QUARTERLY BUSINESS UPDATE

DISCLAIMER AND CAUTIONARY NOTE



REGARDING FORWARD-I OOKING STATEMENTS

FORWARD-LOOKING STATEMENTS

This presentation of Luminar Technologies, Inc. ("Luminar" or the "Company") includes "forward-looking statements" within the meaning of the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements may be identified by the use of words such as "future," "growth," "opportunity," "well-positioned," "forecast," "intend," "seek," "target," "anticipate," "believe," "expect," "estimate," "plan," "outlook," and "project" and other similar expressions that predict or indicate future events or trends or that are not statements of historical matters. Such forward-looking statements include, but are not limited to, projected financial information, statements regarding estimates/Order Book numbers and forecasts of other financial and performance metrics, projected costs and bill of materials (BOM), projections of market opportunity and market share and statements regarding the proposed relationship between Luminar and Volvo or other manufacturers and the implications of those arrangements and related agreements on Luminar's business and results of operations, and statements about achieving anticipated software capability and timeline for release. Such forward-looking statements with respect to revenues, earnings, performance, strategies, prospects and other aspects of the business of Luminar are based on current expectations that are subject to risks and uncertainties. These statements are based on various assumptions, whether or not identified in this presentation, and on the current expectations of Luminar's management and are not predictions of actual performance. These forward-looking statements are provided for illustrative purposes only and are not intended to serve as, and must not be relied on by any investor as, a guarantee, an assurance, a prediction or a definitive statement of fact or probability.

A number of factors could cause actual results or outcomes to differ materially from those indicated by such forward-looking statements. These factors include, but are not limited to: Luminar's limited operating history; Luminar's inability to reduce and control the cost of the inputs on which Luminar relies: Luminar's ability to transition to an outsourced manufacturing business model; the success of Luminar's customers in developing and commercializing products using Luminar's solutions; the amount and timing of future sales; the extent to which customers who have selected Luminar for a program win commercially launch vehicles that include Luminar's hardware and software products: the extent to which Luminar meets contractual terms and conditions: the extent to which Luminar's technology is successfully integrated into Luminar's customers' vehicles: the timina of when Luminar's customers adopt Luminar's technology into their vehicles on a commercial basis which could be delayed for regulatory, safety or reliability issues unrelated to our technology; ability of Luminar hardware and software alone or in combination with that of our customers and partners to deliver necessary levels of safety and performance; undetected or unknown errors, defects or reliability issues in Luminar's hardware or software which could reduce the market adoption of Luminar's new products: loss of business with respect to, the failure or lack of commercial success of a vehicle model for which Luminar is a significant supplier for reasons unrelated to Luminar's technology; a decline, for any reason, in the production levels of Luminar's customers, particularly with respect to models that incorporate Luminar's technology; customer cancellations of their contracts; if Luminar's products are included as part of a vehicle option package, the extent to which end customers select it; whether the complexity of Luminar's products results in undetected defects and reliability issues which could reduce market adoption of its new products, damage its reputation and expose Luminar to product liability and other claims; strict government regulation that is subject to amendment, repeal or new interpretation and Luminar's ability to comply with modified or new laws and regulations applying to its business; Luminar's ability to grow its business and Luminar's ability to manage growth profitably; changes in applicable laws or regulations; the inability to successfully retain or recruit officers, key employees or directors; Luminar's financial performance; the possibility that Luminar may be adversely affected by other economic, business, and/or competitive factors, including the level of demand and financial performance of the autonomous vehicle industry and market adoption of lidar; the risk that any required regulatory approvals are not obtained; risks related to Luminar's relationship with Volvo and other manufacturers, and the related timing of production schedules and other key milestones; the inability of Luminar to adequately protect or enforce its intellectual property rights or prevent unauthorized parties from copying or reverse engineering its solutions which efforts to protect and enforce Luminar's intellectual property rights and prevent third parties from violating its rights may be costly; any legal and/or regulatory proceedings and commercial or confractual disputes in which Luminar may become involved, which could have an adverse effect on its profitability; changes in the price of key materials and disruptions in supply chains for these materials, the ability to meet certain volume estimates; Luminar's ability to successfully integrate acquisitions; Luminar's dependence on producing or sourcing certain key components and raw materials at acceptable price levels and Luminar's ability to adequately reduce and control the costs of such key components; the risk of shortages and long lead times in the supply of key components and the risk that Luminar's suppliers discontinue or modify components used in its products; lack of consistency and adequate auglity and augntity of piece parts, other raw materials and other bill of materials items; contract negotiations and the execution of firm supply agreements; future versions of Luminar's product design incorporating new components meeting Luminar's customers' requirements and specifications; the qualification of new versions of Luminar's key components; defects in production processes (including system assembly) either within Luminar's facilities or at Luminar's suppliers; any transitions or changes in Luminar's production process, planned or unplanned; Luminar's ability to remediate the material weakness in its internal controls over financial reporting; the impact of the global COVID-19 pandemic on employees, customers, and the overall automotive market; Luminar's proposed international expansion into China which could expose it to substantial business, regulatory, political, financial and economic risks; and other risks and uncertainties indicated from time to time in the Annual Report on Form 10-K for the fiscal year ended December 31, 2020 filed with the Securities and Exchange Commission (the "SEC") on April 14, 2021, the registration statement on Form S-1 (No. 333-251657) filed with the SEC on December 23, 2020 and amendments thereto (including the post-effective amendments filed with the SEC on April 26, 2021 and May 21, 2021), and the registration statement on Form S-1 (No. 333-257989) filed with the SEC on July 16, 2021 and amendments thereto, in each case, under "Risk Factors", and other documents filed or to be filed with the SEC. There may be additional risks that Luminar presently knows or that Luminar currently believes are immaterial that could also cause actual results to differ from those contained in the forward-looking statements.

