

A wireframe globe on the left side of the slide, composed of a network of blue lines forming a spherical shape. The globe is set against a dark, starry background. The lines are interconnected, creating a mesh-like structure that represents a global network or data flow.

August 16th, 2024

Cohen & Company Capital Markets:

BTC MINING MARKET DATA

Market Performance – Key Assets and Indices

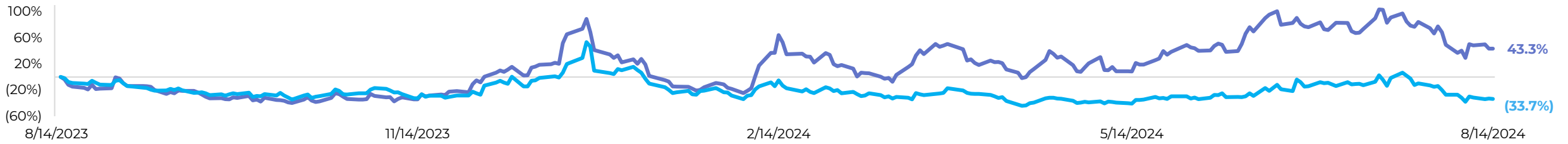
Asset / Index	Ticker	Price / Level	% 52-Wk	% Change						
				7 Days	30 Days	1 Year	MTD	QTD	YTD	
Natural Resources										
Natural Gas (Henry Hub)	HHGAS	\$2.22	65.6%	19.8%	4.5%	(16.4%)	13.6%	0.3%	(13.4%)	
Bitcoin Network										
Hashprice (\$/PH/Day)	NA	\$42.98	22.6%	4.0%	(16.1%)	(39.8%)	(5.2%)	(10.9%)	(54.0%)	
Network Hashrate (EH/s)	NA	691	95.2%	19.1%	14.5%	54.8%	9.3%	15.2%	48.5%	
Transaction Fees as % of Reward	NA	1.7%	0.6%	(23.0%)	(37.5%)	1.0%	(19.8%)	(58.6%)	(90.1%)	
Digital Assets										
Bitcoin	BTC	\$57,613.00	78.8%	(6.8%)	(11.1%)	97.5%	(11.7%)	(8.3%)	28.5%	
Ethereum	ETH	\$2,570.00	63.1%	(4.2%)	(26.3%)	40.7%	(19.8%)	(25.2%)	9.2%	
Solana	SOL	\$144.00	71.2%	(0.8%)	(2.7%)	472.8%	(16.3%)	(1.7%)	31.8%	
Ripple	XRP	\$0.56	78.4%	(9.0%)	4.5%	(7.9%)	(5.9%)	17.8%	(10.4%)	
Indices										
S&P 500	SPX	5,543.22	97.8%	4.2%	(1.6%)	24.9%	1.8%	1.2%	16.9%	
NASDAQ Composite	COMP	17,594.50	94.4%	5.6%	(4.8%)	29.1%	2.3%	(1.6%)	19.2%	
Valkyrie BTC Miners ETF	WGMI	\$17.40	65.0%	(5.8%)	(31.0%)	31.2%	(13.7%)	(24.6%)	(0.5%)	
Market Volatility Index	VIX	15.23	39.5%	(36.0%)	16.1%	(7.5%)	(18.1%)	24.6%	15.4%	
Gold	GoldCOMP	\$2,456.27	99.4%	1.2%	1.4%	29.2%	0.4%	5.3%	19.3%	
Oil	CL00	\$78.16	83.4%	2.6%	(4.6%)	(3.5%)	2.4%	(6.3%)	11.1%	
IG Corp Bond	LQD	\$110.86	99.6%	1.6%	2.1%	6.1%	1.2%	4.5%	0.9%	
HY Corp Bond	HYG	\$78.59	100.0%	0.8%	0.8%	5.4%	0.8%	2.4%	1.9%	
LT US Treasury	TLT	\$97.10	96.6%	1.9%	4.6%	2.7%	1.9%	8.0%	(1.2%)	
Real Yields										
5Y TIPS	DFII5	1.8%	69.5%	(2.7%)	(6.7%)	(15.1%)	1.1%	(16.3%)	2.3%	
10Y TIPS	DFII10	1.8%	71.4%	(3.7%)	(8.2%)	(4.8%)	0.6%	(16.7%)	3.4%	

LTM Public Miner Performance

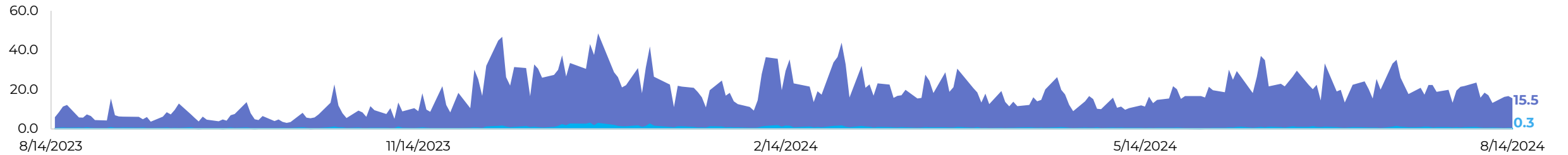
TRADING PERFORMANCE: LARGE VS. SMALL SCALE MINERS

■ Large-Scale Miners ■ Small-Scale Miners

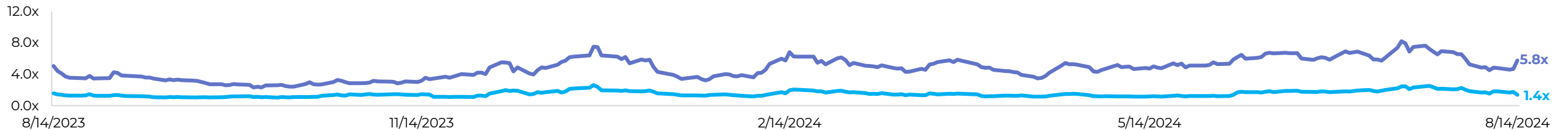
Share Price Performance (%)



