

**May 31, 2022 1:30PM PST**

**Q1 Fiscal Year 2023 (April 30, 2022) earnings call script**

**Louis Gerhardy, VP Corporate Development**

Good afternoon and thank you for joining our first quarter, fiscal year 2023, financial results conference call. On the call with me today is Dr. Fermi Wang, President and CEO, and Brian White, CFO.

The primary purpose of today's call is to provide you with information regarding the results for our first quarter of fiscal year 2023. The discussion today and the responses to your questions will contain forward-looking statements regarding our projected financial results, financial prospects, market growth and demand for our solutions, among other things.

These statements are subject to risks, uncertainties and assumptions. Should any of these risks or uncertainties materialize or should our assumptions prove to be incorrect, our actual results could differ materially from these forward-looking statements. We are under no obligation to update these statements.

These risks, uncertainties and assumptions, as well as other information on potential risk factors that could affect our financial results, are more fully described in the documents that we file with the SEC, including the Annual Report on Form 10-K that we filed on April 1, 2022 for fiscal year 2022 ending January 31, 2022.

Access to our first quarter, fiscal 2023, results press release, transcripts, historical results, SEC filings and a replay of today's call is on the Investor Relations portion of our website.

Fermi will provide a business update for the quarter and Brian will review the financial results and outlook. We will all be available for your questions.

**Dr. Fermi Wang, President and CEO**

Good afternoon, thank you for joining our call today.

During our first quarter we announced the passing of Casey Eichler, who had been our CFO since 2018. Casey's positive demeanor was an inspiration to many of us, and we are thankful to have experienced his leadership.

On March 28<sup>th</sup> we announced the appointment of Brian White as Ambarella's CFO. After two months, we are excited about the leadership and experience Brian brings as we scale the company for the significant opportunities ahead.

Our Q1 revenue was essentially as expected; flat sequentially and up 29% year-over-year. CV revenue grew significantly, both sequentially and year-over-year, representing about 40% of total revenue, and our video processor business declined about 20% sequentially. Our blended average selling price continued to rise.

During Q1, the pandemic flared-up in China, and the resulting lock-down disrupted customer production schedules and orders placed on us as well as logistics in the greater Asia supply-chain. A majority of our customers' products are manufactured in this region and subject to impacts from China related supply-chain disruptions. We are seeing a similar degree of impact across both our automotive and IoT businesses, further complicating the pre-existing kitting issues we have discussed before.

Last quarter we reported a supply constraint for our 14nm video processor SoCs. At this time we continue to expect the Q2 impact to remain at about \$5 million. We are now confident we will see a Q3 and Q4 improvement in supply of 14nm video processor SoCs. As previously noted, the supply of our computer vision SoCs has not been impacted.

We are very excited to announce in late May we received first silicon for CV3, our first central domain controller processor, and we have successfully brought-up the key functional blocks on this 10+ billion transistor SoC. There is more bring-up work to be completed, but we are confident this first rev will be sampled over the summer to key customers and will demonstrate significant performance and power leadership. As a reminder, CV3 will be a family of SoCs we expect to command a selling price between 5x to 20x our current firmwide ASP.

We remain focused on capturing the significant revenue opportunities in front of us. New 5nm products are on schedule, with CV3 close to sampling and CV5, our first 5nm SoC, is expected to commence mass production in the second half of the year. We continue to expect our CV revenue to be about 45% of revenue this year, and this richer mix is expected to drive our blended average selling price (“ASP”) higher.

Interest and activity around our products and technology remains very strong, and I will now provide some examples of our market development activity.

In the automotive market, during the last quarter Ambarella continued its success in sensing applications, an entirely new market for the company, in applications such as ADAS and driver monitoring, as well as new viewing markets like electronic mirrors.

At Japanese OEM Honda, two of their joint venture companies introduced EV models using our H32AQ SoC for a multi-function electronic mirror plus drive recorder. Dongfeng Honda’s eNS1 EV and GAC Honda’s eNP1 EV both use this solution.

