

July 5<sup>th</sup>, 2024

Cohen & Company Capital Markets:

# BTC MINING MARKET DATA

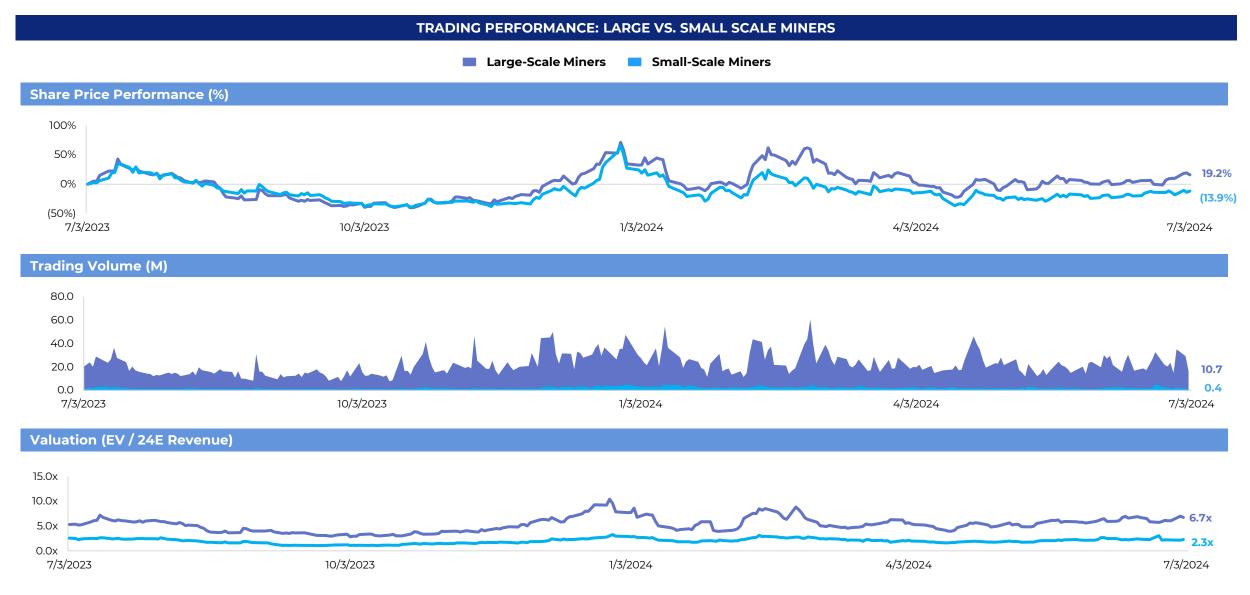
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## Market Performance – Key Assets and Indices

				% Change							
Asset / Index	Ticker	Price / Level	% 52-Wk	7 Days	30 Days	1 Year	MTD	QTD	YTD		
Natural Resources											
Natural Gas (Henry Hub)	HHGAS	\$2.06	61.0%	(24.9%)	(19.2%)	(20.2%)	(6.8%)	(19.2%)	(19.5%)		
Bitcoin Network											
Hashprice (\$/PH/Day)	NA	\$47.19	24.8%	(2.9%)	(15.6%)	(33.1%)	(2.2%)	(15.6%)	(49.5%)		
Network Hashrate (EH/s)	NA	602	83.5%	19.3%	(8.6%)	61.2%	0.3%	(8.6%)	29.4%		
Transaction Fees as % of Reward	NA	3.6%	1.2%	(36.7%)	(59.9%)	88.9%	(14.2%)	(59.9%)	(79.5%)		
Digital Assets											
Bitcoin	BTC	\$60,194.00	82.3%	(0.9%)	(12.5%)	105.9%	(4.1%)	(12.5%)	34.2%		
Ethereum	ETH	\$3,295.80	80.9%	(2.1%)	(12.5%)	77.5%	(4.1%)	(12.5%)	40.1%		
Solana	SOL	\$153.95	76.1%	12.9%	(5.7%)	534.7%	5.1%	(5.7%)	40.9%		
Ripple	XRP	\$0.47	57.0%	(0.5%)	(10.1%)	(33.2%)	(2.0%)	(10.1%)	(25.4%)		
Indices											
S&P 500	SPX	5,537.02	100.0%	1.1%	4.8%	20.7%	1.1%	4.8%	16.7%		
NASDAQ Composite	COMP	18,188.30	100.0%	2.2%	8.1%	26.8%	1.7%	8.1%	23.2%		
Valkyrie BTC Miners ETF	WGMI	\$23.26	99.8%	7.0%	40.2%	45.0%	0.7%	40.2%	33.0%		
Market Volatility Index	VIX	12.09	55.7%	(3.7%)	(7.8%)	(11.3%)	(1.1%)	(7.8%)	(8.4%)		
Gold	GoldCOMP	\$2,356.19	97.1%	2.5%	0.2%	19.9%	1.0%	0.2%	14.4%		
Oil	CL00	\$83.88	89.5%	3.7%	13.0%	2.5%	0.6%	13.0%	19.2%		
IG Corp Bond	LQD	\$107.58	96.6%	(0.0%)	0.3%	(0.3%)	1.4%	0.3%	(2.1%)		
HY Corp Bond	HYG	\$77.20	99.1%	(O.1%)	0.2%	2.3%	0.6%	0.2%	0.1%		
LT US Treasury	TLT	\$91.80	89.2%	(1.4%)	0.2%	(8.2%)	2.1%	0.2%	(6.6%)		
Real Yields											
5Y TIPS	DFII5	2.1%	81.1%	(0.9%)	(0.5%)	9.9%	(2.3%)	(0.5%)	19.3%		
10Y TIPS	DFII10	2.1%	82.9%	1.5%	0.5%	30.6%	(3.2%)	0.5%	20.1%		



