



**Q2 FISCAL 2021**  
LETTER TO SHAREHOLDERS



JULY 27, 2021



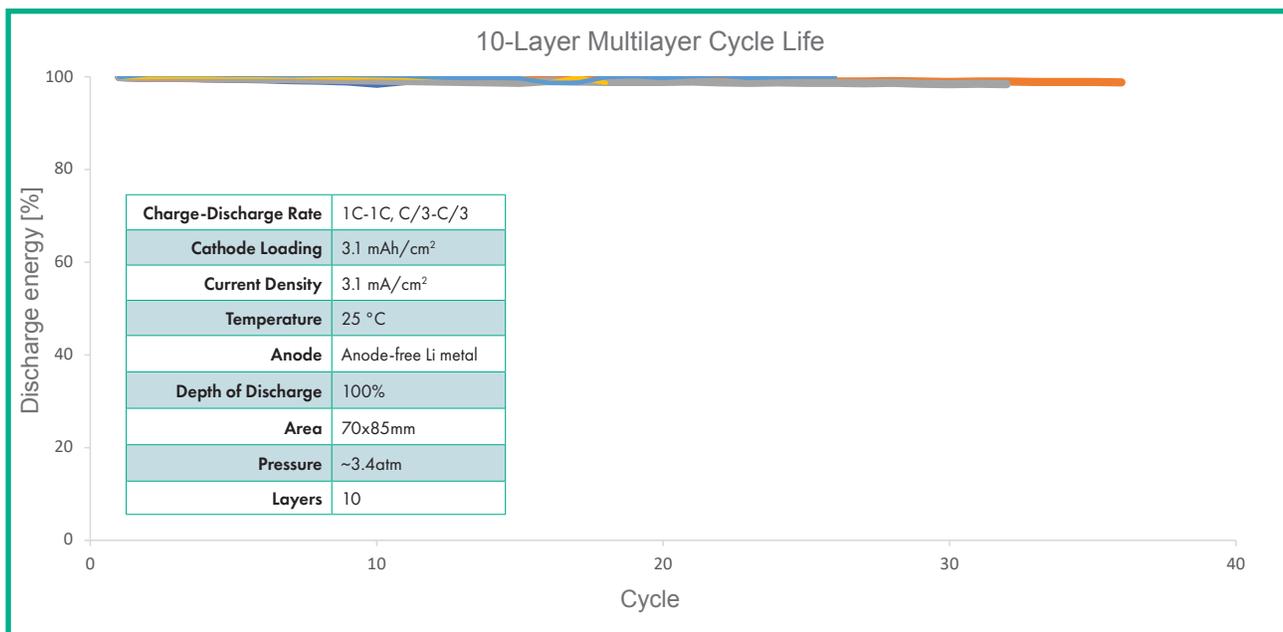
Dear Shareholders,

At the beginning of this fiscal year, we laid out a clear vision for our push to scale up our solid-state lithium-metal battery technology. We set concrete goals to evaluate our progress on two fronts: the layer count of our battery cells and the buildout of a large pre-pilot manufacturing facility that will help us meet demand for test cells from prospective customers. As we move into the second half of 2021, we continue to execute steadily on both fronts.

In this letter, we'll give you an update on some of our most significant achievements and progress over the last quarter.

### 10-Layer Cells

First, we are excited to announce that we have made and are currently testing our first 10-layer cells. These cells, in the commercially relevant 70x85 mm form factor, are being tested at 1C and C/3 (one- and three-hour charge and discharge) rates under our standard temperature (25 °C) and pressure (3.4 atmospheres), conditions we believe are relevant for automotive applications. While we need to produce and test many more such cells to collect data and statistics on their performance and reliability, this is an extremely important result, as it demonstrates we are able to make 10-layer cells with similar early capacity retention and cycling behavior to what we've shown for single- and four-layer cells.