Trading Volume (M)



Valuation (EV / 24E Revenue)



Source: FactSet data as of August 14, 2024; Public Filings

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

Bitcoin Miner ATM Registrations Since 2020
























Filing Date	Issuer	ATM Size (\$M)	Market Cap at Filing (\$M)	% of Market Cap	Gross Spread
8/9/2024	Riot Platforms Inc	750	2,522	30%	3.0%
7/9/2024	Applied Digital Corp	125	1,046	12%	3.0%
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:		348	1,256	45%	3.0%
Median:		225	698	30%	3.0%

Source: FactSet; Bloomberg; Public filings

Over \$5.1B Raised through ATM, ELOC and PIPE by Public Miners in 2024

<i>\$M as of 08/14/2024</i>	2024 Public Markets Activity			Total
Ticker	ATM	ELOC	PIPE	ATM + ELOC + PIPE
RIOT	\$577.0	-	-	\$577.0
MARA	\$997.9	-	\$300.0	\$1,297.9
BTDR	-	\$50.8	\$322.5	\$373.3
CORZ	-	-	\$460.0	\$460.0
APLD	\$23.1	-	\$215.0	\$238.1
NB2	-	-	-	-
CIFR	\$160.4	-	-	\$160.4
CLSK	\$916.5	-	-	\$916.5
HUT	-	-	\$150.0	\$150.0
WULF	\$189.3	-	-	\$189.3
HIVE	\$58.6	-	-	\$58.6
IREN	\$339.1	-	-	\$339.1
BITF	\$174.5	-	-	\$174.5
BTBT	\$48.2	-	-	\$48.2
SDIG	-	-	-	-
ARBK	-	-	\$18.4	\$18.4
BTCM	-	-	-	-
SAI	-	-	-	-
SLNH	-	-	\$30.0	\$30.0
GREE	-	-	\$26.0	\$26.0
SATO	-	-	-	-
GRDI	-	-	-	-
GRYP	\$0.8	-	-	\$0.8
DMG	-	-	-	-
FUFU	-	-	\$77.1	\$77.1
Total	\$3,485.3	\$50.8	\$1,598.9	\$5,135.0

Common Stock Comparison - Bitcoin Mining Companies Operating Metrics

Company Name	EV (\$M)	Mkt. Cap Cap (\$M)	Share Price (\$)	Share Price % Change			EV / Current Metrics				EV / Projected Metrics					
				% 52-Wk	MTD	YTD	Prop Hashrate (EH/s)	Ann. BTC Production ⁽¹⁾	Capacity (MW)	Hashspread ⁽²⁾ (\$/PH/Day)	2024E Prop. Hashrate (EH/s)	2025E Prop. Hashrate (EH/s)	2024E Revenue	2025E Revenue	2024E EBITDA	2025E EBITDA
 Marathon Digital ⁽³⁾	\$4,536	\$4,560	\$15.14	44.4%	(27.1%)	(34.2%)	\$142.6	9.3x	\$4.1	43.4x	\$90.7	NA	6.7x	4.9x	8.9x	11.4x
 Core Scientific	3,882	3,649	8.80	71.8	(12.9)	NA	193.1	13.3	4.7	30.9	178.1	NA	7.2	6.0	22.0	14.7
 CleanSpark	2,360	2,892	10.99	44.5	(30.7)	(0.4)	111.3	6.7	5.3	16.6	73.8	47.2	4.8	3.0	9.0	7.1
 Riot Blockchain ⁽⁴⁾	1,833	2,471	7.65	40.8	(22.0)	(50.5)	78.7	7.0	1.9	11.1	50.5	32.4	4.8	2.9	8.8	6.4
 TeraWulf ⁽⁵⁾	1,486	1,567	3.35	51.5	(36.9)	39.6	148.6	10.8	6.1	20.2	111.7	47.9	9.5	5.6	18.9	11.4
 Iris Energy ⁽⁶⁾	1,148	1,408	7.25	46.0	(41.1)	1.4	109.4	7.3	4.4	(0.8)	38.3	28.7	3.1	1.5	6.9	4.1
 Cipher Mining ⁽⁷⁾	1,074	1,385	3.65	45.7	(22.0)	(11.6)	123.5	8.5	4.0	14.6	79.6	30.7	6.7	3.4	15.0	6.6
 Northern Data ⁽⁸⁾	1,282	1,361	23.34	64.7	1.7	(2.1)	400.7	11.1	2.4	NA	162.3	NA	5.6	2.2	22.3	4.2
 Hut 8 Mining ⁽⁹⁾	1,374	1,147	10.97	52.0	(35.3)	(17.8)	249.9	18.5	1.8	NA	NA	NA	7.8	6.5	5.3	30.7
 Bitfarms ⁽¹⁰⁾	736	930	2.23	57.0	(11.9)	(23.4)	66.3	4.1	2.4	11.6	35.1	21.0	3.2	1.5	8.9	2.9
 BitDeer ⁽¹¹⁾	736	911	7.73	52.8	(26.9)	(35.8)	85.6	5.7	0.8	24.3	62.4	12.3	1.8	1.2	7.4	3.8
 Bitfury ⁽¹²⁾	739	815	5.00	27.3	16.6	(54.2)	25.8	2.8	1.1	28.3	NA	NA	NA	NA	NA	NA
 Applied Digital ⁽¹³⁾	648	620	3.84	44.4	(38.1)	(43.0)	NA	NA	2.3	NA	NA	NA	3.1	1.7	10.4	4.6
 Bit Digital ⁽¹⁴⁾	185	346	2.90	55.0	(23.7)	(31.4)	75.2	4.3	2.7	25.6	30.8	NA	1.4	0.9	2.8	2.5
 Hive ⁽¹⁵⁾	139	309	2.81	49.0	(20.2)	(38.0)	28.4	1.7	1.0	5.6	23.2	NA	1.2	0.7	3.5	1.7
 Argo Blockchain ⁽¹⁶⁾	120	81	1.21	27.2	7.6	(67.6)	44.3	3.5	1.0	40.4	NA	NA	2.2	1.7	38.5	11.9
 DMG	36	60	0.36	62.0	(2.9)	(18.9)	40.5	2.3	0.6	NA	21.4	12.1	1.4	NA	NA	NA
 Stronghold Digital ⁽¹⁷⁾	102	51	2.76	23.8	(27.3)	(62.4)	24.8	1.4	0.8	7.3	NA	NA	1.2	1.1	5.4	13.9
 Soluna ⁽¹⁸⁾	97	34	4.30	48.9	(24.8)	15.8	132.2	8.0	1.3	15.1	NA	NA	NA	NA	NA	NA
 BIT Mining	12	24	4.15	59.7	(3.5)	(17.7)	218.5	2.5	NA	NA	NA	NA	NA	NA	NA	NA
 SAITech Limited	17	20	0.84	51.0	(8.5)	(29.3)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
 Greenidge Generation	78	20	1.83	19.8	(38.0)	(72.7)	100.7	1.9	0.6	NA	NA	NA	1.2	1.4	9.8	NM
 SATO Technologies ⁽¹⁹⁾	10	9	0.18	29.5	(21.8)	(57.7)	18.5	1.3	0.5	NA	NA	NA	0.9	NA	NA	NA
Median					(22.0)	(30.4)	100.7	5.7	1.9	16.6	62.4	29.7	3.1	1.7	8.9	6.5

