

**Action Summary – 24 August 2020**

Analyst Theodore R. O'Neill – Reiterate Buy rating and \$5 PT

- **KULR reported 2Q20 results that were largely as expected, missing our EPS estimate by a penny due to rounding.** The company reported an EPS loss of \$0.01 on \$201,000 of revenue. We had been looking for an EPS loss of \$0.00 on \$200,000 of revenue. Our 2021 estimates are unchanged
- KULR Technology Group develops, manufactures and licenses next-generation carbon fiber thermal management and safety technologies for batteries and electronic systems.
- **The company has been pulling together solid business relationships with companies that will use KULR products.** Those companies, however need to execute on their production plans. For example, subsequent to the end of the quarter announced a supplier partnership with Drako Motors, maker of an electric Supercar and commercialized battery safety technology for Volta Energy's Whispertech™ energy storage systems. It also announced it was awarded two new U.S. patents.
- **Both the growth of electric-motor based transportation and demand for increased safety of lithium-ion batteries are key drivers for KULR.** Semiconductor and other components that control current flow to the motors must manage considerable heat in the process. KULR has what we believe to be better and lighter materials for thermal management.
- **Attractive valuation.** The company has been cutting costs and is targeting cash flow break-even by 4Q20.

8/21 Closing price: \$0.89	Market cap: \$73 million	2021 P/E: NMF	EV/2021 Sales: 13.6
Shares outstanding: 82.6 million	Insider ownership: 46%	Avg. trading volume: 88,655	Dividend/Yield: NA/NA

**GAAP estimates (EPS in dollars – Revenue in thousands)**

Period	EPS	Revenue	Op Margin
1Q19A	\$(0.01)	\$195	NMF
2Q19A	\$(0.01)	\$56	NMF
3Q19A	\$(0.00)	\$527	NMF
4Q19A	<u>\$(0.01)</u>	<u>\$52</u>	<u>NMF</u>
FY19A	<u>\$(0.02)</u>	<u>\$830</u>	<u>NMF</u>
1Q20A	\$(0.01)	\$78	NMF
2Q20A	\$(0.01)	\$201	NMF
3Q20E	\$(0.00)	\$300	NMF
4Q20E	<u>\$(0.00)</u>	<u>\$650</u>	<u>NMF</u>
FY20E	<u>\$(0.01)</u>	<u>\$1,229</u>	<u>NMF</u>
1Q21E	\$(0.00)	\$650	(25.8%)
2Q21E	\$0.00	\$1,000	0.0%
3Q21E	\$0.00	\$1,500	13.3%
4Q21E	<u>\$0.01</u>	<u>\$2,000</u>	<u>21.5%</u>
FY21E	<u>\$0.01</u>	<u>\$5,150</u>	<u>9.0%</u>

Note: Numbers may not add due to rounding. See our full model in the back of this report.

**Cash balance (in thousands)**

• 2019A	• \$109
• 2020E	• \$148
• 2021E	• \$476

**Debt (in thousands)**

• 2019A	• NA
• 2020E	• NA
• 2021E	• NA

**Adj. EBITDA (in thousands)**

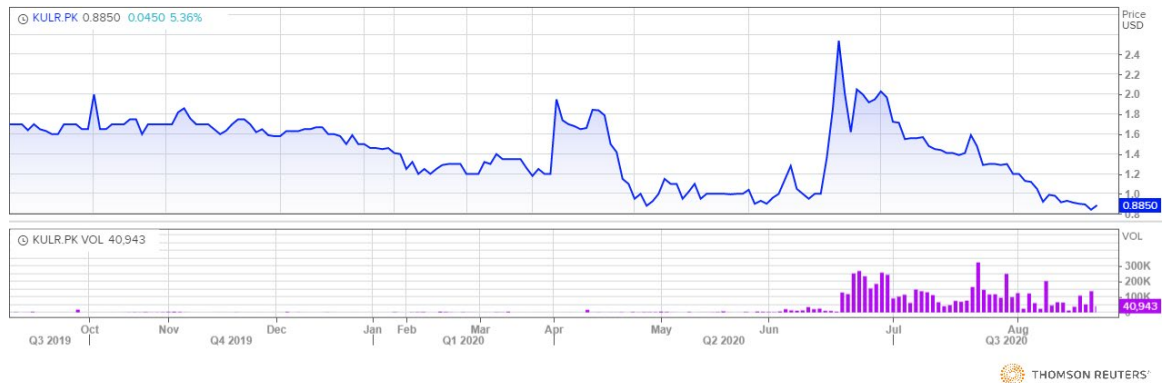
• 2019A	• (\$2.0)
• 2020E	• (\$1.3)
• 2021E	• \$0.9

**Risks/Valuation**

- Risks include: Highly competitive business; changes in customer demand, commercialization of technology
- Our \$5 target is derived using a discounted future earnings model

**Company description:** KULR Technology Group, Inc. (OTCQB: KULR) develops, manufactures and licenses next-generation carbon fiber thermal management technologies for batteries and electronic systems. Backed by a strong intellectual property portfolio, KULR enables leading aerospace, electronics, and electric vehicle manufacturers to make their products cooler, lighter and safer for the consumer.