# **LTM Public Miner Performance**



Source: FactSet data as of July 3, 2024; Public Filings

Note: Large Miners include MARA, CLSK, CORZ, HUT, RIOT; Small Miners include CIFR, APLD, WULF, HIVE, IREN, BTBT, ARBK, SDIG, GREE, SAI, BTCM, SLNH, BITF, DMG



# **Bitcoin Miner ATM Registrations Since 2020**

Filing Date	Issuer	ATM Size (\$M)	Market Cap at Filing (\$M)	% of Market Cap	Gross Spread
5/23/2024	TeraWulf Inc	200	720	28%	3.0%
5/6/2024	Applied Digital Corp	25	402	6%	3.0%
4/19/2024	Gryphon Digital Mining Inc.	70	53	133%	3.0%
3/28/2024	CleanSpark Inc	800	4,577	17%	3.0%
3/21/2024	Iris Energy Ltd	200	525	38%	3.0%
3/18/2024	Bitdeer Technologies Group	250	829	30%	3.0%
3/8/2024	Bitfarms Ltd	375	892	42%	3.0%
3/6/2024	Cipher Mining Inc	200	1,076	19%	3.0%
2/29/2024	Marathon Digital Holdings Inc	1,500	6,932	22%	3.0%
1/5/2024	CleanSpark Inc	500	1,935	26%	3.0%
10/24/2023	Marathon Digital Holdings Inc	750	1,898	40%	3.0%
9/13/2023	Iris Energy Ltd	300	297	101%	3.0%
9/5/2023	SAI.TECH Global Corp	10	17	59%	3.0%
8/9/2023	Riot Platforms Inc	750	2,978	25%	3.0%
8/4/2023	Cipher Mining Inc	250	864	29%	3.0%
6/26/2023	Applied Digital Corp	125	882	14%	3.0%
5/23/2023	Stronghold Digital Mining Inc	15	51	29%	3.0%
9/21/2022	Cipher Mining Inc	250	370	68%	3.0%
10/3/2022	Greenidge Generation Holdings Inc	23	85	27%	3.0%
9/2/2022	HIVE Blockchain Technologies Ltd	100	394	25%	3.0%
8/17/2022	Hut 8 Mining Corp	200	581	34%	3.0%
4/26/2022	TeraWulf Inc	200	416	48%	3.0%
3/31/2022	Bit Digital Inc	500	262	191%	3.0%
3/31/2022	Riot Blockchain Inc	500	2,483	20%	3.0%
2/11/2022	Marathon Digital Holdings Inc	750	2,967	25%	3.0%
8/31/2021	Riot Blockchain Inc	600	3,581	17%	3.0%
8/16/2021	Bitfarms Ltd	500	1,298	39%	3.0%
6/3/2021	CleanSpark Inc	500	582	86%	3.0%
12/11/2020	Marathon Patent Group Inc	200	250	80%	3.0%
12/4/2020	Riot Blockchain Inc	100	675	15%	3.0%
10/7/2020	Riot Blockchain Inc	100	126	79%	3.0%
8/6/2020	Marathon Patent Group Inc	100	125	80%	3.0%
Mean:		342	1,223	<b>47</b> %	3.0%
Median:		225	629	30%	3.0%



# **\$3.0B** Raised through ATM, ELOC and PIPE by Public Miners in 2024

\$M as of 7/3/2024	2024 Publ	ic Markets Activity		Total		
Ticker	АТМ	ELOC	PIPE	ATM + ELOC + PIPE		
RIOT	\$499.8	-	-	\$499.8		
MARA	\$560.6	-	_	\$560.6		
BTDR	-	\$50.8	\$150.0	\$200.8		
CORZ	-	-	-	-		
APLD	\$23.1	-	\$92.1	\$115.2		
NB2	-	-	-	-		
CIFR	\$82.3	-	-	\$82.3		
CLSK	\$575.2	-	-	\$575.2		
HUT	-	-	\$150.0	\$150.0		
WULF	\$61.5	-	_	\$61.5		
HIVE	\$58.6	-	_	\$58.6		
IREN	\$339.1	-	_	\$339.1		
BITF	\$120.6	-	_	\$120.6		
BTBT	\$48.2	-	_	\$48.2		
SDIG	-	-	_	-		
ARBK	-	-	\$10.0	\$10.0		
BTCM	-	-	-	-		
SAI	-	-	_	-		
SLNH	-	-	\$30.0	\$30.0		
GREE	-	-	\$6.0	\$6.0		
SATO	-	-	_	-		
GRDI	-	-	-	-		
GRYP	\$0.0	-	-	\$0.0		
DMG	-	-	-	-		
FUFU	-		\$77.1	\$77.1		
Total	\$2,369.0	\$50.8	\$515.2	\$2,935.0		



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# **Common Stock Comparison - Bitcoin Mining Companies Trading Metrics**

