



June 5, 2019

Bank of America

2019 Global Technology Conference
The Ritz-Carlton, San Francisco

Dr. Fermi Wang, President and CEO

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Forward-Looking Statements

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In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "could," "would," "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "potential," or the negative of those terms, and similar expressions and comparable terminology intended to identify forward-looking statements. We have based forward-looking statements largely on our estimates of our financial results and our current expectations and projections about future events, markets and financial trends that we believe may affect our financial condition, results of operations, business strategy, short term and long-term business operations and objectives, and financial needs as of the date of this presentation. Although these forward-looking statements are based upon information available at the time the statements are made and reflect management's good faith beliefs, forward-looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements to differ materially from anticipated future results. Important factors that could cause actual results to differ materially from expectations are disclosed in the Ambarella's annual reports on Form 10-K and quarterly reports and Form 10-Q filed with the Securities and Exchange Commission (the "SEC"), particularly in the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." You should not place undue reliance on forward-looking statements, which speak only as of the date on which they are made. We do not undertake to update or revise any forward-looking statements after they are made, whether as a result of new information, future events, or otherwise, except as required by applicable law. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this presentation may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

Before you invest, you should read the annual and quarterly reports and other documents Ambarella has filed with the SEC for more complete information about the company and its ordinary shares. Additional information will also be set forth in Ambarella's future quarterly and annual reports and other filings made with the SEC from time to time. You may access these documents for free by visiting EDGAR on the SEC web site at www.sec.gov.

Ambarella Overview

Founded 2004, IPO (NASDAQ: AMBA) 2012

- Focused on video related applications, always operated with the premise that video is a special type of data requiring an optimized chip architecture
- Consumer electronics and security cameras were the targeted applications
- More than 200 million cameras enabled to-date

Ambarella is an artificial intelligence (“AI”) company

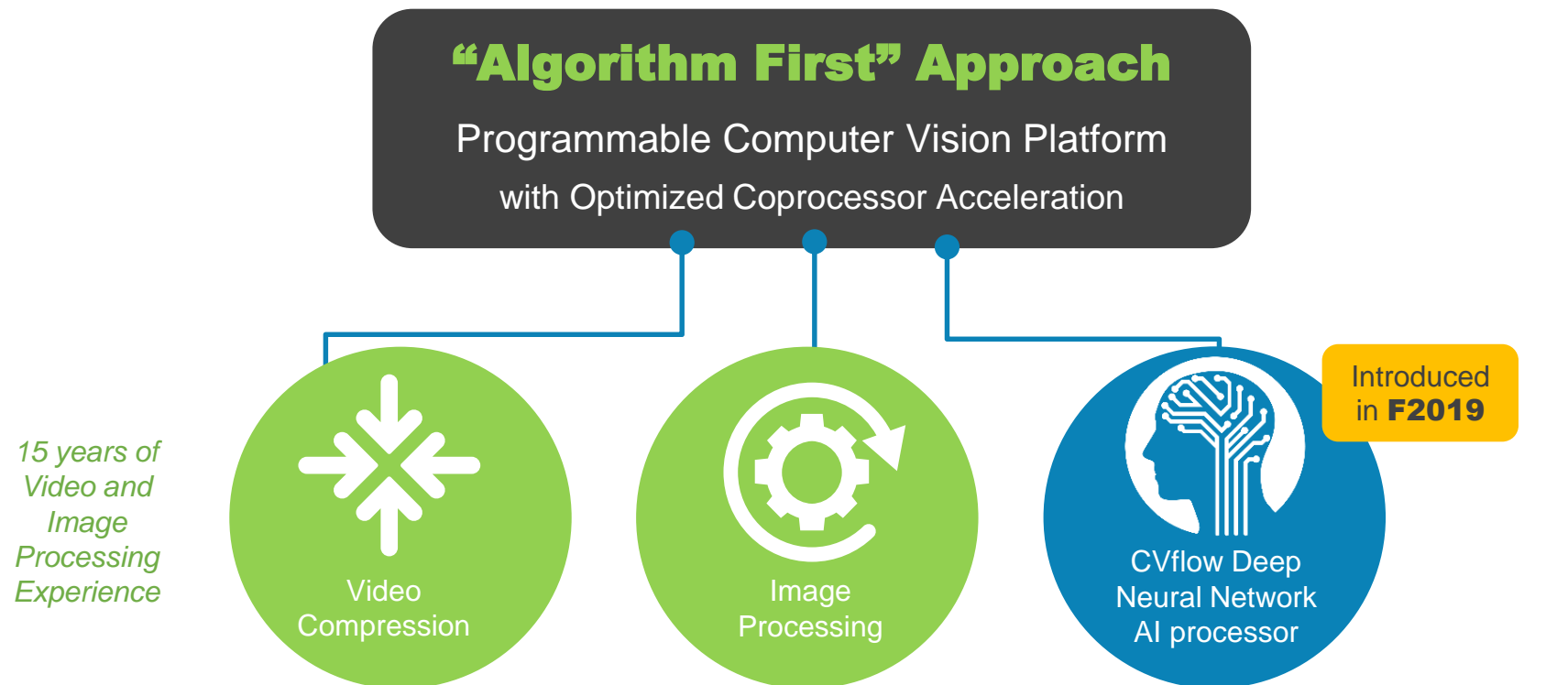
- Ambarella has developed an AI processor for video applications. The integration of this deep neural network AI processor with the company’s state-of-the-art video processor yields a highly optimized and integrated CV system-on-a-chip (“SoC”) solution
- ~\$300 million cumulative investment into CV targeting automotive, security camera and other robotic applications
- The first 3 production CV SoCs were taped-out and sampled in C2018 with two products already in mass production

