AEye, Inc.

Q2 2022 Results

Monday, August 15, 2022, 5:00 PM ET

CORPORATE PARTICIPANTS

Clyde Montevirgen – *Vice President of IR and Strategic Finance*

Blair LaCorte – *Chief Executive Officer*

Bob Brown – *Chief Financial Officer*

PRESENTATION

Operator
Good afternoon, and welcome to the AEye's, Inc. second quarter 2022 update conference call. All participants will be in a listen-only mode. Should you need assistance, please signal a conference specialist by pressing “*” “0”. After today's presentation, there will be an opportunity to ask questions. To ask a question, you may press “*” “1” on your telephone keypad. To withdraw your question, please press “*” “2”. Please note this event is being recorded.

I would now like to turn the conference over to Clyde Montevirgen. Please go ahead.

Clyde Montevirgen
Thank you, and welcome everyone to AEye’s second quarter 2022 earnings call. With me today are Blair LaCorte, our Chief Executive Officer, and Bob Brown, our Chief Financial Officer. Earlier today, we announced our financial results for the second quarter of 2022. A copy of our press release can be found on our website at investors.aeye.ai.

Before we begin, I would like to remind participants that during this call, management may make forward-looking statements, including, without limitation, statements regarding our future operating results, future performance, growth strategy, and financial outlook. Forward-looking statements are based on our current expectations and assumptions regarding our business, the industry, and other conditions. These forward-looking statements are subject to inherent risks, uncertainties, and changes in circumstances that are difficult or impossible to predict. Our actual results may differ materially from those contemplated by the forward-looking statements. We caution you, therefore, against placing undue reliance on any of these forward-looking statements.

You can find more information about the risks, uncertainties, and other factors in our reports filed from time to time with the Securities and Exchange Commission, including in our quarterly report on Form 10-Q for the period ended June 30, 2022. All information discussed today is as of August 15, 2022, and we do not intend and undertake no obligation to update any forward-looking statements, whether as a result of new information, future developments, or otherwise, except as may be required by law.

In addition, today's discussion will include references to certain non-GAAP financial measures. These non-GAAP measures are presented for supplemental informational purposes only and should not be considered as a substitute for financial information presented in accordance with GAAP. A reconciliation of these measures to the most directly comparable GAAP measures is available on our press release, and you should refer to our reconciliations of non-GAAAP financial measures to the most directly comparable GAAP measures in our earnings release.

With that, I'll pass that over to Blair.

Blair LaCorte
Thank you, Clyde, and thank you for joining us and investing your time to participate in our quarterly update. As you have seen in our earnings release today, we had a solid finish to our second quarter, meeting our revenue expectations and significantly outperforming our expense and cash plan.

Our main investor themes and objectives for 2022 remain unchanged. We see strong evidence that customer demand for adaptive Lidar will continue to accelerate as we prepare to launch the

AEye 4Sight platform in Q3. As always, our focus on execution remains paramount. Given the present global market and macro business environment instability, you'll see that we have proactively taken actions in Q2 to optimize schedules and modulate our spend.

As a result, we ended the quarter with a cash balance that was $11 million higher than our plan. Today, we'll be highlighting four of our key 2022 objectives, and we'll update you on our progress in Q2. First and paramount is the release of both the AEye and Continental products on our next generation 4Sight platform. In Q2, we made the initial transfer of our platform to our contract manufacturing partner Sanmina on schedule.

Sanmina will be manufacturing our AEye 4Sight product line for the industrial markets. While we are not experiencing a reduction in demand, the disruption in global supply chains has delayed the start off production to late Q3. In Q2, we also transferred to our lead customer Continental, their B-sample on schedule. Continental will be manufacturing their HRL131 ADAS product in their state-of-the-art Ingolstadt, Germany facility. We believe we're the only Lidar company that expects to have the capability to manufacture completed Lidar units in high-volume production lines with two industry-leading global partners in 2023.

Second, since our hardware design freeze earlier this year, we have been advancing our ability to utilize our sensor-based operating system to configure hardware performance dynamically as a key differentiator from our peers. These software-definable sensors allow AEye to continually innovate between hardware cycles. And today, we'll show you several new groundbreaking capabilities we added in Q2.

Third, we have been engaging with all of our key end-user markets as we've prepared to roll out our new products. For example, we will share with you how quickly we have extended our reach into aerospace and defense with several new strategic engagements. Fourth, we continue to build out a world-class team, public company infrastructure, and optimize our liquidity in the currently volatile financial markets.

In short, today, we will show you material progress across all four of our stated objectives. I will focus today on our product, our manufacturing progress, and customer traction. Bob will discuss financial results and metrics that support these efforts. I will then conclude by sharing a few closing remarks. The call will then be open for Q&A.