Source: FactSet as of August 14, 2024. Mining operating metrics as of July 2024



Self-Mining and Hosting


























Self-Mining Only



Hosting Only

(1) Assumes price of \$59,000 per Bitcoin and production figure annualized based on July 2024 production (2) Hashspread calculated as hashspread * implied operating capacity (fleet efficiency * hashrate) * 24 hrs * 365 days (3) Electricity price based on CCM estimates (4) Cost of power net of total power credits. Hashrate represents total deployed hashrate. Efficiency as of May 2024. Total capacity represents the combined current capacity of the Rockdale and Corsicana facilities (5) Price of electricity excludes the benefit of demand response or ancillary services revenue. Hashrate represents total installed hashrate. Assues the remaining debt on the balance sheet has been paid off via equity issuance (6) Hashrate represents total installed hashrate (7) Electricity price based on May 2024 presentation (8) Cash on balance sheet based on EUR to USD FX rate as of April 10, 2024 (9) Capacity represents total capacity under management (10) Price of electricity represents the estimated power cost at the Yguazu facility (11) Cost of electricity represents the cost of secured power in Bhutan. Efficiency as of March 31, 2024 (12) Hashrate represents total mining capacity. Bitcoins production based on average daily production for self mining operations. Electricity cost as of June, 2023 (13) MW capacity only includes capacity dedicated towards crypto hosting operations (14) Cost of electricity represents the price Bit Digital pays to its hosting partners for electricity. Bitcoin on balance sheet includes Bitcoin equivalents. Hashrate represents active hashrate (15) Cost of electricity as of Q3, 2023. Hashrate represents total mining capacity. Mining efficiency reflects total fleet efficiency upon the installation of S21 Pro miners in July. Cost of electricity represents the cost of power at the New Brunswick facility in USD (16) Electricity price represents the average cost for 2023 (17) Hashrate represents mining capacity. Power capacity represents the power output of power generating assets (18) Efficiency includes a mix of prop and hosted miners. Capacity includes managed capacity (19) Hashrate represents total installed hashrate