You are cautioned not to place undue reliance upon any forward-looking statements, including the projections, which speak only as of the date made. Luminar does not undertake any commitment to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise.

Accordinaly, forward-looking statements, including any projections or analysis, should not be viewed as factual and should not be relied upon as an accurate prediction of future results. The forward-looking statements contained in this presentation are based on the Company's current expectations and beliefs concerning future developments and their potential effects on Luminar. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control), or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements.

Should one or more of these risks or uncertainties materialize, or should any of management's assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. Luminar does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws. Accordingly, you should not put undue relignce on these statements.

DISCLAIMER AND CAUTIONARY NOTE



REGARDING FORWARD-LOOKING STATEMENTS

USE OF PROJECTIONS

This presentation contains financial forecasts with respect to certain financial measurements of Luminar, including, but not limited to Luminar's projected Revenue, cash spend, year end cash, and order book. Such projected financial information constitutes forward-looking information, and is for illustrative purposes only and should not be relied upon as necessarily being indicative of future results. Luminar's independent registered public accounting find in ot audit, review, compile, or perform any procedures with respect to the projections for the purpose of their inclusion in this presentation, and accordingly, it did not express an opinion or provide any other form of assurance with respect thereto for the purpose of this presentation. These projections should not be relied upon as being necessarily indicative of future results. Luminar does not undertake any commitment to update or revise the projections, whether as a result of new information, future events or otherwise.

In this presentation, certain of the above-mentioned projected information has been repeated (in each case, with an indication that the information is an estimate and is subject to the qualifications presented herein), for purposes of providing comparisons with historical data. The assumptions and estimates, including Order Book numbers underlying the prospective financial information are inherently uncertain and are subject to a widely of significant business, economic and competitive risks and uncertainties that could cause actual results to differ materially from those contained in the prospective financial information. See "Forward-Looking Statements" paragraph above. Accordingly, there can be no assurance that the prospective results are indicative of the future performance of Luminar or that actual results will not differ materially from those presented in the prospective financial information. Inclusion of the prospective financial information in this presentation should not be regarded as a representation by any person that the results contained in the prospective financial information will be achieved.

INDUSTRY AND MARKET DATA

In this presentation, Luminar relies on and refers to information and statistics regarding the sectors in which Luminar competes and other industry data. Luminar obtained this information and statistics from third-party sources, including reports by market research firms. Although Luminar believes these sources are reliable, the Company has not independently verified the information and does not guarantee its accuracy and completeness. Luminar has supplemented this information where necessary with information from discussions with Luminar customers and Luminar's own internal estimates, taking into account publicly available information about other industry participants and Luminar's management's best view as to information that is not publicly available.