Figure 1 – KULR Technology Group, Inc. – One-Year Trading snapshot



Source: Thomson Reuters Eikon

## Valuation Methodology

We believe KULR is undervalued and we support that belief with two valuation techniques, one absolute and one relative. The following valuation techniques are being used:

- 1) The discounted value of all future earnings was used for our price target (see Figure 2)
- 2) Valuation relative to peers (see Figure 3)

## Discounted Future Earnings – Basis for Price Target

Our 12-month price target of \$5 is based on a discounted earnings model. For valuation purposes, we sum up all future earnings discounted at 10%. We are making two main assumptions:

- Near-term rapid growth for earnings which steps down to GDP after 7 years
- Company reaches breakeven in 2021

Our valuation model is shown in Figure 2 below. Note, this model understates future new products and growth through acquisitions and probably understates the tax benefits, but offsetting that, the earnings never have a down year. The implied share price is \$5.30 which we round down to \$5. Recognizing that the shares have not traded at this level, we believe the company's operations are at an inflection point: management has said that it is targeting to be at cash flow B/E in 4Q20. We would point out that the stock has traded within 80 cents of this target in the last 24 months.

Figure 2 – KULR Technology Group, Inc. – Discounted Future Earnings Calculation

Discounted Earnings		\$ 5.30
Year 1 is	Forecast	Discounted
2020	EPS	EPS
1	(0.02)	(\$0.02)
2	0.01	\$0.01
3	0.10	\$0.08
4	0.25	\$0.17
5	0.50	\$0.31
Terminal Value		\$4.75

Source: Litchfield Hills Research LLC

## Valuation Relative to Peers

In Figure 3 we look at a summary of KULR peers according to market cap. If we compare KULR to a simple average of its peers, the shares sell at a significant premium. These metrics might also just be the wrong way to look at the stock. One thing common to the companies on the list is that they have high gross profit margins and companies with high gross profit margins tend to trade for higher sales multiples. A very high multiple for KULR isn't extraordinary. It is also possible that the market is anticipating a shift from losses to earnings. Details on each of the peers can be found in Figure 5 near the back of the report.

Figure 3 – KULR Technology Group, Inc. – Valuation Relative to Peers

	2021 EV/Sales	2021 Sales Multiple
Average	6.86	7.25
KULR	13.57	13.47
<b>Premium to peers</b>	<b>98%</b>	<b>86%</b>

Source: Litchfield Hills Research LLC and Refinitiv Eikon (Formerly Thomson Reuters Eikon)

## Guidance and Financial Forecasts

Other than setting the expectation to reach cash flow breakeven in 4Q20, the company provides no guidance. Our financial forecast assumes a relatively rapid growth in revenue, accelerating at the end of 2020. We also assume that the growth we show in 2021 will not require an additional capital raise to fund working capital. The company has been pulling together solid business relationships with companies that will use KULR products. Those companies, however need to execute on their production plans.

## Quarterly Results

As shown in Figure 4 (below), results were largely in-line with expectations, missing our EPS estimate by one-tenth of one cent. The company reported an EPS loss of \$0.005 on \$201,000 of revenue. We had been looking for an EPS loss of \$0.004 on \$200,000 of revenue. There is no consensus. The tiniest of misses was primarily due to higher than expected non-operating expenses, partially offset by higher sales and 244bps better profit margins.

Figure 4 – KULR Technology Group, Inc. – Quarterly Variance Analysis (\$000)

	2020	2020	
	Q2E	Q2A	Better/(worse) than forecast
<b>Income Statement</b>			
Total Revenue	\$200	\$201	\$1
Total cost of revenue	<u>90</u>	<u>41</u>	<u>49</u>
Total Gross Profit	110	160	50
Operating expenses:			
R&D	110	58	52
General and administrative	<u>300</u>	<u>425</u>	<u>(125)</u>
Total Expenses	410	483	(73)
Earnings (loss) from Operations	(300)	(323)	(\$23)
Total Other income/(expense)			
	0	(106)	(106)
Earnings before taxes	(300)	(429)	(129)
Tax expense/(benefit)	<u>0</u>	<u>0</u>	<u>0</u>
Net income	<u>(\$300)</u>	<u>(\$429)</u>	<u>(\$129)</u>
EPS			
	\$ (0.004)	\$ (0.005)	(\$0.00)
non-GAAP			
Diluted common shares	81,000	81,235	235
Orders			
Common size P&L			
Total Revenue	100%	100%	
Total cost of revenue	45%	21%	24.4%
Total Gross Profit	55%	79%	24.4%