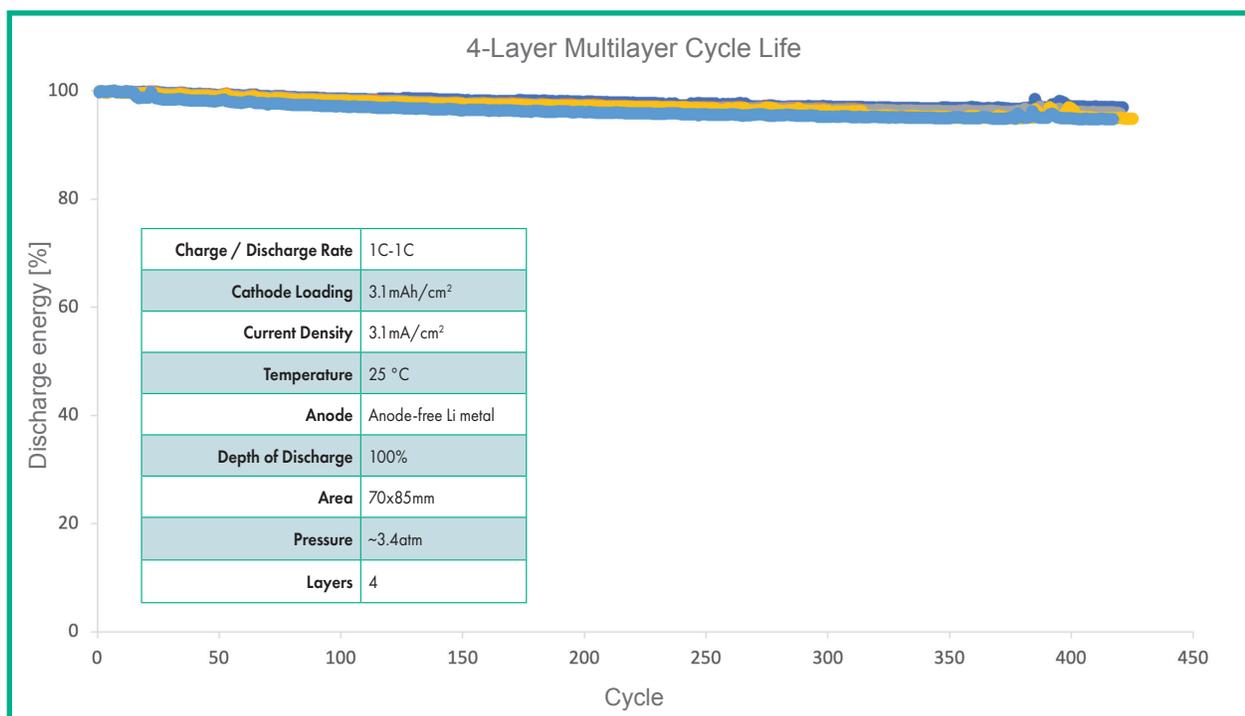
These 10-layer results were enabled by a series of manufacturing innovations resulting in a step-function improvement in separator consistency and quality, which has been a key focus of our development team in recent months. We expect these improvements to continue to yield dividends as we make more of these cells and continue to improve their performance. We also benefited by leveraging the reusable prismatic can package design we introduced earlier this year, using this package design for both 4- and 10-layer cells.

We had set ourselves the goal of showing results from 10-layer cells by the end of 2021, so we are encouraged that we have the first 10-layer cells this early. This reflects a rapid rate of progress over the last few quarters, with single-layer results in December, followed by four-layer results in February, and now 10-layer cells in July. We will seek to continue to improve the performance of the 10-layer cells through the rest of 2021, including ongoing improvements to the quality, consistency, and throughput of our separator, demonstrate several dozen layers in 2022 and produce test cells for vehicles on our QS-0 pre-pilot production line in 2023. We believe accomplishing the improvements described above and translating them to our new, higher-throughput tools will be key to achieving our goals for this year and next. We will report further progress on these cells in future communications.



