

## Research Report – Update

*Investors should consider this report as only a single factor in making their investment decision.*

### KULR Technology Group, Inc.

**Speculative Buy**

John Nobile

April 5, 2021

#### KULR \$2.54 — (OTC)

	<u>2019A</u>	<u>2020A</u>	<u>2021E</u>	<u>2022E</u>
Revenues (million)	\$0.8	\$0.6	\$2.0	\$2.4
Earnings (loss) per share	\$(0.02)	\$(0.03)	\$(0.02)	\$(0.02)

52-Week range	\$3.70 – \$0.55	Fiscal year ends:	December
Common shares out as of 3/18/21	92.6 million	Revenue per share (TTM)	\$0.01
Approximate float	46.5 million	Price/Sales (TTM)	254X
Market capitalization	\$235 million	Price/Sales (FY2022)E	85X
Tangible book value/share	\$0.07	Price/Earnings (TTM)	NMF
Price/tangible book value	36.3X	Price/Earnings (FY2022)E	NMF

*KULR Technology Group, Inc., headquartered in Campbell, California, develops and commercializes high-performance thermal management technologies for batteries, electronics, and other components.*

#### Key investment considerations:

*We are maintaining coverage of KULR Technology Group, Inc. with a Speculative Buy rating and raising our twelve-month price target to \$3.50 per share from \$2.50 based on our 2022 sales projection.*

*We believe the company is well positioned for strong growth as the shift to electric vehicles and 5G technology should be significant growth drivers fueling demand for its products. KULR's recent partnership with the Andretti Technologies should open many doors in the electric vehicle (EV) and automotive markets.*

*According to MarketsandMarkets, the electric vehicles market is projected to reach approximately 27 million units by 2030 from an estimated 3.3 million units in 2019 for annualized growth of 21.1%. Grandview Research projects the global 5G services market size at \$41.5 billion in 2020, expanding annually by 43.9% from 2021 to 2027.*

*The company is gearing up for increased commercialization as evidenced by the hiring of Keith Cochran who brings extensive experience in large-scale manufacturing automations to the company.*

*For 2021, we project a more than 3-fold increase in revenue to \$2 million and a loss of \$(0.02) per share. We previously projected revenue of \$1.5 million and a loss of \$(0.02) per share. The increase in our revenue projection stems from recent commercialization efforts, a DoD contract scheduled to ship in 2021 and beyond, and continued organic growth.*

*For 2022, we project a 20% increase in revenue to \$2.4 million and a loss of \$(0.02) per share. Revenue should be driven by continuation of the DoD contract and organic growth.*

*KULR reported (3/19/21) revenue increased almost four-fold to \$208,000 from \$52,000 in 4Q19. KULR reported a loss of \$(0.01) per share versus a loss of \$(0.01) per share in 4Q19. The increase in revenue was mainly due to new orders received for products and engineering services for military and aerospace customers.*

***\*Please view our disclosures on pages 15 - 17.***

### ***Recommendation and Valuation***

**We are maintaining coverage of KULR Technology Group, Inc. with a Speculative Buy rating and raising our twelve-month price target to \$3.50 per share from \$2.50 based on our 2022 sales projection.**

We believe the company is well positioned for strong growth as the shift to electric vehicles and 5G technology should be significant growth drivers fueling demand for the company's products in the coming years. KULR's recent partnership with Andretti Technologies (discussed below) should open up many doors in the electric vehicle (EV) and automotive markets.

According to MarketsandMarkets, the electric vehicles market is projected to reach approximately 27 million units by 2030 from an estimated 3.3 million units in 2019 for annualized growth of 21.1%. Grandview Research projects the global 5G services market at \$41.5 billion in 2020, with annualized growth of 43.9% from 2021 to 2027.

Shares of KULR have traded at trailing-twelve-month (ttm) P/S multiples ranging from 85X to 257X over the past year. Applying a multiple of 170X (mid-point of ttm multiples) to our 2022 sales projection of nearly \$0.03 per share, discounted to account for execution risks, we arrive at a 12-month price target of approximately \$3.50 per share.

### ***Recent Developments – 4Q20 and 1Q21***

Keith Cochran joined KULR as President and COO. Mr. Cochran was previously SVP of Global Business Unit at Jabil where he was responsible for its \$3.7B smartphone business, and managing over 65,000 employees in US and He brings over 25 years of experience in business operations, supply chain management and large-scale manufacturing automations.

Became the official thermal management and battery safety technical partner for Andretti Technologies, the advanced technology arm of Andretti Autosport, founded by Michael Andretti. As part of the alliance, KULR will establish a thermal management testing and design platform for high performance battery solutions with the highest safety ratings specially adapted to meet the rigorous technical requirements of Andretti's global racing enterprise. Both partners will also focus on co-developing and co-marketing motorsports' battery and safety technologies to automotive partners for mass market EV applications.

Announced the Board appointments of Joanna D. Massey and Morio Kurosaki as directors, contingent upon the company's common stock being approved for up listing to a senior national exchange.

KULR's heat management technology was a part of NASA's Perseverance Rover successful landing on Mars.

Supplied NASA with safe storage solutions for the Microsoft Surface Pro 5 hybrid notebook computers used aboard the International Space Station. KULR included a version of its passive propagation resistant Thermal Runaway Shield (TRS) technology in fireproof storage pouches, which were specifically designed to mitigate the risks of lithium-ion battery fires and explosions while accommodating the restrictive dimensions of the Microsoft Surface Pro 5.

Partnered with Airbus Defense and Space to provide KULR's passive propagation resistant (PPR) battery design solutions for ongoing research into lithium-ion battery testing and safety for flight applications.

