



Mobileye Global Inc at Morgan Stanley Laguna Conference - Final

FD (Fair Disclosure) Wire

September 13, 2023 Wednesday

Copyright 2023 Electronic format, layout and metadata, copyright 2023 VIQ Media Transcript, Inc. ALL RIGHTS RESERVED.

Copyright 2023 Refinitiv. An LSEG business. ALL RIGHTS RESERVED.

Length: 4585 words

Body

Corporate Participants

* Dan Galves

Mobileye Global Inc. - Chief Communications Officer

Conference Call Participants

* Adam Jonas

Morgan Stanley - Analyst

Presentation

ADAM JONAS, ANALYST, MORGAN STANLEY: Thank you so much for joining. Really looking forward to getting a new discussion about Mobileye and its business and the opportunities. Dan Galves, Chief Communication Officer. Dan, I know you for a long time, so fun seeing your career and its many forms and you come back home to Mobileye, it's good to have you.

DAN GALVES, CHIEF COMMUNICATIONS OFFICER, MOBILEYE GLOBAL INC.: It's good to be back in Laguna too. Like, this is a great event, it's always good to see you. And it's going to be an interesting talk.

ADAM JONAS: We'll stop crying in a second folks, I promise, we'll get into this. But I do want to say, I think your role, not just in (technical difficulty) clearly understand Mobileye, that's obviously well known, but I think you were like taking on an even broader, kind of an educator in a kind of common language because it really is a different kind of language, that kind of business you're in. (technical difficulty) So you help make these concepts understandable, clearly that, I think in my opinion, a lot of value to Mobileye through all the phases of this next iteration as a public company and even beyond Mobileye, other aspects of electrification and autonomy. Just, you know, thanks. Thanks for what you do.

DAN GALVES: Thanks, you too Adam. I mean, I get a lot of help from the team in Israel, like they have a very kind of pragmatic approach to really everything that they do. And that kind of, you know, it bleeds into their ability to explain it simply.

Questions and Answers

ADAM JONAS: Okay. Now we are going to ask some tough questions. You've got a lot of affairs over here. But any key messages you wanted to get out there at the top?

DAN GALVES: Yeah. I mean, I think that we feel great about the current business. But what we're really feeling great about is kind of the advanced systems businesses, SuperVision, chauffeur. I think our confidence has never been higher that a substantial number of design wins are going to come through, pretty quickly, I think that that confidence has ramped up pretty significantly over the last six to eight weeks even.

And I think that there's a couple of reasons for it. One is one is proof points, and I think one of the things that's benefited us over the last couple of years is the increased ability to provide proof points to our customers. You go back two, three years and to experience the SuperVision system, you really had to come to Israel. And it's like you come to Israel and you're jet lagged. It's their hometown. What did they do to the roads? It's a nice experience, but let's see kind of what happens.

Then the REM maps started getting built. So that gave us the ability to take cars to North America and Europe and really drive anywhere. And so last year, we did several 2,000 kilometer-3,000 kilometer drives with customers where they basically said we're not going to tell you where to meet us, but once you meet us, we'll tell you where to drive. And so that's kind of an increase proof point.

Then you had the ZEEKR production programs, right? So we launched a set of hardware into a production vehicle in China. That was another proof point. Of course, when, I think was helpful. The ultimate proof point really happened two months ago when we rolled out the true navigate-on-pilot SuperVision software to first 1,100 beta users, ZEEKR owners. They experienced the technology for six weeks, six to eight weeks. ZEEKR monitored got the car into hands of influencers and media people and the reviews were really super positive.

The expectation in China, which is the market where this technology is moving the fastest and that the technology iteration is the fastest, the expectation was like Mobileye has -- they're using 50 tops of processing power in their vehicle and XPeng is using 1,000 tops. XPeng is using LiDAR, Mobileye is not using LiDAR, ZEEKR is not using LiDAR, how could they possibly compete? Maybe you get -- maybe a comparable system, but certainly not a leap ahead and kind of what we found and what the third parties have found, is this really is a leap ahead.

