

## COMPANY NOTE | EQUITY RESEARCH | March 18, 2022

Internet, Media &amp; Enabling Technologies: Digital Assets and Blockchain

Corporate Access Event

Riot Blockchain, Inc. | RIOT - \$18.43 - NYSE | Buy

## Stock Data

52-Week Low - High	\$12.90 - \$67.85
Shares Out. (mil)	117.27
Mkt. Cap.(mil)	\$2,161.36
3-Mo. Avg. Vol.	9,963,985
12-Mo.Price Target	\$46.00
Cash (mil)	\$504.1
Tot. Debt (mil)	\$0.0

Cash pro forma for ATM offering and ESS Metron M&amp;A

## Revenue (\$ millions)

Yr Dec	—2021E—	—2022E—	—2023E—
		Curr	Curr
1Q	23.2A	111.1E	-
2Q	34.3A	116.4E	-
3Q	64.8A	123.8E	-
4Q	99.3E	132.6E	-
YEAR	221.6E	484.0E	650.1E

## EBITDA

Yr Dec	—2021E—	—2022E—	—2023E—
		Curr	Curr
1Q	11.1A	77.6E	-
2Q	45.2A	79.0E	-
3Q	37.6A	82.6E	-
4Q	67.4E	88.3E	-
YEAR	161.3E	327.5E	398.2E

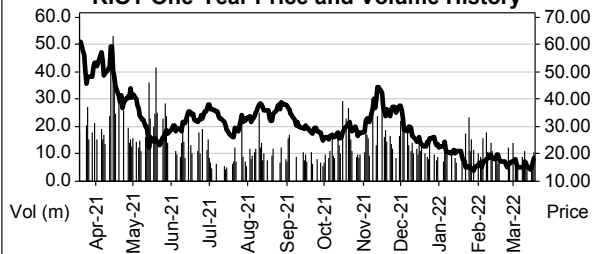
Adjusted EBITDA

## EPS \$

Yr Dec	—2021E—	—2022E—	—2023E—
		Curr	Curr
1Q	0.09A	0.39E	-
2Q	0.22A	0.34E	-
3Q	(0.16)A	0.27E	-
4Q	0.45E	0.19E	-
YEAR	0.66E	1.19E	0.75E

GAAP EPS

## RIOT One-Year Price and Volume History



## RIOT: 34th Annual ROTH Conference Takeaways

We recently hosted RIOT CEO Jason Les, Executive Chairman Benjamin Yi, and VP of Capital Markets Phil McPherson for a series of 1x1 meetings. Our key takeaways can be found in our full report.

**Progress on machine deployment and infrastructure development.** RIOT maintains its target schedule to complete its expansion to 700 MW at Whinstone by the end of FY22. Beyond this expansion, we estimate RIOT could lean towards constructing immersion facilities primarily, however, this is largely dependent on the availability of materials needed which are unique to immersion cooling such as pumps, tanks, firmware chips, and specific switches. With regard to the pace of immersion installation, we reiterate the point that these installs (as of now) could likely continue to take more time than deployment in air-cooled infrastructure. That said, we believe a combination of workforce training, instructional videos, and hands-on experience with these installs could help in accelerating the pace of future deployments, and thus, RIOT's hashrate. With an estimated ~\$25M in capex spending per month throughout 2022, most of which are for new machines being delivered, we estimate that ~70% of RIOT's cash (not including Bitcoin) is spoken for. We believe the remaining cash on hand after remaining machine payments could be allocated towards additional machine orders, new build initiations on future infrastructure, or additional acquisitions similar to that of ESS Metron. However, we believe most of its cash could likely be utilized to continue building out infrastructure at an average price of ~\$350K per MW (~\$35M per 100 MW building) in addition to new machine orders.

## VALUATION

Our \$46 price target is based on 14.3x EV/'22E adj. EBITDA multiple to our ~\$327.5M estimate.

Factors that could impede RIOT from achieving our price target include: changes in block rewards, the capital intensive nature of crypto mining and adequate access to capital, competition, power costs and availability, natural disasters, the price of Bitcoin, government regulation, pandemics, and the ability to procure miners.

## RISKS

**Bitcoin block reward:** When the Bitcoin reward for mining a block is cut in half (halving), the price of Bitcoin will have to increase to compensate. If Bitcoin prices do not rise commensurate with a halving, it could materially affect RIOT's revenue and profitability.