Provided battery safety research and testing devices to the Federal Aviation Administration. The company's internal short circuit technology will be used in evaluating problems leading to passenger lithium-ion battery malfunctions that can cause smoke and fire incidents aboard aircrafts.

The Consumer Product Safety Commission reported that KULR's design solutions can stop fires and explosions in lithium-ion battery packs and provided additional insights on the future of safe battery technology. The report, conducted by the Naval Surface Warfare Center Carderock Division on the company's battery safety technology, confirmed that KULR's thermal management solutions can prevent cell-to-cell propagation.

## **Business**

### *Overview*

KULR Technology Group, Inc., headquartered in Campbell, California, develops and commercializes high-performance thermal management technologies for batteries, electronics, and other components.

The company's main focus is a total solution to battery safety by which it aims to mitigate the effects of thermal runaway propagation (the release of cell energy and highly flammable gas which propagates to neighboring cells leading to fire and explosions). KULR targets and provides thermal solutions for electric vehicles, cloud computing, 5G communication technologies, and energy storage for commercial markets, as well as directed energy weapons and high-power missile programs for aerospace and defense.

The company's proprietary core technology is based on a carbon fiber material that provides superior thermal conductivity and heat dissipation for an ultra-lightweight and pliable material. KULR leverages its proprietary cooling solutions that have been developed through longstanding partnerships with NASA, the Jet Propulsion Lab, and others, to make commercial battery powered products safer and electronics systems cooler and lighter.

### *Products*

Lithium Ion (L-ion) Battery Thermal Runaway Shield (TRS): KULR has developed a thermal insulation technology aimed at passive resistance to thermal runaway propagation in L-ion batteries in partnership with the National Aeronautics and Space Administration Johnson Space Center. HYDRA TRS acts as a heat sink during normal lithium-ion battery pack operation but also prevents thermal runaway propagation, which is a serious concern for aerospace and defense customers and electric vehicle manufacturers.

Phase Change Material (PCM) Heat Sink: The company's PCM composite heat sinks offer passive thermal control for instruments that would otherwise overheat or under-cool during periodic operations. A typical application involves lasers that dissipate heat but need tight thermal control where active cooling is unavailable.

Fiber Thermal Interface Material (FTI): KULR thermal interface materials are selected to serve a wide range of applications, including hostile thermal and chemical environments, sliding interfaces, and interfaces with widely varying gaps. KULR'S FTI can be coated for electrical isolation, require low contact pressure, and provide high thermal conductivity. Their light weight and high compliance make the company's FTI products suited for aerospace, industrial, and high-performance commercial devices.

Internal Short Circuit (ISC) Device: In March 2018, KULR reached an agreement with the National Renewable Energy Laboratory (NREL), a national laboratory of the US Department of Energy, to be the exclusive manufacturing and distribution partner for the patented ISC device. The ISC device causes predictable battery cell failures in L-ion batteries, making them easier to study and, therefore, safer. L-ion batteries are the industry and consumer standard for portable power; billions of individual battery cells exist and billions more are planned for production. They provide power for everything from smart phones and laptops to electric cars and space crafts.

The picture below provides an illustration and highlights of the thermal management products KULR offers.

## KULR's Thermal Management Product Line

KULR

PROVEN TECHNOLOGIES To Transform E-Mobility, Consumer Electronics, And Aerospace Industries

### HYDRA Thermal Runaway Shield (TRS)

- Used in aerospace, defense customers and electric vehicle applications
- Offers a safe and reliable, light-weight battery management solution which prevents lithium-ion batteries from overheating and combusting
- Reduces risk of battery combustion for consumers, significantly limiting legal liability for OEMs



### ARA Thermal Capacitor – PCM heat sink

- Carbon-fiber infused heat sink used to absorb/provide heat and eliminates the need for active cooling
- ARA is useful for compact and high-performance devices that require bursts of power in short intervals, such as batteries in space, high power lasers and RF components



### URSA Fiber Thermal Interface (FTI) Material

- URSA products are high performance, flexible thermally conductive materials that will increase contact between two irregular surfaces and limit the loss of heat conduction across the surfaces
- Increases overall product performance and reliability and reduces manufacturing costs



### LYRA Internal Short Circuit (ISC) Trigger Cell

- Exclusive commercialization partner of NREL and NASA
- Testing tool for battery manufacturers used to analyze and identify failure modes in rechargeable batteries
- Provides the industry with a safe and reliable way to test and ultimately create a better battery pack



Source: KULR Investor Presentation June 2020

KULR also offers the CRUX cathode and battery storage bags.

**CRUX Cathode:** The CRUX Cathode can be customized for different applications including the generation of microwaves, x-rays, and laser radiation. They can be fabricated in a wide variety of physical configurations, ranging from simple planar and cylindrical forms to more complex lobed shapes.

**HYDRA TRS Battery Storage Bag:** KULR developed the HYDRA TRS Bag to safely store and transport lithium-ion batteries in partnership with NASA Johnson Space Center for the International Space Stations. Between January 2019 and June 2019, experts with NASA's Propulsion & Power Division tested the storage and use of rechargeable lithium ion laptop batteries. The tests intentionally triggered the batteries into dangerous failures in order to study what storage methods may stop battery fires from spreading battery to battery in thermal runaway propagation. As a result, KULR TRS bags are currently in service on the International Space Station for storage of spare laptop batteries. KULR is developing a commercial version for mass market applications.

### ***Battery Fires and Explosions***

According to the Website [batteryfires.com](http://batteryfires.com), numerous factors can increase the likelihood of battery failures which can cause fires or explosions. Some of these factors include battery manufacturing defects, product defects, product software issues, battery aging, battery degradation, overcharging, faulty charging, improper product use, battery puncture, and exposure to high temperatures.