Strong and liquid balance sheet

- \$366 cash and marketable securities and no debt exiting Q1 F2020 (April 30, 2019)
- Positive operating cash flow
- Returned \$175 million to shareholders in the last 3 years

Ambarella's Computer Vision

Leveraging 15 Years of Video Processing Expertise with a New and Proprietary AI Processor



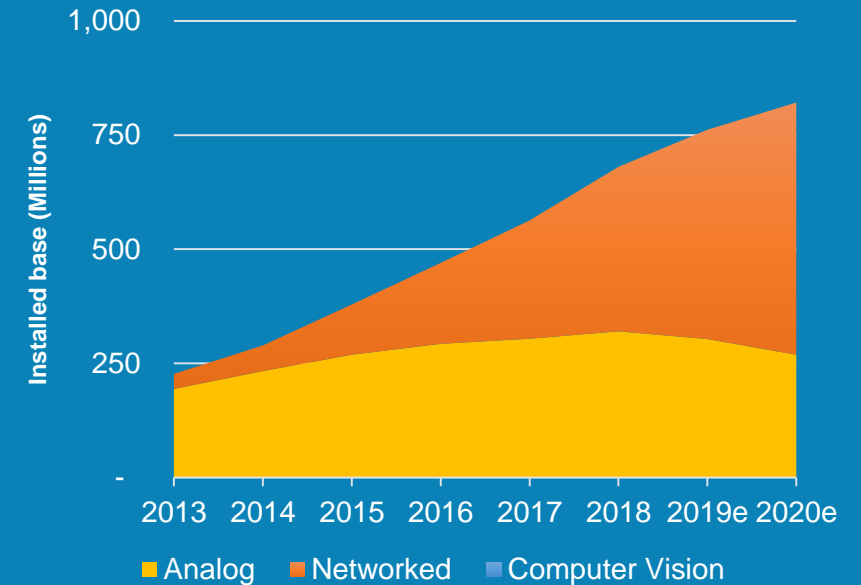
Why We Win

- 2x compression efficiency
- >2x power efficiency compared to app processors
- Best low-light, HDR, lens dewarp, etc.
- Unified viewing and sensing
- Superior performance / watt compared to a general purpose platform like CPU, GPU-C, or FPGA