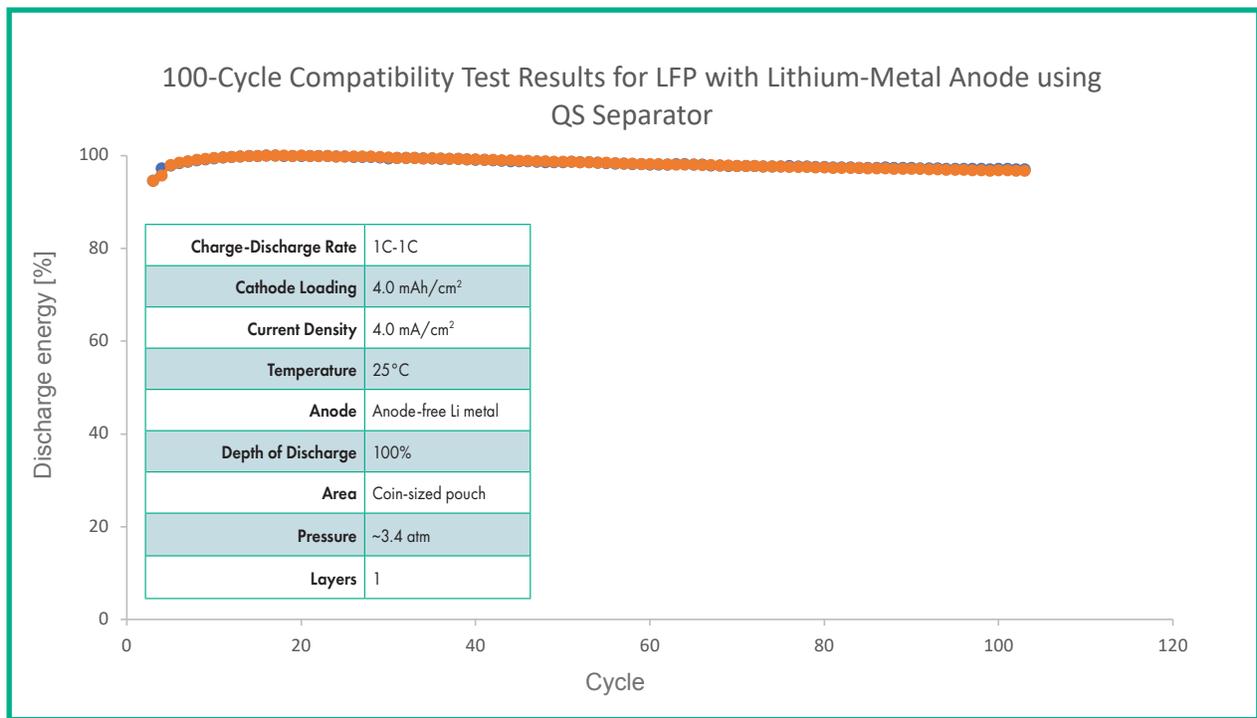
A 10-layer cell currently on test

Regarding the four-layer test results announced in Q1, we reduced the operating pressure to our standard 3.4 atm, and we are pleased to report that this lower pressure did not materially alter the cycling performance, which remains similar to the single-layer data shared in December. These four-layer cells had a commercially relevant area (70x85 mm) and were tested at our standard temperature of 25 °C. As with every aspect of our development process, we are continuing to pursue improvements in yield and reliability.



## Cathode Developments

In another important development, we made and tested our anode-free lithium-metal cells with a low-cost iron phosphate (LFP) cathode and confirmed that our chemistry and cell design are compatible with LFP, as shown on the chart below. LFP has seen a resurgence of interest, but traditional LFP cells using carbon anodes generally suffer from low energy density (typically around 400 Wh/L). By contrast, we believe LFP coupled with QS's lithium-metal anode could deliver energy densities between 600 and 700 Wh/L, approaching today's state-of-the-art NMC chemistries. A lithium-metal anode is a natural fit for a lower voltage cathode chemistry like LFP, which would otherwise need thick conventional anodes to deliver high energy. We believe this demonstrates the commercial flexibility of our cathode-agnostic solid-state lithium-metal platform, which allows us to extend our product offering to a broad spectrum of the automotive market.



## Manufacturing Progress

In Q2, we also made progress on QS-0, our pre-pilot manufacturing line in San Jose, California. In April, we signed a long-term lease on a 197,000-square-foot facility, and over the last quarter, we placed orders for long-lead equipment.