Lithium-ion battery chemistry offers some of the highest energy densities available in today's batteries. However, high energy density comes at a potential price. When battery failure occurs, tremendous thermal energy is released (upwards of 1,000°C) along with toxic fluoride gas and smoke. Lithium-ion battery fires burn with prolonged intensity, oftentimes requiring special procedures and copious amounts of water to extinguish.

Lithium-ion batteries are everywhere, powering everything from consumer goods and electronics to electric vehicles. Battery production and demand are projected to increase rapidly, driven largely by automakers who aim to electrify their entire fleets over the next five to ten years. As a result, the frequency of catastrophic battery

failures will also increase, and consumer-facing industries will undoubtedly look for safer battery technologies (like KULR offers) to power their products.

Global car companies are racing to increase their electric-vehicle offerings in the midst of tougher regulations that aim to reduce greenhouse-gas emissions from transportation. To meet the more-stringent requirements, the auto industry has placed big bets on an electrified future, committing roughly \$200 billion to electrification over the next four years, according to consulting firm AlixPartners LLP.

The lithium-ion batteries in electric cars are similar to those found in consumer electronics, which store large amounts of energy relative to their size. But to power an automobile, there needs to be more of them, and the demands are higher, creating a unique risk.

The National Highway Traffic Safety Administration (NHTSA) said the agency has launched multiple investigations into the potential safety issues related to fires involving electric-vehicle batteries based on data it collects. NHTSA funds targeted research on advanced-battery technology and participates in developing global technical regulations.

### ***Applications***

KULR believes that battery cell testing and screening has become a topic of focus within the commercial, aerospace and defense, and high-value application markets. The company plans to expand its capabilities to include full battery analysis and testing as outlined by NASA's Johnson Space Center.

It is expected that the aerospace and defense sectors will experience high growth in directed energy weapons (ranged weapons that damage their targets with highly focused energy), hypersonic weapons (weapons such as cruise missiles that travel five or more times the speed of sound), and space missions. Experts predict that directed energy weapons will greatly impact the future of warfare. KULR's CRUX cathode generates powerful electron pulses which has the potential to further advance the current technology.

Thermal management is another critical component of both hypersonic weapons programs and space missions. KULR's carbon fiber solutions are used for thermal management in missile defense programs and are particularly effective because of their survivability at very high temperatures. They are very effective at transferring heat and mitigating the risk of overheating in such high-risk environments.

Opportunities for the company's products exists in industries such as electric motor vehicles that have become increasingly more reliant on Cloud computing, portability, and high-demand processing power. KULR's high performance thermal interface materials can be used to accelerate 5G communications development due to their high thermal conductivity, light weight, and low contact pressure. Cloud computing is also an application of interest since high power communications chips and optical communication modules require cooling.

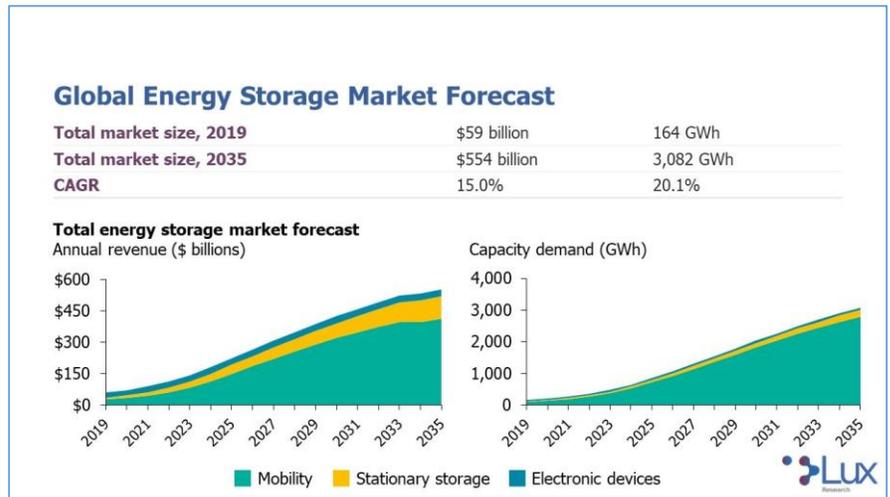
### ***Markets***

KULR operates in the thermal management market which is driven by the energy storage market.

*Energy Storage Market* - The total energy storage market is expected to grow to \$554 billion in annual revenue by 2035 from \$59 billion in 2019 for a compound annual growth rate of 15% according to a report by Lux Research (see chart at top right on next page).

Lux estimates that the three main drivers of energy storage – mobility applications, electronic devices, and stationary storage – will reach an annual combined deployment level of 3,082 GWh (Gigawatt hours, abbreviated as GWh, is a unit of energy representing one billion watt hours) over the next 15 years, up from the current 164 GWh, with mobility applications the primary driver of the growth.

LUX anticipates the energy storage industry is poised for a massive increase in annual revenue and deployment capacity as key innovative technologies, such as solid-state batteries and flow batteries, reach commercialization. Expectations are for electric mobility applications, primarily light-duty passenger vehicles, to be the principal long-term driver of energy storage annual revenue and demand. Total market share is estimated at 74% as measured by annual revenue and 91% as measured by annual deployed GWh by 2035.



