A stylized globe on the left side of the slide, composed of a blue wireframe mesh. The globe is partially illuminated from the left, showing a gradient from dark blue to light blue. The background is a dark, starry space with a subtle nebula-like glow in the lower-left quadrant.

September 20th, 2024

Cohen & Company Capital Markets:

BTC MINING MARKET DATA

Market Performance – Key Assets and Indices

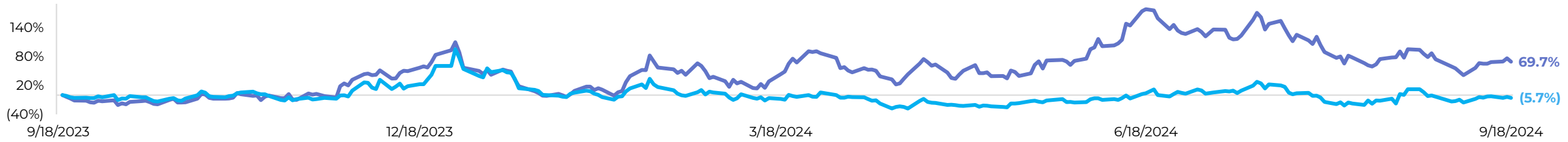
Asset / Index	Ticker	Price / Level	% 52-Wk	% Change						
				7 Days	30 Days	1 Year	MTD	QTD	YTD	
Natural Resources										
Natural Gas (Henry Hub)	HHGAS	\$2.33	69.0%	2.6%	9.9%	(8.3%)	20.7%	5.4%	(9.0%)	
Bitcoin Network										
Hashprice (\$/PH/Day)	NA	\$41.33	21.7%	4.0%	(4.5%)	(36.6%)	0.0%	(14.3%)	(55.8%)	
Network Hashrate (EH/s)	NA	638	85.5%	29.5%	13.3%	51.4%	(14.5%)	6.2%	37.0%	
Transaction Fees as % of Reward	NA	1.6%	0.5%	(17.4%)	(25.5%)	(66.1%)	11.5%	(60.9%)	(90.7%)	
Digital Assets										
Bitcoin	BTC	\$61,245.00	83.8%	6.7%	3.0%	128.9%	3.6%	(2.5%)	36.6%	
Ethereum	ETH	\$2,356.60	57.9%	0.5%	(10.5%)	43.9%	(6.7%)	(31.4%)	0.2%	
Solana	SOL	\$131.41	64.9%	(3.1%)	(8.2%)	599.6%	2.1%	(10.3%)	20.3%	
Ripple	XRP	\$0.58	81.6%	9.2%	(2.2%)	16.2%	3.0%	22.6%	(6.6%)	
Indices										
S&P 500	SPX	5,618.26	99.1%	1.2%	0.2%	26.2%	(0.5%)	2.6%	18.5%	
NASDAQ Composite	COMP	17,573.30	94.2%	1.0%	(1.7%)	28.2%	(0.8%)	(1.7%)	19.0%	
Valkyrie BTC Miners ETF	WGMI	\$17.37	64.9%	2.8%	(6.4%)	64.3%	(2.2%)	(24.8%)	(0.7%)	
Market Volatility Index	VIX	18.23	47.3%	3.1%	24.4%	30.2%	21.5%	49.2%	38.1%	
Gold	GoldCOMP	\$2,558.89	99.1%	1.9%	2.2%	32.3%	2.2%	9.7%	24.3%	
Oil	CL00	\$69.88	74.6%	3.8%	(5.1%)	(22.9%)	(5.0%)	(16.2%)	(0.7%)	
IG Corp Bond	LQD	\$113.25	99.6%	0.3%	1.6%	8.3%	1.8%	6.7%	3.0%	
HY Corp Bond	HYG	\$79.92	100.0%	0.8%	1.2%	7.0%	0.7%	4.2%	3.6%	
LT US Treasury	TLT	\$99.59	98.3%	(1.0%)	1.7%	6.5%	3.2%	10.8%	1.3%	
Real Yields										
5Y TIPS	DFII5	1.5%	57.5%	(3.9%)	(17.7%)	(31.3%)	(12.4%)	(30.7%)	(15.3%)	
10Y TIPS	DFII10	1.6%	62.7%	(1.9%)	(11.7%)	(19.4%)	(10.2%)	(26.9%)	(9.2%)	