**Capital intensive industry:** Bitcoin mining is capital intensive, involving the build-out of physical infrastructure, software development, and acquiring mining machines. If RIOT does not maintain significant sources of capital, its ability to grow and scale could be materially affected.

**Competition among other miners and rising hashrate:** Significant competition exists for both its self-mining and hosting operations. RIOT must continue to scale its machines (miners) and hashrate in order to avoid diluting its relative share of coins mined, relative to the overall growth of the Bitcoin mining network.

**Electrical power supply:** If electrical power supply is low, it could adversely affect the company's ability to mine. Similarly, if pricing terms for electricity change, it could reduce RIOT's profitability per Bitcoin mined.

**Natural disasters:** RIOT's business model is dependent on its physical locations, namely its Whinstone property, which could be subject to natural disasters such as tornados, hurricanes, or ice storms that could affect the facility or its electrical power supply.

**Price of Bitcoin:** The price of Bitcoin directly affects RIOT's reported revenue (and profitability), a sharp decline in the price of Bitcoin and/or a reduction in the adoption rate of Bitcoin could affect RIOT's overall business.

**Regulatory risks:** If the US begins to implement regulations around Bitcoin and Bitcoin mining, as countries such as China and India have, it could adversely impact RIOT's ability to host, mine, and/or hold Bitcoin in the US. Additionally, it could impact the underlying price of Bitcoin.

**Supply chain and access to miners:** RIOT's strategy of acquiring a larger portion of the network hashrate could be materially affected if the company cannot acquire additional miners or receive favorable pricing on these machines moving forward. Additionally, ongoing supply chain issues could impact the ability to build miners in a timely manner, which could adversely impact or cause uncertainty around RIOT's go forward financial model.

**Pandemics:** Global pandemics, such as COVID-19, can have unforeseen consequences that can impact the normal course of business, which could result in delays, or adversely impact the ability to do business at all. Global pandemics, such as COVID-19, can have unforeseen consequences that can impact the normal course of business, which could result in delays, or adversely impact the ability to do business at all.

## COMPANY DESCRIPTION

Riot Blockchain, Inc. (RIOT) is a publicly-traded Bitcoin mining and Bitcoin mining hosting company created in 2017 after reorganizing its prior business, BiOptix Diagnostics, a life sciences company. RIOT operates in two locations within the US: a Coinmint facility in New York where rack space is leased, and one owned facility (Whinstone) in Rockdale, Texas where RIOT mines Bitcoin and hosts other third-party Bitcoin miners. RIOT strictly mines Bitcoin by utilizing ASIC (application-specific integrated circuit) machines (miners) specifically designed to optimize that process. RIOT trades on Nasdaq and is headquartered in Castle Rock, Colorado.

**Riot Blockchain, Inc. (RIOT)**

Fiscal year end - December

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(USD\$ in thousands except per share data)