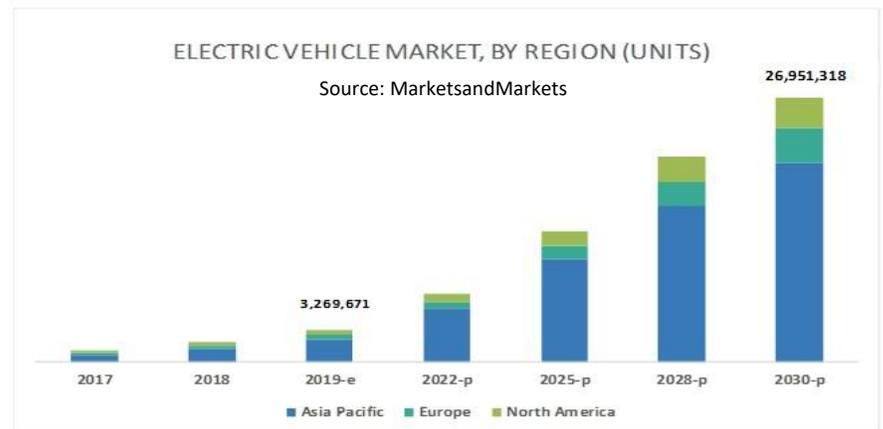
**Thermal Management Market** – The increasing demand for the reliability of microelectronics and lithium-ion batteries has driven the thermal management market. KULR targets the following markets and applications, passive propagation resistant (PPR) battery design (prevents cell to cell thermal runaway propagation and prevents the fire and explosion of single cell thermal runaway from exiting the battery enclosure), battery storage and transportation, electrical transportation, 5G mobile and cloud computing infrastructure, and aerospace and defense.

MarketsandMarkets estimates the global thermal management market was \$8.8 billion in 2020 and projected to reach \$12.8 billion by 2025 for a CAGR of 8.2%. Market growth should be driven by the rising demand for effective thermal management solutions & systems in consumer electronics, increasing demand for electric and hybrid vehicles, increasing use of electronic devices in different end-use industries, and ongoing radical miniaturization of electronic devices.

A MarketsandMarkets published report states that the strong actions taken, such as imposing country-wide lockdowns by governments globally to curb the spread of COVID-19 was expected to have a severe impact on the entire manufacturing industry, dragging down the demand of customers for thermal management solutions.

We believe the shift to electric vehicles and 5G technology will be significant growth drivers fueling demand for the company’s products in the coming years.

**Electrical Transportation Market** – According to MarketsandMarkets, the electric vehicles market is projected to reach approximately 27 million units by 2030 from an estimated 3.3 million units in 2019 for a CAGR of 21.1% (see chart at right). The electric vehicle market has witnessed rapid evolution with the ongoing developments in automotive sector.



Favorable government policies and support in terms of subsidies and grants, tax rebates and other non-financial benefits in the form of car pool lane access, increasing vehicle range, better availability of charging infrastructure and proactive participation by automotive OEMs should drive global electric vehicle sales.

5G Mobile Services Market – According to Grandview Research, the global 5G services market is estimated at \$41.5 billion in 2020 and expanding at a CAGR of 43.9% from 2021 to 2027. 5G wireless mobile services are expected to enable a fully mobile and connected environment by delivering a wide range of use cases and business models to consumers. Grandview Research points out that faster data speeds and extremely low latency offered by 5G technology should enhance the user experience while using 5G services for Virtual Reality (VR) and Augmented Reality (AR) gaming, seamless video calling, and Ultra-high Definition (UHD) videos. Growing demand for high-speed data connectivity for unified Internet of Things (IoT) applications, such as smart home energy management, is estimated to propel the adoption of 5G services over the forecast period. As 5G infrastructure grows, the need for thermal management technologies such that KULR offers should grow.

### ***Economic Outlook***

In January 2021, the International Monetary Fund (IMF) revised its global economic growth estimates to an increase of 5.5% for 2021 and 4.2% for 2022. In October 2020, the IMF predicted GDP growth of 5.2% for 2021 and 4.2% for 2022. The 2021 upward revision primarily reflects expectations that the COVID-19 vaccine would enable a strengthening of economic activity later in the year. Additional fiscal policy support in a few large economies is also expected to boost economic growth.

The IMF revised its economic growth estimate for the US to an increase of 5.1% for 2021 and 2.5% for 2022. In October 2020, the IMF projected US economic growth of 3.1% for 2021 and 2.9% for 2022.

The third estimate of US GDP growth (released on March 25, 2021) showed the US economy increased at an annual rate of 4.3% in 4Q20, down from the 33.4% increase reported in 3Q20. The 4Q20 US GDP estimate primarily reflects increases in exports, business investment, consumer spending, housing investment and inventory investment, partially offset by a decrease in government spending.

### ***Projections***

2021 Forecast - We project a more than 3-fold increase in revenue to \$2 million from \$624,000 in 2020 and a net loss of \$2.3 million or \$(0.02) per share. We previously projected revenue of \$1.5 million and a net loss of \$1.5 million or \$(0.02) per share. The increase in our revenue projection stems from recent commercialization efforts that include the hiring of Keith Cochran who brings extensive experience in large-scale manufacturing automation to the company, a DoD contract scheduled to ship in 2021 and beyond, and continued organic growth. Our net loss projection has widened due primarily to higher SG&A expenses than originally anticipated.

We project gross margins of 77.7%. SG&A expenses are projected to increase to \$3.2 million from \$2.5 million to support sales growth. R&D expenses are projected to increase to \$500,000 from \$290,000 in 2020 as the company expands its operations. We project the operating loss narrowing to \$2.1 million compared to \$2.3 million in 2020. We project amortization of debt discount expense of \$128,000 compared to \$502,000 in 2020 as the company pays off debt.

In 2021, we project \$1.3 million cash used in operations from a cash loss of \$1.8 million and a \$495,000 decrease in working capital. The decrease in working capital primarily reflects increases in accruals. Cash used in operations and a \$2.3 million pay off of debt should reduce cash by \$3.7 million to \$5.2 million at the end of 2021.

2022 Forecast - We project a 20% increase in revenue to \$2.4 million from our projected \$2 million in 2021 and the net loss narrowing to \$2.1 million or \$(0.02) per share. Revenue should be driven by the DoD contract and organic growth.