Also during the quarter ISUZU, a Japanese OEM, introduced through a joint venture company its new MU-X SUV. Based on our CV22AQ SoC, the SUV enables an intelligent driving assistance system utilizing a front facing camera supporting lane departure warning.

We remain optimistic about the vehicular in-cabin monitoring systems opportunity for us. In June we expect Geely to announce a new passenger vehicle utilizing our CV28AQ for driver monitoring.

Dongfeng, one of the largest commercial truck OEMs in the world, shipped its new DF760 truck utilizing a single CV22AQ SoC to support multiple cameras and multiple functions for driver monitoring, around vehicle monitoring and blind spot detection.

In IoT, our smart home business, which we have referred to as CV Wave 2, we are pleased to announce Vivint as another major CV customer. In May, Vivint announced four new products, including outdoor, indoor, and doorbell cameras and a spotlight. All of the cameras implement our CV SoCS to execute Vivint's intelligent AI algorithms for a variety of people and package detection and tracking functions. The spotlight uses the advanced detection algorithm of the outdoor camera to illuminate intruders and follow them as they move around the property.

In the IoT market, the largest portion of our CV revenue has so far been realized from new product cycles in our enterprise and public security camera business, where the trend continues with a vast majority of our customers' design activity involving our CV SoCs. During the ISC West security exhibition in March, almost every major security camera company was demonstrating new products based on our CV SoCs.

There were also many public demonstrations at ISC West of companies entering the access control market with systems based on our reference designs. The access control market is a great example of how our CV portfolio allows us to reach entirely new markets we did not serve before, and access control is one of the areas where we are showing encouraging, early customer wins.

In access control, Motorola Solutions announced the new Openpath Pro Series Video Intercom reader based on our CV25 SoC. The reader combines video, audio and enterprise call routing. Motorola has made a number of acquisitions in the last few years to leverage its IoT camera expertise into new verticals, and Openpath is one example. We are proud to report that most of the camera companies acquired by Motorola are using Ambarella SoCs, and we are eager to help them grow their business.

Also in access control, based on our CV22, RealNetworks announced its SAFR SCAN, a touchless biometric system with anti-spoofing based on the fusion of structured light and cameras to ensure the most accurate results.

During the show, targeting the enterprise and public markets, Hanwha Techwin announced two new AI-powered multi-sensor cameras based on our CV2 SoCs and featuring deep-learning based object detection and classification..

Also in the enterprise and public IoT market, i-Pro, formerly part of Panasonic, introduced its new multi-sensor S series camera, based on our CV2 SoC, offering deep learning intelligence at the edge with pre-installed AI applications and the ability to add 3<sup>rd</sup> party applications.

In the public safety fleet market, i-Pro also launched a 4K panoramic front camera based on CV22 with the form factor and thermal budget to be mounted behind the rearview mirror on the windshield.

Factory automation is another greenfield market opportunity and during the quarter iRAYPLE introduced two products based on our CV2 AI SoC, a stereo 3D factory automation camera with precise measurement capability and a code reader with high resolution and deep learning abilities.

In other IoT markets, Insta360 introduced the One RS action camera. The innovative consumer camera is based on our H22 SoC and can shoot 4Kp60 video, take 48MP photos and includes AI driven editing to make stitching 360-degree footage simple.

Recapping these announcements, a majority of the projects I just described are CV based. In these products, our state-of-the-art video processing expertise is leveraged into new applications where the camera, instead of just enabling a great human viewing experience, is sensing, collecting data and then making decisions. A lot of incremental and specialized processing is needed to do this most efficiently, and our high-bandwidth CVflow AI SoCs provide this for an increasingly diverse set of IoT sensing applications. About half of these products I described represent new product cycles in existing markets and the other half represent entirely new markets for us such as automotive sensing, factory automation and access control.

We are in the midst of a very strong shift in design activity to our CV SoCs. Long-term, we expect to earn a higher ASP with CV products, and the combination of higher ASPs and unit volumes is expected to drive premium growth.

We are confident our strategy addresses the megatrends for security, safety and automation, enabling our customers to innovate and transform their own businesses. Our rapidly expanding AI product portfolio serves the diverse secular growth opportunities emanating from these trends.

