

Research Report – Update

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

KULR Technology Group, Inc.

Speculative Buy

Howard Halpern

March 31, 2023

KULR \$0.92 — (NYSE)

	<u>2021A</u>	<u>2022A</u>	<u>2023E</u>	<u>2024E</u>
Revenues (million)	\$2.4	\$4.0	\$14.5	\$34.0
Earnings (loss) per share	\$(0.15)*	\$(0.18)	\$(0.15)	\$(0.05)
52-Week range	\$2.28 – \$0.66		Fiscal year ends:	December
Common shares out as of 3/27/23	116.2 million		Revenue per share (TTM)	\$0.04
Approximate float	72.4 million		Price/Sales (TTM)	23.0X
Market capitalization	\$106.9 million		Price/Sales (FY2024)E	3.2X
Tangible book value/share	\$0.09		Price/Earnings (TTM)	NMF
Price/tangible book value	10.2X		Price/Earnings (FY2024)E	NMF

*Includes a \$(0.03) per share preferred stock deemed dividend.

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:

Maintaining Speculative Buy rating and establishing a new twelve-month price target of \$2.75 per share. Our newly established price target reflects a change in analyst coverage.

KULR has an opportunity to grow revenue within the energy storage market with its KULR One offering. The market is anticipated to grow nearly 8.5% annually, reaching over \$436 billion in 2030 from \$211 billion in 2021.

KULR One offers customers a suite of battery packs and design solutions in order to accelerate the global transition to a sustainable electrification economy. The design capabilities of this offering brings a combination of safety, performance, intelligence, modularity, and reliability for applications within the electric vehicles, electric aviation, defense contractor, and energy storage infrastructure markets.

The company has positioned itself for additional revenue growth with the 4Q22 acquisition of VibeTech and launch of KULR VIBE. In December 2022, the company announced it has entered into an annual subscription agreement with an industry leading, American-based commercial helicopter operator to provide global track and balance support for its fleet of helicopters utilizing VIBE's proprietary AI-driven vibration reduction solution.

KULR reported (on 3/23/23) 2022 revenue increased 65.5% to nearly \$4 million from \$2.4 million 2021. KULR reported a loss of \$(0.18) per share versus a loss of \$(0.15) per share last year. We projected 2022 revenue of \$3.7 million and a loss of \$(0.19) per share.

For 2023, we project revenue growth of 263% to \$14.5 million with a loss of \$(0.15) per share. We previously projected revenue of \$32 million and a loss of \$(0.10) per share. Our revised forecasts reflect a slower than anticipated revenue ramp from the company's energy storage offerings.

For 2024, we project revenue growth of 134.5% to \$34 million with a loss of \$(0.05) per share. We anticipate deployments of the company's energy storage offering and vibration control offering to accelerate as customer acceptance grows.

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

Recommendation and Valuation

Maintaining Speculative Buy rating and establishing a new twelve-month price target of \$2.75 per share. Our newly established price target reflects a change in analyst coverage.

Our rating reflects the revenue growth prospects for the company's KULR One within the energy storage market. The energy storage market is anticipated to grow nearly 8.5% annually, reaching over \$436 billion in 2030 from \$211 billion in 2021. KULR One offers customers a suite of battery packs and design solutions in order to accelerate the global transition to a sustainable electrification economy. Since its January 1Q23 release, KULR One has had six development engagements with electrical vehicles, Department of Defense applications, electric aviation, and charging infrastructure customers. The company anticipates this offering has a revenue opportunity of at least \$200 million by 2026.

Also, the KULR VIBE should contribute to growth in revenue growth and the company's global customer base. In December 2022, the company announced it has entered into an annual subscription agreement (six-figures) with a large civilian helicopter operators that has over 250 diverse aircraft in five continents. The installation was completed before the end of 1Q23 and will provide the customer global track and balance support for its fleet of helicopters utilizing VIBE's proprietary AI-driven vibration reduction solution.

In February 2023, the company secured a nearly \$2.7 million follow-on contract as the exclusive supplier of its patented and proprietary fail-safe Passive Propagation Resistant battery solutions for a stationary and mobile lithium-ion battery power system manufacturer. This is an initial step toward as the customer scales its operations KULR will likely continue receiving larger follow on contracts through our forecast period.

Our 12-month price target of \$2.75 per share implies shares could triple over the next twelve months. According to finviz.com, the average trailing twelve month price-to-sales multiple for companies associated with parts of the energy storage, equipment, and energy manufacturing sectors is 11.2X, compared to KULR's trailing twelve month price-to-sales multiple of 23X. We anticipate investors are likely to accord KULR Technology Group, Inc. the sectors multiple given our forecasted revenue growth of nearly 135% in 2024. We applied a price-to-sales multiple of 11.2X to our 2024 sales per share forecast of \$0.29, discounted for execution risk, to obtain a year-ahead price target of approximately \$2.75 per share.

KULR's valuation improvement is contingent upon revenue growth, expense leverage, narrowing of operating losses, and reducing cash burn. We forecast revenue growth reaching \$34 million in 2024, up from an estimated \$14.5 million in 2023 and \$4 million in 2022. In 2024, the operating loss should narrow to \$4.5 million from an estimated loss of \$15.9 million in 2023. Cash burn should narrow to \$615,000 in 2024 from an estimated \$12.3 million in 2023.