From its inception, our ceramic separator was designed to be compatible with scalable manufacturing processes. The separator heat treatment step – critical in the production of any ceramic – is no exception. Today, we are in the process of installing high-volume continuous-flow heat treatment equipment, an important milestone on our path to industrialization. This equipment offers the potential for an order of magnitude improvement in throughput over our largest existing tool, and in addition to delivering better throughput, we believe this tooling will deliver improved separator quality, since its design enables highly uniform processing.

Importantly, because our process doesn't require high-vacuum equipment, we believe it's inherently more scalable than processes that do require such equipment such as chemical or physical vapor deposition (CVD or PVD). In addition, we believe our technology lends itself to mass production because:

- The precursor materials for our separator are earth abundant, used at scale in industry today, and available at scale from multiple suppliers on multiple continents.
- Our cell design is anode-free, which means that we don't need to purchase or process pure metallic lithium or any other anode active materials.
- We can leverage existing manufacturing tools and processes for our ceramic separator, as well as for cathode and cell assembly.



Photos of our second-generation continuous-heat treatment tool being installed in the engineering line at our current facility.

Underlying the progress outlined above is a “learn fast and iterate” approach to development. We run enormous numbers of tests on our cell designs, including more than 500,000 tests and measurements in Q2. To supply this data pipeline, we need large volumes of cells. As we bring production volumes up to 200,000 cells per year at QS-0, we believe our ability to assemble statistically significant datasets and refine our technology will benefit accordingly. This will accelerate the development process, serve the testing and sampling requirements of additional engaged prospective customers, and help us to finalize the industrialization blueprint for QS-1, our pilot-line gigafactory joint venture with Volkswagen.

In addition to the new tools, we have also rapidly expanded our team – growing 20% in Q2 to more than 400 employees – with a strong emphasis on experienced manufacturing professionals. Among many others, we are pleased to welcome Celina Mikolajczak from Panasonic and Tesla as our VP of Manufacturing Engineering, and Clayton Patch from Micron Technology, Inc. and IM Flash Technologies as VP of Manufacturing. We’re building a team with significant high-tech mass manufacturing experience; their hard work and dedication puts us in a strong position to achieve our scale-up plans.

As we have pointed out earlier in this letter, it is important to note that there is still work to be done, including continuing to improve the separator manufacturing process, with a particular focus on:

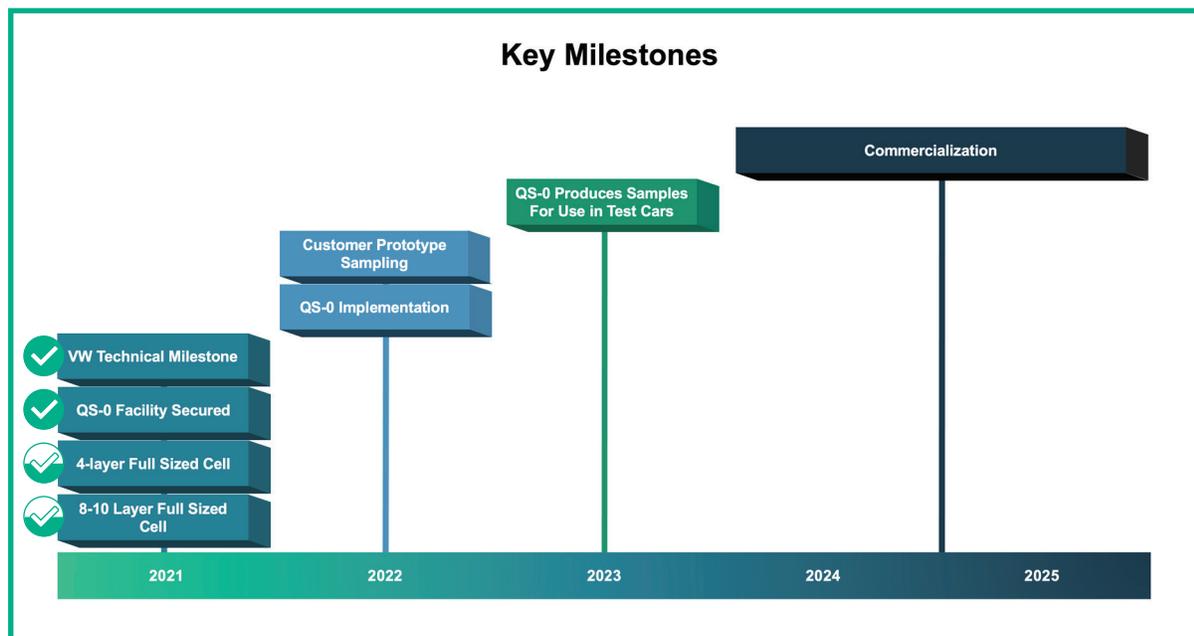
- **Quality** – The quality and uniformity of the ceramic separator affects, among other things, the cycling behavior, power and operating conditions of the cells.
- **Consistency** – Tightening the variability of separator quality results in better yield.
- **Throughput** – Increasing the volume of separator production results in the increased quantities required for higher layer counts and delivery of more test cells to prospective customers.