As I've outlined in our executive summary, we have made significant progress on our path to productization both on our AEye product with our partner Sanmina and our first AEye ADAS license product with our customer Continental. For our AEye product, you can see Sanmina is ramping up our initial sensor production line. Our precision optical components are sourced from top-tier suppliers worldwide for final sensor assembly in this Sanmina facility. We also jointly developed and deployed an automated state-of-the-art calibration and end-of-line testing and validation facility where each sensor is put through its paces to ensure that it reliably delivers AEye’s renowned superior performance.

As we head towards large-scale distribution, we are also testing our new ruggedized, lower-cost, environmentally friendly packaging. For our automotive ADAS product, we are excited to publicly share for the first time a major milestone for AEye, we have transferred manufacturing of the B-sample Continental HRL131 high-performance Lidar to Continental's world-class manufacturing facility in Ingolstadt, Germany. It is our belief that this is the first time that a major Tier-1 has transferred into production, a licensed long-range Lidar Technology, with the intention to

delivering it to their installed customer base. This is a validation of our unique capital-light business model in automotive.

Now let's switch gears, excuse the pun. Today, we would like to share something remarkable. In the next two minutes, we will demonstrate how we utilize our sensor-based OS to instantaneously transform our Lidar hardware into a completely new system, reconfiguring all of the individual components entirely through our software operating system. As Sanmina pointed out in our last earnings call, we can quickly add capabilities to enter new markets, enhance features within existing markets, and customize performance for evolving use cases, all without retooling the manufacturing line.

You can think of this software configurability similar to how smartphones utilize an OS to add capabilities to the same phone using apps and completely transforming the same hardware into a different product, such as a pedometer, a document scanner, or even a geiger counter. Today, we're demonstrating what we believe are two industry-first capabilities that could power new applications, our 4Sight platform's new Zoom and Stabilization.

Let's start with ZoomCam. Similar to how cameras change between wide angle and telephoto modes, 4Sight can dynamically zoom in on objects on the fly to add resolution at extremely long distances. Remember, passive Lidar systems are limited as they scan with fixed patterns at fixed distances. This new capability not only opens up new markets but improves confidence in object tracking for existing customers. In this automotive example on the highway, we receive three points on an SUV at 300 meters, with ZoomCam enabled, we improve resolution on distant objects ahead and now received 19 points from the same SUV beyond 400 meters. This 6x increase in resolution is a game changer in autonomous decision-making.

In rail, trains equipped with 4Sight could have one mode designed for scanning a station or platform and can use ZoomCam while in transit to detect track obstructions at extremely long ranges to allow adequate train stopping distance. In aerospace and defense, helicopters could utilize ZoomCam for longer ranges to detect wires or birds in their path and switch to a wider field of view to locate the ground during landing maneuvers.

Now let's show you SteadiCam. Similar to what a gimbal does and hardware to help cameras compensate for unsteady movement, 4Sight can dynamically adjust the software for any vehicle or use case. All roads aren't flat, smooth, or straight. ADAS and autonomous vehicles require this capability to enable horizon tracking to compensate for less than optimal road conditions. This becomes even more important for off-road, high-speed, or weather-impaired scenarios.

In this video, we are using our automated testing rig to move the sensor pitch to simulate varying road conditions. You will notice with SteadiCam disabled, the dense region of interest moves up and down with a sensor pitch, which we know is a problem when a vehicle is going over speed bumps, potholes, or sloped roads. If we look at the same scene with SteadiCam enabled, you'll see 4Sight automatically adapting to the change in pitch dynamically by repositioning its laser scan pattern to keep the region of interest where it needs to be right on the horizon.

When you look at the two outputs side-by-side, the importance of software-enabled SteadiCam becomes apparent as the AEye sensor is able to put more density where you need it. This patented horizon tracking capability, we believe, is a key to adoption of highway autopilot, a popular feature consumers have been requesting from automotive OEMs. This is a game changer not only in automotive but also for off-highway applications such as mining, construction, and agriculture.

SteadiCam allows these autonomous industrial vehicles to easily navigate a constantly changing ground elevation, which impacts vehicle pitch. As we prepare to launch our new AEye and Continental licensed products in Q3, we already have significant traction across several key markets. Again, in automotive and trucking, we use a licensing model. Our lead customer is Continental, who is building their next-generation high-performance long-range Lidar on the AEye 4Sight intelligence sensing platform.

We are jointly engaged on multiple opportunities with major global automotive and trucking OEMs. Continental's B-sample of their high-performance HRL131 Lidar has been well received. The performance of its product, combined with Continental's ability to scale production quickly puts us on track to move to C-sample phase in 2023.