					Share Price % Change			EV / Current Met	rics			EV / F	Projected Metri	cs		
Company Name	EV (\$M)	Mkt. Cap Cap (\$M)	Share Price (\$)	% 52-Wk	MTD	YTD	Prop Hashrate (EH/s)	Ann. BTC Production <sup>(1)</sup>	Capacity (MW)	Hashspread (\$/PH/Day) <sup>(2)</sup>	2024E Prop. Hashrate (EH/s)	2025E Prop. Hashrate (EH/s)	2024E Revenue	2025E Revenue	2024E EBITDA	2025E EBITDA
(3) S Marathon Digital	\$4,627	\$5,922	\$20.98	61.5%	7.2%	(10.7%)	\$157.9	10.8x	\$4.1	28.1x	\$92.5	NA	6.6x	4.6x	9.2x	12.8x
S CleanSpark	3,129	3,798	16.15	65.3	3.2	46.4	174.1	10.8	7.0	20.5	97.8	62.6	6.2	3.9	10.1	9.5
SH Core Scientific	3,487	3,236	10.12	94.6	107.8	NA	170.9	11.2	4.7	21.3	NA	NA	6.8	5.6	15.0	9.6
S Riot Blockchain <sup>(4)</sup>	2,285	2,973	9.57	46.3	(0.8)	(38.1)	155.4	15.3	3.3	19.6	72.5	56.0	5.8	4.3	7.8	7.1
S Iris Energy	2,473	2,733	14.35	96.0	79.4	100.7	262.7	15.5	9.5	28.8	82.4	61.8	7.0	4.0	14.7	8.8
S TeraWulf <sup>(5)</sup>	1,997	2,028	5.21	97.0	154.1	117.1	249.6	15.4	8.2	28.5	150.2	64.4	12.3	6.8	21.6	12.2
SH BitDeer <sup>(6)</sup>	1,635	1,740	11.83	80.8	86.6	20.0	194.6	12.8	1.8	36.4	136.2	27.2	3.7	2.8	15.5	9.5
S Cipher Mining	1,316	1,580	4.65	78.9	27.7	12.6	164.4	11.4	4.9	16.1	97.5	37.6	8.0	4.3	14.2	9.0
Northern Data (7)	1,328	1,495	30.79	85.3	22.8	(2.1)	415.1	11.7	2.5	NA	147.6	NA	6.0	2.4	34.7	4.9
Hut 8 Mining <sup>(8)</sup>	1,675	1,448	16.16	71.0	80.4	21.1	304.6	16.3	2.2	NA	NA	NA	9.2	8.7	4.9	15.3
H Applied Digital <sup>(9)</sup>	1,070	1,042	6.77	61.2	71.0	0.4	NA	NA	3.8	NA	NA	NA	4.9	2.6	16.7	6.3
S Bitfarms <sup>(10)</sup>	873	994	2.51	64.2	7.7	(13.7)	116.4	8.0	3.6	15.4	41.6	24.9	3.4	1.8	7.8	3.1
SH Bitfufu <sup>(11)</sup>	638	714	4.38	23.9	28.1	(59.9)	22.3	1.1	1.0	NA	NA	NA	NA	NA	NA	NA
S Bit Digital <sup>(12)</sup>	236	397	3.28	62.2	28.1	(22.5)	93.0	5.4	NA	46.1	39.4	NA	1.7	1.2	6.1	3.9
S Hive (13)	164	318	3.05	44.6	18.2	(32.7)	32.9	2.0	1.1	3.8	27.4	NA	1.5	NA	3.0	NA
Stronghold Digital (14)	124	76	4.18	36.2	47.2	(42.7)	30.2	2.2	0.7	5.8	NA	NA	1.3	1.3	6.9	6.4
S Argo Blockchain <sup>(15)</sup>	106	68	1.21	27.2	(12.3)	(67.6)	39.3	3.4	0.9	6.1	NA	NA	1.9	1.7	NA	NA
S DMG	41	65	0.37	64.2	(5.6)	(16.4)	44.0	2.6	0.5	NA	NA	NA	1.5	NA	NA	NA
Greenidge Generation <sup>(16)</sup>	89	34	3.18	34.3	17.8	(52.6)	73.8	2.8	0.7	237.7	NA	NA	1.3	1.5	9.9	NM
BIT Mining <sup>(17)</sup>	21	32	4.15	59.7	(3.5)	(17.7)	364.0	4.2	NA	NA	NA	NA	NA	NA	NA	NA
Soluna (18)	80	29	5.38	55.2	126.1	34.5	99.8	6.4	1.1	9.5	NA	NA	NA	NA	NA	NA
S SAITech Limited	19	22	0.90	36.3	(15.9)	(24.4)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S SATO Technologies	13	12	0.24	40.0	4.3	(42.7)	23.4	1.4	0.7	NA	NA	NA	1.1	NA	NA	NA
Median					22.8	(15.1)	155.4	8.0	2.3	20.5	92.5	56.0	4.9	3.4	10.0	8.9
Source: FactSet as of July 3, 2024. Minir	ng operating metrics a	s of May 2024			S <sub>H</sub> Self-I	Mining and Hostii	ng SS	elf-Mining Only	н Но	osting Only						