## 2021 Outlook

With more than half the year behind us, we continue to execute on near-term goals with our longer-term targets in mind. We ended the second quarter with over \$1.5B in liquidity and continue to expect to enter 2022 with greater than \$1.3B in liquidity. Going into 2022, we believe our balance sheet will enable us to fully fund QS-0, start QS-1 production at 1 GWh scale and contribute capital to the subsequent 20 GWh expansion of the QS-1 facility.

While cash spend on operations remains in the range of \$130M to \$160M for 2021, capex is tracking higher primarily due to the pull forward of the timing of QS-0 pre-pilot manufacturing line spend from 2022 into 2021. We are working closely with manufacturing equipment suppliers as we order our continuous-flow tools for QS-0.

Our longer-term targets remain unchanged – we aim to deliver prototype samples in commercially relevant form factors to automotive OEMs from our engineering lines in 2022, provide cells for R&D test cars from QS-0 in 2023 and enter commercial production in 2024-2025.



Our technical roadmap reflects the milestones we've achieved so far in 2021, with the first two fully completed and the last two partially complete. We believe the appropriate standard for automotive cell performance is a capacity retention demonstration of more than 80% over 800 cycles at 1C rates of power, 100% depth of discharge, 3.4 atm of pressure and 25 °C, and we continue to hold ourselves to this standard for full completion. We will continue to release data as we make progress on completing our 2021 goals.

## Summary

We continue to make progress across many parts of our business. From building our manufacturing processes to achieving key technical milestones, our team is fully committed to executing on the goals ahead. Our employees work incredibly hard to make these achievements possible and we're extremely proud to share the results of their efforts here.

There is still a great amount of work to be done, including: continuing to improve the manufacturing process of our separator, including quality, consistency and throughput, increasing the quantity and performance of our cells, and bringing higher-volume manufacturing tools and processes online in preparation for our QS-0 facility.

It's equally important to keep our eyes on the bigger picture. Given the rate and number of electrification announcements from automakers around the world, it's clear that the industry is on the brink of its biggest transformation in 100 years. The powertrain itself, the heart of the car, moving away from the combustion engines that powered the industry's last century to the electrified powertrains that will power its next century. We believe it will be difficult for electric vehicles to fully displace combustion-engine cars without a step-change improvement in battery performance, and we believe QuantumScape's solid-state lithium-metal batteries can play a key role in delivering this step change. Although there are challenges ahead, every major hurdle we clear becomes a moat that strengthens our competitive position in the race to capture the next-generation battery market. Our team remains laser-focused on delivering this technology into mass production and we look forward to reporting progress as we make this happen.

