

Action Summary – 30 August 2021

Analyst Theodore R. O'Neill – Advancing Li-ion battery safety - Reiterate Buy rating and \$5 PT

- **KULR reported 2Q21 revenue and EPS of \$628K beating estimates by \$248K with a loss of \$0.03 (excluding deemed dividend).** The \$0.02 unfavorable EPS variance was due to higher operating expenses, partially offset by higher product sales.
- Company continues to focus on near-term commercialization opportunities for its approved safety technology for the battery transportation and energy storage markets. Longer-term it is building total battery safety solutions for more efficient battery systems that increase sustainability and improve end-of-life battery management
- KULR is developing a carbon fiber-based architecture for thicker cathode and advanced anode materials to enable faster charging and safer battery cells. The company expects to show preliminary test results on September 21, 2021, at Battery Solutions Day.
- We are lowering our 2021 EPS estimates to reflect increasing investment in R&D and SG&A in order to follow through on both new products and business development. Our 2021 EPS declines to a loss of \$0.11 from a loss of \$0.05. Our 2021 revenue increases to \$2.5MM from \$2.3MM partly the result of better-than-expected revenue in 2Q21.
- We are initiating 2022 revenue and EPS estimates of \$8.5MM and a loss of \$0.09.
- Although the shares trade above peer averages, on the basis of discounted future earnings, we feel the shares are undervalued.

8/27/21 Closing price: \$2.13	Market cap: \$226 million	2022 P/E: NMF	2022 EV / Sales: 15.5
Shares outstanding: 106.3 million	Insider ownership: 41%	3-month avg. trading volume: 1.1MM	Dividend/Yield: NA/NA

GAAP estimates (EPS excluding deemed dividend in dollars – Revenue in thousands)

Period	EPS	Revenue	Op Margin
1Q20A	\$(0.01)	\$195	NMF
2Q20A	\$(0.01)	\$56	NMF
3Q20A	\$(0.00)	\$527	NMF
4Q20A	<u>\$(0.01)</u>	<u>\$52</u>	<u>NMF</u>
FY20A	<u>\$(0.03)</u>	<u>\$830</u>	<u>NMF</u>
1Q21A	\$(0.02)	\$418	NMF
2Q21A	\$(0.03)	\$628	NMF
3Q21E	\$(0.03)	\$500	NMF
4Q21E	<u>\$(0.03)</u>	<u>\$1,000</u>	<u>NMF</u>
FY21E	<u>\$(0.11)</u>	<u>\$2,546</u>	<u>NMF</u>
1Q22E	\$(0.03)	\$1,500	NMF
2Q22E	\$(0.02)	\$2,000	NMF
3Q22E	\$(0.02)	\$2,000	NMF
4Q22E	<u>\$(0.02)</u>	<u>\$3,000</u>	<u>NMF</u>
FY22E	<u>\$(0.09)</u>	<u>\$8,500</u>	<u>(91.5%)</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
• 2020A	• \$8,880
• 2021E	• \$7,199
• 2022E	• \$2.081

Debt (in thousands)

• 2019A	• NA
• 2020A	• 2,332
• 2021E	• NA
• 2022E	• NA

Adj. EBITDA (in thousands)

• 2019A	• (\$2.0)
• 2020A	• (\$2.4)
• 2021E	• (\$9.6)
• 2022E	• (\$7.8)

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: FactSet

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 2022

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 \$4.72 which we round up to \$5.

Figure 2 - KULR Technology Group, Inc. - Discounted Future Earnings

Discounted Earnings		\$ 4.72
Year 1 is	Forecast	Discounted
2021	EPS	EPS
1	(0.11)	(\$0.11)
2	(0.09)	(\$0.08)
3	0.20	\$0.15
4	0.30	\$0.20
5	0.45	\$0.28
Terminal Value		\$4.28

Source: Litchfield Hills Research LLC

Valuation Relative to Peers

In Figure 3 we look at a summary of metrics for KULR peers. 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

	2022 EV / Sales	2022 Sales Multiple
Average	6.46	7.20
KULR	25.49	26.59
Premium to peers	291%	269%

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

Guidance and Financial Forecasts

The company is not providing guidance. It appears to us that it has sufficient cash to get through 2021, but we assume there is a capital raise in 2022 to fund growth. Our financial forecast assumes a slow growth in revenue. 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), KULR reported 2Q21 revenue and EPS of \$628K and a loss of \$0.03 (excluding deemed dividend). The \$0.02 unfavorable variance was due to higher operating expenses, partially offset by higher sales.