(1) Assumes price of \$58,000 per Bitcoin and production figure annualized based on May 2024 production (2) Hashspread calculated as hashspread \* implied operating capacity (fleet efficiency \* hashrate) \* 24 hrs \* 365 days (3) Cost of electricity represents the average hosting cost. Does not include the cost of electricity post acquisitions of assets from Generate Capital and Applied Digital. Hashrate represents energized hashrate. Cash and Bitcoin on balance sheet data as of March 3, 2024 (4) Cost of electricity represents the cost of secure power in Bhutan (7) Cash on balance sheet based on EUR to USD FX rate as of April 10, 2024 (8) Bitcoin production based on April production (9) MW capacity only includes capacity dedicated towards crypto hosting operations (10) Price of electricity represents the cost of electricity represents the price Bit Digital pays to its hosting partners for electricity. Bitcoin on balance sheet includes Bitcoin equivalents (13) Cost of electricity as of Q3, 2023 (14) Hashrate represents current hashrate capacity. Includes 26 Bitcoin on balance sheet figure includes Bitcoin equivalents (17) Electricity proteces of Q3, 2023. GPB to USD FX rate as of December 31, 2023 (16) Bitcoin production based on Q1 2024 numbers (17) Bitcoin on balance sheet figure includes Bitcoin equivalents (18) Efficiency and Q3, 2023. GPB to USD FX rate as of December 31, 2023 (16) Bitcoin production based on Q1 2024 numbers (17) Bitcoin on balance sheet figure includes Bitcoin equivalents (18) Efficiency and ported mander sheet figure includes Bitcoin equivalents (18) Efficiency and Q3, 2023. GPB to USD FX rate as of December 31, 2023 (16) Bitcoin production based on Q1 2024 numbers (17) Bitcoin on balance sheet figure includes Bitcoin equivalents (18) Efficiency and Nosted miners

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# **Common Stock Comparison - Bitcoin Mining Companies Operating Metrics**

				Most Current Mining Metrics					Projected Mini		2024E Boy		Financial I			
Company Name	Prop. Hashrate (EH/s)	Efficiency (J/TH)	Capacity (MW)	Power Cost (\$/MWh)	Revenue (\$/MWh) <sup>(1)</sup>	GP Margin (\$/MWh)	Hashspread (\$/PH/Day) <sup>(2)</sup>	BTC Mined Monthly (#)	2024E Prop. Hashrate (EH/s)	2025E Prop. Hashrate (EH/s)	2024E Rev. Growth	2024E Gross Margin	2024E EBITDA Margin	Total BTC Cas Holdings (#)	sh on B. Sheet Deb (\$M)	bt on B. Sheet (\$M)
S Marathon Digital	29.3	24.5	1,116	\$54	\$80	\$26	\$15	616	50.0	NA	81.7%	0.2%	71.3%	17,857	\$290.4	\$325.7
S CleanSpark	18.0	23.1	446	43	85	42	23	417	32.0	50.0	117.4	46.7	61.2	6,154	323.1	12.8
SH Core Scientific	20.4	24.2	745	43	81	38	22	447	NA	NA	1.7	32.6	45.4	NA	98.1	579.9
S Riot Blockchain <sup>(4)</sup>	14.7	27.7	700	38	71	33	22	215	31.5	40.8	39.2	38.6	74.6	9,084	688.5	0.0
S Iris Energy	9.4	24.8	260	37	79	42	25	230	30.0	40.0	165.0	57.8	47.7	NA	321.5	0.0
S TeraWulf <sup>(5)</sup>	8.0	24.6	245	39	80	41	24	186	13.3	31.0	133.8	62.3	57.2	NA	45.8	99.4
SH BitDeer <sup>(6)</sup>	8.4	31.7	895	43	62	19	15	184	12.0	60.0	21.1	27.1	23.7	NA	118.5	22.7
S Cipher Mining	8.0	29.0	266	27	68	40	28	166	13.5	35.0	29.9	66.8	56.3	2,142	88.7	0.0
SH Northern Data (7)	3.2	NA	538	41	NA	NA	NA	164	9.0	NA	192.4	62.2	17.4	NA	42.6	0.0
SH Hut 8 Mining <sup>(8)</sup>	5.5	NA	762	406	NA	NA	NA	148	NA	NA	67.1	51.7	186.9	9,102	11.5	177.6
H Applied Digital <sup>(9)</sup>	NA	NA	280	NA	NA	NA	NA	NA	NA	NA	96.5	33.3	29.5	NA	4.4	61.8
S Bitfarms <sup>(10)</sup>	7.5	27.0	240	41	73	32	21	156	21.0	35.0	73.5	(8.1)	44.0	850	66.0	1.6
SH Bitfufu <sup>(11)</sup>	28.6	NA	644	74	NA	NA	NA	800	NA	NA	NA	NA	NA	NA	87.2	0.0
S Bit Digital <sup>(12)</sup>	2.5	28.8	NA	60	68	8	6	63	6.0	NA	207.9	46.9	28.1	2,119	33.1	0.0
S Hive <sup>(13)</sup>	5.0	28.9	156	34	68	34	23	119	6.0	NA	(4.4)	25.9	50.4	2,468	9.7	22.5
Stronghold Digital (14)	4.1	32.0	165	43	61	19	14	82	NA	NA	27.3	70.8	18.7	26	7.5	55.2
S Argo Blockchain <sup>(15)</sup>	2.7	32.5	115	38	60	23	18	45	NA	NA	9.2	(7.5)	NA	12	12.4	51.8
S DMG	0.9	28.4	85	NA	69	NA	NA	23	NA	NA	22.1	49.5	NA	446	1.2	8.8
(16) SH Greenidge Generation	1.2	28.7	122	67	68	1	1	45	NA	NA	(3.8)	NA	13.1	NA	14.3	68.7
SH BIT Mining <sup>(17)</sup>	0.1	NA	NA	NA	NA	NA	NA	7	NA	NA	NA	NA	NA	23	3.6	0.0
Soluna <sup>(18)</sup>	0.8	26.0	75	29	75	46	29	18	NA	NA	NA	NA	NA	NA	8.4	16.5
S SAITech Limited	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.2	0.0
S SATO Technologies	0.6	NA	20	43	NA	NA	NA	13	NA	NA	(10.8)	NA	NA	62	0.7	6.9
Median	5.5	28.1	263	43	70	33	22	156	13.5	40	39.2	46.7	46.5	2,119	33.1	12.8