USE OF NON-GAAP FINANCIAL MEASURES

The financial information and data contained in this presentation is unaudited and does not conform to Regulation S-X promulgated under the Securities Act of 1933, as amended. Accordingly, such information and data may not be included in, may be adjusted in or may be presented differently in, any filling Luminar makes with the SEC.

This presentation includes non-GAAP financial measures, including earnings before interest, taxes, depreciation and amortization ("EBITDA"), Order Book, cash spend, Free Cash Flow ("FCF"), and non-GAAP operating expenses. Free Cash Flow is defined as EBITDA less capital expenditures (including patent acquisitions) less changes in net working capital less net interest expense less taxes (including the benefit of existing and future net operating losses). Cash spend or free cash flow are defined as operating cash flows less capital expenditures. Non-GAAP operating expenses is defined as operating expenses less stock-based compensation and expenses related to the re-sale registration statement on Form S-1.

Major win is defined as a written agreement with a major industry player, including based on their past experience in high volume production, leadership in autonomy, or market leadership, that selects our technology for what is expected to be a significant commercial program, including OEM series production programs. We only include major commercial wins in our forward looking orderbook calculation, and subject to the risks set forth in the "Forward-Looking Statements" above.

Order Book is defined as the forward-looking cumulative sales estimates of Luminar's hardware and software products over the lifetime of given programs which Luminar's technology is integrated into or provided for, based primarily on projected/actual contractual pricing terms and good faith estimates of "take rates" of Luminar's technology on vehicles. Such anticipated programs and volumes/take rates are based on commitments by our partners that are dependent on successful performance through development and validation and entering definitive purchase orders for series production, which may change for a variety of reasons as disclosed herein, including, without limitation, the risks set forth in the "Forward-Looking Statements" section above. Customer production vehicle volume estimates (and take rates when applicable) are largely sourced from (i) the OEM/customer, (ii) IHS Markit or other third party estimates, and/or (iii) Luminar's management good faith estimates.

Luminar believes that these non-GAAP measures of financial results provide useful information to management and investors regarding certain financial and business trends relating to Luminar's financial condition and results of operations. Luminar's management uses these non-GAAP measures to compare Luminar's performance to that of prior periods for trend analyses and for budgeting and planning purposes. These measures are used in monthly financial reports prepared for management and Luminar's board of directors. Luminar believes that the use of these non-GAAP financial measures provides an additional tool for investors to use in evaluating ongoing operating results and trends. Management of Luminar does not consider these non-GAAP measures in isolation or as an alternative to financial measures determined in accordance with GAAP. The principal limitation of these non-GAAP measures is that they exclude significant expenses and income that are required by GAAP to be recorded in Luminar's financial statements. In addition, they are subject to inherent limitations as they reflect the exercise of judgments by Luminar's management about which expenses and income are excluded or included in determining these non-GAAP measures.

Other companies may calculate non-GAAP measures differently, and therefore the non-GAAP measures of Luminar included in this presentation may not be directly comparable to similarly titled measures of other companies.

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WHAT'S INSIDE



Business	Update .	/ Recent	Highlights
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Standardization Overview

Software / Sentinel

First Proactive Safety Demonstration

Milestones to Measure Success

Q2'21 Financial Results and 2021 Outlook

Photos

Appendix

BUSINESS UPDATE // RECENT HIGHLIGHTS



1. Raising 2021 Revenue and Commercial Guidance

Increasing 2021 revenue guidance to \$30M - \$33M (previously \$25M - \$30M)
Raising major commercial wins target to 6 (from 3); forward-looking order book growth to 60%+ (from 40%+)

2. Industry-first Standardization Win with Volvo

Luminar lidar and software expected to be standard on Volvo's Next-Gen Electric SUV; setting a new benchmark for automotive safety

3. Awarded and Issued 100th Patent

Luminar currently has more issued patents than all other public lidar companies combined

4. Acquired OptoGration, Key InGaAs Chip Design Partner and Manufacturer Secured key part of supply chain and deepened competitive moat

5. Kicked-off Global Customer Roadshow

Nearly 50 customer/investor meetings in 12 cities Clear indications of accelerating program plans. Relationships evolving from transactional to strategic Highlighted design vision for future of autonomous cars/trucks/robo-taxis with Blade reference design

LANDMARK STANDARDIZATION DEAL WITH VOLVO



— STANDARDIZATION

Luminar lidar and software planned standard on Volvo's next generation electric SUV.

