We are against end-to-end being the sole engine for the system.

Back at the CES a few months ago in January. I presented Mobileye's end-to-end perception engine, right? What I call the multi by the power of 5, how to build an end-to-end perception engine, and this is running on the EyeQ6. We have also another engine, which also includes actuation. So this is going from videos to actuation as an end-to-end, but it's a component. It's a subsystem of a more complex system.

Adam Jonas – Morgan Stanley

Thanks Amnon for clarifying. Just as a follow-up, I know you've said that some of your design wins are also for SuperVision, or include internal combustion architectures. Some people on this call might be a little skeptical as to whether your OEM customers would have software-defined internal combustion vehicles. I guess my question is, when would you actually—while theoretically and practically possible, when would you expect, based on your visibility of today, to see a SuperVision fitment in production internal combustion architecture vehicle?

Amnon Shashua - President and Chief Executive Officer

The Volkswagen Group win was 17 models. Nine of them are combustion engine models, right? So 50% of the models is going to be combustion engine. It doesn't have to be software-defined vehicle. It's a system,

just like ADAS is a system. It's really encapsulated in our ECU. It doesn't have to be a software-defined vehicle, and all the over-the-air update is done through our ECU so everything is very self contained.

Nimrod Nehushtan - Executive Vice President, Business Development & Strategy

If I may follow up on this, I think that maybe a few years ago some OEMs said that their future plans in terms of future architecture, software-defined vehicles will be based on EVs under the assumption that EVs will become the leading powertrain for their cars towards the back half of the decade. What has changed for some OEMs in the last year is that the plans are today maybe a little bit more moderate in terms of the EV percentage versus combustion engines or a hybrid, but this still means that they are kind of aligning their architectures to the powertrain in a more balanced way as opposed to going all in on EVs for future technologies.

Dan Galves - Mobileye, Chief Communications Officer

Thank you, Adam. We can take one more question, Maria.

Operator

Okay. Our last question comes from Chris McNally with Evercore ISI. Please proceed with your question.

Chris McNally - Evercore

Thanks so much, team. Last, but hopefully not least, maybe we can dive into some of the SuperVision details on the potential wins for second half. We'd love to know if we look at the wins by type of the RFPs, is it sort of the old model-by-model RFP approach where we've seen the legacy OEMs kind of bid this out in the past, or maybe DXP or sort of the wide Audi/Porsche deployment has led to a broader fleet deployment for the potential RFPs, ie., could we have hundreds of thousands of vehicles per OEM in the '27-plus timeframe?

Nimrod Nehushtan - Executive Vice President, Business Development & Strategy

Yes. What we have is for—Normally, what we do is to see kind of the plans for OEMs in launching specific vehicle models, but it's more a platform question as opposed to specific vehicle models. Normally, a platform will include a few vehicle models that will be launched according to their plans, and then we're not going one-by-one in kind of a rigorous process with each OEM. It's a bundle of cars and car models, and it could be—the volumes can vary according to the OEM, of course, but when we have a deal, it can include multiple car models as we had with Volkswagen Group, which with one announcement we covered 17 car models with multiple brands and with all geographies and so on and so forth.

Chris McNally - Evercore

Really appreciate that. Maybe for the follow-up, if as a follow-up, if we could follow on to Adam's question sticking to this topic of, at least for now, supervised eyes-on performance, autonomous evolution to the side. Amnon, in the past, I think Mobileye has discussed something like you were hoping for 10x better miles per disengagement from SuperVision when we compare it to something like full self-driving. I think a lot of those comments were pre Version 12. Any thought on how you think SuperVision, again, as a supervised eyes-on system, the competitive statistics stacks up today?

Amnon Shashua - President and Chief Executive Officer

We are targeting the current generation with EyeQ5. It's improving all the time. We have over-the-air update every two months or so. We are close to achieving a 100-hour mean time between intervention on highways, less so in the urban but it's more than one or two hours of mean time between intervention.

On the EyeQ6 system, as I mentioned in my prepared remarks, just for the camera subsystem, it's about 1,000 hours of mean time between intervention on highways. I don't know what is the mean time to intervention on Tesla's Version 12. I don't know if anyone measured that, but these are the kinds of things that we measure in terms of KPIs on how we progress.

Operator

There are no further s at this time. I would now like to turn the floor back over to Dan Galves for closing comments.

Dan Galves - Mobileye, Chief Communications Officer

Thanks everyone for your time and we will talk to you next quarter. Thanks to the Mobileye team for the session. Thank you.

Operator

This concludes today's teleconference. You may disconnect your lines at this time. Thank you for your participation.