Common Stock Comparison - Bitcoin Mining Companies Operating Metrics

Company Name	Most Current Mining Metrics								Projected Mining Metrics		Financial Metrics					
	Prop. Hashrate (EH/s)	Efficiency (J/TH)	Capacity (MW)	Power Cost (\$/MWh)	Revenue (\$/MWh) (1)	GP Margin (\$/MWh)	Hashspread (\$/PH/Day) (2)	BTC Mined Monthly (#)	2024E Prop. Hashrate (EH/s)	2025E Prop. Hashrate (EH/s)	2024E Rev. Growth	2024E Gross Margin	2024E EBITDA Margin	Total BTC Holdings (#)	Cash on B. Sheet (\$M)	Debt on B. Sheet (\$M)
 Marathon Digital (3)	31.8	25.0	1,100	\$55	\$70	\$15	\$9	692	50.0	NA	73.8%	2.6%	75.7%	20,818	\$556.0	\$626.5
 Core Scientific	20.1	24.1	830	43	73	30	17	411	21.8	NA	7.0	27.5	32.8	NA	496.1	945.1
 CleanSpark	21.2	22.9	446	43	76	33	18	494	32.0	50.0	116.3	51.4	52.7	7,082	126.1	11.0
 Riot Blockchain (4)	23.3	27.7	960	34	63	29	19	370	36.3	56.6	35.3	40.9	54.8	9,704	481.2	0.7
 TeraWulf (5)	10.0	24.6	245	37	71	34	20	195	13.3	31.0	125.3	60.0	50.4	NA	31.8	0.0
 Iris Energy (6)	10.5	24.0	260	707	73	(634)	(365)	222	30.0	40.0	184.3	59.2	44.4	NA	425.3	0.0
 Cipher Mining (7)	8.7	29.0	266	27	60	33	23	178	13.5	35.0	26.6	62.0	44.5	2,270	122.6	0.0
 Northern Data (8)	3.2	NA	538	41	NA	NA	NA	164	7.9	NA	204.1	70.2	25.1	NA	268.4	190.3
 Hut 8 Mining (9)	5.5	NA	762	41	NA	NA	NA	105	NA	NA	61.1	45.5	147.1	9,102	175.5	328.8
 Bitfarms (10)	11.1	25.0	310	44	70	26	16	253	21.0	35.0	55.3	(10.9)	36.5	1,016	138.6	1.7
 BitDeer (11)	8.6	31.7	895	43	55	13	10	181	11.8	60.0	10.7	26.4	24.4	NA	353.9	187.8
 Bitfufu (12)	28.6	22.3	644	74	78	5	3	378	NA	NA	NA	NA	NA	NA	163.7	0.0
 Applied Digital (13)	NA	NA	280	NA	NA	NA	NA	NA	NA	NA	81.1	30.0	29.4	NA	4.4	61.8
 Bit Digital (14)	2.5	28.3	70	50	62	12	8	61	6.0	NA	195.6	44.0	49.1	2,009	33.1	0.0
 Hive (15)	4.9	24.5	140	48	71	23	14	116	6.0	NA	1.5	23.7	34.6	2,533	25.6	20.4
 Argo Blockchain (16)	2.7	32.5	115	50	54	4	3	48	NA	NA	6.1	2.4	5.8	11	12.4	38.2
 DMG	0.9	28.4	60	NA	62	NA	NA	22	1.7	3.0	21.8	49.5	NA	444	1.2	8.9
 Stronghold Digital (17)	4.1	32.0	130	43	55	12	9	100	NA	NA	15.0	47.0	22.0	4	4.9	54.8
 Soluna (18)	0.7	26.0	75	29	67	38	24	17	NA	NA	NA	NA	NA	NA	8.4	16.5
 BIT Mining	0.1	NA	NA	NA	NA	NA	NA	7	NA	NA	NA	NA	NA	NA	3.2	0.0
 SAITech Limited	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.2	0.0
 Greenidge Generation	0.8	28.7	122	78	61	(17)	NM	58	NA	NA	(10.4)	NA	12.5	NA	14.3	68.7
 SATO Technologies (19)	0.6	NA	20	43	NA	NA	NA	11	NA	NA	(10.8)	NA	NA	45	0.7	7.9
Median	5.5	26.0	266	43	67	19	14	164	13.5	38	35.3	44.0	36.5	2,140	33.1	11.0