- Proactive SafetyTM enabled by Luminar expected to be part of Volvo's safety package, setting a new benchmark for automotive safety.
- Hands-off and eyes-off highway self-driving powered by Luminar expected to be available as an additional option via over-the-air upgrade.

— INDUSTRIALIZATION



Validates technology and de-risks industrialization



Completed Volvo's comprehensive automotive qualification audits



Enables economies of scale required for enhanced unit economics



Sets the stage for new safety standard, expediting other OEM partners to series production



Integrating lidar into Volvo rooflines will be a trademark to identify the brand. I believe people will see it on the road and think, "Here comes a very safe car."

~ Håkan Samuelsson, CEO of Volvo Cars



LUMINAR'S SENTINEL SOLUTION



Luminar's full-stack, hardware and software Sentinel solution will enable Proactive SafetyTM and Highway Autonomy for series production

- VALUE OF SOFTWARE



Unlocks lidar capabilities: Enables Proactive Safety™ and Highway Autonomy



TAM & margin expansion: Higher TAM and premium margins vs. industry



Data advantage:
Data from series production vehicles enables accelerating software lead

\$150B+

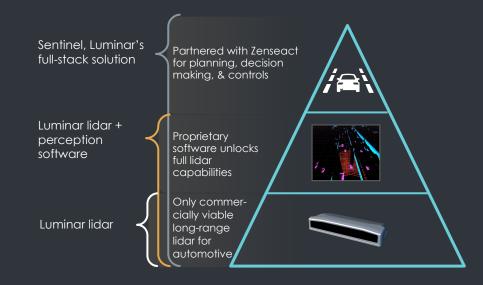
TAM in 2030



PASSENGER VEHICLE
1 lidar configuration



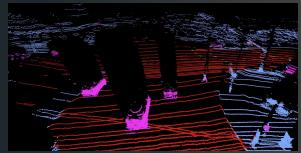
1-4 lidar configuration



PROACTIVE SAFETYTM - SOFTWARE IN ACTION



Q2 Status Update: On-track to deliver Sentinel Alpha version by EOY



Perception integrated into Iris



Testing Sentinel on German roads

Software developed on Hydra ports directly to Iris for series production. See our first Proactive Safety demonstration below:



Luminar test vehicle preventing a collision in an NCAP scenario of a moving pedestrian

MILESTONES TO MEASURE SUCCESS IN 2021



Торіс	Target Metric Summary:	Current Progress (since last update)
IRIS: INDUSTRIALIZATION FOR SERIES PRODUCTION	C-Sample Before Year-End	 Locked down over 85% of series production supply chain and tooling; completed DV1 testing, process transfer On-track for C-sample by year-end OptoGration acquisition secures supply and reinforces IP/tech moat
SOFTWARE DEVELOPMENT	Sentinel Development & Alpha Release Before Year-End	 Alpha release on track for year-end Showcased first demonstration of Proactive Safety Volvo standardization win includes Luminar SW; can accelerate data advantage
COMMERCIAL PROGRAM WINS	6 Major Commercial Wins Before Year-End	 Doubled target from 3 major commercial wins to 6 4 public major wins YTD, most recently with Volvo standardization on next-gen electric SUV
FORWARD-LOOKING ORDER BOOK	Forward-Looking Order Book Growth 60%+ by Year-End	Raised target from 40%+ growth to 60%+More wins YTD than anticipated
CASH SPEND & INVESTMENTS	Greater Cash Position at Year-End Than Start	 On-track to meet target spend Q2 cash position of \$580M; 1H cash spend \$61M