We project gross margins of 79.2%. SG&A expenses are projected to increase to \$3.4 million from \$3.2 million to support sales growth. R&D expenses are projected to increase to \$600,000 from \$500,000 projected for 2021 as the company continues to expand operations. We project an operating loss of \$2.1 million.

In 2022, we project \$1.6 million cash used in operations, primarily from a cash loss, should result in a \$1.6 million decrease in cash to \$3.6 million at the end of 2022.

#### ***4Q20 and FY20 Financial Results***

4Q20 – Revenue increased almost four-fold to \$208,000 from \$52,000 in 4Q19. KULR reported a net loss of \$859,000 or \$(0.01) per share versus a loss of \$52,000 or \$(0.01) per share in 4Q19. The increase in revenue was mainly due to new orders received for products and engineering services for military and aerospace customers.

Gross margins increased to 80.3% from 50%. R&D expenses decreased to \$68,000 from \$121,000 due primarily to reductions in headcount and salary reductions as a result of COVID-19.

Selling, general and administrative expenses increased 80% to \$776,000 from \$431,000 due primarily to additional marketing and advertising expense, consulting fees, and non-cash stock-based compensation.

Total other expenses increased to \$182,000 from less than \$1,000 due primarily to the amortization of debt discount related to the issuance of notes payable.

FY20 – Revenue decreased 24.8% to \$624,000 and the net loss widened to \$2.9 million or \$(0.03) per share from a loss of \$2 million or \$(0.02) per share in 2019. Product sales decreased 45% to \$404,000 while contract services increased 131% to \$219,000 from \$95,000.

The decrease in product sales was primarily due to a DoD contract of about \$355,000 received in 2019 of which the customer pushed its next shipment to 2021. Contract services growth was due to increased project requirements from some of the company's new and existing customers.

Gross margins remained relatively flat at 72.9%. R&D expenses decreased to \$290,000 from \$502,000 due primarily to reductions in salaries and other salary related costs, such as payroll taxes and other benefits, due to COVID-19.

Selling, general and administrative expenses increased 20.4% to \$2.5 million due primarily to increases of approximately \$529,000 for marketing and advertising expense and \$262,000 for stock-based compensation related to consultants and employees, partially offset by decreases of approximately \$116,000 related to travel, meals, and entertainment expense, \$99,000 of rent expense due to the termination of an operating lease in 2019, \$30,000 of professional fees, \$98,000 of payroll and benefits due to salary reductions implemented in 2020, and \$17,000 of conference and seminar expenses due to the travel restrictions and stay-at-home orders as a result of COVID-19.

Total other expenses increased to \$509,000 from \$1,000 due primarily to the amortization of debt discount related to the issuance of a note payable.

Liquidity – As of December 31, 2020, KULR had \$8.9 million cash, a current ratio of 3.1X, \$2.5 million of total debt (\$2.3 million short-term) and shareholder's equity of \$6.1 million.

In 2020, the company's cash burn of \$2 million and a \$745,000 increase in working capital resulted in \$2.7 million cash used in operations. The increase in working capital was primarily due to decreases in payables and accruals. Offsetting cash used in operations and \$46,000 of capital expenditures was \$11.5 million of cash provided by financing activities (from debt and equity financing). Cash increased by \$8.8 million to \$8.9 million as of December 31, 2020.

In 2020, the Company entered into note purchase agreements with the YAII PN, Ltd., a Cayman Island exempt limited partnership in which the investor purchased \$4 million of promissory notes for cash proceeds of \$3.7 million which included an original issue discount of \$290,000. The notes bears no coupon interest (original issue discount only) and will become immediately due and payable on May 31, 2021 or June 30, 2021, depending on the note, or upon acceleration, redemption or otherwise upon the occurrence of an event of default. As of December 31, 2020, \$2.3 million was outstanding on the promissory notes.

In April 2020, KULR received approximately \$155,000 of cash proceeds pursuant to an unsecured loan provided in connection with the Paycheck Protection Program (PPP) under the Coronavirus Aid, Relief, and Economic Security Act (CARES Act). Under the terms of the CARES Act, the company is eligible to apply for and receive forgiveness for all or a portion of its PPP loans. Any amounts not forgiven will incur interest at 1% per annum. While the company's PPP loans currently have a two-year maturity, the amended law will permit the company to request a five-year maturity.

In February 2020, the company entered into a Standby Equity Distribution Agreement (SEDA) with YAII PN, pursuant to which the company may, at its discretion, sell to up to an aggregate of \$8 million of the company's common stock. Under the terms of this agreement, the company raised approximately \$2.3 million from the facility and had approximately \$5.7 million available as of December 31, 2020.

## ***Risks***

In our view, these are the principal risks underlying the stock.

*Limited operating history* - KULR was formed in 2015 and KTC was formed in 2013. The company has a limited operating history and has not yet demonstrated sales of products at a level capable of covering its fixed expenses. There can be no assurance that KULR will ever produce a profit.

*Substantial capital requirements* - KULR will need to raise additional capital to fund its operations. The company may not be able to raise such funds when needed and on acceptable terms, which could have a materially adverse effect on its business.

*Reliance on a small number of customers* - In 2020, KULR had two customers who accounted for 50% of total revenues. There is the risk of significant loss of future revenues if one or more of these customers were to stop ordering the company's materials.

*Technological obsolescence* - The company operates in a market that is subject to rapid technological change. If KULR is not able to adapt to new advances in materials sciences, the company's revenues and business prospects would likely be adversely affected.

*Competition* - The company operates in a market that is expected to have significant competition in the future. Global research is being conducted by substantially larger companies who have greater financial, personnel, technical, and marketing resources. There can be no assurance that KULR will be able to compete with other companies.