The ability to handle much more difficult situation, the ability to be more assertive on the road, things like if you're wanting to get off an exit and there's a line of cars, do you get in back of the line or do you do the Jersey mechanics and go up and push yourself in front, and that's what the ZEEKR vehicle is doing. And then ZEEKR had enough confidence to roll it out from 1,100 people to 110,000 people about two weeks ago. And so, this is really the ultimate proof point because it's one thing to do a demo, it's one thing to put a production hardware in place, but to actually have the confidence to launch the software, kind of full capability, and have these types of positive reviews even though you're clearly at a cost advantage versus your competition is huge. And we think it really led to an acceleration of the seriousness of the conversations we're having.

I think the other thing that's happening is that China is just -- they're really moving fast. The market share gains within China have been pretty significant, especially this year. The rhetoric of bringing, exporting vehicles to Europe. I mean, even in Israel, Chinese vehicles are maybe 30% of the market now after being in market for two or three years.

ADAM JONAS: Of the EV market or --?

DAN GALVES: Of the overall market. And so, I think that the question of, clearly, we're a little bit behind on EV cost and input costs, are we willing to be behind on AV as well, has really played into the sense of urgency of our customers. And it's led to, we talked about nine automakers, in significant discussions. We expect most, if not all of those, to convert in the next six months. But now, we're seeing the next wave, and these are some companies that have been doing their own thing. And now, again, not anywhere close to as advanced as that first group, but we're starting to see the next wave come in and that's important, obviously.

We're feeling great about the performance of our system and this proof point and the response from the customer base.

ADAM JONAS: Dan, I've had more than a few investors email me in the last couple of weeks. They went to China. They experienced the system in the ZEEKR vehicles, and they think it's better than Tesla, they think it's better than full self-driving. Are they right? Why are they right? Is that an unfair comparison as if we're comparing apples and oranges? Because I hear from a lot of investors, hey Adam I see you're bullish on Tesla, but like Mobileye system is better, might drop down, over. Tell me about that?

DAN GALVES: Yeah. I think we've been very impressed with the progress that Tesla has made and their ability to put this type of technology on the roads, particularly in the US, because I think that it's not quite as advanced in the other regions. I have to say, we don't have SuperVision system in production in the US yet. So, maybe it is a little bit apples and oranges. I think that we know what we think, but I think most of our customers have also done these types of benchmark tests, whether it's versus Tesla or whether it's versus Li Auto, XPeng, Neo. And the most common comment we get is the intervention rate of the SuperVision system is much lower.

ADAM JONAS: I mean, you could measure that.

DAN GALVES: You can measure that.

ADAM JONAS: You can test that.

DAN GALVES: Exactly.

ADAM JONAS: Do you test that?

DAN GALVES: Yeah. I think things like coming to a bank of traffic light and if one is red and the rest are green, kind of a harsh braking event. To us that comes from a lack of the high-definition map, which gives you the relevancy of traffic lights to lane, which traffic light is relevant to my action, which traffic light is relevant to my lane. I think it's too early to really compare and contrast exactly, but this is what we hear from our customers.

ADAM JONAS: I have the CEO of a major EV startup. Give me this view about ADAS. He said, and I started the conversation by saying what do you think about what Tesla is doing? And he said, look, what Tesla has an advantage of is they do it all themselves, the hardware and the software, they do pretty much all the key stuff all in-house. They have a monumental dataset and their sensors are pretty much configured in a very, very consistent way. So that combination of huge amounts of data, every line of code, all the hardware done in-house, and then the sensors that are here are kind of fixed, and there's no argument about, hey, what data is yours and mine, that's a big advantage.

You said, and you continued saying, so you do want to do it, you're going to do advanced eight asset into level four plus. You want to do it all in-house or let someone else do all of it. Like, someone like -- SuperVision just take over. Is that oversimplifying it? Where would you kind of -- what would you adjust from that view of the world, of all or for outsource?