LTM Public Miner Performance

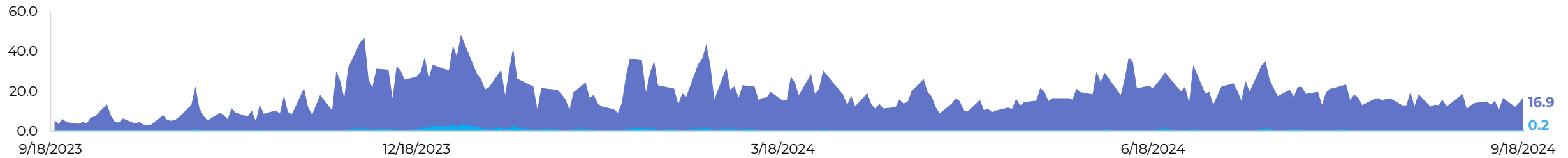
TRADING PERFORMANCE: LARGE VS. SMALL SCALE MINERS

■ Large-Scale Miners ■ Small-Scale Miners

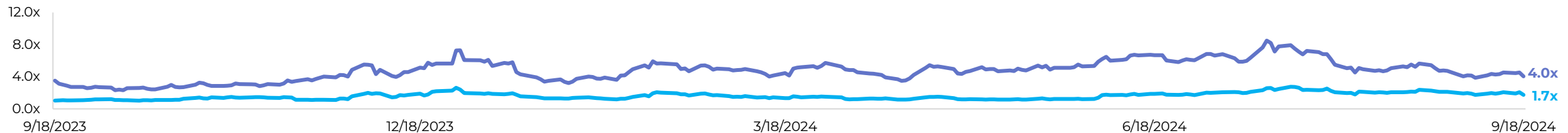
Share Price Performance (%)



Trading Volume (M)



Valuation (EV / 24E Revenue)



Source: FactSet data as of September 18, 2024; Public Filings

Note: Large Miners include MARA, CLSK, CORZ, RIOT, WULF, IREN, BITF, CIFR; 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
9/3/2024	Cipher Mining Inc	600	1,073	56%	3.0%
9/3/2024	Cipher Mining Inc	297	1,053	28%	3.0%
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:		353	1,245	45%	3.0%
Median:		250	774	30%	3.0%

Source: FactSet; Bloomberg; Public filings

~\$5.9B Raised through ATM, ELOC and PIPE/Convertibles by Public Miners in 2024

\$M as of 09/18/2024	2024 Public Markets Activity			Total
Ticker	ATM	ELOC	PIPE / Convertibles	ATM + ELOC + PIPE + Convertibles
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	\$49.3	-	\$425.0	\$474.3
NB2	-	-	-	-
CIFR	\$160.4	-	-	\$160.4
CLSK	\$916.5	-	\$0.0	\$916.5
HUT	-	-	\$150.0	\$150.0
WULF	\$189.3	-	-	\$189.3
HIVE	\$63.6	-	-	\$63.6
IREN	\$752.4	-	-	\$752.4
BITF	\$174.5	-	-	\$174.5
BTBT	\$113.9	-	-	\$113.9
SDIG	-	-	-	-
ARBK	-	-	\$18.4	\$18.4
BTCM	-	-	-	-
SAI	-	-	-	-
SLNH	-	\$9.3	\$30.0	\$39.3
GREE	-	-	\$26.0	\$26.0
SATO	-	-	-	-
GRDI	-	-	-	-
GRYP	\$0.8	-	-	\$0.8
DMG	-	-	-	-
FUFU	-	-	\$77.1	\$77.1
Total	\$3,995.5	\$60.1	\$1,808.9	\$5,864.5