Source: FactSet as of July 3, 2024. Mining operating metrics as of May 2024

Self-Mining and Hosting

s Self-Mining Only

H Hosting Only

Note: Debt excludes financial and operating leases

(1) Revenue / MWh calculated as hashprice of \$47.0/PH/day divided by fleet efficiency divided by 24 (2) Hashspread calculated as hashprice of \$47.0/PH/day minus hashcost; hashcost calculated as power cost/MWh \*24\* fleet efficiency (3/TH) / 1000 (3) Cost of electricity represents the average hosting cost. Does not include the cost of electricity post acquisitions of assets from Generate Capital and Applied Digital. Hashrate represents energized hashrate. Cash and Bitcoin on balance sheet data as of March 31, 2024 (4) Cost of power represents FY 2023 cost (5) Price of electricity excludes the benefit of demand response or ancillary services revenue (6) Cost of electricity represents the cost of secured power in Bhutan (7) Cash on balance sheet to USD FX rate as of April 10, 2024 (8) Bitcoin production based on April production (9) MW capacity only includes capacity dedicated towards crypto hosting operations (10) Price of electricity. Bitcoins mined by cloud-mining customers (12) Cost of electricity represents the price Bit Digital pays to its hosting partners for electricity. Bitcoin on balance sheet includes Bitcoin equivalents (13) Cost of electricity as of Q3, 2023 (14) Hashrate represents current hashrate capacity. Includes 26 Bitcoin on balance sheet (15) Electricity price as of Q3, 2023. GPB to USD FX rate as of December 31, 2023 (16) Bitcoin production based on Q1 2024 numbers (17) Bitcoin on balance sheet figure includes Bitcoin equivalents (18) Efficiency includes a mix of prop and hosted miners

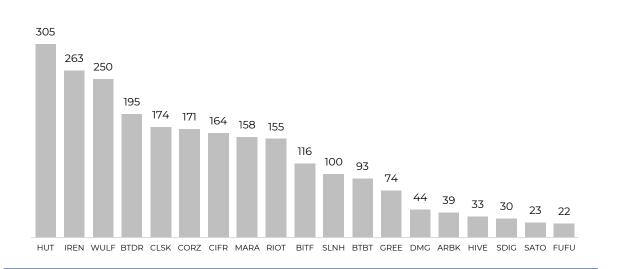


# **Trading Multiples**

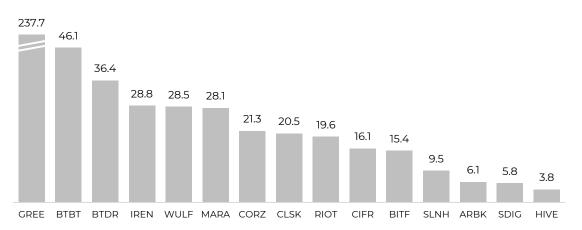
**EV / Current Proprietary Hashrate** 

(\$M / EH/s)

(x)



### EV / Hashspread<sup>(1)</sup>

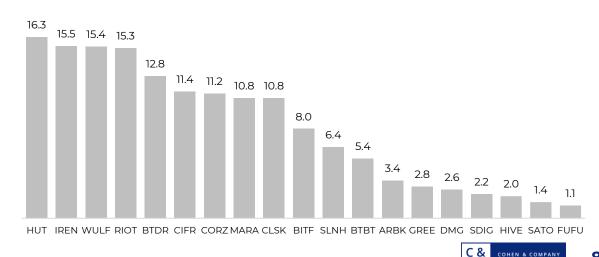




(I) Hashspread calculated as hashprice of \$47.0/PH/day minus hashcost; hashcost calculated as power cost/MWh \*24\* fleet efficiency (J/TH) /1000 (2) Assumes price of \$58,000 per Bitcoin and production figure annualized based on May production

## **EV / Current Installed Capacity** (\$'000 / MW) 9,513 8,151 7,020 4,946<sub>4,680</sub> 4,146<sub>3,8203,636</sub> 3,264 2,198 1,826 1,070 1,054 990 923 749 726 655 487 IREN WULF CLSK CIFR CORZ MARA APLD BITF RIOT HUT BTDR SLNH HIVE FUFU ARBK SDIG GREE SATO DMG