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

	2021	2021	
	Q2E	Q2A	Better/(worse) than forecast
Income Statement			
Total Revenue	\$350	\$628	\$278
Total cost of revenue	158	439	(282)
Total Gross Profit	193	189	(3)
Operating expenses:			
R&D	150	353	(203)
General and administrative	1,000	2,723	(1,723)
Total Expenses	1,150	3,076	(1,926)
Earnings (loss) from Operations	(958)	(2,887)	(\$1,930)
Total Other income/(expense)	(200)	(140)	60
Earnings before taxes	(1,158)	(3,027)	(1,870)
Tax expense/(benefit)	0	0	0
Net income	(\$1,158)	(\$3,027)	(\$1,870)
Deemed dividend for Series C		(\$2,624)	
Net income attributable to shareholders		(\$5,651)	
EPS	\$ (0.01)	\$ (0.03)	(\$0.02)
EPS plus deemed dividend		\$ (0.06)	
Diluted common shares	92,627	92,513	114

Source: Litchfield Hills Research LLC

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

FactSet Ticker	Company Name	Closing Price	Market Cap \$MM	EV \$MM	2022 Consensus Multiples	
					EV /Sales	Market Cap / Sales
SNPS-US	Synopsys Inc	\$331.81	50,602	51,210	11.12	10.98
CDNS-US	Cadence Design Systems	\$162.47	44,968	44,757	14.09	14.09
OLED-US	Universal Display Corp	\$209.42	9,868	9,201	13.34	14.32
BC-US	Brunswick Corp.	\$102.84	7,970	8,417	1.37	1.29
VICR-US	Vicor Corp	\$122.84	3,911	5,282	11.06	11.22
ALTR-US	Altair Engineering Inc.	\$74.95	3,490	5,610	9.97	9.88
DAN-US	Dana Inc	\$23.86	3,465	5,940	NA	NA
THRM-US	Gentherm Incorporated	\$87.98	2,917	2,840	2.22	2.30
ELK-NO	Elkem ASA (NO Listing)	\$4.20	2,689	3,299	0.94	0.80
ENVX-US	Enovix Corporation (US Listing)	\$15.67	2,276	450	NA	X
MTRN-US	Materion Corp.	\$71.67	1,465	1,587	1.01	0.93
ASPN-US	Aspen Aerogels Inc.	\$44.14	1,454	1,173	7.90	10.16
CEVA-US	Ceva Inc (US Listing)	\$47.74	1,095	985	7.15	8.13
LGO-CA	Largo Resources Ltd. (CA Listing)	\$13.56	877	828	2.90	3.18
SRL-AU	Sunrise Energy Metals Limited (AU Listing)	\$1.23	111	59	NA	NA
IPWR-US	Ideal Power Inc.	\$16.21	95	74	X	X
ADOM-US	ADOMANI, Inc.	\$0.27	78	54	0.97	6.28
	AVERAGE				6.46	7.20
KULR-US	KULR Technology Group Inc	\$2.13	226	215	25.29	26.59
	KULR-US Premium to peers:				291%	269%

Comparable metrics that are more than 4x the mean are X'ed out in order to make the comparison meaningful

Source: Litchfield Hills Research LLC and FactSet

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

December year-end	2018	2019	2020A	2021E				2021E	2022E				2022E
	Year	Year	Year	Q1A	Q2A	Q3E	Q4E	Year	Q1E	Q2E	Q3E	Q4E	Year
Total revenue	\$1,274	\$830	\$624	\$418	\$628	\$500	\$1,000	\$2,546	\$1,500	\$2,000	\$2,000	\$3,000	\$8,500
<i>Growth</i>		-35%	-25%	439%	212%	265%	380%	308%	259%	218%	300%	200%	234%
Cost of Goods	337	227	169	275	439	250	510	1,474	750	1,000	1,000	1,530	4,280
Gross Profit	937	604	455	143	189	250	490	1,072	750	1,000	1,000	1,470	4,220
Gross Margin	73.6%	72.7%	72.9%	34.1%	30.1%	50.0%	49.0%	42.1%	50.0%	50.0%	50.0%	49.0%	49.6%
Operating Expenses													
R&D	\$508	\$502	\$290	\$123	\$353	\$400	\$500	\$1,376	\$500	\$500	\$500	\$500	\$2,000
% of total revenue	40%	60%	46%	29%	56%	80%	50%	54%	33%	25%	25%	17%	24%
General and administrative	\$2,511	\$2,081	\$2,506	\$1,493	\$2,723	\$2,500	\$2,500	\$9,216	\$2,500	\$2,500	\$2,500	\$2,500	\$10,000
% of total revenue	197%	251%	402%	357%	433%	500%	250%	362%	167%	125%	125%	83%	118%
Total Operating Expenses	3,019	2,583	2,795	1,616	3,076	2,900	3,000	10,592	3,000	3,000	3,000	3,000	12,000
Operating Income	(2,082)	(1,979)	(2,340)	(1,473)	(2,887)	(2,650)	(2,510)	(9,520)	(2,250)	(2,000)	(2,000)	(1,530)	(7,780)
Operating Margin		-238.4%	-375.1%	-352.5%	-459.5%	-530.0%	-251.0%	-373.9%	-150.0%	-100.0%	-100.0%	-51.0%	-91.5%
Total Other Items	23	(0)	(510)	(242)	(140)	(200)	(200)	(782)	(200)	(200)	(200)	(200)	(800)
Pre-Tax Income	(2,058)	(1,980)	(2,850)	(1,715)	(3,027)	(2,850)	(2,710)	(10,302)	(2,450)	(2,200)	(2,200)	(1,730)	(8,580)
Pre-Tax Margin			-456.8%	-410.3%	-481.8%	-570.0%	-271.0%	-404.6%	-163.3%	-110.0%	-110.0%	-57.7%	-100.9%
Taxes (benefit)	0	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%	0.0%	0.0%	0.0%	0.0%	0.0%
Net income	(\$2,058)	(\$1,980)	(\$2,850)	(\$1,715)	(\$3,027)	(\$2,850)	(\$2,710)	(\$10,302)	(\$2,450)	(\$2,200)	(\$2,200)	(\$1,730)	(\$8,580)
Deemed dividend for Series C			(\$2)	\$0	(\$2,624)	\$0	\$0	(\$2,624)	\$0	\$0	\$0	\$0	\$0
Net income attributable to shareholders			(\$2,852)	\$0	(\$5,651)	\$0	\$0	(\$12,926)	\$0	(\$2,200)	\$0	\$0	(\$8,580)
EPS	(0.03)	(0.02)	(0.03)	(0.02)	(0.03)	(0.03)	(0.03)	(0.11)	(0.03)	(0.02)	(0.02)	(0.02)	(0.09)
EPS plus deemed dividend	0.00	0.00	0.00	0.00	(0.06)	0.00	0.00	(0.14)	0.00	(0.02)	0.00	0.00	(0.09)
Diluted Shares Outstanding	77,642	80,123	82,032	90,079	92,513	92,627	92,627	91,962	90,079	92,513	92,627	92,627	91,962