Common Stock Comparison - Bitcoin Mining Companies Trading 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 (\$/PH/Day) ⁽²⁾	2024E Prop. Hashrate (EH/s)	2025E Prop. Hashrate (EH/s)	2024E Revenue	2025E Revenue	2024E EBITDA	2025E EBITDA
 Core Scientific ⁽³⁾	\$5,174	\$4,941	\$12.03	96.4%	19.2%	NA	\$252.4	19.0x	\$6.2	42.1x	\$237.3	NA	9.6x	6.8x	29.0x	22.8x
 Marathon Digital ⁽⁴⁾	3,318	4,704	15.34	45.0	(5.5)	(0.3)	94.3	6.5	3.0	22.7	66.4	NA	5.0	3.6	6.9	8.3
 Riot Blockchain ⁽⁵⁾	1,239	2,356	7.17	38.2	(10.3)	(53.7)	52.7	5.1	1.3	5.4	34.1	21.9	3.3	2.0	6.0	4.4
 CleanSpark	1,663	2,258	8.84	35.8	(25.3)	(19.9)	73.6	4.6	3.0	12.7	44.9	33.3	3.6	2.3	7.3	5.1
 Northern Data ⁽⁶⁾	1,778	1,857	29.57	82.0	10.8	(2.1)	555.7	14.3	3.3	NA	225.1	NA	7.7	3.0	30.7	5.8
 TeraWulf ⁽⁷⁾	1,532	1,636	4.06	62.4	0.7	69.2	153.2	10.9	6.3	26.2	115.2	49.4	9.9	5.5	19.8	10.9
 Iris Energy ⁽⁸⁾	1,089	1,493	7.72	49.0	(3.1)	8.0	68.1	5.8	3.6	(1.9)	36.3	21.8	3.2	2.0	8.0	4.6
 Applied Digital ⁽⁹⁾	1,465	1,357	6.07	70.2	51.4	(9.9)	NA	NA	5.2	NA	NA	NA	6.7	4.3	28.6	15.2
 Hut 8 Mining ⁽¹⁰⁾	1,300	1,072	11.02	52.2	(4.5)	(17.4)	232.1	19.6	1.7	NA	NA	NA	7.9	7.6	5.2	14.4
 Cipher Mining	718	1,035	2.90	36.3	(24.5)	(29.8)	78.9	5.9	2.7	9.0	53.2	20.5	4.5	2.3	9.8	4.4
 BitDeer	856	1,031	7.12	48.6	10.2	(27.8)	99.5	6.8	1.0	27.9	72.5	14.3	2.2	1.4	8.6	4.5
 Bitfarms ⁽¹¹⁾	714	908	1.96	50.1	(18.0)	(32.6)	63.2	4.0	2.3	11.1	34.0	20.4	3.4	1.4	9.0	2.5
 Bitfufu ⁽¹²⁾	701	777	4.77	26.0	(3.0)	(56.3)	28.4	NA	1.3	31.1	NA	NA	NA	NA	NA	NA
 Bit Digital	208	397	2.87	54.5	(2.4)	(32.2)	85.5	5.1	2.5	22.2	34.6	NA	1.6	1.1	2.6	2.3
 Hive	207	370	2.99	52.1	(2.0)	(34.0)	39.1	2.4	1.6	6.9	34.5	15.3	1.8	1.0	6.4	2.6
 Stronghold Digital ⁽¹³⁾	131	80	4.31	37.3	65.1	(41.0)	32.6	2.7	1.0	9.6	NA	NA	1.6	1.3	20.1	6.2
 Argo Blockchain ⁽¹⁴⁾	105	77	1.18	26.5	(4.8)	(68.4)	38.8	3.6	0.9	35.4	NA	NA	2.1	1.8	95.2	8.4
 DMG	41	60	0.35	59.3	(5.1)	(23.0)	43.5	2.6	0.7	NA	24.0	13.6	1.6	NA	NA	NA
 BIT Mining	13	25	4.15	59.7	(3.5)	(17.7)	228.3	2.4	NA	NA	NA	NA	NA	NA	NA	NA
 Greenidge Generation	77	19	1.77	19.1	(3.8)	(73.6)	96.5	1.8	0.6	NA	25.7	NA	1.2	1.4	9.8	NM
 SAITech Limited	15	18	0.73	44.2	(16.1)	(38.7)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
 Soluna ⁽¹⁵⁾	92	16	2.86	32.5	(38.1)	(28.5)	140.4	8.6	1.2	16.5	NA	NA	NA	NA	NA	NA
 SATO Technologies	10	8	0.16	25.8	(12.4)	(63.0)	18.6	1.4	0.5	NA	NA	NA	0.9	1.2	NA	NA
Median					(3.8)	(29.1)	78.9	5.1	1.7	16.5	40.6	20.5	3.3	2.0	9.0	5.4

Source: FactSet as of September 18, 2024. Mining operating metrics as of August 2024



Self-Mining and Hosting


























Self-Mining Only



Hosting Only

(1) Assumes price of \$63,500 per Bitcoin and production figure annualized based on August 2024 production (2) Hashspread calculated as hashspread * implied operating capacity (fleet efficiency * hashrate) * 24 hrs * 365 days (3) Cash and debt on balance sheet figures reflect issuance of convertible note (4) Cash and debt on balance sheet figures reflect issuance of convertible note (5) 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 (6) Cash on balance sheet based on EUR to USD FX rate as of April 10, 2024 (7) Price of electricity excludes the benefit of demand response or ancillary services revenue. Hashrate represents total installed hashrate. Assumes the remaining debt on the balance sheet has been paid off via equity issuance (8) Hashrate represents total installed hashrate (9) MW capacity only includes capacity dedicated towards crypto hosting operations (10) Capacity represents energy capacity under management. Cash and debt on balance sheet figures reflect issuance of convertible notes (11) Price of electricity represents the estimated power cost at the Yguazu facility (12) Hashrate represents total mining capacity. Bitcoins production based on average daily production for self mining operations. Electricity cost as of June, 2023 (13) Hashrate represents mining capacity (14) Electricity price represents the average cost for 2023 (15) Efficiency includes a mix of prop and hosted miners