We believe KULR Technology Group, Inc. is most suitable for risk tolerant investors that seek exposure to a microcap company providing a suite of offerings to accelerate the global transition to a sustainable electrification economy.

Recent Developments

On March 29, 2023, the company announced the appointment of Shawn Canter as its new CFO, effective March 31, 2023. Mr. Canter has over 25 years of experience leading teams in hands-on roles in both institutional and early/growth stage companies. He served in various financial and transactional rolls as an executive in mergers and acquisitions (M&A) at Goldman Sachs and at Bank of America's investment bank (serving as its Chief Operating Officer of M&A). He is a partner at Orange Capital Ventures. Earned a bachelor's degree in economics and a master's degree in organizational behavior from Stanford University, as well as a JD and an MBA from the University of Michigan.

On March 13, 2023, KULR announced the opening of a new research and development center in Webster, Texas, in order to accommodate for increasing higher margin battery development engagements. The R&D center

integrates state-of-the-art prototyping equipment and tools necessary for its engineering team to deliver prototype designs rapidly.

On February 28, 2023, the company it secured a nearly \$2.7 million follow-on contract as the exclusive supplier of its patented and proprietary fail-safe Passive Propagation Resistant battery solutions for a stationary and mobile lithium-ion battery power system manufacturer. The Customer's lithium-ion battery systems have been authorized as safe to use in occupied buildings. The systems can be configured to provide from 50 KWh to 5 MWh of distributed energy storage at the point-of-use. The applications range from medical and research complexes, residential and commercial buildings, to remote data centers and manufacturing facilities. The systems also provide fully renewable mobile energy solutions for construction equipment, waste disposal, last-mile delivery, as well as other portable industrial markets.

On February 7, 2023, KULR announced it was awarded from the United States Patent and Trademark Office a patent on the technology behind its SafeCase products – a U.S. Department of Transportation permitted lithium-ion battery cell and pack storage and transportation system.

On December 29, 2022, the company announced partnership with Theory Racing to build upon its thermal management expertise by optimizing state-of-the-art technology with high-performance e-bikes. The advancement of KULR's technology in the e-bike space could potentially serve and transform a number of industries including general urban transportation, e-mobility sporting, and food and product delivery.

On December 21, 2022, KULR announced it has entered into a six-figure annual subscription agreement with an American-based commercial helicopter operator to provide global track and balance support for its fleet of helicopters via KULR VIBE.

On December 1, 2022, the company announced it achieved operational readiness for its Fractional Thermal Runaway Calorimeter (FTRC) within its suite of battery safety and thermal management solutions after finalizing a commercial licensing agreement with the National Aeronautics and Space Administration (NASA) for the agency's patent-pending FTRC solution. This follows a one-year trial license from NASA. This new commercial license allows FTRC to be utilized by commercial-leaning companies.

Business

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 the energy storage, electric vehicles, cloud computing, 5G communication technologies, as well as directed energy weapons and high-power missile programs for aerospace and defense. Entering 2023, the company has expanded its offering to target medical and research complexes, residential and commercial buildings, remote data centers and manufacturing facilities, as well as mobile energy solutions for construction equipment, waste disposal, and other portable industrial markets.

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 is 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.

Battery Cell Screening and Testing Automation System is an automated battery cell testing platform to support the stringent requirements of NASA and the Department of Defense. This platform meets the entire specifications of NASA WI-037 battery testing requirements. The automated equipment is modular and the initial processing capability is 500K cells annually.

CellCheck is a scalable battery management platform to provide a new level of safety, performance optimization and regulatory compliance capabilities.

KULR-Tech Safe Case - was developed for the commercial transportation and storage of Li-ion batteries and is an extension of TRS Bags which safely store and transport Li-ion batteries to and in the International Space Station. The cases have been tested and granted special permits by the Department of Transportation for shipment of Li-ion batteries up to 2.5KWh batteries classified as DDR (damaged, defective or recall), recycling and prototype.

Fiber Thermal Interface Material (FTI) can 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.

Phase Change Material (PCM) Heat Sink are composite heat sinks that provide 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.

Internal Short Circuit (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.

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.

Offerings

KULR's mission is to develop energy management platforms to accelerate the global transition to a sustainable electrification economy by providing the hardware and software solutions for renewable energy and advanced mobility applications. If successful, the company will enable its customers to use less energy, to use energy more efficiently, and to make energy consumption safer and cooler. Use of less energy was one reason for the company introducing its KULR VIBE offering as it can be applied to motors in order to reduce vibrations that in turn should reduce energy consumption.