Source: FactSet as of August 14, 2024. Mining operating metrics as of July 2024

Note: Debt excludes financial and operating leases



Self-Mining and Hosting



Self-Mining Only

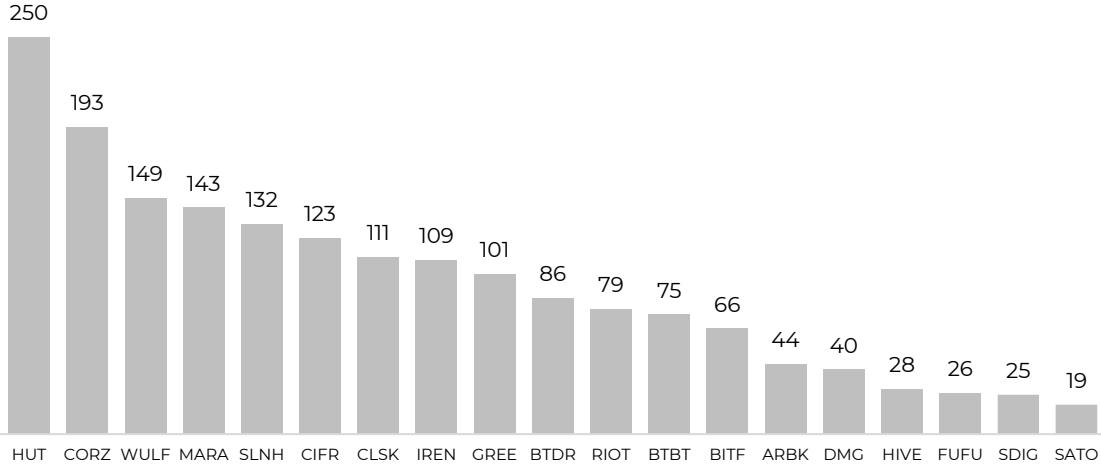


Hosting Only

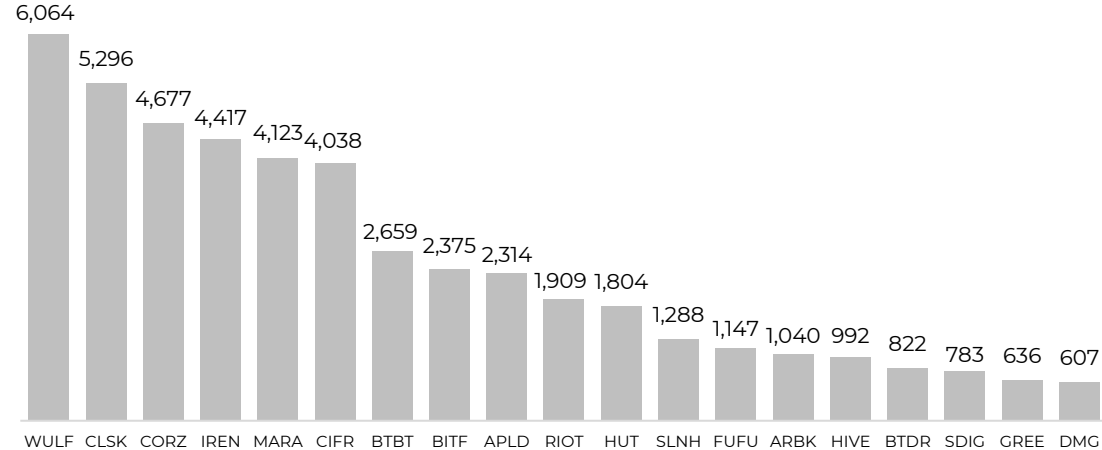
(1) Revenue / MWh calculated as hashprice of \$42.0/PH/day divided by fleet efficiency divided by 24 (2) Hashspread calculated as hashprice of \$42.0/PH/day minus hashcost; hashcost calculated as power cost/MWh *24* fleet efficiency (J/TH) / 1000 (3) Electricity price based on CCM estimates (4) Cost of power net of total power credits. Hashrate represents total deployed hashrate. Efficiency as of May 2024. Total capacity represents the combined current capacity of the Rockdale and Corsicana facilities (5) Price of electricity excludes the benefit of demand response or ancillary services revenue. Hashrate represents total installed hashrate. Assues the remaining debt on the balance sheet has been paid off via equity issuance (6) Hashrate represents total installed hashrate (7) Electricity price based on May 2024 presentation (8) Cash on balance sheet based on EUR to USD FX rate as of April 10, 2024 (9) Capacity represents total capacity under management (10) Price of electricity represents the estimated power cost at the Yguazu facility (11) Cost of electricity represents the cost of secured power in Bhutan. Efficiency as of March 31, 2024 (12) Hashrate represents total mining capacity. Bitcoins production based on average daily production for self mining operations. Electricity cost as of June, 2023 (13) MW capacity only includes capacity dedicated towards crypto hosting operations (14) Cost of electricity represents the price Bit Digital pays to its hosting partners for electricity. Bitcoin on balance sheet includes Bitcoin equivalents. Hashrate represents active hashrate (15) Cost of electricity as of Q3, 2023. Hashrate represents total mining capacity. Mining efficiency reflects total fleet efficiency upon the installation of S21 Pro miners in July. Cost of electricity represents the cost of power at the New Brunswick facility in USD (16) Electricity price represents the average cost for 2023 (17) Hashrate represents mining capacity. Power capacity represents the power output of power generating assets (18) Efficiency includes a mix of prop and hosted miners. Capacity includes managed capacity (19) Hashrate represents total installed hashrate

Trading Multiples

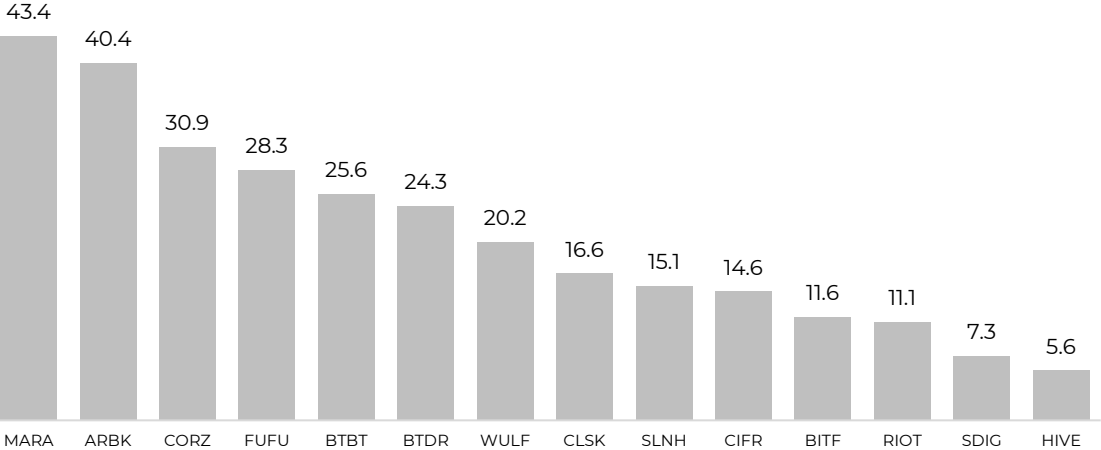
EV / Current Proprietary Hashrate (\$M / EH/s)



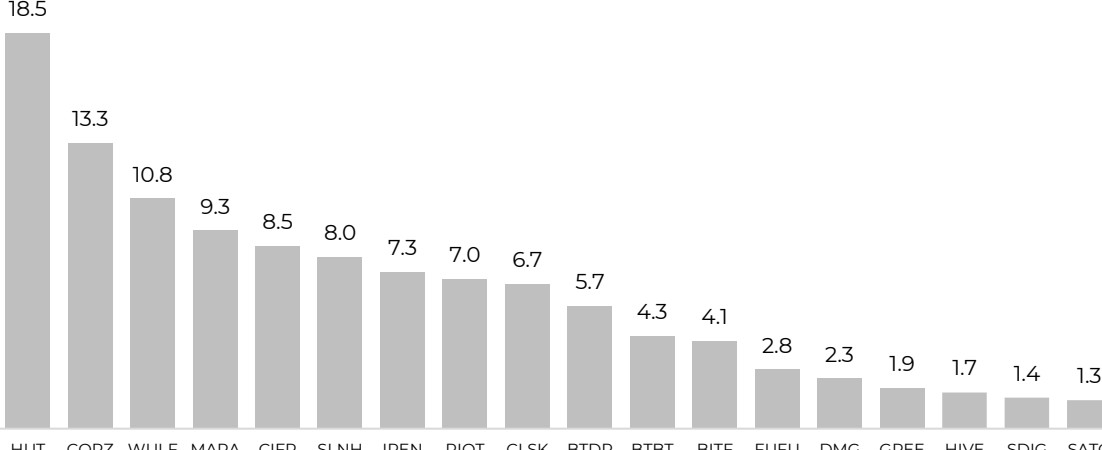
EV / Current Installed Capacity ('000 / MW)