*Economic conditions* - Downturns in general economic conditions can reduce demand for the company's products, product prices, volumes and gross margins. A decline in the demand for KULR's products or a shift to lower-margin products due to deteriorating economic conditions could adversely affect sales of the company's products and profitability.

High level of unpredictability in sales growth – KULR’s customers and prospective customers are large organizations with multiple levels of management, controls/procedures, and contract evaluation/authorization. The business activity cycle between initial customer interest to shipping, acceptance and billing can be lengthy, unpredictable and lumpy, which can influence the timing, consistency and reporting of sales growth.

High concentration of insider ownership – As of March 19, 2021, KULR’s officers, directors and affiliates owned approximately 41% of KULR outstanding common stock. With such concentrated control of the company, other shareholders may have no effective voice in the company’s management.

Pandemic concerns - Given the uncertainty around the extent and timing of the potential future spread or mitigation of COVID-19, it is difficult to reasonably estimate the impact this pandemic will have on KULR’s future results of operations, cash flows, or financial condition.

Liquidity risk - Shares of KULR have risks common to those of the microcap segment of the market. Often these risks cause microcap stocks to trade at discounts to their peers. The most common of these risks is liquidity risk, which is typically caused by small trading floats and very low trading volume and can lead to large spreads and high volatility in stock price. There are 46.5 million shares in the float and the average daily volume is approximately 355,000 shares.

Miscellaneous risk - The company's financial results and equity values are subject to other risks and uncertainties including competition, operations, financial markets, regulatory risk, and/or other events. These risks may cause actual results to differ from expected results.

KULR Technology Group, Inc.

Consolidated Balance Sheets  
(in thousands \$)

	<u>2018A</u>	<u>2019A</u>	<u>2020A</u>	<u>2021E</u>	<u>2022E</u>
Cash	230	109	8,880	5,218	3,606
Accounts receivable	112	30	56	178	213
Inventory	10	27	55	149	166
Prepaid expenses and other	54	43	159	159	159
Total current assets	406	209	9,150	5,704	4,144
Property and equipment	45	28	58	93	120
<b>Total assets</b>	<b><u>451</u></b>	<b><u>237</u></b>	<b><u>9,208</u></b>	<b><u>5,797</u></b>	<b><u>4,264</u></b>
Accounts payable	118	349	66	175	195
Accounts payable-related party	-	-	3	-	-
Accrued expenses and other	374	659	395	1,000	1,200
Accrued expenses and other-related party	84	10	-	-	-
Accrued issuable equity	-	-	128	128	128
Notes payable	-	-	2,322	-	-
Loans payable	-	-	13	13	13
Deferred revenue	-	15	20	20	20
Total current liabilities	576	1,033	2,947	1,336	1,556
Loans payable	-	-	142	142	142
<b>Total liabilities</b>	<b><u>576</u></b>	<b><u>1,033</u></b>	<b><u>3,089</u></b>	<b><u>1,478</u></b>	<b><u>1,698</u></b>
<b>Total stockholders' equity (deficit)</b>	<b><u>(125)</u></b>	<b><u>(796)</u></b>	<b><u>6,119</u></b>	<b><u>4,319</u></b>	<b><u>2,566</u></b>
<b>Total liabilities &amp; stockholders' equity</b>	<b><u>451</u></b>	<b><u>237</u></b>	<b><u>9,208</u></b>	<b><u>5,797</u></b>	<b><u>4,264</u></b>

Source: Company filings and Taglich Brothers' estimates

KULR Technology Group, Inc.

Income Statements for the Fiscal Years Ended  
(in thousands \$)

	<u>2018A</u>	<u>2019A</u>	<u>2020A</u>	<b>2021E</b>	<b>2022E</b>
Revenue	1,274	830	624	<b>2,000</b>	<b>2,400</b>
Cost of revenue	<u>337</u>	<u>226</u>	<u>169</u>	<b>446</b>	<b>499</b>
Gross profit	937	604	455	<b>1,554</b>	<b>1,901</b>
Research and development	508	502	290	<b>500</b>	<b>600</b>
Selling, general and administrative	<u>2,510</u>	<u>2,081</u>	<u>2,506</u>	<b>3,200</b>	<b>3,400</b>
Operating income (loss)	(2,081)	(1,979)	(2,341)	<b>(2,146)</b>	<b>(2,099)</b>
Interest expense	(1)	(2)	(5)	<b>(4)</b>	<b>(4)</b>
Other income	-	1	-	-	-
Amortization of debt discount	-	-	(502)	<b>(128)</b>	-
Change in fair value of accrued equity	<u>24</u>	<u>-</u>	<u>(2)</u>	<u>-</u>	<u>-</u>
Net Income / (Loss)	<u>(2,058)</u>	<u>(1,980)</u>	<u>(2,850)</u>	<b>(2,278)</b>	<b>(2,103)</b>
EPS	<u>(0.03)</u>	<u>(0.02)</u>	<u>(0.03)</u>	<b>(0.02)</b>	<b>(0.02)</b>
Shares Outstanding	77,642	80,123	82,032	<b>91,525</b>	<b>92,700</b>
<u>Margin Analysis</u>					
Gross margin	73.5%	72.8%	72.9%	<b>77.7%</b>	<b>79.2%</b>
R&D	39.9%	60.5%	46.5%	<b>25.0%</b>	<b>25.0%</b>
SG&A	197.0%	250.7%	401.6%	<b>160.0%</b>	<b>141.7%</b>
Operating margin	(163.3)%	(238.4)%	(375.2)%	<b>(107.3)%</b>	<b>(87.5)%</b>
<u>Year / Year Growth</u>					
Total Revenues		(34.9)%	(24.8)%	<b>220.5%</b>	<b>20.0%</b>

Source: Company filings and Taglich Brothers' estimates

KULR Technology Group, Inc.