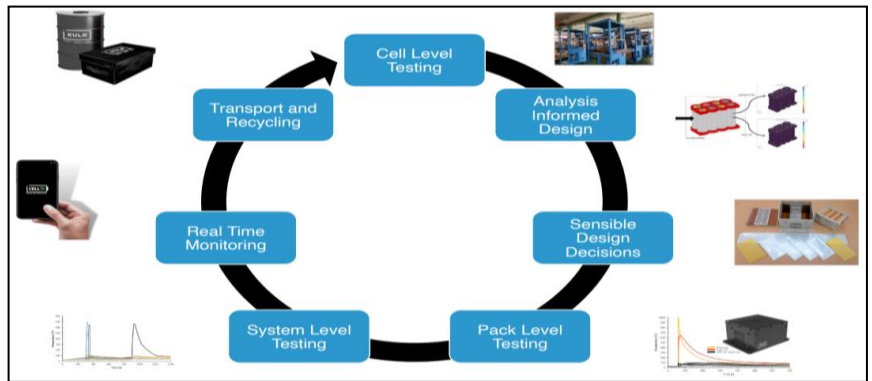
Opportunities for the company's offering exists in markets such as energy storage, electric vehicles, cloud computing, 5G communication, as well as directed energy weapons and high-power missile programs for aerospace and defense. Additional targets include medical and research complexes, residential and commercial buildings, remote data centers and manufacturing facilities, as well as mobile energy solutions for construction equipment, waste disposal, and other portable industrial markets.

KULR ONE

The KULR ONE offering is a family of battery packs that should facilitate the global transition to a sustainable electrification economy. The company anticipates it has a revenue opportunity of at least \$200 million by 2026 from this offering. In 1Q23, the KULR ONE offering has had six development engagements with electrical vehicles, Department of Defense applications, electric aviation, and charging infrastructure customers.

KULR ONE brings a combination of safety, performance, intelligence, modularity and reliability for demanding applications. This approach was adopted from the NASA methodology and design flow to address the most critical battery safety pumps. It begins with deep analysis of the battery cell from the time it's made, understanding how it behaves when it goes into thermal runaway through the FTRC test that takes all that data to design the battery pack. The process of thermal and mechanical analysis before building and testing the KULR ONE battery pack. The offering is developed and provided to customer its uses the real-time monitoring analysis through the company's CellCheck and Safe Case products, as well as enabling large-format batteries to be stored, transported and recycled safely.

The KULR ONE offering is built upon the company's proprietary intellectual property patents (twelve) and know-hows that have been gained over the last decade. The process for this offering's holistic methodology for battery safety is pictured on the right (source: company's 1Q23 presentation).



Research Facility

In 1Q23, KULR opened a new research and development center in Texas to accommodate the increasing number of higher margin battery development engagements that should occur through 2024 and beyond.

This new facility brings KULR to the next phase of its expansion and growth as it integrates many aspects of the company's operations. The facility is outfitted with state-of-the-art prototyping equipment and tools necessary for an agile engineering team to deliver prototype designs in rapid turnaround. The company will use this new facility to maintain its excellence in technology innovation and execution by gaining momentum in the design, development, and manufacturing of next-generation carbon fiber thermal management technologies for batteries and electronic systems. The new facility is located close to other leading engineering organizations and firms including NASA, Axiom, Oceaneering International, KBR Wiley, and Lockheed Martin

Over the next three years this facility should be an integral part of the company potentially achieving over \$100 million in revenue for KULR ONE's design solutions as long as the initial traction with large OEM customers continues to grow.

KULR VIBE

Acquired in 4Q22, KULR VIBE was launched as a software technology that identifies, eliminates vibration related loss of energy in motors. As KULR VIBE is integrated into the company suite of tools, it should provide additional capabilities for customer seeking efficient energy source and energy usage. In addition to one initial helicopter customer, the company has had favorable engagements with the Marine Corps industrial drone operators and commercial flight operators. As customer demonstrations continue, the company's sales pipeline should grow for this technology offering within the following markets of aviation, transportation, renewable energy (wind), manufacturing, industrial, performance racing, and autonomous aerial (drone) applications. We anticipate cross-selling opportunities between KULR VIBE and KULR ONE customers should grow.

Markets

Energy Storage Market

In October 2022, research firm BloombergNEF, published a report indicating that they anticipate energy storage installations around the world could increase 15-fold by the end of 2030 reaching a cumulative 411 gigawatts (or 1,194 gigawatt-hours) compared to 27GW/56GWh of storage at the end of 2021.

In January 2023, market research organization Facts & Factors published a report on the energy storage market. The report indicated that the global energy storage market should grow nearly 8.5% annually, reaching over \$436 billion in 2030 from \$211 billion in 2021. One of the driving forces for energy storage growth will be from batteries that include metal-air, sodium-ion, lead-acid, and lithium-ion batteries.

Lux Research 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 growth driver. LUX also 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.

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.

In March 2023, MarketsandMarkets estimates the global thermal management market will reach \$12.1 billion (up from \$10.1 billion in 2022) and should achieve \$19.3 billion by 2028 for annualized growth of 9.7%. Market growth should be driven by the rising demand for effective thermal management solutions and 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.

We anticipate the shift to electric vehicles will be a significant growth driver fueling demand for the company's products in the coming years.

Electrical Transportation Market

According to MarketsandMarkets, the electric vehicle market is projected to reach approximately 34.8 million units by 2030 from an estimated 4.1 million units in 2021 for a CAGR of 26.8%. Factors such as growing demand for low emission commuting and governments supporting long-range, zero emission vehicles through subsidies and tax rebates have and should continue to drive demand for electric vehicles.

In December 2022, market research and consulting services firm Exactitude Consultancy issued a report that projects the global electric vehicles market could grow at an annualized rate of 16.4% from 2022 to 2029, reaching over \$628 billion. In 2020, the electric vehicles markets was \$160 billion.