Source: Company reports and Litchfield Hills Research LLC

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

December year-end	FY2022E	FY2021E	FY2020E	FY2019	FY2018
Balance sheet					
Current Assets					
Cash and S.T.I.	\$2,081	\$7,199	\$8,880	\$109	\$230
Accounts receivable	1,000	800	55	30	112
Inventories	400	200	55	27	10
Other assets	500	500	150	43	55
Total Current Assets	3,981	8,699	9,142	209	406
Net PP&E	200	100	58	28	45
Goodwill & Intangible	0	0	0	0	0
Other non-current assets	800	813	9	0	0
Total Assets	\$4,981	\$9,612	\$9,208	\$237	\$451
Current Liabilities					
Accounts payable	\$1,000	\$500	\$69	\$349	\$118
Accrued exp. & other	\$1,000	\$700	\$395	\$659	\$374
Deferred revenue	\$0	\$0	\$20	\$15	\$0
Other current liabilities	\$500	\$400	\$2,463	\$0	\$0
Total current liabilities	2,500	1,600	2,947	1,034	576
Notes payable	0	0	142	0	0
Other Liabilities	600	550	0	0	0
Total Liabilities	3,100	2,150	3,090	1,034	576
Stockholders' Equity					
Preferred stock	0	0	0	0	0
Common stock	9	10	9	8	8
Additional paid-in-capital	32,000	29,000	17,356	7,591	6,284
Retained earnings	(30,128)	(21,548)	(11,246)	(8,396)	(6,417)
Cum. Other comp and treasury stock	0	0	0	0	0
Total stockholders' equity	1,881	7,462	6,119	(797)	(125)
Total Liabilities and equity	\$4,981	\$9,612	\$9,208	\$237	\$451

Source: Company reports and Litchfield Hills Research LLC

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

	FY22E	FY21E	FY20A	FY19
Net Income	(\$8,580)	(\$10,302)	(\$2,850)	(\$1,980)
Accounts receivable	(200)	(745)	(25)	82
Inventories	(200)	(145)	(28)	(17)
Other assets	0	(350)	(107)	11
PP&E	(100)	(42)	(30)	17
Goodwill & Intangible	0	0	0	0
Other non-current	13	(804)	(9)	0
Accounts payable	500	431	(280)	231
Accrued exp & other - related party	0	0	(10)	(74)
Accrued exp. & other	300	305	(264)	285
Deferred revenue	0	(20)	5	15
Other current liabilities	100	(2,063)	2,463	0
Notes payable	0	(142)	142	0
Other Liabilities	50	550	0	0
Common stock	(1)	1	1	0
Additional paid-in-capital	3,000	11,644	9,765	1,308
Cum. trans. adj. and treasury stock	0	0	0	0
Dividends	0	0	0	0
Total Cash Flow	(5,118)	(1,681)	8,771	(121)

Source: Company reports and Litchfield Hills Research LLC

Disclosures:

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