	2018A	2019A	2020A	1Q21A	2Q21A	3Q21A	4Q21E	2021E	1Q22E	2Q22E	3Q22E	4Q22E	2022E	2023E
<b>Income Statement</b>														
Cryptocurrency mining	7,749	6,741	11,984	23,173	31,450	53,590	88,058	196,271	99,570	104,891	112,313	121,105	437,880	558,000
Data center hosting				0	2,874	11,193	11,193	25,260	11,500	11,500	11,500	11,500	46,000	92,000
Other revenue	97	96	97	24	24	25	24	97	24	24	25	24	97	97
<b>Total revenue</b>	<b>7,845</b>	<b>6,837</b>	<b>12,081</b>	<b>23,197</b>	<b>34,348</b>	<b>64,808</b>	<b>99,275</b>	<b>221,628</b>	<b>111,094</b>	<b>116,415</b>	<b>123,838</b>	<b>132,629</b>	<b>483,977</b>	<b>650,097</b>
Cost of revenue	5,820	6,097	6,251	7,534	13,061	25,615	27,151	73,361	28,296	31,530	34,404	36,305	130,535	217,544
<b>Gross profit</b>	<b>2,025</b>	<b>740</b>	<b>5,830</b>	<b>15,663</b>	<b>21,287</b>	<b>39,193</b>	<b>72,124</b>	<b>148,267</b>	<b>82,799</b>	<b>84,885</b>	<b>89,435</b>	<b>96,324</b>	<b>353,442</b>	<b>432,553</b>
Operating expenses														
Sales, general and administrative	20,857	9,159	10,251	5,462	3,512	40,307	7,644	56,925	8,277	9,022	10,155	11,539	38,992	50,289
Research and development	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation and amortization	5,267	119	4,494	2,846	5,738	12,207	12,344	33,135	16,432	25,709	39,069	55,588	136,798	268,329
Impairment of cryptocurrencies	3,501	844	989	0	17,507	0	0	17,507	0	0	0	0	0	0
Stock-based compensation	4,660	745	3,407	936	969	36,023	2,879	40,807	3,029	3,179	3,329	3,479	13,016	15,916
<b>Total operating expenses (Cash)*</b>	<b>16,197</b>	<b>8,414</b>	<b>6,844</b>	<b>4,526</b>	<b>2,543</b>	<b>4,284</b>	<b>4,765</b>	<b>16,118</b>	<b>5,248</b>	<b>5,843</b>	<b>6,826</b>	<b>8,060</b>	<b>25,976</b>	<b>34,373</b>
Total operating expenses (GAAP)	61,391	10,822	25,147	8,308	26,438	43,405	19,988	98,139	24,708	34,731	49,224	67,127	175,790	318,617
<b>Adj. EBITDA</b>	<b>(45,196)</b>	<b>(19,891)</b>	<b>(9,047)</b>	<b>11,137</b>	<b>45,216</b>	<b>37,576</b>	<b>67,359</b>	<b>161,288</b>	<b>77,551</b>	<b>79,042</b>	<b>82,609</b>	<b>88,264</b>	<b>327,466</b>	<b>398,180</b>
Operating income/(loss)	(59,366)	(10,082)	(19,317)	7,355	(5,151)	(4,212)	52,137	50,129	58,090	50,154	40,211	29,197	177,652	113,936
Interest (expense)	(123)	(122)	0	0	0	0	0	0	0	0	0	0	0	0
Income (loss) before taxes	(61,008)	(20,446)	(12,667)	7,530	23,067	(15,343)	52,137	67,391	58,090	50,154	40,211	29,197	177,652	113,936
Provision for income taxes	699	143	0	0	(3,730)	0	0	(3,730)	(12,199)	(10,532)	(8,444)	(6,131)	(37,307)	(23,927)
Minority Interest	2,205	264	(7)	0	0	0	0	0	0	0	0	0	0	0
Income (loss) from discontinued operations	96	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Adj. Net income/(loss)</b>	<b>(48,095)</b>	<b>(19,175)</b>	<b>(4,773)</b>	<b>11,312</b>	<b>43,047</b>	<b>26,211</b>	<b>67,359</b>	<b>147,929</b>	<b>65,352</b>	<b>68,509</b>	<b>74,165</b>	<b>82,133</b>	<b>290,159</b>	<b>374,254</b>
Net income/(loss)	(58,008)	(20,039)	(12,674)	7,530	19,337	(15,343)	52,137	63,661	45,891	39,621	31,767	23,066	140,345	90,009
Adj. EPS	(\$3.59)	(\$0.98)	(\$0.11)	\$0.14	\$0.48	\$0.27	\$0.58	\$1.53	\$0.56	\$0.58	\$0.63	\$0.69	\$2.46	\$3.12
<b>GAAP EPS - diluted</b>	<b>(\$4.23)</b>	<b>(\$1.02)</b>	<b>(\$0.30)</b>	<b>\$0.09</b>	<b>\$0.22</b>	<b>(\$0.16)</b>	<b>\$0.45</b>	<b>\$0.66</b>	<b>\$0.39</b>	<b>\$0.34</b>	<b>\$0.27</b>	<b>\$0.19</b>	<b>\$1.19</b>	<b>\$0.75</b>