In the smart infrastructure market, AEye's 4Sight sensors are being installed by top-tier system integration partners for applications such as automatic incident detection, smart tolling, wrong-way driver detection, and smart intersections. The implementations have been worldwide, from intersections in California and Florida to pedestrian and bicycle detection systems in Ireland to highway incident detection in Virginia and automated tolling applications across Europe. We will be showcasing solutions from many of these partners at the upcoming ITS World Congress event in Los Angeles this September. Today, however, we want to highlight our progress in a market that is well known to AEye's executive team, aerospace and defense.

Our collective defense industry experience is encapsulated in our systems approach. AEye's 4Sight sensors are uniquely capable of long-range detection exceeding 3 kilometers with custom optics, are flexible enough to track a bullet at greater than 20,000 frames per second and can either queue off of other sensors or self-queue, adapting to place high-density regions of interest of up to 1,600 points per square degree around targets. These capabilities enabled by 4Sight in-sensor perception greatly expand the utility of AI and machine learning for defense applications; add in additional capabilities like ZoomCam and SteadiCam, and you can see why these customers are so excited.

I would be remiss if I also did not mention, at this point, capabilities enabled by a recently granted AEye patent on optical communications that directly expands our ability to extend our solution envelope for aerospace and defense. With this capability, the same sensor can not only navigate and acquire targets but could allow the Lidar to optically communicate between assets in theater, enabling the ability to coordinate and swarm where Wi-Fi and other communication systems aren't available.

Most importantly today, we are announcing a cornerstone partnership with Booz Allen Hamilton, one of the Department of Defense's premier digital systems integrators and the leader in data-driven artificial intelligence. In addition, we'll be integrating AEye's 4Sight Lidar platform to enhance Booz Allen's real-time embedded processor perception stack with high-quality spatial information and ultimately to enable their digital battle space vision.

This vision combines technologies like high-performance Lidar, artificial intelligence, machine learning, and edge computing, providing an information-driven, fully integrated conflict space to realize information superiority and achieve overmatch across all warfighting domains. This partnership with Booz Allen Hamilton significantly accelerates our time to market in the aerospace and defense domain.

In addition to our strategic partnership with Booz Allen, we are also excited to announce another highly respected partner in the aerospace market, LAKE FUSION Technologies, a company with a proven history of delivering Lidar-based perception and software applications. We'll be working with LAKE FUSION to create airborne applications for deployment in 2023. To support these expanded engagements, we have opened a new office on the Space Coast of Florida that will be the focal point of our efforts in this area. Our new Florida office will be led by industry veteran Steve Frey, who has extensive aerospace and defense experience at companies like L3Harris and Lockheed Martin.

Now, let's turn to our financial update with our CFO, Bob Brown.

Bob Brown
Thanks, Blair, and good afternoon, everyone. I would like to discuss our Q2 financial performance, our strategic cash management and then speak briefly on our outlook for the balance of the year. Revenue in the second quarter was $706,000, which was consistent with our guidance of $700,000 of revenue for the quarter. We have been managing our spending carefully over the last quarter, given the slowing economy and market volatility. We're continuing to grow our team and advance our technology, but we are doing so in a very thoughtful way.

GAAP operating expenses were $25.9 million in the second quarter, an increase of $1.4 million from the prior quarter, which relates to strategic investments to scale our team and advance our R&D in sales and marketing efforts. Conversely, our G&A expenses declined by $1.5 million quarter-over-quarter. In addition, our non-GAAP operating expenses were $19.1 million in the second quarter, down slightly relative to Q1. Net loss was $26.5 million on a GAAP basis, and GAAP EPS was a loss of $0.17. Net loss on a non-GAAP basis was $19.8 million, and non-GAAP EPS was a loss of $0.13 or $0.02 better than the consensus estimate for Q2.

We continue to manage our cash carefully. Net cash used in operating activities for the quarter was $17.1 million, which increased by $1.1 million from the prior quarter. Our capital expenditures in the quarter were nominal under $1 million. We exited the second quarter with $125.8 million of cash, cash equivalents, and marketable securities on our balance sheet. That includes $1.4 million in proceeds during the quarter from issuing shares under our $125 million common stock purchase agreement, which now has up to $123.6 million of potential proceeds remaining.

So when you consider our cash, cash equivalents, and marketable securities together with the potential proceeds from our remaining common stock purchase agreement, we have total available liquidity of approximately $250 million. We believe that provides us with a solid financial base to support our growing business. We expect to make modest use of our common stock purchase agreement in the third quarter.

We continue to make improvements as an organization and have grown from an R&D-focused entity into a scalable product-focused commercial operation. We believe that our capital-light business model will allow us to optimize our resources in order to mitigate risks and take advantage of market shifts faster and more effectively than our peers. By focusing on our core competencies, we intend to continue to extend our industry-leading position.