#### EV / Annualized BTC Production<sup>(2)</sup>

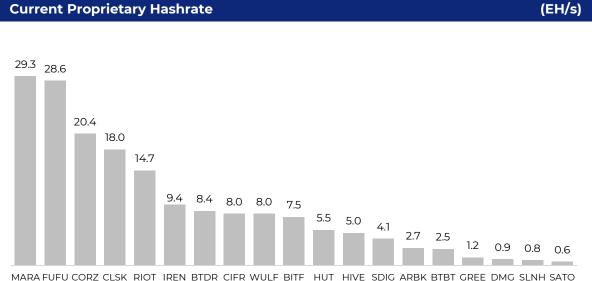


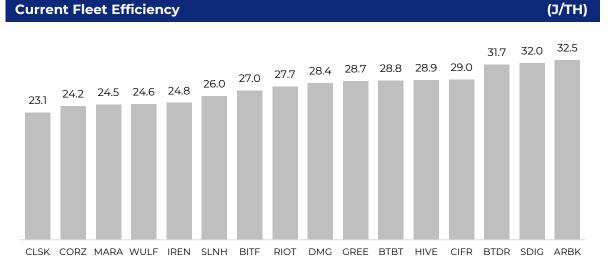
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(x)

# **Operating Metrics**

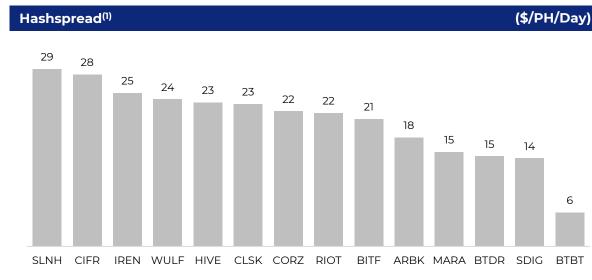




Note: Hut 8 capacity includes capacity under management

Source: FactSet, investor presentations, press releases and other public filings. Market data as of July 3, 2024. Mining metrics as of May 2024 (I) Hashspread calculated as hashprice of \$47.0/PH/day minus hashcost; hashcost calculated as power cost/MWh \*24\* fleet efficiency (J/TH) / 1000

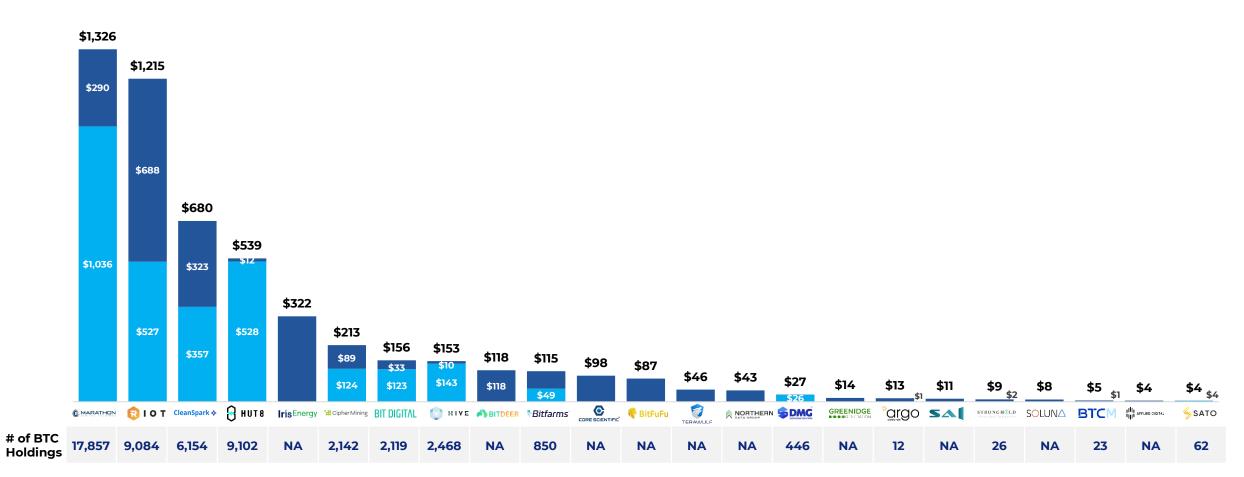
## **Current Installed Capacity** (MW) 1,116 895 762 745 700 644 446 280 266 260 245 240 165 156 122 115 85 75 MARA BTDR HUT CORZ RIOT FUFU CLSK APLD CIFR IREN WULF BITF SDIG HIVE GREE ARBK DMG SLNH





# **Cash and Bitcoin Holdings of Bitcoin Miners**

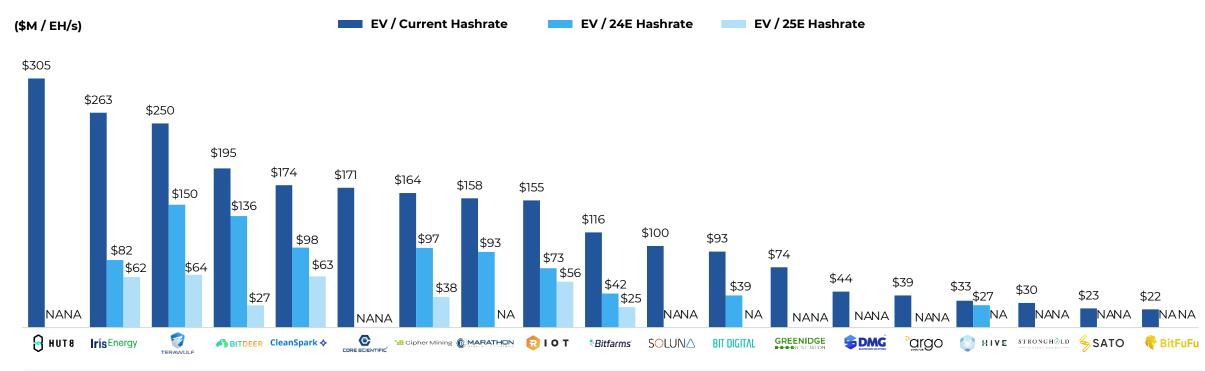
Cash (\$M) BTC (\$M) (Market Value Based on BTC Price of \$58,000)