Jagdeep Singh  
Founder, CEO & Chairman



Kevin Hettrich  
CFO



## QuantumScape Corporation

### Condensed Consolidated Balance Sheets (Unaudited) (In Thousands, Except per Share Amounts)

	June 30, 2021	December 31, 2020
<b>Assets</b>		
Current assets		
Cash and cash equivalents (\$3,382 and \$3,406 as of June 30, 2021 and December 31, 2020, respectively, for joint venture)	\$ 402,391	\$ 113,216
Marketable securities	1,165,139	884,336
Prepaid expenses and other current assets	10,622	11,616
Total current assets	1,578,152	1,009,168
Property and equipment, net	91,217	43,696
Right-of-use assets - finance lease	38,105	—
Right-of-use assets - operating lease	23,382	11,712
Other assets	12,219	2,193
Total assets	<u>\$ 1,743,075</u>	<u>\$ 1,066,769</u>
<b>Liabilities, redeemable non-controlling interest and stockholders' equity</b>		
Current liabilities		
Accounts payable	\$ 14,135	\$ 5,383
Accrued liabilities	3,663	2,701
Accrued compensation	5,602	2,391
Operating lease liability, short-term	1,519	1,220
Strategic premium, short-term	352	655
Total current liabilities	25,271	12,350
Operating lease liability, long-term	22,516	11,244
Finance lease liability, long-term	38,708	—
Assumed common stock warrant liabilities	148,455	689,699
Total liabilities	234,950	713,293
Redeemable non-controlling interest	1,694	1,704
Stockholders' equity		
Preferred stock- \$0.0001 par value; 100,000 shares authorized, none issued and outstanding as of June 30, 2021 and December 31, 2020	—	—
Common stock - \$0.0001 par value; 1,250,000 shares authorized (1,000,000 Class A and 250,000 Class B); 304,933 Class A and 109,607 Class B shares issued and outstanding as of June 30, 2021, 207,769 Class A and 156,225 Class B shares issued and outstanding as of December 31, 2020	41	36
Additional paid-in-capital	3,478,814	2,329,406
Accumulated other comprehensive loss	(694)	(31)
Accumulated deficit	(1,971,730)	(1,977,639)
Total stockholders' equity	1,506,431	351,772
Total liabilities, redeemable non-controlling interest and stockholders' equity	<u>\$ 1,743,075</u>	<u>\$ 1,066,769</u>

## QuantumScape Corporation

### Condensed Consolidated Statements of Operations and Comprehensive Income (Loss) (Unaudited) (In Thousands, Except per Share Amounts)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
<b>Operating expenses:</b>				
Research and development	\$ 35,776	\$ 12,049	\$ 65,241	\$ 25,396
General and administrative	13,846	2,178	29,056	4,747
Total operating expenses	49,622	14,227	94,297	30,143
Loss from operations	(49,622)	(14,227)	(94,297)	(30,143)
<b>Other (loss) income:</b>				
Interest expense	(238)	—	(238)	—
Interest income	349	281	596	819
Change in fair value of assumed common stock warrant liabilities	130,504	—	99,740	—
Other (expense) income	(5)	—	98	—
Total other income	130,610	281	100,196	819
Net income (loss)	80,988	(13,946)	5,899	(29,324)
Less: Net loss attributable to non-controlling interest, net of tax of \$0 for the three and six months ended June 30, 2021 and 2020	—	(1)	(10)	(5)
Net income (loss) attributable to common stockholders	\$ 80,988	\$ (13,945)	\$ 5,909	\$ (29,319)
Net income (loss)	\$ 80,988	\$ (13,946)	\$ 5,899	\$ (29,324)
<b>Other comprehensive income (loss):</b>				
Unrealized gain (loss) on marketable securities	(837)	(258)	(663)	57
Total comprehensive income (loss)	80,151	(14,204)	5,236	(29,267)
Less: Comprehensive loss attributable to non-controlling interest	—	(1)	(10)	(5)
Comprehensive income (loss) attributable to common stockholders	\$ 80,151	\$ (14,203)	\$ 5,246	\$ (29,262)
<b>Net income (loss) per share of common stock attributable to common stockholders</b>				
Basic	\$ 0.20	\$ (0.06)	\$ 0.02	\$ (0.12)
Diluted	\$ (0.12)	\$ (0.06)	\$ (0.24)	\$ (0.12)
<b>Weighted-average shares used in computing net income (loss) per share of common stock</b>				
Basic	404,957	239,798	386,970	239,795
Diluted	410,372	239,798	396,059	239,795