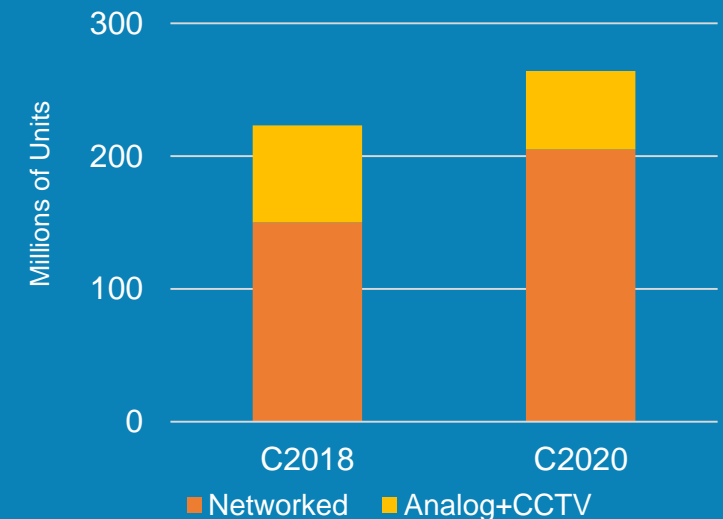
Security Camera Market

- ~60% of Ambarella's F2019 revenue originated from the security camera market. Two-thirds of revenue came from professional security cameras and one-third from consumer security cameras.
- ~750 million security camera global installed base in 2019. Ambarella serves the networked security camera portion which is taking share from analog cameras.
- Networked security camera global market unit shipments ~150 million units in C2018 and expected to reach over 200 million units in C2020.
- Security camera market is on the cusp of a major new product cycle as it migrates from pure human viewing to computer vision
 - We expect to ~5 professional security camera customers in mass production by the end of F2020. CV mass production revenue commenced to the 1st customer in Q4 F2019 (January 2019).
 - We are in-design at 9 of the 10 leading professional security camera companies.
 - In discussions with all the leading consumer security camera customers for wins. Market development ~1 year behind professional