Vibration Control Systems Market

According to Grandview Research, the global vibration control system is expected to reach nearly \$8 billion by 2030, up from nearly \$4.7 billion in 2021 for annualized growth of approximately 6.2% from 2022 to 2030. The growth forecast reflects an emphasis on mechanical stability and balancing of industrial machinery and automobiles.

Economic Outlook

In January 2023, the International Monetary Fund (IMF) revised its global economic growth estimates to an increase of 2.9% for 2023 and 3.1% for 2024. In October 2022, the IMF's prior projections called for growth of 2.7% in 2023 and 3.2% growth in 2024. The forecast reflects a rise global interest rates to fight inflation, particularly in advanced economies, as well as negative effects from the war in Ukraine.

The IMF revised its economic growth estimate for the US to an increase of 1.2% for 2023 and 1.4% for 2024. In October 2022, the IMF projected US economic growth of 1.1% and 1.6% for 2023 and 2024, respectively.

The second estimate of US GDP growth (released on February 23, 2023) showed the US economy increased at an annual rate of 2.7% in 4Q22, down from growth of 3.2% reported for 3Q22. The 4Q22 US GDP estimate reflects a downward revision to consumer spending that was partly offset by an upward revision to nonresidential fixed investment.

Projections

Our revenue forecasts reflect the January 2023 release of the KULR One family of offering, which has obtained six development engagements with electrical vehicles, Department of Defense applications, electric aviation, and charging infrastructure customers. The company anticipates this offering has a revenue opportunity of at least \$200 million by 2026. We anticipate the company's KULR VIBE offering should contribute to growth in revenue growth and the company's global customer base. In December 2022, the company announced it has entered into an annual subscription agreement (six-figures) with a large civilian helicopter operators that has over 250 diverse aircraft in five continents. The installation was completed before the end of 1Q23.

In February 2023, the company secured a nearly \$2.7 million follow-on contract as the exclusive supplier of its patented and proprietary fail-safe Passive Propagation Resistant battery solutions for a stationary and mobile lithium-ion battery power system manufacturer. This is an initial step toward as the customer scales its operations KULR will likely continue receiving larger follow on contracts through our forecast period. We anticipate this customer should drive significant revenue growth in 4Q23 and throughout 2024.

We anticipate gross margins improving over-time to 52.7% in 2024 from an estimated 46.5% in 2023, as the company should experience improved leverage as production volumes increase.

2023 Forecast

We project revenue growth of 263% to \$14.5 million (prior was \$32 million) from nearly \$4 million in 2022 due primary to customer acceptance and order growth from its KULR ONE, KULR VIBE, and proprietary fail-safe Passive Propagation Resistant battery solutions offerings. While year-over-year revenue growth should be significant it is a reduction from our prior forecast as we anticipate deployment delays by a customer for KULR's proprietary fail-safe Passive Propagation Resistant battery solutions.

We project gross margins of 46.5% compared to 59.2% in 2022, the decrease reflects higher margin design work completed last year that is unlikely to reoccur at the same level of total revenue in the current period.

We anticipate the operating loss narrowing to \$15.9 million from \$18.3 million due primarily to revenue growth and operating expense margin improving to 156% from 517% in 2022. We project operating expenses increasing 9.4% to \$22.6 million from \$20.7 million last year. The modest increase reflects the spending infrastructure the company put in place in 2022 to support revenue growth. SG&A expenses should increase to \$17.8 million from \$16.7 million in 2022 to support revenue growth. R&D expenses are projected to increase to \$4.8 million from \$4 million in 2022 as the company continues to expand its product offerings.

Other expense should approximate \$2 million compared to \$1.2 million in 2022 due to higher interest expense of \$1.1 million (compared to 936,000 in 2022) and an increase in amortization of debt discount to \$910,000 (compared to \$512,000 last year).

We project a net loss of \$17.9 million or (\$0.15) per share on 116.3 million average shares outstanding. We previously forecast a net loss of \$11.6 million or \$(0.10) per share on 116.7 million average shares outstanding.

In 2023, we project \$9.2 million cash used by operations from a cash loss of \$12.3 million and a \$3.1 million decrease in working capital. The \$2 million from financing activity will not cover cash used in operations and capital expenditures. We project an \$8.2 million decrease in cash to \$2.1 million at the end of 2023.

2024 Forecast

We project revenue growth of 134.5% to \$34 million from an estimated \$14.5 million as customer acceptance and order growth occurs for the company's thermal and vibration control offerings. We also anticipate the company's proprietary fail-safe Passive Propagation Resistant battery solutions offerings will be deployed by the customer at a rapid pace starting in 4Q23 and throughout the balance of 2024.

We project gross margins improving to 52.7% from an estimated 46.5% in 2023 due primarily to a positive revenue mix shift to higher margin offerings.

We anticipate the operating loss narrowing to \$4.5 million from \$15.9 million due primarily to revenue growth, gross margin expansion, and operating expense margin improving to 65.9% from an estimated 156% in 2023. We project operating expenses relatively flat at \$22.4 million compared to an estimated \$22.6 million in 2023. SG&A expenses should increase to \$18.2 million from an estimated \$17.8 million in 2023 due to higher compensation costs. R&D expenses are projected to decrease to \$4.2 million from \$4.8 million in 2023.