Let me turn now to our near-term outlook. We expect to see modest revenue growth over the next few quarters as manufacturing of our commercial product begins to ramp up at Sanmina, setting up our ability to scale volumes in 2023. As Blair mentioned, our initial ramp is getting underway in Q3. However, we have not been immune to the impact of supply chain challenges, which has

had a direct impact on our ability to build product at expected volumes requested by our customers.

Because of these industry-wide constraints, we're taking a more cautious view on revenue for the second half overall. We expect our revenue for the third quarter to be in the range of $700,000 to $900,000. While we have not seen a reduction in demand, we expect that these global supply chain challenges are going to be with us for a while longer. For the full year 2022, we now expect our revenue to be in the range of $3 (million) to $4 million. In response to this uncertain environment, as we noted earlier, we have been managing our spending carefully without compromising our expected growth in 2023.

As a result, even at the lower end of our revenue guidance, we expect our full-year net loss on a non-GAAP basis, excluding stock-based compensation expense, to be in the range of $90 (million) to $95 million, improving from $100 million non-GAAP net loss we guided to at the beginning of the year. We do expect our capital expenditures to grow modestly in the second half as we work with our contract manufacturing partners on the production ramp. While we anticipate slower growth in the broader economy and supply chain challenges to persist in the near term, we have an experienced team to manage through that, and we are confident in both the superiority of our product and the market opportunity in front of us.

With that, I'll turn the call back to Blair to wrap things up before the Q&A. Blair?

Blair LaCorte
Thank you, Bob. I want to close by thanking each AEye team member for their impactful contributions for the successful quarter, where we made great strides in product development, customer engagement, and enhancing our financial strength. We look forward to continued progress in the second half of 2022 and believe we are well-positioned to scale in 2023.

Now, let's open the call for questions.

QUESTION AND ANSWER

Operator
We will now begin the question and answer session. To ask a question, you may press “*” “1” on your telephone keypad. If you are using a speakerphone, please pick up your handset before pressing the keys. To withdraw your question, please press “*” “2”. We ask that you please limit yourself to one question and one follow-up. If you have further questions, you may reenter the question queue.

Once again, that was “*” “1” to ask a question, and at this time, we will pause momentarily to assemble the roster.

And our first question will come from Suji Desilva of ROTH Capital. Please go ahead.

Suji Desilva
Hi, Blair. Hi, Bob. Just wanted to get a sense, the changes in the near-term outlook, if that has any impact on what you may have communicated during the SPAC merger in terms of the intermediate opportunity and the timing of the volume ramp for the auto, and non-auto businesses?

Bob Brown

Hi, Suji, it's Bob. Yes, I think what we're not going to give a longer-term outlook on today's call. So, we're going to continue to give annual guidance. But I think this is in terms of the near-term impact that we talked about, this is really supply chain challenges, primarily affecting the industrial business. So, it's really us working through some of those basically component shortages that have impacted us in the short term in terms of the ramp.

So again, this primarily relates to the industrial business here for Q3 and Q4. So that's the impact you are really seeing. Meanwhile, we continue to move full speed ahead with Continental on the B-samples and working very closely with them on a number of opportunities. So Blair may want to comment on the automotive side and the opportunities there.

Blair LaCorte
Yes. No, I think that was well said. What you're seeing in the guidance today has to do with our ability to get products out of the factory versus demand in the industrial markets we're seeing for those products.

Suji Desilva
Okay. Appreciate that color, Blair and Bob. And then you talked about highway autopilot, that's clearly being watched carefully in terms of timing of adoption. I'm just curious if that's a L4 feature, if that can come in L2 plus L3, and what are the key features like SteadiCam that are going to be needed to make that something that the Tier 1s are comfortable implementing.

Blair LaCorte
So, we've talked before, so you know the the way we contextualize adding Lidar into the market. Number one, we believe that cameras and radar aren't going away. Number two, we believe that there's a huge advantage in use of orthogonal data for certain features. So, one of those features in auto is highway autopilot because, as you've seen others try with different solutions, it's very difficult at higher speeds where you need reaction time with small objects and in highly dense metal environments, where you have guardrails to actually enable a highway autopilot without having a high-performance Lidar system that can do a couple of things.

One is you need to be able to have the density to find those small objects on the road. Number two, you need to be able to have the distance at those higher speeds to allow lane changing or stopping. Number three, which is, I think probably one of the things that is most difficult for non-adaptive systems is while you're doing that, you need to also be able to follow cut-ins or wide angle or lateral entry type of activities. So when we talk about the SteadiCam capability, what we're really addressing is finding those very small objects, like bricks on the road, where you're not bouncing, and you're not going to miss it because that you can't actually attach to the road surface at the longer distances.