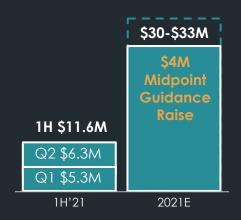
Q2'21 RESULTS & 2021 GUIDANCE



REVENUE (\$M)(1)

CASH SPEND (\$M)(2)

CASH POSITION(3)





- Raised FY guidance from \$25-30M to \$30-33M on accelerated commercial adoption
- Expect OEM Program revenue associated with series production wins to continue to ramp substantially through 2H'21



Q2'21 CASH SPEND OF \$32M:

- Investing in Opex as planned to drive industrialization and scaling for major customer wins - progression to series production with high efficiency
- Further Capex investments to follow for production preparation process



Q2'21 CASH POSITION OF \$580M

- Disciplined use of cash even as we scale customers and order-book
- On track for 2021 cash spend and year-end cash position guidance

PHOTOS



GLOBAL ROADSHOW: ~50 U.S. ENGAGEMENTS. NEXT STOP, E.U.





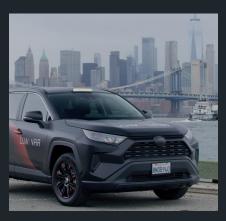










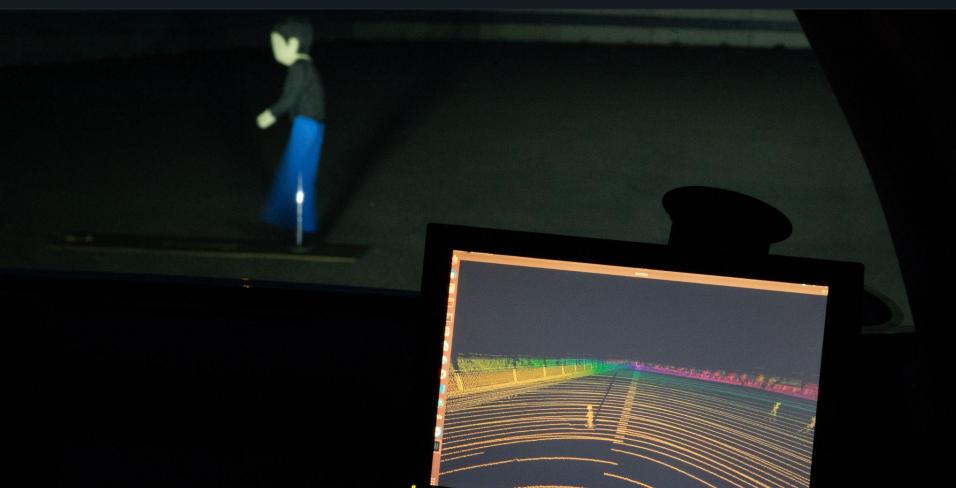


LUMINAR SUCCESSFUL PEDESTRIAN AVOIDANCE TEST