\*NA: Company does not disclose number of BTC



# **EV / Hashrate Multiples – Bitcoin Miners**



	Hashrate (EH/s)																		
Current	5.5	9.4	8.0	8.4	18.0	20.4	8.0	29.3	14.7	7.5	0.8	2.5	1.2	0.9	2.7	5.0	4.1	0.6	28.6
2024E	NA	30.0	13.3	12.0	32.0	NA	13.5	50.0	31.5	21.0	NA	6.0	NA	NA	NA	6.0	NA	NA	NA
2025E	NA	40.0	31.0	60.0	50.0	NA	35.0	NA	40.8	35.0	NA								

\*NA: Company does not disclose projected Hashrate



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# **Bitcoin Mining Transactions Since June 2017**

Date	Buyer	Target	Target Location	Deal Value (\$M)	EV/MW (\$K)
6/28/2024	Bitdeer	Monroe County Port Authority	Clarington, Ohio	N/A	N/A
6/27/2024	CleanSpark	GRIID Infrastructure	Cincinnati, OH	\$155	<b>\$388</b> <sup>(1)</sup>
6/18/2024	CleanSpark	Five New Bitcoin Mining Facilities in Georgia	Georgia	\$26	\$430
6/13/2024	Bitfarms	120MW site in Sharon, Pennsylvania	Sharon, Pennsylvania	\$4	\$313
5/29/2024	Northern Data	Penguin Group	Asuncion, Paraguay	N/A	N/A
5/24/2024	Northern Data	300MW of data center location	Corpus Christi, Texas	N/A	N/A
5/9/2024	CleanSpark	75 MW of Bitcoin Mining Sites	Wyoming	\$19	\$250
3/15/2024	Marathon Digital Holdings	200MW Data Center from Applied Digital	Garden City, TX	\$87	\$437
3/11/2024	Greenidge	Mississippi & North Dakota Sites	Mississippi, North Dakota	N/A	N/A
3/5/2024	Undisclosed Buyer	Mirabel Facility of Argo Blockchain	Mirabel, Quebec	\$6	\$1,220
2/27/2024	CleanSpark	Three Turnkey Bitcoin Mining Facilities (MS)	Mississippi	\$20	N/A
2/27/2024	CleanSpark	Bitcoin Mining Facility in Dalton, GA	Dalton, GA	\$3	N/A
2/1/2024	Ionic Digital	Bitcoin Mining Assets of Celsius Mining	Hoboken, NJ	N/A	N/A
12/19/2023	Marathon Digital Holdings	Two Bitcoin Mining Facilities (TX and NE) of Generate Capital	Granbury, TX / Kearney, NE	\$179	\$458
12/12/2023	Millenium	Gibbons Creek Power Facility	Grimes County, TX	N/A	N/A
12/12/2023	Northern Data	300MW Corpus Christi Site from Saxet	Corpus Christi, TX	N/A	N/A
11/27/2023	HIVE Blockchain Technologies	Certain Assets of Turis AB	Boden, Sweden	\$2	\$375
11/15/2023	NYDIG	Greenidge Generation's South Carolina Mining Site	Spartanburg, SC	\$28	\$636
11/6/2023	Cipher Mining	Black Pearl Mining Site of Trinity Mining Group	Winkler County, TX	\$9	N/A
11/2/2023	Quantum Expeditions	Badgerland Mining Club (WholeCo, Mining Only)	Canada	\$3	\$2,600
9/15/2023	Celsius	Core Scientific's Cedarvale Site	Ward County, TX	\$45	\$209
6/21/2023	Arkon Energy	200MW Data Center from Amber Group	Hannibal, OH	N/A	N/A
6/21/2023	CleanSpark	Two Bitcoin Mining Facilities from Coinmaker / Makerstar	Dalton, GA	\$9	\$465
5/25/2023	Fahrenheit	Celsius Network (WholeCo, Includes Non-Mining Assets)	Hoboken, NJ	N/A	N/A
5/4/2023	BlockQuarry	Blockchain Energy Services (WholeCo, Includes Non-Mining Assets) $^{(2)}$	Cheyenne, WY	\$1	\$200
4/11/2023	Bitfarms	Baie-Comeau, Quebec Hydro Power Facility	Baie-Comeau, Canada	\$2	\$82
2/7/2023	Hut 8 Mining	U.S. Bitcoin Corp (WholeCo, Mining Only) $^{(3)}$	Medicine Hat, AB / Drumheller, AB / Niagara Falls, NY / Kearney, NB / Granbury, TX / King Mountain TX	\$495	\$678
1/27/2023	Akerna	Gryphon Digital Mining (WholeCo, Mining Only)	New York	\$125	\$4,456
1/12/2023	Evergreen Sustainable Enterprises (Cryptorica)	Toro Energía Sociedad Anonima (WholeCo, Includes Non-Mining Assets) <sup>(2)</sup>	Alajuela, Costa Rica	\$3	\$3,438
12/28/2022	Galaxy Digital Holdings	Helios Facility of Argo Blockchain	Dickens County, TX	\$65	\$361