Weighted avg. shares - diluted	13,404	19,598	41,977	83,712	89,241	96,064	116,583	96,400	117,083	117,583	118,083	118,583	117,833	119,833
Bitcoin and equivalents mined		944	1,033	491	675	1,291	1,496	3,953	1,867	1,967	2,106	2,271	8,210	8,801
Bitcoin and equivalents balance		514	1,078	1,565	2,243	3,534	5,030	5,030	6,897	8,863	10,969	13,239	13,239	22,040
<b>Margin analysis:</b>														
Cryptocurrency mining	0.0%	0.0%	0.0%	67.5%	70.3%	75.7%	83.1%	77.2%	83.2%	81.0%	79.7%	79.6%	80.8%	77.3%
Gross profit	25.8%	10.8%	48.3%	67.5%	62.0%	60.5%	72.7%	66.9%	74.5%	72.9%	72.2%	72.6%	73.0%	66.5%
Sales, general and administrative	265.9%	134.0%	84.9%	23.5%	10.2%	62.2%	7.7%	25.7%	7.5%	7.8%	8.2%	8.7%	8.1%	7.7%
Research and development	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%	0.0%
Depreciation and amortization	67.1%	1.7%	37.2%	12.3%	16.7%	18.8%	12.4%	15.0%	14.8%	22.1%	31.5%	41.9%	28.3%	41.3%
Total operating expenses (Cash)	206.4%	123.1%	56.7%	19.5%	7.4%	6.6%	4.8%	7.3%	4.7%	5.0%	5.5%	6.1%	5.4%	5.3%
Total operating expenses (GAAP)	782.5%	158.3%	208.2%	35.8%	77.0%	67.0%	20.1%	44.3%	22.2%	29.8%	39.7%	50.6%	36.3%	49.0%
Adj. EBITDA	(576.1%)	(290.9%)	(74.9%)	48.0%	131.6%	58.0%	67.9%	72.8%	69.8%	67.9%	66.7%	66.5%	67.7%	61.2%
Operating income/(loss)	(756.7%)	(147.5%)	(159.9%)	31.7%	(15.0%)	(6.5%)	52.5%	22.6%	52.3%	43.1%	32.5%	22.0%	36.7%	17.5%
Tax rate	8.9%	2.1%	0.0%	0.0%	(16.2%)	0.0%	0.0%	(5.5%)	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
Adj. net income/(loss)	(613.0%)	(280.5%)	(39.5%)	48.8%	125.3%	40.4%	67.9%	66.7%	58.8%	58.8%	59.9%	61.9%	60.0%	57.6%
Net income/(loss)	(739.4%)	(293.1%)	(104.9%)	32.5%	56.3%	(23.7%)	52.5%	28.7%	41.3%	34.0%	25.7%	17.4%	29.0%	13.8%
<b>Y/Y Growth:</b>														
Cryptocurrency mining	4,380.0%	(13.0%)	77.8%	881.1%	1,539.7%	2,099.0%	1,571.9%	1,537.8%	329.7%	233.5%	109.6%	37.5%	123.1%	27.4%
Total revenue	2,809.4%	(12.9%)	76.7%	872.2%	1,668.7%	2,532.3%	1,776.3%	1,734.5%	378.9%	238.9%	91.1%	33.6%	118.4%	34.3%
Cryptocurrency mining gross profit	NM	NM	NM	NM	NM	NM	NM	NM	430.0%	284.1%	120.7%	31.7%	133.5%	22.0%
Gross profit	728.5%	(63.5%)	687.8%	1,499.9%	4,132.0%	3,278.7%	2,162.4%	2,443.2%	428.6%	298.8%	128.2%	33.6%	138.4%	22.4%
Sales, general and administrative	186.0%	(56.1%)	11.9%	46.2%	57.5%	1,915.4%	234.4%	455.3%	51.5%	156.9%	(74.8%)	50.9%	(31.5%)	29.0%
Depreciation and amortization	491.2%	(97.7%)	3,676.5%	329.3%	591.3%	863.5%	611.9%	637.3%	477.4%	348.0%	220.1%	350.3%	312.9%	96.2%
Stock-based compensation	80.0%	(84.0%)	357.3%	(51.1%)	107.5%	7,613.7%	415.0%	1,097.7%	223.6%	228.1%	(90.8%)	20.8%	(68.1%)	22.3%
Total operating expenses (Cash)	242.9%	(48.1%)	(18.7%)	148.5%	44.2%	179.5%	175.9%	135.5%	15.9%	129.8%	59.3%	69.1%	61.2%	32.3%
Total operating expenses (GAAP)	358.2%	(82.4%)	132.4%	54.2%	112.0%	1,228.6%	397.2%	290.3%	197.4%	31.4%	13.4%	235.8%	79.1%	81.2%
Adj. EBITDA	NM	NM	NM	NM	NM	NM	4,564.8%	NM	596.3%	74.8%	119.8%	31.0%	103.0%	21.6%
Operating income/(loss)	NM	NM	NM	NM	NM	NM	NM	NM	689.8%	NM	NM	(44.0%)	254.4%	(35.9%)
Adj. net income/(loss)	NM	NM	NM	NM	NM	NM	985.9%	NM	477.7%	59.2%	183.0%	21.9%	96.1%	29.0%
Net income/(loss)	NM	NM	NM	NM	NM	NM	1,233.4%	NM	509.4%	104.9%	NM	(55.8%)	120.5%	(35.9%)
Bitcoin and equivalents mined	122.7%	46.2%	9.4%	74.7%	197.4%	481.5%	393.6%	282.6%	280.2%	191.3%	63.1%	51.8%	107.7%	7.2%
Bitcoin and equivalents balance	122.7%	46.2%	109.7%	NM	NM	NM	NM	366.6%	340.7%	295.1%	210.4%	163.2%	163.2%	66.5%