Suji Desilva
Okay. That’s helpful, Blair. Thanks. And then you talked about several end markets in the prepared remarks. Can you give a sense of maybe which ones have relative opportunity sizes of each? I know it's--for just kind of relative notions and more importantly, which ones have the nearer time to production revenue ramp, just refresh us on that?

Blair LaCorte
Sure. As you know, the automotive market, because of the functional safety requirements, when the demand moved from say, B2B or the autonomous vehicles into the ADAS type systems that have been coming together faster, that's a consumer product, and therefore you not only need to have a product, but you need to put it through functional safety testing. So, the revenues ramp up

over a number of years. You get a pilot, you get a contract, and then ultimately, your system is tested, and it will be implemented. And then over time, either you'll continue to scale up in number of car brands or models or you'll stay in a small section, and someone else will come in. So that's the way the automotive market moves.

So when you look across our sector today, the automotive market, the way you have to judge it is what's the performance of your product, who you're working with and where are you getting tractions and pilots, and then ultimately, longer-term contracts. The near-term revenue across our industry is really industrial revenue. And the industrial market for Lidar has been around for a decent amount of time in the aerospace and defense, and telecom business, we're talking about 60 years. But in traditional industrial markets, there's been about 20 years of use of Lidar systems.

Now, I'll caveat that by saying it's been bimodal. There's been a lot of very low-end mapping systems, some there is GIS, and then there's also been very, very high-end systems that were very, very expensive for very unique or specialized things like being able to see in the dark in a mine with dust. So when you take a look at the industrial markets in the shorter term, our belief is that ITS, has actually been--the opportunities ITS have been expanding for a couple of reasons.

One is you've already seen a lot of cameras and radar implemented in everything from stoplights to toll roads, and this system actually has tremendous value, either as an addition or replacing those systems. And most governments around the world, including the new transportation bill from the United States, are actually setting records for funding to initiate these type of activities. So, I think you're going to see ITS in smart cities, a significant ramp over the next two, three, four, five years redoing infrastructure.

The second market that we often talk about is that the more industrial construction, agriculture and mining type markets, again, smaller markets, but with high value, and they're ready for systems today. The value proposition is different, and ITS system is obviously a safety-based system, and it's selling data to the cities. The models in those industrial markets tend to be more closed loop within a certain site, and they tend to have much higher value in keeping safety high and throughput high. So, those two things are unfortunately related where if you have a safety accident, it can cost you $50 million a day to close down a segment of a mine.

The third area, which we also highlighted today, is really a back-to-the-future type area, whereas I said for the past 60 to 70 years, aerospace and defense has really used Lidar. I think a new emerging market in aerospace defense is coming in, which is really using COTS, commercial off-the-shelf products that are now reentering aerospace and defense. And that's one of the things that we announced today, with our partnerships is we're seeing great demand. I think that ultimately is, probably in the near term, may dwarf some of the other industrial markets just because they've been using sensing systems.

And quite honestly, if you saw *Top Gun*, you would've seen system that a bunch of our engineers did, which was the Lidar system on the side of Tom Cruise's jet. They understand the value of spatial data. So again, our opinion is that ITS in smart cities, you'll see the narrower niche in agricultural construction and mining but higher value and pricing, and then you're also going to see the emergence of aerospace and defense.

Suji Desilva
Thanks, Blair. That was really comprehensive. One last quick question then I'll pass it along. The optical communications technology you talked about, is that applicable potentially for consumer V2X? Thanks.

Blair LaCorte
Sure. And this is a more complicated question in the sense that every single technology has to be actually weighed against what's there today, what are you going to be actually moving out? So there's an opportunity for it, but it's much more applicable in the short term we believe in some of the more industrial markets. But again, we wouldn't say that it couldn't be used for B2B maybe even more for V2X, but I think the industrial markets tend to have a closed loop infrastructure, and it's easiest to implement there. So I think if you start to see some traction in V2X in industrial, it's easier to actually migrate it back into the consumer markets.

Suji Desilva
Okay. Thanks, Blair. Thanks, Bob.

Operator
The next question comes from Hans Chung of D. A. Davidson. Please go ahead.

Hans Chung
Hi. Thank you for taking my question. So first, I wanted to follow up on the supply chain issue. Can you provide some color around the shortage? I think you mentioned shortage in some component. I'm just wondering what kind of the component, is that some kind of the chip, or I don't know, maybe laser or other stuff? And then also, how are you confident with the tracking to the end of the quarter and any potential challenges here in terms of supply chain as we move from?