DAN GALVES: Yeah. I actually think that there's a middle ground. So, what we're providing to our customers and prospective customers with SuperVision is a platform that includes some core technology assets. It includes a camera-based perception system, highly accurate. You don't have to do anything to it. The car will build a model of the environment based on the data that's coming in through the cameras. We're providing a high-definition map that provides a lot of preloaded information about the world. So when the car goes out and drives in some environment, it's like it's driven there, 20-30 times before.

A decision making system that makes decisions through AI, but then really checks them against safety measurements through a system we call Responsibility-Sensitive Safety, and then the compute platform, which is super efficient because we design it in-house. And then what we've found and what we believe is that the OEM has a lot to do beyond that, right? They -- an OEM should tune the system to create a driving experience that their

Mobileye Global Inc at Morgan Stanley Laguna Conference - Final

customers want, right? And they should monitor feedback from the customers and they have the ability to tweak how the car feels like, do I want a car that's weaving in and out of traffic? Do I want you want a car that's doing --

ADAM JONAS: You could click Jersey mode.

DAN GALVES: Right, the Jersey mode. Do we want a car that, you know, it's kind of like harshly braking in front of -

ADAM JONAS: Is anyone hear from New Jersey? Like come on, just chill out. Sorry, keep going.

DAN GALVES: I am, so I'm allowed. The driver monitoring, how am I going to monitor the driver to make sure that they're staying focused? What kind of warnings, how am I going to visualize the system, how am I going to make the driver feel comfortable that the car is identifying everything around it and what's its next move? These are all customer facing areas that the OEM should take on themselves and there are areas that don't require hundreds of AI experts to do. And so, we've worked very hard over the last five or six years to provide these types of, essentially, tuning knobs and the driving experience and ability to kind of access our data feed and create visualizations. I think that you -- I think our view is you should let the expert take care of the core of the system and provide you these assets, but you should be able to build on top of it. And I think that that creates kind of a nice offering for the OEMs.

ADAM JONAS: To look, there's different ways to skin a cat, and I don't want to overly obsess about Tesla here, but Mobileye and Tesla, the two main benchmark setters in this field right now, at least I think in the eyes of investors. You do HD maps, Tesla says they do not. Is that really correct? Or is there some nuance there from your understanding. Tesla says they're no longer doing labeling, not even auto labeling, and that's freeing up 40% of the GPU capacity. They say they feed just raw visual data to the computer and then outcomes actions. They don't draw circles around a stop sign, they let the computer -- they let the car figure out that that octagon with its red with the words stop on, it's just synonymous with bringing a car to a stop.

Are these things that you're -- you do label and you do HD maps, is that something you think is just absolutely critical for the safety or is it something maybe overtime, maybe you won't need it one day when the compute can catch up with the task.

DAN GALVES: Yeah.

ADAM JONAS: Sorry for the wordy question.

DAN GALVES: No, it's a good question. On the HD map side, I think our belief is that Tesla is building something similar to what we've built. It took us six or seven years to do it so it's not easy.

ADAM JONAS: Could be a definitional thing of what --

DAN GALVES: It could be a definitional thing. We don't know that for sure, but some clues from their AI days would give us that impression. I think our view is the HD map really takes a lot of pressure off of the real-time sensing, right? And kind of gives the car this kind of preloaded information where, the traffic lights are the perfect example because it's like, clearly a camera can see whether a traffic light is red or green, but if there's eight or nine traffic lights across an intersection, which one is for the pedestrians? Which one is for the left-hand turn? Which one is for your lane? To kind of have that built into the car, it's very helpful. I think in construction areas or areas where you have a merge or a split in the highway, it's good to have that capability.