Source: Litchfield Hills Research LLC

Figure 5 – KULR Technology Group, Inc. – Comp Table

Ticker	Company Name	8/21 Close	Market Cap \$MM	EV \$MM	2021 EV / Revenue	2021 Sales Multiple
SNPS.O	Synopsys Inc	\$215.16	32,443.70	31,530.52	7.91	8.16
CDNS.O	Cadence Design Systems Inc	\$111.26	31,018.62	30,525.83	10.96	11.15
OLED.O	Universal Display Corp	\$181.19	8,534.11	7,890.09	14.92	15.98
VICR.O	Vicor Corp	\$80.25	3,455.88	3,259.49	9.13	9.61
ALTR.O	Altair Engineering Inc	\$41.75	3,052.52	2,985.85	6.10	6.23
THRM.O	Gentherm Inc	\$43.42	1,417.87	1,409.30	1.50	1.50
MTRN.K	Materion Corp	\$57.06	1,159.59	1,064.49	0.88	0.96
CEVA.O	CEVA Inc	\$42.31	937.54	781.43	7.77	9.16
IPWR.O	Ideal Power Inc	\$7.58	21.98	20.28		
ADOM.PK	Adomani Inc	\$0.21	15.29	14.81	<u>2.45</u>	<u>2.53</u>
	<b>AVERAGE</b>				6.85	7.25
KULR.PK	KULR Technology Group Inc	\$0.84	69.35	69.90	13.57	13.47
	KULR Premium to peers				98%	86%

Source: Litchfield Hills Research LLC and Refinitiv Eikon (formerly Thomson Reuters Eikon)

Figure 6 – KULR Technology Group, Inc. – Income Statement (\$000)

December year-end	2018 Year	2019 Year	2020E				2020E Year	2021E				2021E Year
			Q1A	Q2A	Q3E	Q4E		Q1E	Q2E	Q3E	Q4E	
<b>Total revenue</b>	\$1,274	\$830	\$78	\$201	\$300	\$650	\$1,229	\$650	\$1,000	\$1,500	\$2,000	\$5,150
<i>Growth</i>		-35%	-60%	257%	-43%	1140%	48%	739%	397%	400%	208%	319%
Cost of Goods	337	227	26	41	105	228	400	293	450	750	1,020	2,513
<b>Gross Profit</b>	<b>937</b>	<b>604</b>	<b>52</b>	<b>160</b>	<b>195</b>	<b>423</b>	<b>829</b>	<b>358</b>	<b>550</b>	<b>750</b>	<b>980</b>	<b>2,638</b>
<b>Gross Margin</b>	<b>73.6%</b>	<b>72.7%</b>	<b>66.5%</b>	<b>79.4%</b>	<b>65.0%</b>	<b>65.0%</b>	<b>67.5%</b>	<b>55.0%</b>	<b>55.0%</b>	<b>50.0%</b>	<b>49.0%</b>	<b>51.2%</b>
Operating Expenses												
R&D	\$508	\$502	\$112	\$58	\$80	\$100	\$350	\$100	\$100	\$100	\$100	\$400
% of total revenue	40%	60%	144%	29%	27%	15%	28%	15%	10%	7%	5%	8%
General and administrative	\$2,511	\$2,081	\$470	\$425	\$425	\$425	\$1,744	\$425	\$450	\$450	\$450	\$1,775
% of total revenue	197%	251%	606%	211%	142%	65%	142%	65%	45%	30%	23%	34%
Total Operating Expenses	3,019	2,583	581	483	505	525	2,094	525	550	550	550	2,175
<b>Operating Income</b>	<b>(2,082)</b>	<b>(1,979)</b>	<b>(530)</b>	<b>(323)</b>	<b>(310)</b>	<b>(103)</b>	<b>(1,265)</b>	<b>(168)</b>	<b>0</b>	<b>200</b>	<b>430</b>	<b>463</b>
<b>Operating Margin</b>		<b>-238.4%</b>	<b>-683.4%</b>	<b>-160.7%</b>	<b>-103.3%</b>	<b>-15.8%</b>	<b>-103.0%</b>	<b>-25.8%</b>	<b>0.0%</b>	<b>13.3%</b>	<b>21.5%</b>	<b>9.0%</b>
Total Other Items	23	(0)	(21)	(106)	0	0	(126)	0	0	0	0	0
<b>Pre-Tax Income</b>	<b>(2,058)</b>	<b>(1,980)</b>	<b>(550)</b>	<b>(429)</b>	<b>(310)</b>	<b>(103)</b>	<b>(1,392)</b>	<b>(168)</b>	<b>0</b>	<b>200</b>	<b>430</b>	<b>463</b>
<b>Pre-Tax Margin</b>			<b>-710.0%</b>	<b>-213.3%</b>	<b>-103.3%</b>	<b>-15.8%</b>	<b>-113.3%</b>	<b>-25.8%</b>	<b>0.0%</b>	<b>13.3%</b>	<b>21.5%</b>	<b>9.0%</b>
Taxes (benefit)	0	0	0	0	0	0	0	0	0	0	0	0
Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	#DIV/0!	0.0%	0.0%	0.0%
<b>Net Income (loss)</b>	<b>(2,058)</b>	<b>(1,980)</b>	<b>(550)</b>	<b>(429)</b>	<b>(310)</b>	<b>(103)</b>	<b>(1,392)</b>	<b>(168)</b>	<b>0</b>	<b>200</b>	<b>430</b>	<b>463</b>
<b>Net Margin</b>		<b>NMF</b>	<b>NMF</b>	<b>NMF</b>	<b>-103.3%</b>	<b>-15.8%</b>	<b>-113.3%</b>	<b>-25.8%</b>	<b>0.0%</b>	<b>13.3%</b>	<b>21.5%</b>	<b>9.0%</b>
<b>EPS, as reported</b>	<b>(0.03)</b>	<b>(0.02)</b>	<b>(0.01)</b>	<b>(0.01)</b>	<b>(0.00)</b>	<b>(0.00)</b>	<b>(0.02)</b>	<b>(0.00)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>
Diluted Shares Outstanding	77,642	80,123	81,098	81,235	81,000	81,000	81,083	81,000	82,566	82,566	82,566	82,175