Source: SEC Filings, ROTH Capital Partners Estimates

\*Adj. defined as GAAP plus stock-based compensation and D&A

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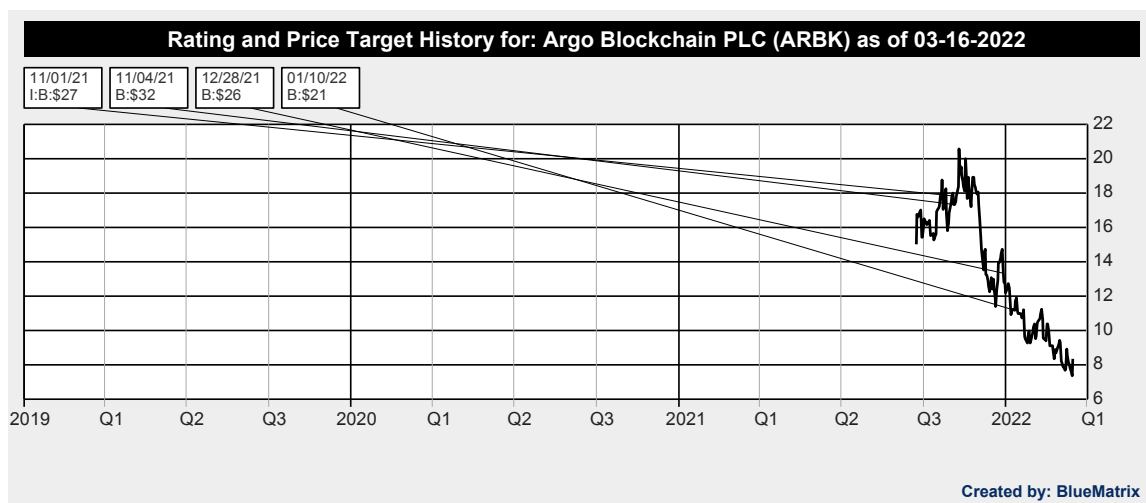
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Each box on the Rating and Price Target History chart above represents a date on which an analyst made a change to a rating or price target, except for the first box, which may only represent the first note written during the past three years. **Distribution Ratings/IB Services** shows the number of companies in each rating category from which Roth or an affiliate received compensation for investment banking services in the past 12 month.

#### Distribution of IB Services Firmwide

Rating	Count	Percent	IB Serv./Past 12 Mos. as of 03/18/22	
			Count	Percent
Buy [B]	348	82.86	234	67.24
Neutral [N]	45	10.71	24	53.33
Sell [S]	0	0.00	0	0
Under Review [UR]	27	6.43	17	62.96

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**Neutral:** A rating, which at the time it is instituted and or reiterated, that indicates an expectation of a total return between negative 10% and 10% over the next 12 months.

**Sell:** A rating, which at the time it is instituted and or reiterated, that indicates an expectation that the price will depreciate by more than 10% over the next 12 months.

**Under Review [UR]:** A rating, which at the time it is instituted and or reiterated, indicates the temporary removal of the prior rating, price target and estimates for the security. Prior rating, price target and estimates should no longer be relied upon for UR-rated securities.

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