Blair LaCorte
Sure. I'll handle the first part, and I'll let Bob handle the second part of the question. Clearly, the chip crisis still impacts us. I wouldn't say it is the main driver of what we have been dealing with in the last few months. Ironically, it's been some things that you wouldn't think of very, very small connectors or very small bomb cost pieces of the system, that unfortunately, what you realize is although you have locked down all of your main component suppliers, if the entire bomb is not ready, you can't finish full assembly. And I appreciate the question because I think there are still challenges around chips, but it could be solved with price if we wanted to.

But some of the shakeout now is just that these really small things, and Bob will get mad at me if I go into too much detail. But one of the challenges we spent a decent amount of time on was a $2 part that just wasn't available, right, and was unexpected. But I would leave you thinking, look, we are not going to get out of supply chain challenges anytime soon because the world is what it is. But I think what you are seeing is, we and the rest of us, the rest of the industry, are working through how to manage those. I think the little bit of this last bump in the road was just the unexpected that tiny little things, not big things, could have actually caused us some consternation in how we get the final assembly done.

So, Bob, I don't know if you want to handle the next.

Bob Brown
Yes. So just to add to that, Hans, yes, I think Blair's exactly right. And so, we're doing our best to get those parts that we need as quickly as we can. We think we are going to be able to solve much of that during this quarter. We won't have necessarily access to as many parts as early as we'd like. So that is putting more ramp into the back end of the quarter, as Blair said in his remarks. So consequently, there is some risk there, of course, on the revenue side for Q3, with more of that revenue coming in later in the quarter.

So, we did contemplate that as part of the guidance we gave on revenue for the quarter of $700,000 to $900,000. So part of that range incorporates some risk around getting these parts as quickly as we'd like and actually getting into early production. So it has set us back both in terms of the production as well as some testing that we need to do on the products. So, we are working through all that expeditiously, and we think we will make some good progress against that in the quarter, but there does remain some risk there right that we've got to work through.

Blair LaCorte
Hans, I know you'll go back through the math in your head and what you'll see when you look at this is that it's probably put us back two months. When you take a look at what Bob said about getting testing done early enough so that we feel comfortable on product and EOL and the line calibration, and also in just getting so enough parts into the system. So, we don't feel like this is a structural problem that will continue over time. We do believe it's something we're going to live. We're going to live with a low level of this, and we're just going to have to, like everyone else, mitigate the risk and plan for it.

Hans Chung
Got it. That’s helpful. And so, our next question is about the new aerodefense business. So, is that incremental opportunity based on the current 4Sight platform, or is sort of new application or based on new platform?

Blair LaCorte
Right, look, it's not a new business to many of us in the company. It was not considered a large portion of our plan in the short run because we weren't sure how we would be--how the product would be accepted, and what we found is that there's been a bunch more pull than we thought. So, I don't know if that's--Bob, is that fair?

Bob Brown
Yes, I think we had always contemplated aero and defense as an opportunity, Hans, but we hadn't necessarily built that explicitly in the models for the reason Blair suggested. So, as you said, this is really a commercial off-the-shelf solution, but because we've got this unique software capability, we're able to adapt to different solutions like a defense sort of application, right?

So that's one of the strengths of this model, and this technology is that it is very adaptable to different markets using that same platform. So, we think we'll get synergies out of that over time, and defense is one example of that, where we can address that market with the same fundamental platform with different software implementations.

Blair LaCorte
Yes. And to emphasize that, I think part of your question was, this product will be coming off the Sanmina line, it was not going to be a new line, it's within the industrial. Now, there may be times in the future, just like with everything else, where there may be a customer who wants to do something that's very different, and then we'll address those opportunities as they come up. But today, we're assuming this is just another application off of our 4Sight operating system.

Hans Chung
Got it, got it. Okay. And then next, so recently one of your peers got deal with the Volkswagen Group, and it seems like kind of long-term a big deal. And I know, would that imply that this kind of closed the door with you and Continental to Volkswagen or it's not necessary?

Blair LaCorte
No, and in fact, I sent a note to congratulate them. Those guys come from actually the same background we do in a sense, from the military background. That was a deal that we were not involved in, and it actually predated ours and Continental's partnership. And remember, in our model, we don't go direct to automotive without a licensee. So, we were not necessarily involved in that deal.

Also, when you look take a look at Volkswagen, they have multiple different radar systems, they'll have multiple different Lidar systems, multiple different camera systems. There's been initial selection or nomination for a certain application. I think we talked about this in the last call, the beauty of where the automotive industry is moving is to software-definable cars.

So, the point there is that they'll have multiple sensors with multiple applications that they can add value to the consumer and ultimately be able to charge for that. So, we look at this as a good sign that these initial systems are getting specked in. And there'll be many, many more opportunities, not only in people like VW but the other 25 OEM brands.

Hans Chung
Got it. Okay. And one last quick, so will we be able to benefit from recently passed the CHIPS Act bill in some ways?