Source: Company reports and Litchfield Hills Research LLC

Figure 7 – KULR Technology Group, Inc. – Balance Sheet (\$'000)

December year-end	FY2021E	FY2020E	FY2019	FY2018
<b>Balance sheet</b>				
Current Assets				
Cash and S.T.I.	\$476	\$148	\$109	\$230
Accounts receivable	1,000	80	30	112
Inventories	200	40	27	10
Other assets	50	70	43	55
<b>Total Current Assets</b>	<b>1,726</b>	<b>338</b>	<b>209</b>	<b>406</b>
Net PP&E	40	27	28	45
Goodwill & Intangible	0	0	0	0
Other non-current assets	0	75	0	0
<b>Total Assets</b>	<b>\$1,766</b>	<b>\$440</b>	<b>\$237</b>	<b>\$451</b>
Current Liabilities				
Accounts payable	\$1,250	\$400	\$349	\$118
Accrued exp. & other	\$1,200	\$1,500	\$659	\$374
Deferred revenue	\$0	\$100	\$15	\$0
Other current liabilities	\$0	\$0	\$0	\$0
<b>Total current liabilities</b>	<b>2,450</b>	<b>2,010</b>	<b>1,034</b>	<b>576</b>
Notes payable	210	210	0	0
Other Liabilities	0	0	0	0
<b>Total Liabilities</b>	<b>2,660</b>	<b>2,220</b>	<b>1,034</b>	<b>576</b>
Stockholders' Equity				
Preferred stock	0	0	0	0
Common stock	8	8	8	8
Additional paid-in-capital	8,000	8,000	7,591	6,284
Retained earnings	(8,902)	(9,788)	(8,396)	(6,417)
Cum. Other comp and treasury stock	0	0	0	0
Total stockholders' equity	(894)	(1,780)	(797)	(125)
<b>Total Liabilities and equity</b>	<b>\$1,766</b>	<b>\$440</b>	<b>\$237</b>	<b>\$451</b>

Source: Company reports and Litchfield Hills Research LLC

Figure 8 – KULR Technology Group, Inc. – Cash Flow (\$000)

