

## **Q1 FY2022 (April 30, 2021) Earnings Call Prepared Script for June 1, 2021**

### **Louis Gerhardy, Corporate Development & Investor Relations**

Good afternoon and thank you for joining our first quarter, fiscal year 2022, financial results conference call for the three months ending April 30, 2021. With me on the call today is Dr. Fermi Wang, President and CEO, and Casey Eichler, CFO.

The primary purpose of today's call is to provide you with information regarding the results for the first quarter of our fiscal year 2022. 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 filed on March 31, 2021 for fiscal year 2021 ending January 31, 2021.

Access to our first quarter fiscal 2022 results press release, historical results, SEC filings, a transcript of our prepared remarks and a replay of today's call can be found on the Investor Relations portion of our website.

Today we will begin with a business update from Fermi, I will review the financial results and then Fermi, Casey and I will be available for your questions.

With that I will turn it over to Dr. Fermi Wang...

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

The first quarter was another strong quarter with revenue growing nearly 13% sequentially and 28% on a year-over-year basis. We continued to deliver positive operating leverage, with non-GAAP operating margins expanding to 12% from 8% in the prior quarter and 1% a year ago. Our results are clearly being driven by the beginning of our CV new product cycle, and to a much lesser degree by industry wide cyclical forces.

In fact, currently, cyclical forces are actually constraining our results, not exaggerating them. Supply-chain challenges remain significant, but our execution is strong, and our guidance assumes the worst of the supply-chain challenges from the Texas freeze will be felt in Q2 and gradually improve as we progress through the 2<sup>nd</sup> half. Capacity is tight and lead times for certain substrates remain extended. With solid support from key supply-chain partners, including foundry partner Samsung, we usually are not the bottleneck for our customers.

With our higher revenue outlook we remain confident CV will be at least 25% of our total revenue this year. Professional security CV revenue, or CV Wave 1, became material last year and momentum continues to build, with new design wins and new customers entering production.

We expect our home security CV business, or Wave 2, to become material this year, with several large programs entering mass production.

Automotive, or CV Wave 3, has clearly commenced. In fact as of yesterday, May 31st, we have cumulatively shipped more than 450 thousand CV SoCs into the automotive market. We expect our automotive business to roughly double this year, and we see tremendous remaining headroom for growth. Our share exiting the year is expected to be only a few percent of a serviceable market we estimate to be about \$2.2B in calendar year '21 and approaching \$5 billion in calendar year '25.

I will now update you on our target market progress, beginning with automotive.

The automotive market is being transformed by the introduction of electric vehicles that enable sustainable, high-performance transportation. The requirements for advanced active safety features in these vehicles represents a significant, new opportunity for our AI Vision SoCs due to the need for increasing levels of performance in camera based AI perception.

During the quarter we were excited to see the successful IPO of UK-based electric vehicle maker Arrival. Founded in 2015, Arrival's mission is to provide affordable and sustainable urban transportation by producing electric vehicles at competitive prices and by pioneering a new method of manufacturing that challenges traditional economies of scale.

I am pleased to announce that Arrival has selected Ambarella's CVflow® AI vision processors for the environmental perception module used to enable L2+ autonomy in Arrival passenger buses and delivery vans. The inclusion of L2+ autonomous driving capability provides the driver an array of safety and convenience related driver assistance (ADAS) capabilities.

Ambarella's AI vision processors were chosen because of their neural network processing performance, stereovision support, excellent image quality and extremely low power.

We look forward to sharing more information regarding our partnership with Arrival in the near future.

In addition to the unrivaled efficiency our CV SoCs offer, we have also highlighted the advantages of our "open platform" approach, which allows OEMs and tier 1s to create differentiated "combo" products. Today I'm pleased to discuss 4 examples of this from the recent Shanghai Auto Show, namely Great Wall Motors, Momenta, Autocruis and HASCO.

In April we announced that the leading domestic Chinese SUV auto maker Great Wall Motors has launched a 3-in-1 combo system, based on our CV25AQ, for drive recording, driver monitoring (or “DMS”) and occupancy monitoring (or “OMS”). The system is integral to the new WEY Mocha flagship SUV, which was launched during Auto Shanghai 2021 as the first model from GWM’s “Coffee Intelligence” driving platform. This CV25AQ-based system can support a variety of simultaneous, multi-camera channel combinations for recording and/or DMS and OMS, with the entire system meeting Euro NCAP 2025 standards and playing a key role in GWM’s Intelligent Drive process.

Another combo product leveraging our open CV platform is Momenta’s AutoRing A4 fleet management solution combining front ADAS, DMS, and drive recording functions. Based on Ambarella’s CV22, the product includes front ADAS features such as Forward Collision Warning, Pedestrian Collision Warning, Headway Monitor Warning and Lane Departure Warning, while DMS features include Face-ID, Fatigue Detection, and Distracted driver Detection with Full HD recording.