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)
 Core Scientific ⁽³⁾	20.5	24.8	830	\$43	\$71	\$28	\$16	358	21.8	NA	7.3%	29.9%	33.1%	NA	\$556.1	\$1,005.1
 Marathon Digital ⁽⁴⁾	35.2	23.2	1100	55	75	20	11	673	50.0	NA	72.7	(1.4)	71.6	25,945	299.5	626.5
 Riot Blockchain ⁽⁵⁾	23.5	24.5	960	26	71	45	27	322	36.3	56.6	35.3	37.9	54.8	10,019	481.2	0.7
 CleanSpark	22.6	22.7	557	48	77	29	16	478	37.0	50.0	107.1	54.7	48.9	7,558	126.1	11.0
 Northern Data ⁽⁶⁾	3.2	NA	538	41	NA	NA	NA	164	7.9	NA	206.4	70.2	25.1	NA	268.4	190.3
 TeraWulf ⁽⁷⁾	10.0	24.6	245	44	71	27	16	184	13.3	31.0	124.5	59.2	49.7	NA	26.6	0.0
 Iris Energy ⁽⁸⁾	16.0	18.0	300	329	97	(232)	(100)	245	30.0	50.0	159.3	57.1	40.5	NA	404.6	0.0
 Applied Digital ⁽⁹⁾	NA	NA	280	NA	NA	NA	NA	NA	NA	NA	83.0	11.8	23.4	NA	4.4	61.8
 Hut 8 Mining ⁽¹⁰⁾	5.6	NA	762	32	NA	NA	NA	87	NA	NA	50.5	44.4	150.5	9,105	325.5	478.8
 Cipher Mining	9.1	27.8	266	27	63	36	24	160	13.5	35.0	25.1	61.6	46.2	2,284	122.6	0.0
 BitDeer	8.6	31.6	895	43	55	13	10	166	11.8	60.0	7.3	27.0	25.1	NA	401.3	210.3
 Bitfarms ⁽¹¹⁾	11.3	25.0	310	44	70	26	16	233	21.0	35.0	45.0	(19.0)	37.6	1,103	138.6	1.7
 Bitfufu ⁽¹²⁾	24.7	22.3	522	74	78	5	3	NA	NA	NA	NA	NA	NA	NA	155.0	0.0
 Bit Digital	2.4	27.9	84	47	63	16	11	53	6.0	NA	189.0	45.8	61.8	1,858	59.0	0.0
 Hive	5.3	23.0	128	48	76	28	16	112	6.0	13.5	0.9	26.2	28.5	2,567	25.6	20.4
 Stronghold Digital ⁽¹³⁾	4.0	32.0	130	43	55	12	9	63	NA	NA	5.8	71.3	8.2	4	4.9	54.8
 Argo Blockchain ⁽¹⁴⁾	2.7	32.5	115	50	54	4	3	38	NA	NA	(0.3)	7.6	2.2	10	12.4	41.2
 DMG	0.9	28.4	60	NA	62	NA	NA	21	1.7	3.0	18.7	48.7	NA	453	1.2	8.9
 BIT Mining	0.1	NA	NA	NA	NA	NA	NA	7	NA	NA	NA	NA	NA	NA	3.2	0.0
 Greenidge Generation	0.8	28.7	122	73	61	(12)	NM	55	3.0	NA	(10.4)	NA	12.5	NA	10.3	69.2
 SAI Tech Limited	NA	26.0	NA	NA	67	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.2	0.0
 Soluna ⁽¹⁵⁾	0.7	26.0	75	30	67	37	23	14	NA	NA	NA	NA	NA	NA	9.6	20.9
 SATO Technologies	0.6	NA	20	36	NA	NA	NA	10	NA	NA	(6.6)	NA	NA	43	0.3	7.2
Median	5.6	25.5	280	44	69	23	16	136	13.4	35	35.3	44.4	37.6	2,071	59.0	11.0

Source: FactSet as of September 18, 2024. Mining operating metrics as of August 2024