Quarterly Income Statements 2020A - 2022E  
(in thousands \$)

	3/20A	6/20A	9/20A	12/20A	2020A	3/21E	6/21E	9/21E	12/21E	2021E	3/22E	6/22E	9/22E	12/22E	2022E
Revenue	78	201	137	208	624	300	800	400	500	2,000	400	900	500	600	2,400
Cost of revenue	26	41	61	41	169	75	160	96	115	446	96	162	115	126	499
Gross profit	52	160	76	167	455	225	640	304	385	1,554	304	738	385	474	1,901
Research and development	112	58	52	68	290	125	125	125	125	500	150	150	150	150	600
Selling, general and administrative	470	425	835	776	2,506	800	800	800	800	3,200	850	850	850	850	3,400
Operating income (loss)	(530)	(323)	(811)	(677)	(2,341)	(700)	(285)	(621)	(540)	(2,146)	(696)	(262)	(615)	(526)	(2,099)
Interest expense	(1)	(2)	(1)	(1)	(5)	(1)	(1)	(1)	(1)	(4)	(1)	(1)	(1)	(1)	(4)
Other income	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amortization of debt discount	-	(78)	(210)	(214)	(502)	(128)	-	-	-	(128)	-	-	-	-	-
Change in fair value of accrued equity	(19)	(26)	10	33	(2)	-	-	-	-	-	-	-	-	-	-
Net Income / (Loss)	(550)	(429)	(1,012)	(859)	(2,850)	(829)	(286)	(622)	(541)	(2,278)	(697)	(263)	(616)	(527)	(2,103)
EPS	(0.01)	(0.01)	(0.01)	(0.01)	(0.03)	(0.01)	(0.00)	(0.01)	(0.01)	(0.02)	(0.01)	(0.00)	(0.01)	(0.01)	(0.02)
Shares Outstanding	81,098	81,235	82,467	83,327	82,032	88,000	92,700	92,700	92,700	91,525	92,700	92,700	92,700	92,700	92,700

Margin Analysis

Gross margin	66.7%	79.6%	55.5%	80.3%	72.9%	75.0%	80.0%	76.0%	77.0%	77.7%	76.0%	82.0%	77.0%	79.0%	79.2%
R&D	143.6%	28.9%	38.0%	32.7%	46.5%	41.7%	15.6%	31.3%	25.0%	25.0%	37.5%	16.7%	30.0%	25.0%	25.0%
SG&A	602.6%	211.4%	609.5%	373.1%	401.6%	266.7%	100.0%	200.0%	160.0%	160.0%	212.5%	94.4%	170.0%	141.7%	141.7%
Operating margin	(679.5)%	(160.7)%	(592.0)%	(325.5)%	(375.2)%	(233.3)%	(35.6)%	(155.3)%	(108.0)%	(107.3)%	(174.0)%	(29.1)%	(123.0)%	(87.7)%	(87.5)%

Year / Year Growth

Total Revenues	(60.0)%	258.9%	(74.0)%	300.0%	(24.8)%	284.6%	298.0%	192.0%	140.4%	220.5%	33.3%	12.5%	25.0%	20.0%	20.0%
----------------	---------	--------	---------	--------	---------	--------	--------	--------	--------	--------	-------	-------	-------	-------	-------

Source: Company filings and Taglich Brothers' estimates

KULR Technology Group, Inc.

Statement of Cash Flows for the Periods Ended  
(in thousands \$)

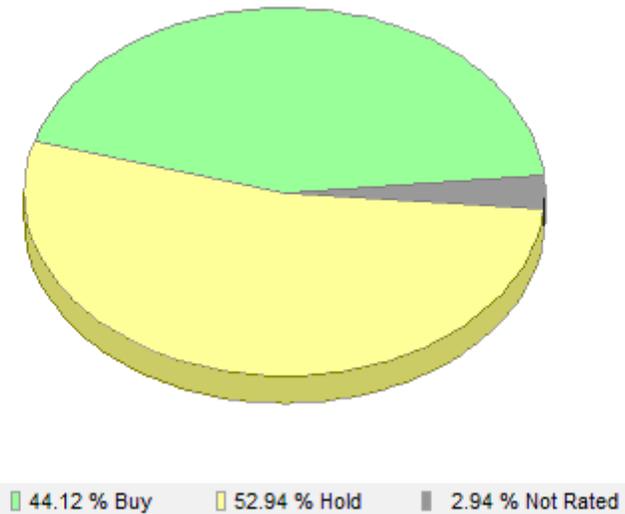
	2018A	2019A	2020A	2021E	2022E
Net income (loss)	(2,058)	(1,980)	(2,850)	(2,278)	(2,103)
Amortization of debt discount	-	-	502	128	-
Depreciation expense	15	17	16	25	33
Bad debt expense	-	-	1	-	-
Change in fair value of accrued issuable equity	(24)	-	2	-	-
Lower of cost or net realizable value adjustment	4	-	-	-	-
Share-based compensation	458	221	344	350	350
Cash earnings (loss)	(1,605)	(1,742)	(1,985)	(1,775)	(1,720)
<i>Changes in assets and liabilities</i>					
Accounts receivable	40	82	(26)	(122)	(36)
Inventory	-	(17)	(28)	(94)	(18)
Prepaid expenses and other	69	11	(116)	-	-
Accounts payable	81	231	(296)	109	21
Accounts payable-related party	-	-	(2)	(3)	-
Accrued expenses and other	185	270	(271)	605	200
Accrued expenses and other-related party	(121)	(38)	(11)	-	-
Security deposit	(8)	-	-	-	-
Deferred revenue	-	15	5	-	-
(Increase) decrease in working capital	246	554	(745)	495	168
<b>Net cash provided by (used in ) operations</b>	<b>(1,359)</b>	<b>(1,188)</b>	<b>(2,730)</b>	<b>(1,280)</b>	<b>(1,552)</b>
Purchase of property and equipment	(17)	-	(46)	(60)	(60)
<b>Net cash used in investing</b>	<b>(17)</b>	<b>-</b>	<b>(46)</b>	<b>(60)</b>	<b>(60)</b>
Proceeds from note payable	-	-	3,710	-	-
Repayments of note payable	-	-	(759)	(2,322)	-
Payment of debt issuance costs	-	-	(340)	-	-
Proceeds from Paycheck Protection Program loan	-	-	155	-	-
Proceeds from issuance of Series B conv. pref. stock	31	-	-	-	-
Proceeds from sale of Series C conv. pref. stock	-	184	-	-	-
Proceeds from sale of common stock	679	898	9,501	-	-
Payment of offering costs	-	(15)	(720)	-	-
<b>Net cash provided by (used in) financing</b>	<b>710</b>	<b>1,067</b>	<b>11,547</b>	<b>(2,322)</b>	<b>-</b>
<b>Net Change in Cash</b>	<b>(666)</b>	<b>(121)</b>	<b>8,771</b>	<b>(3,662)</b>	<b>(1,612)</b>
<b>Cash - Beginning of Period</b>	<b>896</b>	<b>230</b>	<b>109</b>	<b>8,880</b>	<b>5,218</b>
<b>Cash - End of Period</b>	<b>230</b>	<b>109</b>	<b>8,880</b>	<b>5,218</b>	<b>3,606</b>