Another active safety combo system, this one from automotive tier 1 Autocruis, is expected to enter mass production this year targeting commercial fleet deployments. This solution combines front ADAS and DMS functions on a single CV25 SoC.

And lastly, HASCO, a spin-out of leading OEM SAIC, demonstrated its Adapted Driving Beam, or ADB, solution based on Ambarella's CV22AQ SoC. The solution utilizes both ADAS and DMS algorithms for intelligent headlight control.

As you can see, Ambarella's exhibition at the Shanghai Auto Show in April generated strong interest, with more than 50 automotive OEMS and tier 1s visiting our booth. Ambarella demonstrated a number of designs covering ADAS, electronic mirror, DMS and OMS applications, while also demonstrating partnerships with many of China's leading third party automotive software companies.

One area of significant interest at the show was our "Rebel" front ADAS reference design, a turnkey platform based on our CV2FS SoC and Sensetime's software stack. This solution includes front ADAS features - such as pedestrian detection, lane detection, drivable area detection, traffic light and traffic sign detection, while also supporting millimeter wave radar and visual perception, providing sensor fusion between the camera and radar. Our Rebel reference design provides Tier 1 suppliers and software development partners an open platform for differentiated high-performance automotive systems.

I will now update you on our continuing progress in the IP security camera markets.

During our Q2 FY21 earnings call on September 2nd, we stated that, in addition to our SoC share gains in professional security outside of China, for the first time we were also seeing additional opportunities in the professional security market within China.

During the last quarter, UnisinSight launched the first of its cameras based on Ambarella solutions, including 2MP and 4MP models with full-color night vision and people counting capabilities. This is the first camera design in mass production using our new low-cost CV28M CVflow SoC which was introduced at the end of last year.

Also during the quarter, Kedacom introduced its first Ambarella-based designs –the IPC695 and IPC445 cameras based on our CV2 and CV22 SoCs. The IPC695 features include 9MP resolution with HD snapshots and AI-based exposure optimization while the IPC445 features a 4MP dome design with advanced area intrusion detection and motion detection.

Our CVflow SoCs are raising the bar in multi-sensor camera designs based on their ability to process multiple high-resolution streams concurrently with AI processing. In April iPro, formerly Panasonic's security camera business, introduced two new models based on our CV2 SoCs – the 8530 and 8570. These cameras are equipped with four sensors per camera capable of independent operation for 360-degree viewing with minimal blind spots and color imaging in just 0.05 lux, or extremely low-light conditions.



In the body worn security camera category, UK-based Reveal became the first to introduce new cameras with Ambarella CVflow SoCs to provide a platform for advanced AI-based features. Based on our CV25 SoC, the new K series cameras include HD recording, movable lens and full color display.

In April home monitoring market leader Ring, a unit of Amazon, introduced two new models based on Ambarella's CVflow SoCs. The new Video Doorbell Pro 2 model raises the bar for video doorbell designs, with 3D motion detection, head-to-toe HD+ video and integration of Alexa greetings. Alexa can speak to visitors and accept deliveries when you can't get to the door, while the wide angle video allows you to check on packages left on the doorstep.

Additionally, Ring's new Floodlight Cam Wired Pro also includes 3D motion detection and adds bird's eye video for precise motion alerts.

And lastly, among new customer product introductions, Insta360 introduced its tiny Go 2 action cam based on Ambarella's H22 SoC. The waterproof camera can record 4Kp30 video, includes a 6x speed hyperlapse mode, image stabilization and is small enough to be worn on shirts or headbands.

From these customer engagements, and others, you can see Ambarella's SoCs are enabling customers to add significant value to their products. While **efficiency** benchmarks like *performance-per-Watt* and *performance-per-dollar* are important elements of customer design win decisions, our "**open platform**" and its **flexibility** also uniquely enable our customers to create optimized and differentiated products and to price them accordingly. "**Open platform**" means customers can develop their own software to run on our SoCs, but "**flexibility**" means they can be creative and use the hardware and software resources on our SoCs to develop proprietary configurations and feature-sets. Such flexibility is usually not available from our competitors. For example, in the automotive market, earlier I discussed projects with Great Wall, Momenta, Autocruis and HASCO that take advantage of the flexibility of our SoCs to create unique combo systems. These powerful solutions integrate what used to be 2-3 discrete camera products with limited functionality into a unified feature rich solution operating on one Ambarella CV SoC. And we are especially excited by our design win at Arrival where the performance, flexibility and low power of our SoCs is being harnessed for the next generation of electric vehicles.

In conclusion, Ambarella's product portfolio is the strongest in our history. After a very good Q1, despite the supply-chain challenges, we are guiding Q2 revenue to be up 48% to 54% year-over-year. Our long-term outlook is fueled by our high level of investment into proprietary technology that is setting the pace of innovation in the visual AI market. Not only is our CV portfolio continuing to expand our reach into new markets, but we believe our visual AI roadmap will enable us to capture more processing value per design win.