Other expense should decrease to approximately \$1.6 million compared to an estimated \$2 million due to lower average outstanding prepaid advance liability, partly offset by a higher interest rate.

We project a net loss of \$6.1 million or (\$0.05) per share on 118 million average shares outstanding.

In 2024, we project \$236,000 cash used by operations from a cash loss of \$615,000 and a \$379,000 decrease in working capital. Cash used in operations and capital expenditures should decrease cash by \$1.2 million to \$911,000 at the end of 2024.

2022 and 4Q22 Results

2022 Results

Revenue increased 65.5% to nearly \$4 million from \$2.4 million in 2021 due primarily to a \$1.1 million or 77% increase in product sales from two customer contracts for custom TRS kits and the company's heatsink technology, as well as a \$434,000 or 47% increase in contract services from three large contracts.

Gross profit increased 80.3% to nearly \$2.4 million from \$1.3 million last year due to revenue growth and gross margin expansion to 59.2% from 54.3% in 2021. Gross margin improvement reflects a positive shift to higher margin offerings.

Operating loss increased \$18.3 million from \$11.5 million in 2021 stemming from a 61% increase in operating expenses. R&D expense increased 139.4% to nearly \$4 million from nearly \$1.7 million last year due primarily to increases in headcount to build future capacity and expenses related to new initiatives designed to support revenue growth. SG&A expenses increased 49.4% to nearly \$16.7 million from \$11.2 million in 2021 due primarily to increased headcount, marketing and advertising expenses, travel costs related to customer and vendor relations, as well as internal software implementation and SEC filing and professional services.

Total other expense was nearly \$1.2 million compared to \$398,000 last year. In the current period, the two most significant components of other expense was interest expense of \$936,000 and amortization of debt discount of \$512,000. In the year-ago period interest expense was \$3,300 and amortization of debt discount of \$128,000. The increases reflect higher average balance of notes payable and the prepaid advances compared to last year.

KULR Technology Group, Inc.

KULR reported a net loss of \$19.4 million or (\$0.18) per share versus a loss of \$14.5 million or (\$0.15) per share in 2021. The year-ago period included \$2.6 million related to deemed dividend to series D preferred stockholders. We projected 2022 revenue of \$3.7 million and a net loss of \$20.3 million or (\$0.19) per share.

4Q22 Results

Revenue increased 136.8% to \$1.8 million from \$776,000 in 4Q21. The net loss was \$4.5 million or (\$0.04) per share versus a loss of \$4.1 million or (\$0.04) per share in the year-ago period.

Gross margins increased to 91.7% from 69.6% due primarily to higher margin design revenue compared to the year-ago period.

R&D expenses increased to \$1.2 million from \$704,000 and SG&A expenses was \$4.5 million compared \$3.8 million. Operating expenses increased due primarily to increases in headcount, new product development initiatives, stock-based compensation, and marketing and advertising activities.

Total other expense increased to \$460,000 from \$60,000 in 4Q21 due primarily to higher average debt and prepaid advance balances in the current period.

Liquidity – As of December 31, 2022, KULR had \$10.3 million cash, \$8.9 million of prepaid advance liability and shareholder's equity of \$10.5 million.

In 2022, the company's cash loss of \$14 million and a \$3.4 million increase in working capital resulted in \$17.4 million cash used in operations. Cash used in operations and investing did not cover \$17.5 million cash provided by financing primarily from increased debt and the exercise of warrants. Cash decreased by \$4.5 million to \$10.3 million as of December 31, 2022.

In May 2022, KULR entered into a Standby Equity Purchase Agreement (SEPA) with Yorkville where the company shall have the right, but not the obligation, to sell to Yorkville up to \$50 million of its shares of common stock at KULR's request any time during the commitment period. The commitment period commences on May 13, 2022 and terminates on the earlier of the first day of the month following the 24-month anniversary of the SEPA and the date on which Yorkville shall have made payment of any advances requested pursuant to the SEPA for shares of KULR's common stock equal to the commitment amount of \$50 million. Each sale the company requests under the SEPA may be for a number of shares of common stock with an aggregate value of up to \$5 million at 98% of the market price.

In September 2022, the company recorded an initial prepaid advance liability of \$15.8 million. The initial advance amount of nearly \$3.9 million was used to repay amounts due under a note purchase agreement with Yorkville.

As of December 31, 2022, the KULR issued nearly 5.4 million shares of common stock as partial repayment of the initial advance principal of \$6 million and premium and interest of \$316,000 and \$125,000, respectively. As of the end of 2022, the balance was approximately \$8.9 million.

Between January 1, 2023 and March 28, 2023, the company issued nearly 3.2 million shares of common stock, at purchase prices per share ranging from \$0.90 to \$1.20, pursuant to investor notices submitted by Yorkville for aggregate proceeds of nearly \$3.6 million. As of March 28, 2023, balance on the initial advance was approximately \$5.8 million.

On March 10, 2023, the company and Yorkville agreed and closed on a second prepaid advance for \$2 million. Interest accrues on the outstanding balance of each prepaid advance at an annual rate of 10%.

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. While we are not forecasting profitability through 2024, we do anticipate operating loss to narrow.