Blair LaCorte
So, first of all, we're a huge supporter of this because it drives innovation. And we need that. And we think we have a lot of opportunities there. We are actually number one, participating in the Lidar coalition at the highest levels to actually help everybody in the industry. But we specifically see opportunities within our domain because we work with so many partners. We're an open system with modular hardware, so either with us working on design or with some of our partners. We think this is a good opportunity to accelerate innovation. Bob actually came from that industry; I don't know if you had any thoughts.

Bob Brown
Yes, no. Our model Hans really benefits from development in the semiconductor ecosystem, right, because of what Blair said. We're really this open modular architecture, and our strategy has been to use components that are developed by major players in the semiconductor industry. So the CHIPS Act, we think, supports certainly that whole ecosystem. And therefore, we're going to benefit from that probably indirectly. We'll also look at whether there are some direct benefits as well, but anything that supports the semiconductor ecosystem supports our platform.

Operator
The next question comes from Michael Mani of B. Riley. Please go ahead.

Michael Mani
This is Michael Mani on behalf of Craig Ellis. Thanks for letting us ask a few questions. To start, I just wanted to begin with your industrial segment, given AEye’s focus on high-performance and long-range sensors in this market and its various applications, could you just talk about the competitive landscape in this particular area? What kind of Greenfield opportunities are there like aerospace and defense, as you mentioned, is an emerging opportunity. And how do you think they're currently served or underserved, and where does AEye fit into that mix?

Blair LaCorte

Sure. So what I would say first is that the way we look at the industrial markets is through value-based use cases. So although we have to say it's ITS, it's mining, it's agriculture, it's aerospace and defense, there's a set of things that you can do with a very fast, powerful deterministic sensor like Lidar. And so, the way we've actually approached each market is to take a look at what we can do that helps them either to increase safety, increase efficiency, or to add features that they can make more money on.

And if you take a look at the business model behind that, part of the challenge has been that some of these markets will pay a great deal because it's high value, but there is not a lot of volume. One of the things in the automotive business is everyone is always looking for big volume to drive a full manufacturing line. Bob alluded to it, but one of the strengths of our model is that our manufacturing line at Sanmina can be used for any industrial market, no matter how big or small because all the customization for the high performance comes in the operating system after the manufacture of the hardware.

So that's really the way we look at it. And Bob said quickly, and you may not have caught it, but it also gives us the ability to actually take advantage of things faster. If ITS gets big legislation, there is a big uptick in people that want it we can ramp up our volume using that line, or we can ramp down if there is any delay in that type of market. So, that's the way we look at industrial is that there is a tremendous amount of different markets based on similar use cases, but they're all in our model, we're building the technology on one manufacturing line, and then we're using the software to add those capabilities in.

Michael Mani
Great. Thank you for that. And maybe just a follow-up on your new features, so nice to see the color there. I was just wondering, given that, particularly with the industrial market, given that there is typically higher ASPs and maybe in auto. And what do you think about pricing considerations or gross margin considerations for these kind of new features? And how does that fit into your long-term strategy? And maybe what other features, if you can give us any color, do you plan to roll out that can also be (inaudible) expansive?

Blair LaCorte
Sure. And you bring up something that's a more a larger context in the business model of sensors, right? So if you take a look at auto and you take a look at ADAS, a lot of the software is automotive grade software, functionally safe and integrated with other systems is done by the OEMs or by the Tier 1s. So, we are unique in the sense that we actually license software to our Tier 1 partners, and we highlighted Continental, our lead customer. But there is a limit on how much you can make on software using the traditional model where you are just selling a hardware product. Usually, that's bundled in. So, we have a very different model. It's a very high-margin licensing model.

In the industrial markets, however, to your point, we think the markets are maybe smaller in hardware volume, but that there is a lot more value to be added and, therefore, a lot more software margin to be gained, if you can produce, what they need to again either make it safer, so my mine doesn't shut down, to make it more efficient so I can increase throughput or to add a new feature so that I can actually do something I couldn't do before. At the end of the day, you have to look through the eyes of the customer. So, we actually believe that there's going to be more software opportunity in the industrial markets over the next couple of years for us than maybe people would expect.

Michael Mani

Great. Thank you. And maybe for my final question, it's a nice to see the progress with the B sample, the Continental. Could you just walk us through the rest of the timeline in terms of timing you want to get the C sample and the other stages before production over the next few years?

Blair LaCorte
Sure. I mean, and I know you're familiar with the automotive vernacular; it's tough. Some people talk about ABCD, but in reality, in the automotive industry, it's a very distinct, it's a very formal, and a very structured process. This process for us, we transfer at B sample so that the industrialization can be done by Continental and their facilities, where they pick up all the cost of the manufacturing line. They pick up all the cost of the warranty and liability, and they pick up all the working capital.