Global Security Camera Installed Base Is Fertile Ground for New CV Product Cycle



Global Security Camera Unit Shipments



Source: Ambarella, IHS, Strategy Analytics, TSR

Ambarella's Global Security Camera Footprint

Enabling Most of the Major Professional and Consumer Security Camera Companies

Professional Security



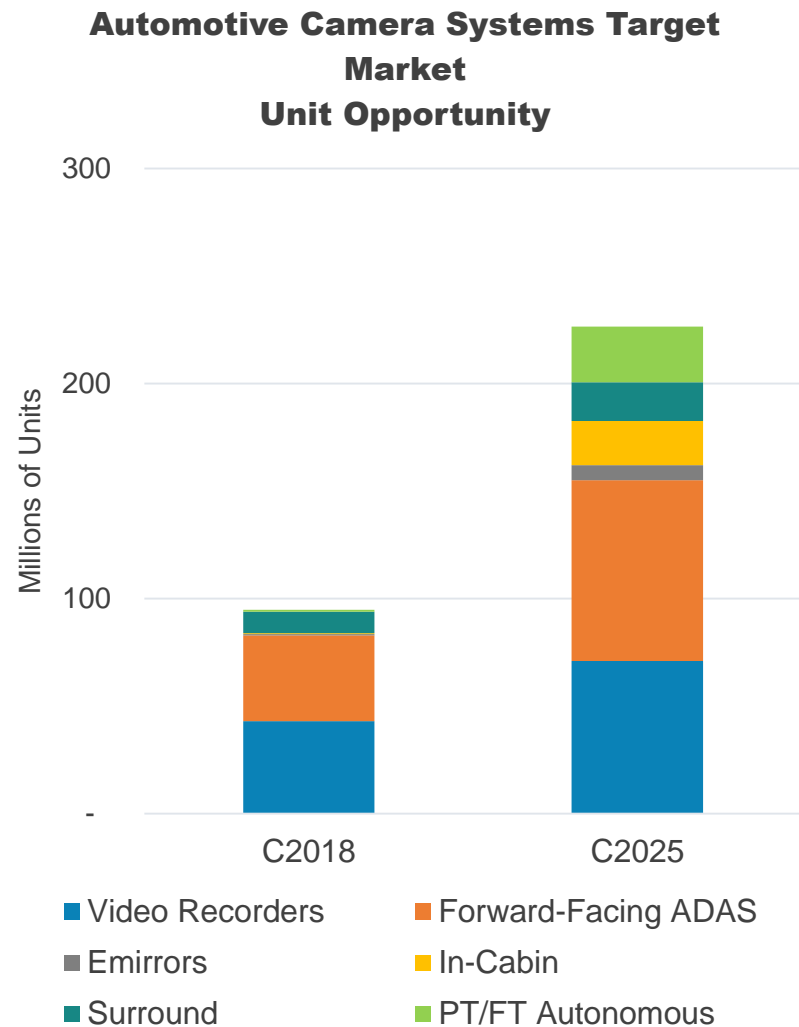
Consumer Security



Automotive Camera System Target Markets

Computer Vision Unlocks New Opportunities

Auto Camera Systems	Vision		Level of Autonomy						Ambarella Revenue F2019A	SAM	
	Human	Computer	L0 ADAS	L1	L2+	L3	L4	L5 Autonomous		C2018	C2025
Video Recorders	✓	✓	✓						~\$45M	~\$300M	~\$500M
Forward-Facing ADAS		✓	✓	✓	✓	✓			New	\$1B+	\$1.5B
eMirror(s)	✓	✓	✓	✓	✓	✓	✓		New	<\$10M	<\$250M
In-Cabin	✓	✓	✓	✓	✓	✓	✓	✓	New	<\$50M	~\$500M
Surround	✓	✓	✓	✓	✓	✓			New	<\$100M	~\$250M
Part-time and Full-time Autonomous Systems		✓				✓	✓	✓	New	~\$100M	~\$2.5B



Ambarella's Automotive Footprint

OEM and Tier 1s and 2s

Computer Vision



OEM



Tier 1



Tier 1

Video Processing



Mercedes-Benz



北京汽车
BAIC MOTOR



INVO

DENSO TEN

Q1 F2020 (April 2019) Review and Q2 Outlook

(Q1 F2020 reported June 4, 2019)

- **Geopolitical factors creating uncertainty and volatility with a wide range of potential outcomes**
 - Although there is no regulation in place, there is speculation that some of our customers in China could be blacklisted
 - Tariffs, rising tariff rates, and the potential expansion of tariffs could cover more goods
 - Market share shifts between customers creates risk
 - Supply-chain congestion may make it more difficult and/or expensive for us to pull-in orders
 - Our largest competitor in the security camera market, HiSilicon, a unit of Huawei, may also face headwinds of their own
- **Q2 F2020 (July, 2019) Outlook**
 - Due to recent customer order pull-ins, our Q2 revenue guidance of \$51 to \$53 million was above market expectations and we continue to expect second half F2020 revenue to be greater than first half F2020 revenue
 - We anticipate automotive and security revenue to increase sequentially, with “Other” revenue down sequentially
 - We estimate Q2 gross margins between 57% to 59% due to a change in the product mix from the order pull-ins
- **Q1 F2020 (April, 2019) Results**
 - Revenue of \$47.2M slightly above the mid-point of guidance with automotive and “Other” revenue up sequentially and security camera down sequentially
 - Non-GAAP EPS of \$0.01 with a positive operating cash flow of \$5.3 million
 - Announced a new stock repurchase authorization of \$50 million through June 2020



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