EV / Hashspread⁽¹⁾ (x)



EV / Annualized BTC Production⁽²⁾ (x)



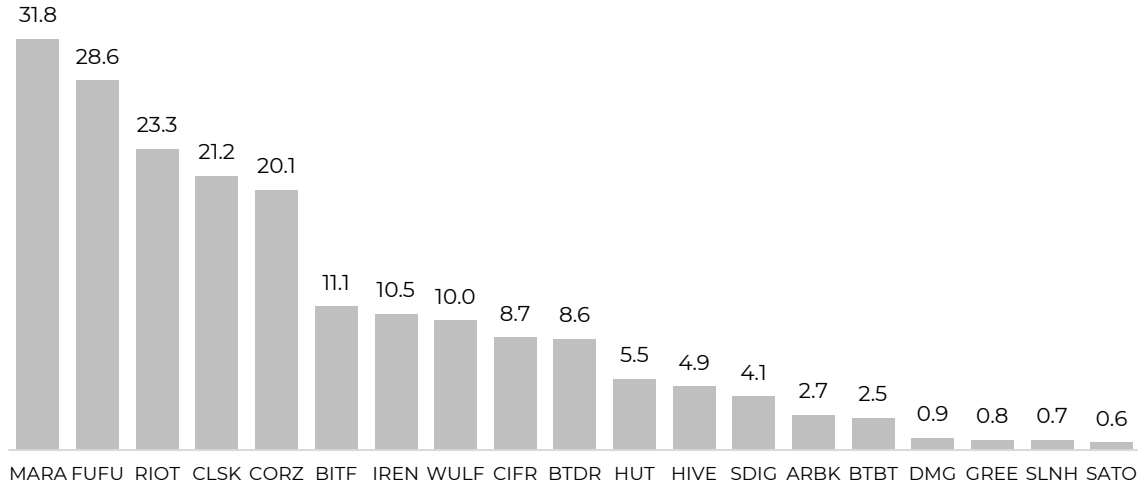
Source: FactSet, investor presentations, press releases and other public filings. Market data as of August 14, 2024. Mining metrics as of July 2024

(1) Hashspread calculated as hashprice of \$42.0/PH/day minus hashcost; hashcost calculated as power cost/MWh *24* fleet efficiency (J/TH) / 1000 (2) Assumes price of \$59,000 per Bitcoin and production figure annualized based on July production

Operating Metrics

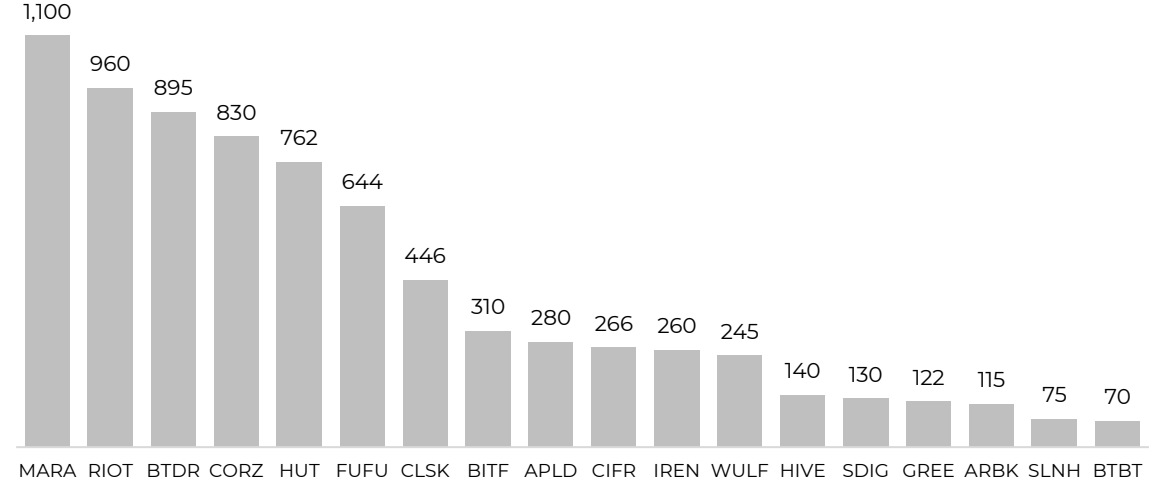
Current Proprietary Hashrate (EH/s)

(EH/s)