## QuantumScope Corporation

### Condensed Consolidated Statements of Cash Flows (Unaudited) (In Thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
<b>Operating activities</b>				
Net income (loss)	\$ 80,988	\$ (13,946)	\$ 5,899	\$ (29,324)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	2,954	1,633	5,155	3,075
Amortization of right-of-use assets- operating lease	335	305	706	605
Amortization of right-of-use assets- finance lease	565	—	565	—
Amortization of premiums and accretion of discounts on marketable securities	3,022	48	5,432	(5)
Amortization of strategic premium	(151)	(163)	(302)	(327)
Stock-based compensation expense	11,607	2,185	23,283	4,382
Change in fair value of assumed common stock warrant liabilities	(130,504)	—	(99,740)	—
Other	(9)	(8)	(113)	(8)
Changes in operating assets and liabilities:				
Prepaid expenses and other current assets	(2,011)	(283)	468	(448)
Accounts payable, accrued liabilities and accrued compensation	765	(21)	5,016	579
Operating lease liability	(459)	(269)	(804)	(529)
Net cash used in operating activities	(32,898)	(10,519)	(54,435)	(22,000)
<b>Investing activities</b>				
Purchases of property and equipment, net	(30,494)	(4,957)	(43,655)	(9,891)
Proceeds from maturities of marketable securities	300,000	30,000	411,000	62,000
Proceeds from sales of marketable securities	121,455	—	121,455	—
Purchases of marketable securities	(819,339)	(24,351)	(819,339)	(24,351)
Net cash (used in) provided by investing activities	(428,378)	692	(330,539)	27,758
<b>Financing activities</b>				
Proceeds from exercise of stock options	8,572	1	9,452	14
Proceeds from exercise of warrants	3,185	—	112,318	—
Payment of Business Combination share issuance costs	—	—	(1,016)	—
Proceeds from issuance of common stock, net of issuance costs paid	(899)	—	462,926	—
Proceeds from issuance of Class A Common Stock pursuant to Legacy QuantumScope Series F Preferred Stock Purchase Agreement, net of issuance costs	99,930	—	99,930	—
Proceeds from finance lease, net of principal payment	38	—	38	—
Net cash provided by financing activities	110,826	1	683,648	14
Net increase in cash, cash equivalents and restricted cash	(350,450)	(9,826)	298,674	5,772
Cash, cash equivalents and restricted cash at beginning of period	764,534	41,194	115,410	25,596
Cash, cash equivalents and restricted cash at end of period	\$ 414,084	\$ 31,368	\$ 414,084	\$ 31,368
<b>Supplemental disclosure of cash flow information</b>				
Cash paid for interest	\$ 238	\$ —	\$ 238	\$ —
Purchases of property and equipment, accrued but not paid	\$ 13,090	\$ 1,524	\$ 13,090	\$ 1,524
Fair value of assumed common stock warrants exercised	\$ 9,080	\$ —	\$ 441,504	\$ —

## Net Loss to Adjusted EBITDA

Adjusted EBITDA is a non-GAAP supplemental measure of operating performance that does not represent and should not be considered an alternative to operating loss or cash flow from operations, as determined by GAAP. Adjusted EBITDA is defined as net income (loss) before interest expense, non-controlling interest, revaluations, stock-based compensation and depreciation and amortization expense. We use Adjusted EBITDA to measure the operating performance of our business, excluding specifically identified items that we do not believe directly reflect our core operations and may not be indicative of our recurring operations. Adjusted EBITDA may not be comparable to similarly titled measures provided by other companies due to potential differences in methods of calculations. A reconciliation of Adjusted EBITDA to net loss is as follows:

(\$ in Thousands)	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
	<b>GAAP net income (loss) attributable to Common Stockholders</b>	<b>\$ 80,988</b>	<b>\$ (13,945)</b>	<b>\$ 5,909</b>
Interest expense (income), net	(111)	(281)	(358)	(819)
Other expense (income), net	5	—	(98)	—
Change in fair value of assumed common stock warrant liabilities	(130,504)	—	(99,740)	—
Net gain (loss) attributable to non-controlling interests	—	(1)	(10)	(5)
Stock-based compensation	11,607	2,185	23,283	4,382
<b>Non-GAAP operating loss</b>	<b>\$ (38,015)</b>	<b>\$ (12,042)</b>	<b>\$ (71,014)</b>	<b>\$ (25,761)</b>
Depreciation and amortization expense	2,803	1,470	4,853	2,748
<b>Adjusted EBITDA</b>	<b>\$ (35,212)</b>	<b>\$ (10,572)</b>	<b>\$ (66,161)</b>	<b>\$ (23,013)</b>

## Management's Use of Non-GAAP Financial Measures

This letter includes certain non-GAAP financial measures as defined by SEC rules. These non-GAAP financial measures are in addition to, and not a substitute for or superior to, measures of financial performance prepared in accordance with U.S. GAAP. There are a number of limitations related to the use of these non-GAAP financial measures versus their nearest GAAP equivalents. For example, other companies may calculate non-GAAP financial measures differently or may use other measures to evaluate their performance, all of which could reduce the usefulness of our non-GAAP financial measures as tools for comparison. We urge you to review the reconciliations of our non-GAAP financial measures to the most directly comparable U.S. GAAP financial measures set forth in this letter, and not to rely on any single financial measure to evaluate our business.

## Forward-Looking Statements

This current report contains forward-looking statements within the meaning of the federal securities laws and information based on management's current expectations as of the date of this current report. All statements other than statements of historical fact contained in this current report, including statements regarding the future development of the Company's battery technology, the anticipated benefits of the Company's technologies and the performance of its batteries, plans and objectives for future operations, forecasted cash usage, including spending and investment, are forward-looking statements. When used in this current report, the words "may," "will," "estimate," "pro forma," "expect," "plan," "believe," "potential," "predict," "target," "should," "would," "could," "continue," "believe," "project," "intend," "anticipates," "seek," "working toward," "embarking" the negative of such terms and other similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain such identifying words. These forward-looking statements are based on management's current expectations, assumptions, hopes, beliefs, intentions, and strategies regarding future events and are based on currently available information as to the outcome and timing of future events.

These forward-looking statements involve significant risks and uncertainties that could cause the actual results to differ materially from the expected results. Many of these factors are outside the Company's control and are difficult to predict. Factors that may cause such differences include, but are not limited to ones listed here. The Company faces significant barriers in its attempts to produce a solid-state battery cell and may not be able to successfully develop its solid-state battery cell. Building high volumes of multilayer cells in commercially relevant area and with higher layer count requires substantial development effort. The Company could encounter significant delays and/or technical challenges in replicating the performance seen in its single-layer cells and early tests of its four and ten-layer cells and in achieving the high quality, consistency and throughput required for commercial production and sale. The Company may encounter delays and other obstacles in acquiring, installing and operating new manufacturing equipment for automated and/or continuous-flow processes, including vendor delays (which we have already experienced) and challenges optimizing complex manufacturing processes. The Company may encounter delays in hiring the engineers it needs to expand its development and production efforts, delays in building out QS-0, and delays caused by the COVID-19 pandemic. Delays in increasing production of engineering samples would slow the Company's development efforts. The Company may be unable to adequately control the costs associated with its operations and the components necessary to build its solid-state battery cells at competitive prices. The Company's spending may be higher than currently anticipated. The Company may not be successful in competing in the battery market industry or establishing and maintaining confidence in its long-term business prospectus among current and future partners and customers and the duration and impact of the COVID-19 pandemic on the Company's business. The Company cautions that the foregoing list of factors is not exclusive. The Company cautions readers not to place undue reliance upon any forward-looking statements, which speak only as of the date made.

Except as otherwise required by applicable law, the Company disclaims any duty to update any forward-looking statements. Should underlying assumptions prove incorrect, actual results and projections could differ materially from those expressed in any forward-looking statements. Additional information concerning these and other factors that could materially affect the Company's actual results can be found in the Company's periodic filings with the SEC. The Company's SEC filings are available publicly on the SEC's website at [www.sec.gov](http://www.sec.gov).