Another thing that's been really impressive to the Chinese media is, there's a lot of road, highways in between highways. So like, connector highways that could be curvy, they could be three or four miles long. And if you get stuck in one lane, maybe there's two lanes, but if you get stuck in one lane behind somebody that's going 30 miles an hour, it's very frustrating. And because our system has the knowledge of what's the common speed on that road and very clear knowledge about the geometry of the curves in the road and the lanes, people have been very impressed that we're passing people on those kinds of lanes.

I think that HD map is really critical and not Tesla, but you've also got companies in China that are saying we don't need an HD map. Well, if it's going to cost, you like \$20 million for every city to build a map manually and then you've got to figure out how you're going to keep that updated, then that could make you say, I don't want to map.

In terms of the question of labeling or not labeling, I think that this is really the end to end approach versus what we do is break the problem into modules. We have different techniques for each, module could be like vehicle detection or pedestrian detection or lane detection, traffic sign. We have multiple techniques within each of those modules, which creates redundancies within the division system. This is our approach. This is what we think is the right way to do it. If you go back to 2015 and when deep neural networks were new, this was invidious pitch to automakers, we've got these GPUs, deep neural network technology, all you need to do is feed a ton of data into the system and kind of out is going to pop autonomous driving. That clearly didn't work, but I think Tesla is in a different ballpark, right? They have -- they're willing to spend a lot on compute power -- training compute power. They have a lot of data. So, I think I'm not qualified to say if it's going to work or not.

ADAM JONAS: I want to go a little deeper on compute and then I'll come up and take questions. So please think of your questions now, folks. Let's talk about the hot mic on the 2Q results. Thanks for let me answer your question, but I did make an amateur hour take. At the end, I asked Amnon of custom silicon versus GPU, and I was thinking in the training computer and he was answering the question more at the edge of the inference, yes computer, which of course, you've been doing yourselves, custom silicon forever. And I said the words, I don't think you understood the question, I apologize for that, Amnon. (multiple speakers)

The question as intended, let's talk about that. I would imagine that given the scope of your mission and then how it's ramping, you want to get your hands on as much compute power as you can, am I wrong in that? And are you struck -- where our bottlenecks, are we experiencing bottlenecks in getting GPU clusters from Nvidia.

DAN GALVES: We're not experiencing bottlenecks at all. I think it's a different approach that, on the edge, we don't need as much compute power and I think Tesla doesn't really either, other approaches need a lot. I think in the training environment, we don't need like a massive, massive amount of compute power. We have, if you look at the data size, we have 400 terabytes of video clips, which is a lot more than anybody else we've heard of has, but we're able to process that -- use that information to close up edge cases. You know, when we find a problem with the system, we can search for the specific clips that would help to kind of improve the system, train the system. So we're not, I think it's just a different --

ADAM JONAS: You're not constantly feeding the data back into a training computer, like in a --

DAN GALVES: That's correct. We spend -- most of our CapEx is related to buying GPUs for on-prem computing. A fairly significant part of our R&D is for AWS, off-prem, cloud services. We use a lot of compute, but it's not in the same ballpark. That's kind of what your --

ADAM JONAS: One more for me, I want to go to the audience here. The topic of clean sheet versus retro fit. Around the time of the IPO, you and I engaged in that discussion and I was quite skeptical, I still kind of am, on the ramp of clean sheet or a pure EV architectures from legacy car companies. At Morgan Stanley, we think that that stuff is going to get way pushed out, way dialled back, and I don't see a path to profitability from the legacy car companies, categorically on that, there will be exceptions along the way.

And my message to you was, well if SuperVision, and yes, there's the China ramp, which is thankfully there and that's an incredible asset and learning for you, but if the EV adoption of clean sheet gen two, gen three is slower then maybe, your shots on goal for SuperVision might be lower because SuperVision, it seemed to lend itself to start over clean sheet. But then there's the argument of, oh, we may not need that, you could put SuperVision on a diesel F-150 (inaudible) every duly, and it would be fine, but it strikes me is that, I don't know if OEMs are going to necessarily want to commit to that kind of thing.