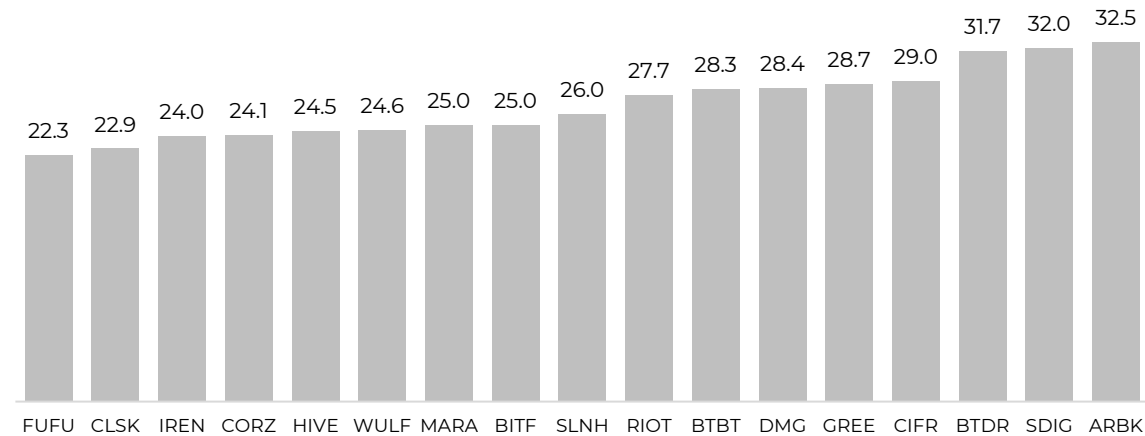
Current Installed Capacity (MW)

(MW)



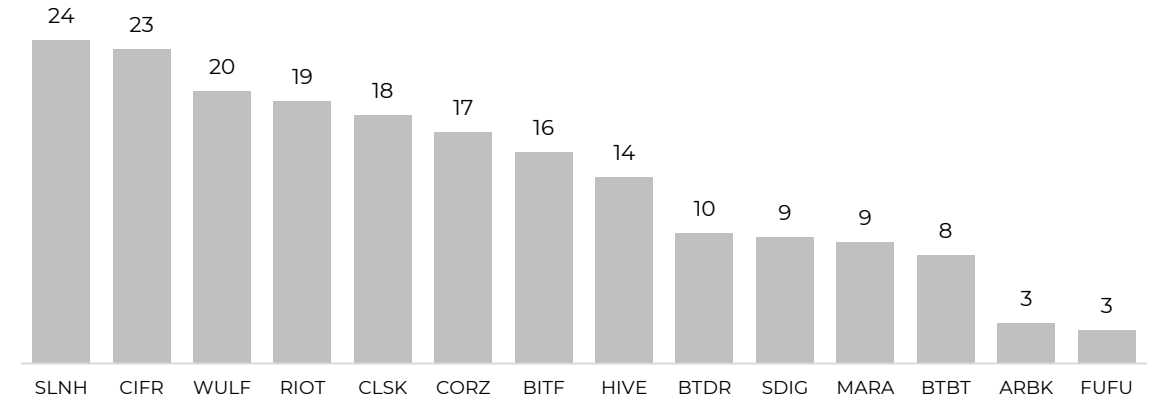
Current Fleet Efficiency (J/TH)

(J/TH)



Hashspread⁽¹⁾

(\$/PH/Day)



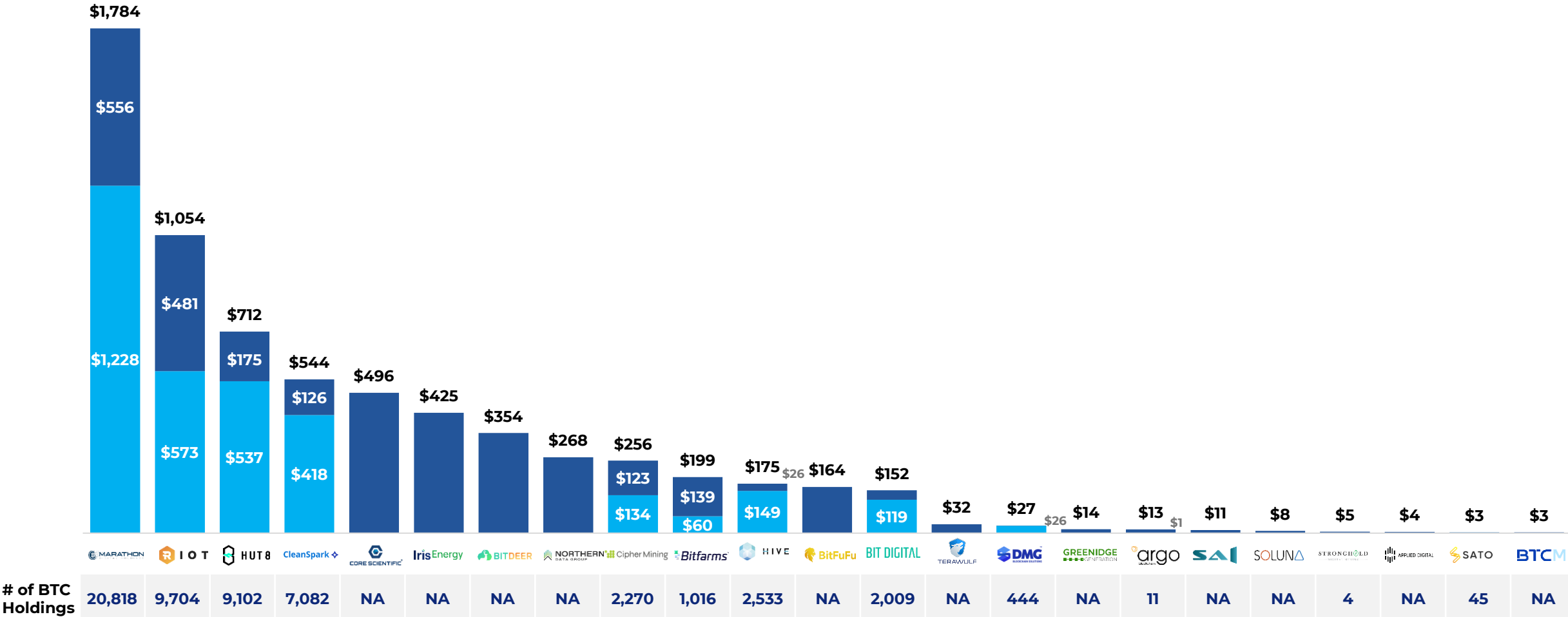
Note: Hut 8 capacity includes capacity under management