Source: Company filings and Taglich Brothers' estimates

**Price Chart**



**Taglich Brothers' Current Ratings Distribution**



<b>Investment Banking Services for Companies Covered in the Past 12 Months</b>		
Rating	#	%
Buy	3	16
Hold		
Sell		
Not Rated		

### **Important Disclosures**

As of the date of this report, we, our affiliates, any officer, director or stockholder, or any member of their families do not have a position in the stock of the company mentioned in this report. Taglich Brothers, Inc. does not currently have an Investment Banking relationship with the company mentioned in this report and was not a manager or co-manager of any offering for the company within the last three years.

All research issued by Taglich Brothers, Inc. is based on public information. The company paid a monetary fee of \$6,000 (USD) in October 2020 for the creation and dissemination of research reports for the first three months. After the first three months from initial publication, the company will pay a monthly monetary fee of \$2,000 (USD) to Taglich Brothers, Inc., for a minimum of twelve months for the creation and dissemination of research reports.

### **General Disclosures**

The information and statistical data contained herein have been obtained from sources, which we believe to be reliable but in no way are warranted by us as to accuracy or completeness. We do not undertake to advise you as to changes in figures or our views. This is not a solicitation of any order to buy or sell. Taglich Brothers, Inc. is fully disclosed with its clearing firm, Pershing, LLC, is not a market maker and does not sell to or buy from customers on a principal basis. The above statement is the opinion of Taglich Brothers, Inc. and is not a guarantee that the target price for the stock will be met or that predicted business results for the company will occur. There may be instances when fundamental, technical and quantitative opinions contained in this report are not in concert. We, our affiliates, any officer, director or stockholder or any member of their families may from time to time purchase or sell any of the above-mentioned or related securities. Analysts and members of the Research Department are prohibited from buying or selling securities issued by the companies that Taglich Brothers, Inc. has a research relationship with, except if ownership of such securities was prior to the start of such relationship, then an Analyst or member of the Research Department may sell such securities after obtaining expressed written permission from Compliance.

### **Analyst Certification**

**I, John Nobile, the research analyst of this report, hereby certify that the views expressed in this report accurately reflect my personal views about the subject securities and issuers; and that no part of my compensation was, is, or will be, directly, or indirectly, related to the specific recommendations or views contained in this report.**

Public companies mentioned in this report:

Honeywell (NYSE: HON)

Lydall (NYSE: LDL)

3M (NYSE: MMM)

### **Meaning of Ratings**

**Buy** – The growth prospects, degree of investment risk, and valuation make the stock attractive relative to the general market or comparable stocks.

**Speculative Buy** – Long term prospects of the company are promising but investment risk is significantly higher than it is in our BUY-rated stocks. Risk-reward considerations justify purchase mainly by high risk-tolerant accounts. In the short run, the stock may be subject to high volatility and could continue to trade at a discount to its market.

**Neutral** – Based on our outlook the stock is adequately valued. If investment risks are within acceptable parameters, this equity could remain a holding if already owned.

**Sell** – Based on our outlook the stock is significantly overvalued. A weak company or sector outlook and a high degree of investment risk make it likely that the stock will underperform relative to the general market.

**Discontinued** – Research coverage discontinued due to the acquisition of the company, termination of research services (includes non-payment for such services), diminished investor interest, or departure of the analyst.

### **Some notable Risks within the Microcap Market**

**Stocks in the Microcap segment of the market have many risks that are not as prevalent in Large-cap, Blue Chips or even Small-cap stocks. Often it is these risks that cause Microcap stocks to trade at discounts to their peers. The most common of these risks is liquidity risk, which is typically caused by small trading floats and very low trading volume which can lead to large spreads and high volatility in stock price. In addition, Microcaps tend to have significant company specific risks that contribute to lower valuations. Investors need to be aware of the higher probability of financial default and higher degree of financial distress inherent in the microcap segment of the market.**

---

From time to time our analysts may choose to withhold or suspend a rating on a company. We continue to publish informational reports on such companies; however, they have no ratings or price targets. In general, we will not rate any company that has too much business or financial uncertainty for our analysts to form an investment conclusion, or that is currently in the process of being acquired.