So tell me where I'm wrong in terms of the do you need the attachment to clean sheet and your revenue being trapped outside your control attached to that ramp of legacy car companies versus, oh no, in order to sell a car, you're going to have to have SuperVision, whether it's a hybrid or, you know?

Mobileye Global Inc at Morgan Stanley Laguna Conference - Final

DAN GALVES: Yeah, I think that SuperVision is not -- it's not necessary to have a clean sheet EV architecture to support SuperVision. I think it's a mix, our customers, I think, much more to come in terms of, sort of who the design wins are with and what platforms they're going on. But I don't necessarily think that the majority of OEMs are thinking of this as needing to be on a clean sheet EV architecture. I think that they're thinking of it is like, we want to put this on our highest profile vehicles. Now, a lot of OEMs, their highest profile vehicles are EVs. So that's change, right? But with Porsche, it's not an EV only design win.

ADAM JONAS: Okay. Thanks for that Dan. Questions for Dan Galves. Just wait for the mic if you don't mind. Thank you.

UNIDENTIFIED PARTICIPANT: Could you maybe frame the opportunity or how you think about companies that are coming from different backgrounds, say, cellular modem or GPU, compete in this space, and how have you seeing things evolve for them.

DAN GALVES: Yeah. I think that our competition in the single front-facing camera, ADAS, comply with safety ratings, is the same as it always has been. It's other tier one auto suppliers, and we're not seeing competition from semi companies or GPU providers. I think that those companies like Qualcomm and Nvidia are trying to penetrate into these advanced systems, right? Because I think that their products are not relevant from a cost standpoint, for basic ADAS.

It's not new, I indicated before, Nvidia has been trying to get into this market since 2015. I think their approach and it's generally the same with Qualcomm or other semi providers is, hey, we've got these kind of very powerful chips and we're going to tailor them to automotive uses, and you know, if you can come up with the software, this is kind of the right approach. You're going to need a lot of processing power, we can help you get there and we'll create tools and libraries and SDKs and (inaudible) it, but it's really reliant on the automaker to find the content, the software. And we've seen a lot of attempts at this and some of them have come to the road or some are coming. And I think when you -- the results, you have to think about what do the OEMs want? They want good performance.

And performance is really all about how broadly will these functions work? Is it just on highway? Is it off-highway? Is it all across the country or regions? And what we're finding is that the systems coming to the road are limited by maybe, speed. They're limited by what roads have been mapped. They're limited by geography. There's a lot of limit -- limiting factors. So I think from a performance standpoint, our ability to scale and create a system that works everywhere is very positive from a cost standpoint. All you really need to do is look at the sensor set on the vehicle and the amount of compute.

And so we're seeing efforts that are using two Nvidia boards and a Qualcomm board. Probably, more than 1,000 of compute and with LiDARs and radars and tons more sensors than we have. And what we're hearing from inside, companies, is that these systems that are limited -- severely limited in terms of where they operate are costing \$4,000, \$5,000, \$6,000 bill of material, and we can provide. SuperVision is essentially, roughly \$1,500 to us and maybe, \$2,000 total bill of materials to the OEMs. So we feel like we have a significant cost advantage.

Ability to customize is something that is -- it was the real benefit of working with those companies. But we've created EyeQ kit, which is an open architecture within our chip. And we've created these knobs where you can tune the driving experience. So we feel like we're comparable on a customization standpoint.

And then the last thing I would say is ability to scale to eyes off. Because a lot of OEMs feel like the real value here is if you can put a system on the road where people don't have to pay attention anymore and they can do other things, at least on the highway. And because our system is -- SuperVision is camera centric. We are supporting this broad ODD with just cameras mapping and kind of a low compute driving policy.