Source: FactSet, investor presentations, press releases and other public filings. Market data as of August 14, 2024. Mining metrics as of July 2024

(1) Hashspread calculated as hashprice of \$42.0/PH/day minus hashcost; hashcost calculated as power cost/MWh *24* fleet efficiency (J/TH) / 1000

Cash and Bitcoin Holdings of Bitcoin Miners

■ Cash (\$M)
 ■ BTC (\$M) (Market Value Based on BTC Price of \$59,000)



*NA: Company does not disclose number of BTC

Source: Investor presentations, press releases and other public filings. Market data as of August 14, 2024. Bitcoin on balance sheet as of July 2024

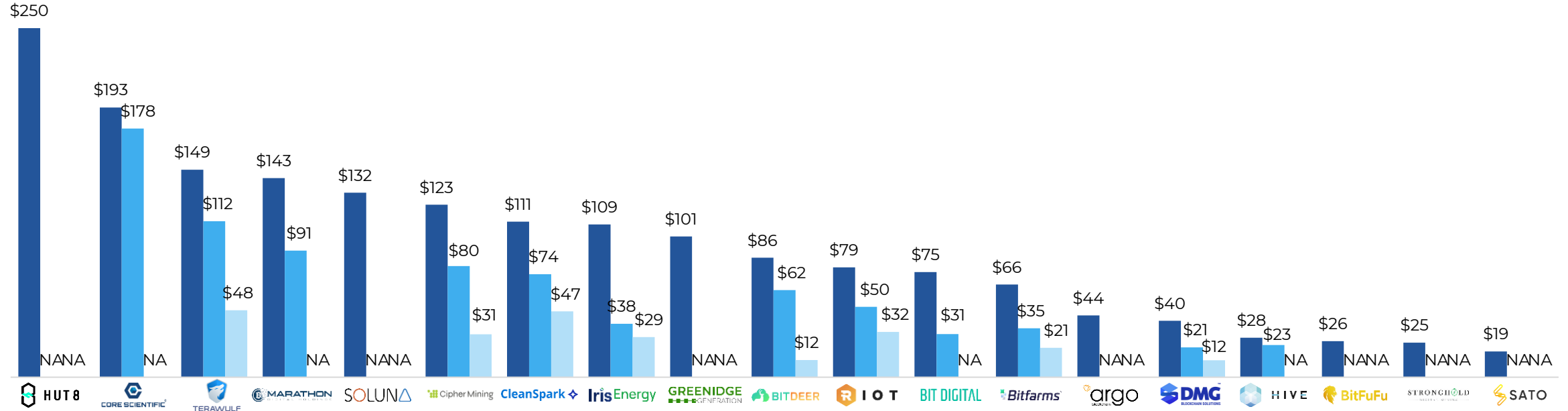
EV / Hashrate Multiples – Bitcoin Miners

(\$M / EH/s)

■ EV / Current Hashrate

■ EV / 24E Hashrate

■ EV / 25E Hashrate



Hashrate (EH/s)

	HUT 8	CORE SCIENTIFIC	TERAWULF	MARATHON DIGITAL	SOLUNA	Cipher Mining	CleanSpark	Iris Energy	GREENIDGE GENERATION	BITDEER	IO T	BIT DIGITAL	Bitfarms	argo	DMG BLOCKCHAIN SOLUTIONS	HIVE	BitFuFu	STRONGHOLD	SATO
Current	5.5	20.1	10.0	31.8	0.7	8.7	21.2	10.5	0.8	8.6	23.3	2.5	11.1	2.7	0.9	4.9	28.6	4.1	0.6
2024E	NA	21.8	13.3	50.0	NA	13.5	32.0	30.0	NA	11.8	36.3	6.0	21.0	NA	1.7	6.0	NA	NA	NA
2025E	NA	NA	31.0	NA	NA	35.0	50.0	40.0	NA	60.0	56.6	NA	35.0	NA	3.0	NA	NA	NA	NA

*NA: Company does not disclose projected Hashrate

Bitcoin Mining Transactions Since June 2017

Date	Buyer	Target	Target Location	Deal Value (\$M)	EV / MW (\$K)
8/13/2024	Cipher Mining	Reveille datacenter site	Cotulla, TX	N/A	N/A
7/31/2024	HIVE Blockchain Technologies	100 MW Site in Paraguay	Paraguay	N/A	N/A
7/23/2024	Riot Platforms	Block Mining	Chicago, IL	\$125	\$2,083
7/9/2024	Hut 8	205MW for a site in West Texas	West Texas	N/A	N/A
6/28/2024	Bitdeer	Monroe County Port Authority	Clarington, Ohio	N/A	N/A
6/27/2024	CleanSpark	GRID Infrastructure	Cincinnati, OH	\$155	\$388 ⁽¹⁾
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) ⁽²⁾	Alajuela, Costa Rica	\$3	\$3,438

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. Not featured in the prior precedent transaction slide (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)
12/28/2022	Galaxy Digital Holdings	Helios Facility of Argo Blockchain	Dickens County, TX	\$65	\$361
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) ⁽¹⁾	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-Mining 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/M
11/1/2017	Riot Blockchain	Kairos Global Technology (WholeCo, Mining Only) ⁽¹⁾	Miami Beach, FL	\$12	N/A
6/14/2017	HIVE Blockchain Technologies	Certain Assets of Genesis Mining	Reykjanes, Iceland	\$45	N/M
Median					\$458

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) Location of operations not disclosed, displaying HQ location

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