Dilution – Our forecast only includes a modest use of the company’s standby equity purchase agreement. However, if the company requires more capital than we anticipate increased usage of the agreement could dilute existing shareholder through the issuance of common stock.

Global supply chain issues – KULR could experience significant disruptions as a result of global supply chain issues and, in the event of a disruption, cannot make any assurances that it would be able to locate alternative suppliers of materials of comparable quality at an acceptable price.

Reliance on a small number of customers – In 2022, KULR had three customers who accounted for 87% 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 the March 2023, 10-K filing, KULR’s officers, directors and affiliates owned approximately 34.2% of KULR outstanding common stock. With such concentrated control of the company, other shareholders may have no effective voice in the company’s management.

Material weakness in disclosure controls and procedures - As of December 31, 2022, KULR did not maintain effective controls to ensure that there is an independent review and approval of electronic payments (wires, EFT’s, ACH’s and credit card payments). The company is in the process of developing a detailed plan for remediation of the material weakness, including developing and maintaining preventative controls around the electronic payment process to ensure proper segregation of duties.

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

KULR Technology Group, Inc.

high volatility in stock price. There are 72.4 million shares in the float and the average daily volume over the last three months to March 30, 2023 approximately 517,000 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.

Consolidated Balance Sheets
(in thousands \$)

	2020A	2021A	2022A	2023E	2024E
Cash	8,880	14,863	10,334	2,147	911
Accounts receivable	56	136	1,542	1,410	2,078
Inventory	55	191	1,962	1,552	1,694
Prepaid expenses and other includes deposits	150	571	1,898	1,750	1,850
Total current assets	9,141	15,761	15,736	6,858	6,533
Property and equipment	58	374	3,193	3,195	3,190
Vendor (equipment) deposits	-	2,154	3,515	3,200	3,000
Security deposits	9	59	60	60	60
Intangible assets	-	217	721	700	680
Deferred financing costs	-	-	72	72	72
Right of use asset	-	666	329	329	329
Total assets	9,208	19,231	23,626	14,414	13,864
Accounts payable	66	455	1,408	2,048	2,683
Accrued expenses and other	398	1,163	2,142	3,625	4,080
Accrued expenses and other-related party	-	-	-	-	-
Accrued issuable equity	128	291	228	228	228
Notes payable	2,322	-	-	-	-
Loans payable	13	155	-	-	-
Lease liability	-	262	224	224	224
Prepaid advance liability, net	-	-	5,656	2,076	2,837
Deferred revenue	20	132	23	23	23
Total current liabilities	2,947	2,458	9,681	8,224	10,075
Lease liability	-	408	98	100	100
Prepaid advance liability, net	-	-	3,197	5,674	-
Accrued interest	-	-	157	200	225
Loans payable	142	-	-	-	-
Total liabilities	3,089	2,866	13,132	14,198	10,400
Total stockholders' equity (deficit)	6,119	16,365	10,494	217	3,465
Total liabilities & stockholders' equity	9,208	19,231	23,626	14,414	13,864

Source: Company filings and Taglich Brothers' estimates

KULR Technology Group, Inc.

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

	<u>2020A</u>	<u>2021A</u>	<u>2022A</u>	<u>2023E</u>	<u>2024E</u>
Revenue	624	2,413	3,995	14,500	34,000
Cost of revenue	<u>169</u>	<u>1,102</u>	<u>1,631</u>	<u>7,760</u>	<u>16,095</u>
Gross profit	455	1,311	2,364	6,740	17,905
Research and development	290	1,662	3,978	4,790	4,175
Selling, general and administrative	<u>2,506</u>	<u>11,162</u>	<u>16,673</u>	<u>17,800</u>	<u>18,245</u>
Operating income (loss)	(2,341)	(11,513)	(18,286)	(15,850)	(4,515)
Interest expense	(5)	(3)	(936)	(1,100)	(800)
Other income (expense)	-	(140)	150	-	-
Amortization of debt discount	(502)	(128)	(512)	(910)	(830)
Loss on foreign currency transactions	-	(1)	-	-	-
Change in fair value of accrued equity	<u>(2)</u>	<u>(126)</u>	<u>147</u>	<u>-</u>	<u>-</u>
Net Income / (Loss)	<u>(2,850)</u>	<u>(11,911)</u>	<u>(19,436)</u>	<u>(17,860)</u>	<u>(6,145)</u>
Preferred stock deemed dividend	-	(2,624)	-	-	-
Net Income / (Loss) to common	<u>(2,850)</u>	<u>(14,535)</u>	<u>(19,436)</u>	<u>(17,860)</u>	<u>(6,145)</u>
EPS	<u>(0.03)</u>	<u>(0.15)</u>	<u>(0.18)</u>	<u>(0.15)</u>	<u>(0.05)</u>
Shares Outstanding	82,032	97,708	105,656	116,250	117,964
<u>Margin Analysis</u>					
Gross margin	72.9%	54.3%	59.2%	46.5%	52.7%
R&D	46.5%	68.9%	99.6%	33.0%	12.3%
SG&A	401.6%	462.6%	417.4%	122.8%	53.7%
Operating margin	(375.2)%	(477.1)%	(457.8)%	(109.3)%	(13.3)%
<u>Year / Year Growth</u>					
Total Revenues	(24.8)%	286.7%	65.5%	263.0%	134.5%

Source: Company filings and Taglich Brothers' estimates

KULR Technology Group, Inc.