We are very thankful to have stakeholders - in particular our dedicated employees as well as a network of suppliers, customers and investors - who understand the AI vision opportunity and support us as we continue to execute amidst all the challenges the market has thrown at us in recent years. So, once again, thank you.

**Louis Gerhardy, Corporate Development & Investor Relations**

I will review the financial highlights for the first quarter of FY2022 ending April 30<sup>th</sup> and provide a financial outlook for our second quarter of FY2022 ending July 31<sup>st</sup>.

I will 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 adjusted for the impact of taxes.

Robust demand was capped in the quarter by supply-chain challenges, nevertheless revenue of \$70.1 million was slightly above the high-end of our original guidance. This represents a sequential increase of 13% from Q4 and a 28% increase from the year ago quarter.

Automotive revenue increased about 40% sequentially, security grew more than 20% sequentially, and "Other" product revenue was down more than 25% sequentially.

Non-GAAP gross margin for Q1 was 62.9% compared to 61.4% in the preceding quarter. We incurred some higher costs to manage the supply-chain challenges, but a relatively stable pricing environment and a more favorable customer mix combined to offset this.

Non-GAAP operating expense for the first quarter was \$35.4 million, compared to \$33.4 million for the previous quarter. Operating expenses increased primarily due to a seasonal increase in payroll taxes and increased headcount.

Other income was five hundred ninety three thousand dollars, reflecting the low interest rate environment.

The Non-GAAP net income for Q1 was \$8.9 million, or \$0.23 per share compared with non-GAAP net income of \$5.1 million, or \$0.14 per share in the fourth quarter. In the first quarter the non-GAAP earnings per share were based on 38.1 million diluted shares as compared to 37.6 million in the prior quarter.

Total headcount at the end of the first quarter was 803 with about 81% of employees dedicated to engineering. Approximately 68% of our total headcount is located in Asia.

Total accounts receivable at the end of Q1 were \$34.5 million or 44 days sales outstanding, versus \$25.0 million or 37 days sales outstanding at the end of the prior quarter. The increase was primarily driven by supply constraints which caused the quarter to be more back-end-loaded.

Net inventory at the end of the first quarter was \$33.1 million compared to \$26.1 million at the end of the previous quarter. Days of inventory increased to 102 days in Q1 from 93 days in Q4 for anticipated demand.

In Q1 our operating cash outflow was \$4.5 million. Cash and marketable securities were \$435.5 million, down from \$440.7 million at the end of the fourth quarter.

We had two 10% plus revenue customers in Q1. WT Microelectronics, a fulfillment partner in Taiwan who ships to multiple customers in Asia, was 63% of revenue and Chicony, a Taiwanese ODM, manufacturing for multiple customers, came in at 16%. Dahua and Hikvision, combined, declined sequentially and represent about 10% of our total revenue in Q1.

**I will now discuss the outlook for the second quarter of fiscal year 2022:**

During Q2 we expect to continue to experience a variety of supply chain challenges, in particular from the Texas freeze, which disrupted video processor manufacturing at Samsung's Austin, Texas, wafer fab. We expect wafer deliveries from Samsung's Austin fab to gradually recover in the 2H of the year, while other industry-wide cyclical forces are likely to constrain supply through the end of the year.

Based on these factors and our best judgement at the current time, we expect total revenue for the second quarter ending July 31, 2021 to be in the range of \$74 million to \$77 million.

We anticipate both Auto and Security to increase about 10% sequentially, with Other revenue down about 20% sequentially.

We estimate Q2 non-GAAP gross margin to be between 61.0% and 62.0% compared to 62.9% in the first quarter. We expect to continue to incur higher costs to manage the supply-chain challenges, but a stable pricing environment should continue to support gross margins at the mid to high end of our long-term model of 59% to 62%.

We expect non-GAAP operating expenses in the second quarter to be between \$36.0 and \$37.5 million due primarily to accelerate hiring and increased chip development costs.

Other income should be modeled around two-hundred thousand dollars, reflecting lower interest rates on our cash and marketable securities.

The Q2 non-GAAP tax rate should be modeled in the 3% to 6% range.

We estimate our diluted share count for Q2 to be approximately 38.3 million shares.

Ambarella will be participating in Cowen's TMT conference and Craig-Hallum's Institutional Investor conference, both on June 2<sup>nd</sup>, Rosenblatt's Age of AI Scaling conference on June 3<sup>rd</sup>, Bank of America's Global Technology Conference on June 8<sup>th</sup> and Stifel's Cross Sector Insights conference on June 9<sup>th</sup>. In advance of the International Security Conference, also known as ISC West, we will be hosting virtual demos on June 23<sup>rd</sup>, please contact me for more information.

With that, Fermi, Casey and I are available for questions, and operator I will turn it over to you for polling.

**Question & Answer Participants**

Dr. Fermi Wang, President & CEO

Casey Eichler, CFO

Louis Gerhardy, Corporate Development & Investor Relations