So, our transfer point is the B sample, and then Continental, having shipped over 20 million Lidar and 150 million radars, will move it into the C sample. And they will decide when they actually want to launch as part of their digital offering or as part of a system offering to their installed base. So, we've moved through B, we're transferring over, and Continental will decide when they're in the C sample. We can't talk too much about their business because it is their product other than we did allude to the fact that we believe that, given the normal standards that 2023 is when the C sample will come out.

Michael Mani
Got it. That's helpful. Thank you very much.

Operator
The next question comes from John Roy of Water Tower Research. Please go ahead.

John Roy
So, Blair, I want to talk about the Booz Allen deal just a little bit. Obviously, you won that business. I was curious as to what were the key elements of the technology or the business that allowed you to actually win that business.

Blair LaCorte
Yes, I think it may seem counterintuitive, but it's really around data architecture. Whereas, most people talk about the hardware, the acquisition of data first, but because Louis, when he designed the system, designed it from military perspective, he designed the network and the software first. And then how do you acquire it through, whether it's a Lidar system or a combination of Lidar and other sensors. And I think that was refreshing and very attractive because, in most aerospace and military situations, they're actually trying to solve a problem first, which means it's about data.

Most people, maybe you wouldn't put it this where most people don't think about this, but at the end of the day, you can't be autonomous without making decisions. You can't make decisions without data. So, we're really in the data business, better spatial data faster. And that's really, I believe, what impressed our partners at Booz Allen because they're the experts at AI and machine learning. And one of the challenges that they have as they've said publicly before, is that a lot of times people are bringing them in to build out this system, but they have to deal with whatever data that's being put through the pipeline and they can't change it.

Well, with us, our system can actually, it's a two-way communication, they can actually ask for the type of data that they want. So, it's much more impactful in their perception stack because we together can actually acquire and preprocess data in a way that makes it easier for AI and machine learning to add value, to make decisions faster. So I think that's the first thing.

I think the other thing is just that we're adaptive. And I think that in the aerospace and defense, there's very rarely a one size fits all solution. And the fact that we could give them a commercial off-the-shelf hardware system that had the kind of performance envelope they were looking for yet, they could customize in software and on the sensor I think that was also very attractive. So, I think data and adaptability of the operating system.

John Roy
So is this giving you a pretty big barrier to others getting into the market and Booz Allen's going after with their own versions?

Blair LaCorte
Look again, I said this at the very beginning of the call, and our philosophy, I think, look, sensors are a heterogeneous environment. I think that there will be--places aerospace and defense have been using sensors for a long time. I don't really look at it as defensibility as much as I look at it as value added. I think we have a unique opportunity to add value that maybe others aren't designed to add, but that I think that we'll ultimately work with cameras and radars and infrared and other types of sensors in almost every application that we do in the defense area because it just makes sense.

Even if you take a look at human vision, 80% of human vision is actually preprocessed in the visual cortex at the edge of the network, and 40% of human vision is impacted heavily by other senses, touch, smell, sound when you rotate and foveate. So I think it's just that if we want to be better than humans, there's a lot to be learned from bioinspiration. So, I've said Bob, because I ended with philosophical, but I was able to get that in there right at the end.

John Roy
Maybe one final question. So, the aerospace and defense strategy that you have, obviously partnering is going to be key. Can you give us any more color on what you're thinking is there?

Blair LaCorte
Yes. Well, I think that this you look at these things that they're a mirror in the consumer areas. We're trying to find, detect, acquire and make a decision on objects so that we're safer. And I think that there's a direct analogy to that in defense, which is they have a different terminology, they call it find, and feel and fix. So we're doing the same thing.

We're trying to actually give computer systems the ability to find things, to acquire them, detect, acquire, and then to act on those. And that's really again, I'll say it again. The basis for autonomy is the correct data to make decisions without a human involved. That's the definition of autonomy is the final sensor is not a human sensor to make the decision.

So, our philosophy is to go out and give this adaptive platform to a bunch of people who need to solve that problem and let them help us help them.

John Roy
Thank you very much.

Blair LaCorte
Thanks for the questions.

CONCLUSION

Operator
This concludes our question-and-answer session. I would like to turn the conference back over to Blair LaCorte for any closing remarks.

Blair LaCorte
As always, thank you for those of you who joined us today. I think this was a record for our earnings call, and I'll give Clyde, our Head of IR, some kudos for that. And as always, thank you to all the employees who really made this possible; Bob and I are just actually out here to actually report and this presentation and the videos will be available on our website in our Investor section.

So thank you.

Bob Brown
Thanks, everybody.

Operator
The conference is now concluded. Thank you for attending today's presentation, and you may now disconnect.