Brian will now review our financials.

**Brian White, CFO**

Thanks Fermi. I'll review the financial highlights for our fiscal Q1, and provide a financial outlook for our second quarter of fiscal year 2023, ending on July 31, 2022.

I'll be discussing non-GAAP results and ask that you refer to today's press release for a detailed reconciliation of GAAP to non-GAAP results. For non-GAAP reporting, we have eliminated stock-based compensation expense and acquisition related costs adjusted for the impact of taxes.

Revenue for fiscal Q1 was \$90.3 million, in line with the midpoint of our prior guidance, flat to the prior quarter and up 29% year-over-year. As expected, a sequential increase in IoT revenue offset a decline in Automotive. Both IoT and automotive were up strongly on a year-over-year basis.

Non-GAAP gross margin for Q1 was 63.8%, slightly ahead of the midpoint of our prior guidance range.

Non-GAAP operating expense for fiscal Q1 was \$39.8 million, down \$500 thousand from the prior quarter. Non-GAAP operating expense was \$2.2 million below the mid-point of our prior guidance, driven by the timing of new product development activities.

Our non-GAAP tax provision was \$0.9 million or 4.8% of pretax income and we reported non GAAP net income of \$17.1 million, or \$0.44 per diluted share.

Now, I'll turn to our balance sheet and cash flow.

Cash increased \$30 million, to \$201 million, driven by strong operating cash flow of \$34 million. Fiscal Q1 cash flow was aided by decreases in both inventory and accounts receivable. Inventory decreased \$4 million, from 128 to 117 days and accounts receivable decreased \$16 million, from 45 to 28 days. The substantial decrease in accounts receivable was attributable to a front-end skewed revenue profile in the quarter.

We had three logistics and ODM companies represent 10% or more of our revenue in Q1. WT Microelectronics, a fulfillment partner in Taiwan that ships to multiple customers in Asia, came in at 57% of revenue. Chicony an ODM who manufactures for multiple IoT customers was 11% and Hakuto, a logistics partner who primarily supplies multiple automotive customers in Japan was about 10% of revenue.

I will now discuss the outlook for the second quarter of fiscal year 2023:

As Fermi described, the external environment remains complex and dynamic. The supply chain, already stressed with persistent kitting issues, is now also facing the rolling pandemic impacts in China. Our guidance, to the best of our knowledge at the current time, contemplates these challenges. We estimate our Q2 revenue to be in the \$78.0 to \$82.0 million range, or down approximately 11% sequentially at the midpoint.

We estimate Q2 non-GAAP gross margin to be between 63.0% and 64.0%, relatively flat to the prior quarter.

We expect non-GAAP OPEX in the second quarter to be in the range of \$42 million to \$45 million. The sequential increase in OPEX is driven by the beginning of an advanced 5nm automotive grade CV SoC development project.

Our fiscal Q2 forecast for Ambarella's Non-GAAP tax rate is 4% to 6% and we estimate our diluted share count to be approximately 38.7 million shares.

Ambarella will be participating on June 1<sup>st</sup> in Craig Hallum's virtual Investor Conference, June 2<sup>nd</sup> at Cowen's TMT Conference, June 8<sup>th</sup> at Bank of America's TMT Conference, and on June 9<sup>th</sup> at Rosenblatt's virtual AI Scaling Conference. Please contact us for more details.

Thank you for joining our call today, and with that, I will turn the call over to the operator for questions.

## Q&A

**Dr. Fermi Wang, President and CEO**

Thank you for joining us this afternoon. Although fiscal 2023 is bringing unexpected external challenges, our CV momentum remains strong. I am excited about the technology development progress we made with CV3 and the business development with CV5. These two 5nm chips will provide significant opportunities for Ambarella in AIoT and automotive markets. Thanks to all our stakeholders, and especially our global base of employees who continue to persevere. Goodbye for now.

Contact: Louis Gerhardy, VP Corporate Development [lgerhardy@ambarella.com](mailto:lgerhardy@ambarella.com)