Source: FactSet; Pitchbook; Public filings, Cohen & Company Capital Markets intelligence

Note: For acquisitions of mining facility only, target locations indicate the location of mining operation. For acquisitions of WholeCo with non-mining assets, target locations indicate company headquarters

(1) Multiple based on total expansion capacity of 400MW (2) Acquisition includes substantial non-Bitcoin mining operations or assets (3) Merger of equals. Deal value shown for USBTC based on USBTC's 50% pro forma ownership of the combined entity with a market capitalization of \$990M



# **Bitcoin Mining Transactions Since June 2017 (cont'd)**

Date	Buyer	Target	Target Location	Deal Value (\$M)	EV / MW (\$K)
12/1/2022	U.S. Bitcoin Corp	Certain Assets of Compute North	King Mountain, TX	\$222	\$793
11/22/2022	Foundry Digital	Certain Assets of Compute North	North Sioux City, SD / Big Springs, TX / Minden, NE	\$14	\$824
11/1/2022	Generate Capital	Certain Assets of Compute North	Wolf Hollow, TX / Kearney, NE	\$106	\$265
10/12/2022	Crusoe Energy Systems	Great American Mining (WholeCo, Includes Non-Mining Assets)	Dickinson, ND	N/A	N/A
9/9/2022	CleanSpark	Certain Assets of Mawson Infrastructure Group	Dalton, GA	\$43	\$531
8/18/2022	Vinanz	Certain Assets of of Valereum	Nebraska	\$1	N/A
8/9/2022	CleanSpark	Certain Assets of Waha Technologies	Washington, GA	\$16	\$450
4/24/2022	American Premium Water	CloudXchange DataCentre (WholeCo, Mining Only)	Singapore / Malaysia / TX, USA	\$46	N/A
2/17/2022	Redivider Blockchain	EnergyX (WholeCo, Includes Non-Mining Assets)	College Station, TX	N/A	N/A
1/31/2022	Advanced Mining Group	Vbit Technologies (WholeCo, Mining Only)	United States, Canada, Kazakhstan	\$105	N/A
11/29/2021	Windmill	KingHash (WholeCo, Includes Non-Mining Assets)	Singapore	N/A	N/A
11/9/2021	Bitfarms	Hydro Power Facility	Moses Lake, WA	\$27	\$1,112
9/27/2021	Northern Data	Bitfield (WholeCo, Mining Only) <sup>(1)</sup>	Amsterdam, Netherlands	\$355	N/A
8/24/2021	Blockstream	Spondoolies (WholeCo, Includes Non-Mining Assets)	Ness Ziona, Israel	N/A	N/A
8/14/2021	Britannia Mining	Bullet Blockchain (WholeCo, Mining Only)	Aktobe, Kazakhstan	N/A	N/A
7/6/2021	TRON Group	American Crypto Systems (WholeCo, Mining Only)	Boise Valley, ID	N/A	N/A
6/4/2021	The9	Montcrypto (WholeCo, Includes Non-Mining Assets)	Calgary, Canada	N/A	N/A
4/8/2021	Riot Blockchain	Whinstone (WholeCo, Mining Only)	Rockdale, TX	\$651	\$2,169
4/5/2021	500.com (BIT Mining)	Bee Computing (WholeCo, Includes Non-Mining Assets)	Hong Kong, Hong Kong	\$100	N/A
4/1/2021	Future Fintech Group	Nanjing Ribensi Electronic Technology (WholeCo, Mining Only)	Sichuan Province, China	\$1	N/A
2/10/2021	LUXXFOLIO Holdings	WestBlock Capital (WholeCo, Mining Only)	New Mexico	\$4	\$293
12/30/2020	Wize Pharma	Cosmos Capital (Mawson Infrastructure Group) (WholeCo, Includes Non-Mini	ng Assets) Sydney, Australia	\$66	N/A
12/10/2020	CleanSpark	ATL Data Centers (WholeCo, Includes Non-Mining Assets)	College Park, GA	\$26	\$1,315
11/23/2020	HIVE Blockchain Technologies	GPU.one (WholeCo, Mining Only)	New Brunswick, Canada	\$19	\$374
10/7/2020	Argo Blockchain	Certain Assets of GPU.one	Quebec, Canada	\$14	\$696
3/30/2020	HIVE Blockchain Technologies	9376-9974 Quebec (Subsidiary of Cryptologic) (WholeCo, Mining Only)	Quebec, Canada	\$4	\$123
11/18/2019	Northern Data	Whinstone US (WholeCo, Mining Only)	Netherlands, Louisiana, Texas	\$135	\$676
3/26/2018	HIVE Blockchain Technologies	Kolos Norway (WholeCo, Mining Only)	Ballangen, Norway	\$12	\$409
1/14/2018	Blockchain Mining	Backbone Hosting Solutions (WholeCo, Mining Only)	Quebec, Canada	\$437	N/М
11/1/2017	Riot Blockchain	Kairos Global Technology (WholeCo, Mining Only) <sup>(1)</sup>	Miami Beach, FL	\$12	N/A
6/14/2017	HIVE Blockchain Technologies	Certain Assets of Genesis Mining	Reykjanes, Iceland	\$45	N/M
Median					\$454



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