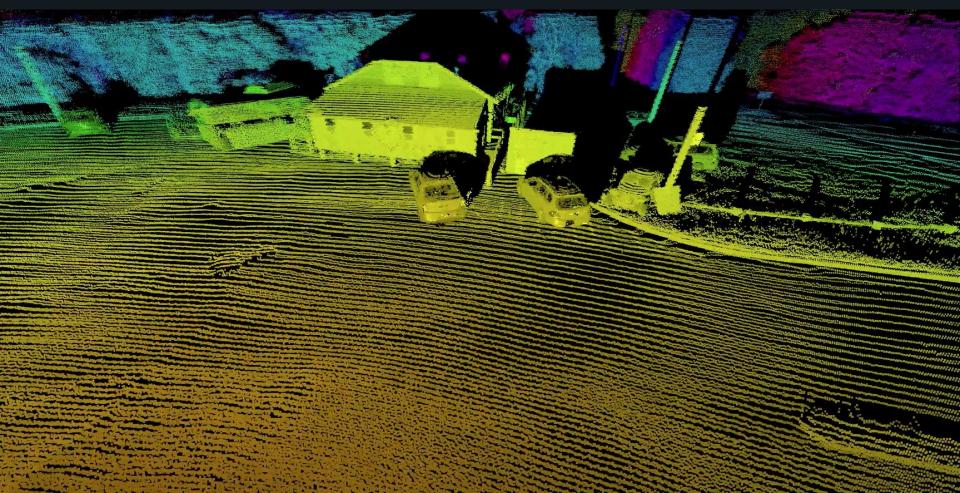




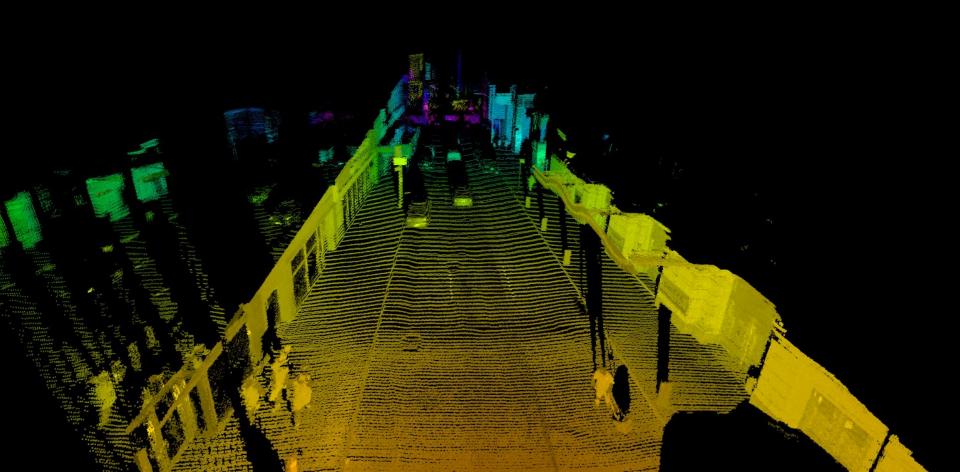


GEORGIA, USA



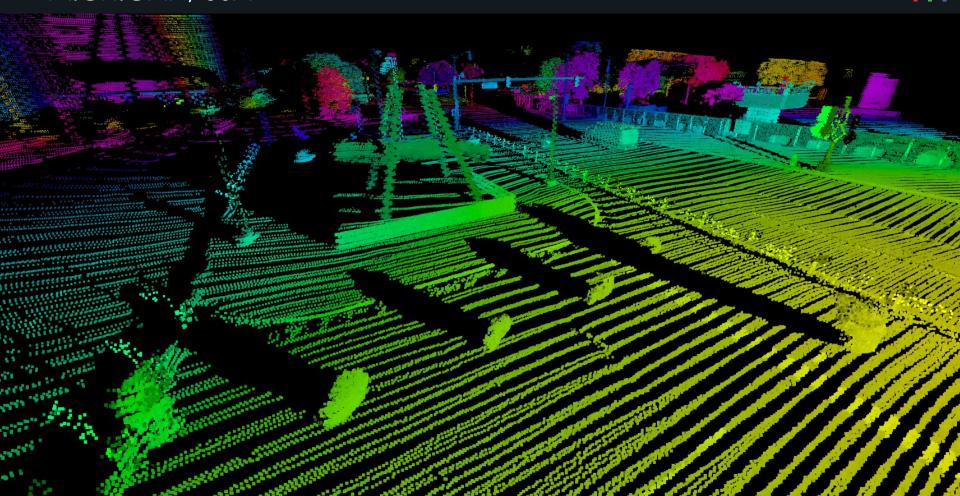




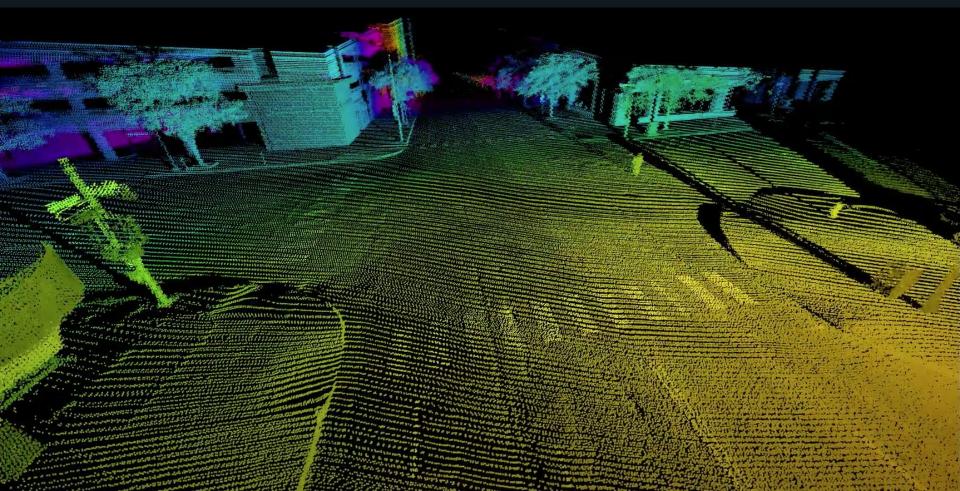


MICHIGAN, USA



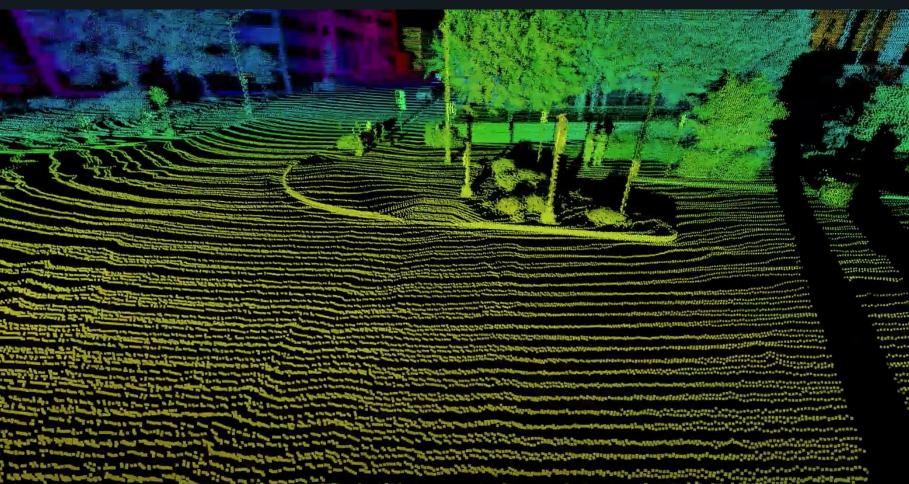




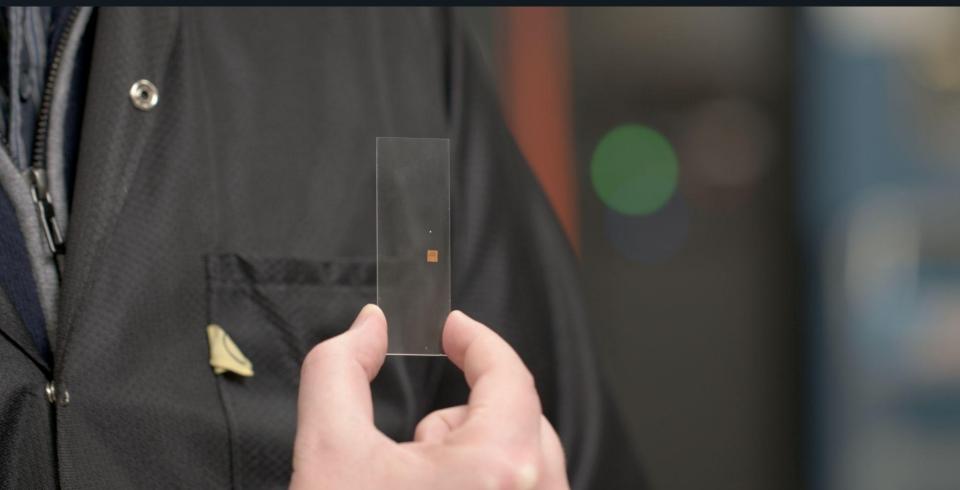


KANSAS, USA

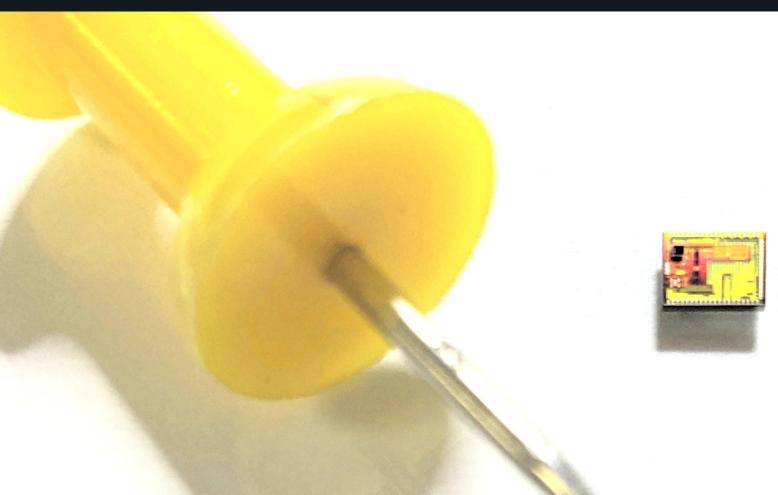












"BLADE" REFERENCE DESIGN











APPENDIX



ESTIMATED YEAR-END SHARE COUNT



SHARES OUTSTANDING	 341.6 million shares of Class A and Class B common stock outstanding as of 6/30/21 Remaining warrants outstanding: 3.1 million private SPAC warrants outstanding (\$11.50/share strike price) 4.1 million warrants previously issued as a private company (yet to be vested) 		
EARNOUT SHARES	 Earnout negotiated as part of our SPAC transaction based on the following criteria: Earnout measurement began on June 1, 2021 25.8M shares in total; 6 Earnout tranches, with each