Quarterly Income Statements 2022A - 2024E
(in thousands \$)

	3/22A	6/22A	9/22A	12/22A	2022A	3/23E	6/23E	9/23E	12/23E	2023E	3/24E	6/24E	9/24E	12/24E	2024E
Revenue	200	588	1,393	1,814	3,995	2,000	2,500	3,500	6,500	14,500	7,500	8,000	9,000	9,500	34,000
Cost of revenue	123	424	932	151	1,631	1,040	1,375	2,030	3,315	7,760	3,750	3,840	4,230	4,275	16,095
Gross profit	77	164	461	1,662	2,364	960	1,125	1,470	3,185	6,740	3,750	4,160	4,770	5,225	17,905
Research and development	721	999	1,070	1,187	3,978	1,190	1,195	1,200	1,205	4,790	1,000	1,025	1,050	1,100	4,175
Selling, general and administrative	3,535	4,326	4,349	4,462	16,673	4,400	4,425	4,475	4,500	17,800	4,525	4,545	4,575	4,600	18,245
Operating income (loss)	(4,179)	(5,162)	(4,958)	(3,987)	(18,286)	(4,630)	(4,495)	(4,205)	(2,520)	(15,850)	(1,775)	(1,410)	(855)	(475)	(4,515)
				(472)											
Interest expense	(1)	(42)	(633)	(259)	(936)	(275)	(275)	(275)	(275)	(1,100)	(200)	(200)	(200)	(200)	(800)
Other income (expense)	-	-	150	-	150	-	-	-	-	-	-	-	-	-	-
Amortization of debt discount	-	(103)	(172)	(236)	(512)	(235)	(230)	(225)	(220)	(910)	(215)	(210)	(205)	(200)	(830)
Change in fair value of accrued equity	43	53	27	24	147	-	-	-	-	-	-	-	-	-	-
Net Income / (Loss)	(4,137)	(5,255)	(5,587)	(4,458)	(19,436)	(5,140)	(5,000)	(4,705)	(3,015)	(17,860)	(2,190)	(1,820)	(1,260)	(875)	(6,145)
Preferred stock deemed dividend	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Income / (Loss) to common	(4,137)	(5,255)	(5,587)	(4,458)	(19,436)	(5,140)	(5,000)	(4,705)	(3,015)	(17,860)	(2,190)	(1,820)	(1,260)	(875)	(6,145)
EPS	(0.04)	(0.05)	(0.05)	(0.04)	(0.18)	(0.04)	(0.04)	(0.04)	(0.03)	(0.15)	(0.02)	(0.02)	(0.01)	(0.01)	(0.05)
Shares Outstanding	102,561	104,546	105,573	109,943	105,656	116,235	116,245	116,255	116,265	116,250	117,275	117,285	118,295	119,000	117,964

Margin Analysis

Gross margin	38.5%	27.9%	33.1%	91.7%	59.2%	48.0%	45.0%	42.0%	49.0%	46.5%	50.0%	52.0%	53.0%	55.0%	52.7%
R&D	360.5%	170.1%	76.8%	65.5%	99.6%	59.5%	47.8%	34.3%	18.5%	33.0%	13.3%	12.8%	11.7%	11.6%	12.3%
SG&A	1767.5%	736.4%	312.2%	246.0%	417.4%	220.0%	177.0%	127.9%	69.2%	122.8%	60.3%	56.8%	50.8%	48.4%	53.7%
Operating margin	NMF	(878.6)%	(355.9)%	(219.8)%	(457.8)%	(231.5)%	(179.8)%	(120.1)%	(38.8)%	(109.3)%	(23.7)%	(17.6)%	(9.5)%	(5.0)%	(13.3)%

Year / Year Growth

Total Revenues	(52.2)%	(6.4)%	131.8%	136.8%	65.5%	900.0%	325.5%	151.2%	258.3%	263.0%	275.0%	220.0%	157.1%	46.2%	134.5%
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Source: Company filings and Taglich Brothers' estimates

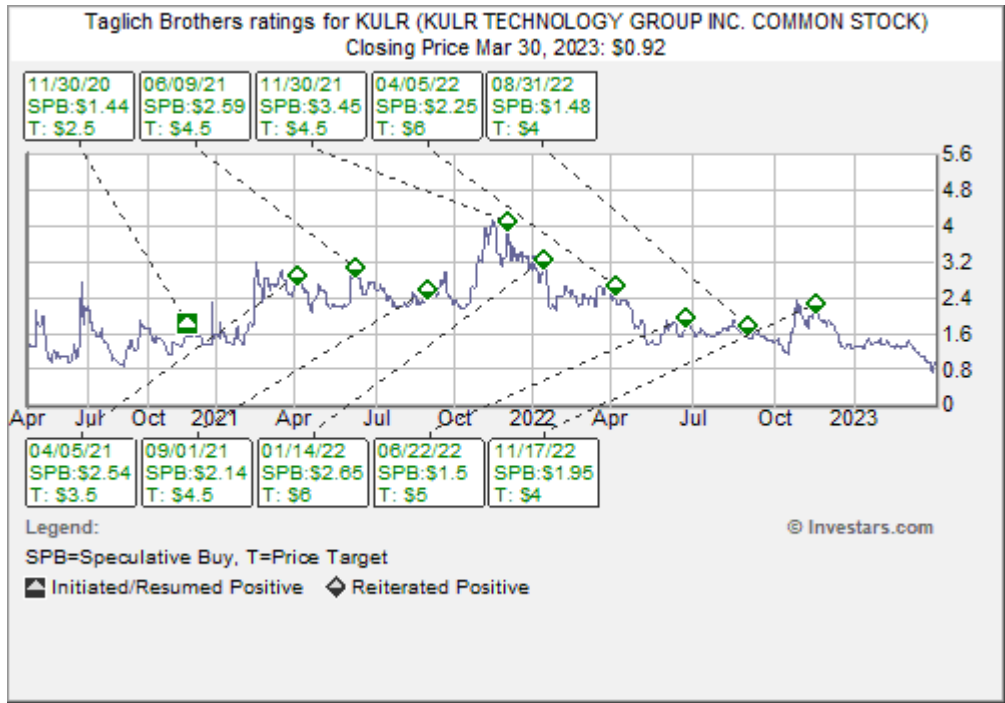
KULR Technology Group, Inc.