Our approach is to add a second perception system based on radars and LiDARs to expand the meantime between failure, to get to the point where you can feel comfortable enough to allow the driver to disengage. The other systems that we're seeing, they're basically throwing everything that they have at the initial problem and not really kind of -- and still kind of being limited. But then what do you do? If you've got a system that's not good enough to kind of tell the driver to disengage, except, 15 miles an hour, then how do you -- but you've thrown everything at the

Mobileye Global Inc at Morgan Stanley Laguna Conference - Final

problem, then how do you go to the next step? And I think that that's something very appealing about our approach. So we feel like we're competing very well against those providers.

ADAM JONAS: Any more questions for Dan?

UNIDENTIFIED PARTICIPANT: I got one more, before we wrap up here. Would love your views on some of the differences between the Chinese EV makers and the Western ones, very topical and even the OEMs, the Western OEMs themselves, the Germans, the US guys have experienced these vehicles and met with the management team there, post-COVID is like, what we're you doing during COVID, like something's changed.

But from your lens, in terms of how they work.

DAN GALVES: Speed to market. It's really unbelievable that you've got startup companies launching a new car every year or maybe two. And I think that there is -- we have a lot of people within the company that are kind of directly interacting with automakers that are coming from the legacy automaker world. And sometimes they're surprised that it's not really cutting corners, but it's not the same process. It's not the same validation process. But they're willing to take those risks and I think it's leading to a much faster iteration. And of course, it's helpful when you only have to focus on one pipe of propulsion system.

ADAM JONAS: Says a lot about your strategy that you were ahead of that and doing business with them to help your other customers and be that kind of vessel, if you will, hey, look, you need to pay attention what they're doing. Super important.

DAN GALVES: It's a really important market for us.

ADAM JONAS: Well, Dan, thanks for spending time with us.

DAN GALVES: You too.

ADAM JONAS: Whenever you're up here, I feel like I could spend hours with you. Unfortunately, we don't have the time.

DAN GALVES: It's always fun. Yeah, have a good rest of the conference.

ADAM JONAS: Appreciate it.

DAN GALVES: Thanks a lot.

ADAM JONAS: Got it.

DAN GALVES: Thanks, everybody.

[Refinitiv, an LSEG business, reserves the right to make changes to documents, content, or other information on this web site without obligation to notify any person of such changes.

In the conference calls upon which Event Transcripts are based, companies may make projections or other forward-looking statements regarding a variety of items. Such forward-looking statements are based upon current expectations and involve risks and uncertainties. Actual results may differ materially from those stated in any forward-looking statement based on a number of important factors and risks, which are more specifically identified in the companies' most recent SEC filings. Although the companies may indicate and believe that the assumptions underlying the forward-looking statements are reasonable, any of the assumptions could prove inaccurate or incorrect and, therefore, there can be no assurance that the results contemplated in the forward-looking statements will be realized.

THE INFORMATION CONTAINED IN EVENT TRANSCRIPTS IS A TEXTUAL REPRESENTATION OF THE APPLICABLE COMPANY'S CONFERENCE CALL AND WHILE EFFORTS ARE MADE TO PROVIDE AN ACCURATE TRANSCRIPTION, THERE MAY BE MATERIAL ERRORS, OMISSIONS, OR INACCURACIES IN

Mobileye Global Inc at Morgan Stanley Laguna Conference - Final

THE REPORTING OF THE SUBSTANCE OF THE CONFERENCE CALLS. IN NO WAY DOES REFINITIV OR THE APPLICABLE COMPANY OR THE APPLICABLE COMPANY ASSUME ANY RESPONSIBILITY FOR ANY INVESTMENT OR OTHER DECISIONS MADE BASED UPON THE INFORMATION PROVIDED ON THIS WEB SITE OR IN ANY EVENT TRANSCRIPT. USERS ARE ADVISED TO REVIEW THE APPLICABLE COMPANY'S CONFERENCE CALL ITSELF AND THE APPLICABLE COMPANY'S SEC FILINGS BEFORE MAKING ANY INVESTMENT OR OTHER DECISIONS.]

Load-Date: October 12, 2023

End of Document