tranche totaling 4.3M shares a piece Tranches triggered if stock trades above the following six share price levels for 20 of 40 consecutive trading days: \$13.00; \$16.00; \$19.00; \$22.00; \$25.00; \$28.00 Four tranches were triggered and issued in the initial measurement period (\$13, \$16, \$19, \$22), which equates to 17.2 millions shares; two tranches (\$25, \$28) remain 		
OTHER ITEMS	Expect 1.2 million shares for: Optogratio	n acquisition, Employee exercises / vesting, and other uses	
ESTIMATED YEAR-END SHARE COUNT*	June shares outstanding +Earnout shares (first four tranches) +Other items =Estimated year-end share count	341.6 million shares 17.2 million shares 1.2 million shares ~360 million shares	

^{*}A number of factors could cause this estimate to vary, including the stock price which could drive increased earnout or stock option exercises of up to 13.1 million shares

Q2'21 FINANCIALS



	June 30	March 31
(\$M)	2021	2021
Cash and cash equivalents	\$134	\$207
Marketable securities	<u>\$446</u>	<u>\$403</u>
Cash and cash equivalents	\$580	\$610
Total Assets	\$626	\$651

	Three months ended June 30,		
(\$M)	2021	2020	
Free cash flow ⁽²⁾	\$(32.0)	\$(16.3)	

	<u>GAAP</u> Three months end June 30,	ed	Th	NON-GAAP ⁽¹⁾ ree months ended June 30,
(\$M)	2021	2020	2021	2020
Revenue	\$6.3	\$3.4	\$6.3	\$3.4
Cost of sales	\$7.8	\$7.4	\$6.7	\$7.4
Gross loss	\$(1.5)	\$(4.0)	\$(0.4)	\$(4.0)
Operating expenses	\$42.7	\$15.8	\$27.7	\$13.6

Notes: (1) Non-GAAP results have been adjusted for stock-based compensation (\$14.5M and \$2.3M for Q2 2021 and Q2 2020, respectively) and expenses related to registration statement on Form S-1 on behalf of selling stockholders (\$1.5M for Q2 2021). (2) Cash flows from operating activities (\$(30.2)M and \$(16.4)M for Q2 2021 and Q2 2020, respectively) less capital expenditure (\$(1.8)M and \$0.1M for Q2 2021 and Q2 2020, respectively).