	FY21E	FY20E	FY19	FY18
Net Income	\$887	(\$1,392)	(\$1,980)	(\$2,058)
Accounts receivable	(920)	(50)	82	40
Inventories	(160)	(13)	(17)	4
Other assets	20	(27)	11	61
PP&E	(13)	1	17	(1)
Goodwill & Intangible	0	0	0	0
Other non-current	75	(75)	0	0
Accounts payable	850	51	231	81
Accrued exp & other - related party	(10)	(0)	(74)	(170)
Accrued exp. & other	(300)	841	285	185
Deferred revenue	(100)	85	15	0
Other current liabilities	0	0	0	0
Notes payable	0	210	0	0
Other Liabilities	0	0	0	0
Common stock	0	(0)	0	0
Additional paid-in-capital	0	409	1,308	1,193
Cum. trans. adj. and treasury stock	0	0	0	0
Dividends	0	0	0	0
Total Cash Flow	329	39	(121)	(666)

Source: Company reports and Litchfield Hills Research LLC

**Disclosures:**

**Analyst Certification**

We, the Litchfield Hills Research Department, hereby certify that the views expressed in this research report accurately reflect our personal views about the subject company and the underlying securities.

**FINRA Compliant Research Report**

We, the Litchfield Hills Research Department, hereby certify that this report is compliant with FINRA research rules 2241, 3110, the analyst is registered with FINRA and the report has been reviewed by a Supervisory Analyst.

**MiFID II Compliant Research Report**

Our research is classified as minor non-monetary benefit under MiFID II. This applies to all forms of transmission, including email, website and financial platforms such as Bloomberg, FactSet, S&P Global, Refinitiv, Wind and 13 others. We do not seek payment from the asset management community and do not have any execution function. Investors can continue to receive our research under the MiFID II regime without the need for a contract for services to be put in place. This applies to all forms of transmission, including email, website and financial platforms.

**Litchfield Hills Research LLC Rating System**

**BUY:** We expect the stock to provide a total return of 15% or more within a 12-month period.

**HOLD:** We expect the stock to provide a total return of negative 15% to positive 15% within a 12-month period.

**SELL:** We expect the stock to have a negative total return of more than 15% within a 12-month period.

Total return is defined as price appreciation plus dividend yield.

**Other Disclosures**

Litchfield Hills Research, LLC ("LHR") is not a U.S. broker-dealer registered with the U.S. Securities and Exchange Commission nor a member of Financial Industry Regulatory Authority. The principal of LHR and publisher of this report, Theodore R. O'Neill, is a





## KULR Technology Group, Inc.

## KULR-Buy-\$5 PT

registered representative of Ascendant Capital Markets, LLC ("Ascendant"), a registered broker-dealer and FINRA member firm. Ascendant considers Mr. O'Neill's association with LHR to be an "outside business activity" and is disclosed as such with FINRA. This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject LHR or any divisions, subsidiaries or affiliates to any registration or licensing requirement within such jurisdiction.

All material presented in this report, unless specifically indicated otherwise, is under copyright to LHR and the subject company. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of LHR or the subject company. All trademarks, service marks and logos used in this report are trademarks, service marks, registered trademarks, or service marks of LHR or its affiliates. The information, tools and material presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or the solicitation of an offer to sell or to buy or subscribe for securities or other financial instruments. LHR may not have taken any steps to ensure that the securities referred to in this report are suitable for any particular investor. The investments or services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about such investments or investment services. Nothing in this report constitutes investment, legal, accounting or tax advice or a representation that any investment or strategy is suitable, appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. LHR does not offer advice on the tax consequences of investment and you are advised to contact an independent tax adviser. LHR believes the information and opinions in the Disclosure Appendix of this report are accurate and complete. Information and opinions presented in this report were obtained or derived from sources LHR believes are reliable, but LHR makes no representations as to their accuracy or completeness.

### **Ownership and Material Conflicts of Interest**

The analyst owns no shares of the subject company. The analyst and his family have no known material conflicts of interest in authoring this report. No employees of Ascendant Capital Markets, LLC own any material amount of KULR stock or have any influence on the KULR Board of Directors.

### **Investment Banking and Fees for Services**

Litchfield Hills Research has not received compensation for advisory or investment banking services from the Company in the past 12 months. Ascendant Capital Markets, LLC has not received compensation for advisory or investment banking services from the Company in the past 12 months. Litchfield Hills Research LLC has received compensation for distribution and investor targeting services. Ascendant Capital Markets, LLC has not received compensation for non-investment banking services from the Company in the past 12 months.

### **Market Making**

Neither Litchfield Hills Research, LLC nor Ascendant Capital Markets, LLC makes a market in the subject company's securities.

Additional information is available upon request. LHR accepts no liability for loss arising from the use of the material presented in this report, except that this exclusion of liability does not apply to the extent that liability arises under specific statutes or regulations applicable to LHR. This report is not to be relied upon in substitution for the exercise of independent judgment.