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

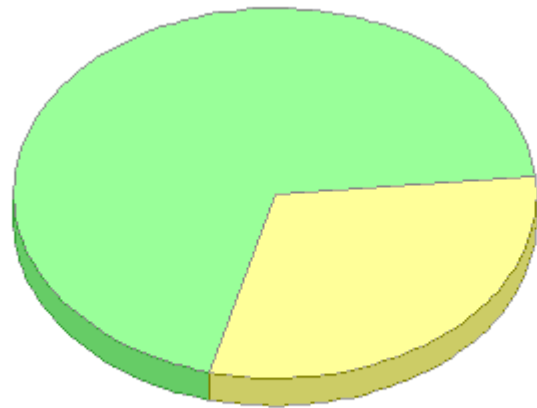
	2020A	2021A	2022A	2023E	2024E
Net income (loss)	(2,850)	(11,911)	(19,436)	(17,860)	(6,145)
Amortization of debt discount	502	128	512	445	445
Non-cash lease expense	-	149	193	200	200
Depreciation expense	16	68	259	400	385
Bad debt expense and forgiveness of PPP loan	1	-	(144)	-	-
Change in fair value of accrued issuable equity	2	126	(147)	-	-
Non-cash interest expense	-	-	577	-	-
Loss on extinguishment of note payable	-	-	9	-	-
Share-based compensation	344	4,200	4,175	4,500	4,500
Cash earnings (loss)	(1,985)	(7,240)	(14,002)	(12,315)	(615)
<i>Changes in assets and liabilities</i>					
Accounts receivable	(26)	(81)	(1,421)	132	(668)
Inventory	(29)	(136)	(1,771)	410	(142)
Prepaid expenses and other	(116)	(420)	(1,328)	148	(100)
Deposits - Security and Vendor	(296)	(50)	(2)	315	200
Accounts payable	(271)	385	659	640	635
Accrued expenses and other	(12)	768	825	1,483	455
Lease liability	-	(144)	(205)	-	-
Deferred revenue	5	112	(109)	-	-
(Increase) decrease in working capital	(745)	434	(3,352)	3,128	379
Net cash provided by (used in) operations	(2,730)	(6,806)	(17,354)	(9,187)	(236)
Deposits for equipment purchases	-	(2,154)	(1,421)	-	-
Purchase of intangible asset	-	(200)	(544)	-	-
Purchase of property and equipment	(46)	(383)	(2,683)	(1,000)	(1,000)
Net cash used in investing	(46)	(2,737)	(4,648)	(1,000)	(1,000)
Proceeds from note payable	3,710	-	4,750	-	-
Repayments of note payable	(759)	(2,450)	(1,000)	-	-
Payment of debt issuance costs	(340)	-	(17)	-	-
Proceeds from the exercise of warrants	-	11,719	3,021	-	-
Proceeds from Paycheck Protection Program loan	155	-	-	-	-
Proceeds from the SEPA, net	-	-	250	3,580	4,913
Proceeds from prepaid advance liability, net	-	-	10,573	2,000	-
Payment on prepaid advance liability	-	-	-	(3,580)	(4,913)
Proceeds from sale of Series D conv. pref. stock	-	6,500	-	-	-
Proceeds from sale of common stock	9,501	-	-	-	-
Proceeds from exercise of options	-	122	53	-	-
Payment of financing costs	(720)	(365)	(158)	-	-
Net cash provided by (used in) financing	11,547	15,526	17,472	2,000	-
Net Change in Cash	8,771	5,983	(4,530)	(8,187)	(1,236)
Cash - Beginning of Period	230	8,880	14,863	10,334	2,147
Cash - End of Period	<u>8,880</u>	<u>14,863</u>	<u>10,334</u>	<u>2,147</u>	<u>911</u>

Source: Company filings and Taglich Brothers' estimates

Price Chart



Taglich Brothers' Current Ratings Distribution



69.57 % Buy | 30.43 % Hold

Investment Banking Services for Companies Covered in the Past 12 Months		
Rating	#	%
Buy	4	20
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 began paying 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, Axos Clearing, 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, Howard Halpern, 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.