Note: Debt excludes financial and operating leases



Self-Mining and Hosting



Self-Mining Only

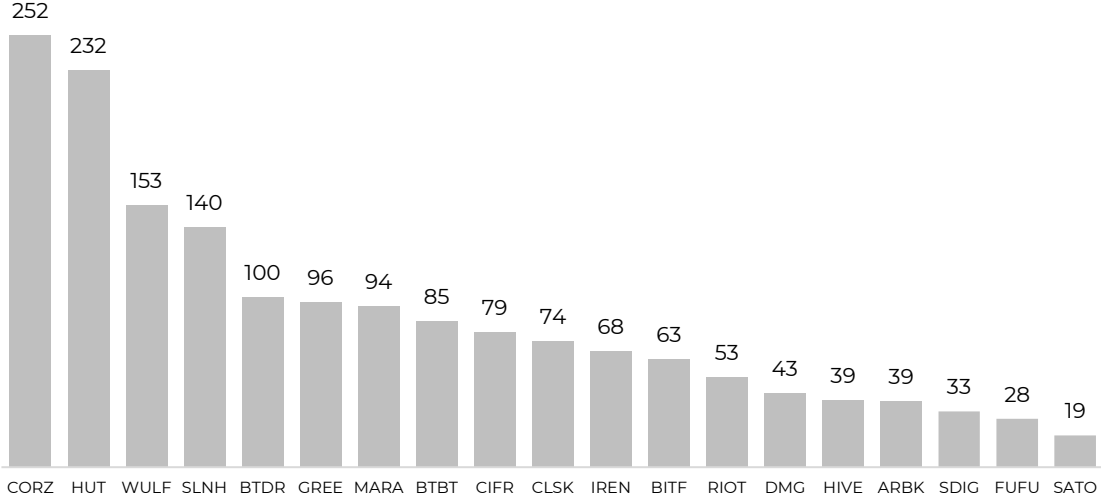


Hosting Only

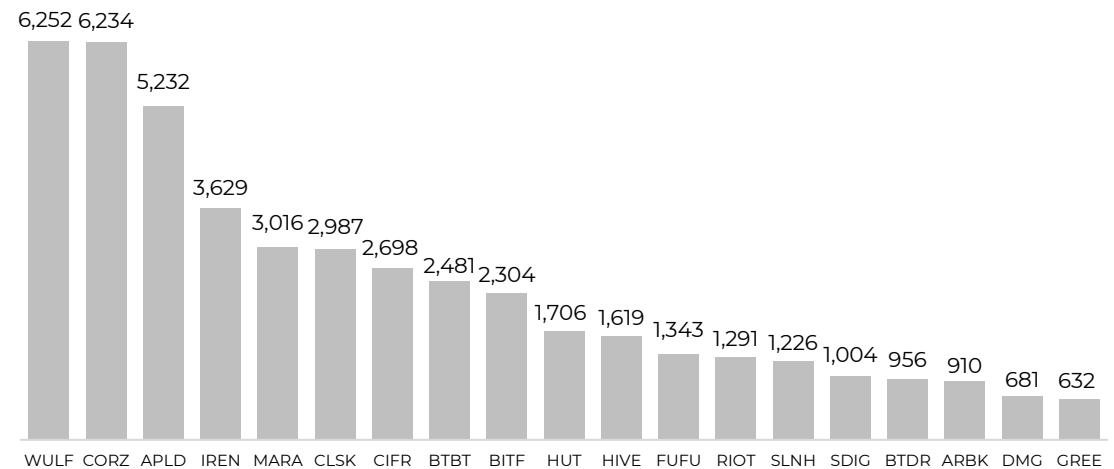
(1) Revenue / MWh calculated as hashprice of \$42.0/PH/day divided by fleet efficiency divided by 24 (2) Hashspread calculated as hashprice of \$42.0/PH/day minus hashcost; hashcost calculated as power cost/MWh *24* fleet efficiency (J/TH) /1000 (3) Cash and debt on balance sheet figures reflect issuance of convertible note (4) Cash and debt on balance sheet figures reflect issuance of convertible note (5) 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 (6) Cash on balance sheet based on EUR to USD FX rate as of April 10, 2024 (7) Price of electricity excludes the benefit of demand response or ancillary services revenue. Hashrate represents total installed hashrate. Assumes the remaining debt on the balance sheet has been paid off via equity issuance (8) Hashrate represents total installed hashrate (9) MW capacity only includes capacity dedicated towards crypto hosting operations (10) Capacity represents energy capacity under management. Cash and debt on balance sheet figures reflect issuance of convertible notes (11) Price of electricity represents the estimated power cost at the Yguazu facility (12) Hashrate represents total mining capacity. Bitcoins production based on average daily production for self mining operations. Electricity cost as of June, 2023 (13) Hashrate represents mining capacity (14) Electricity price represents the average cost for 2023 (15) Efficiency includes a mix of prop and hosted miners

Trading Multiples

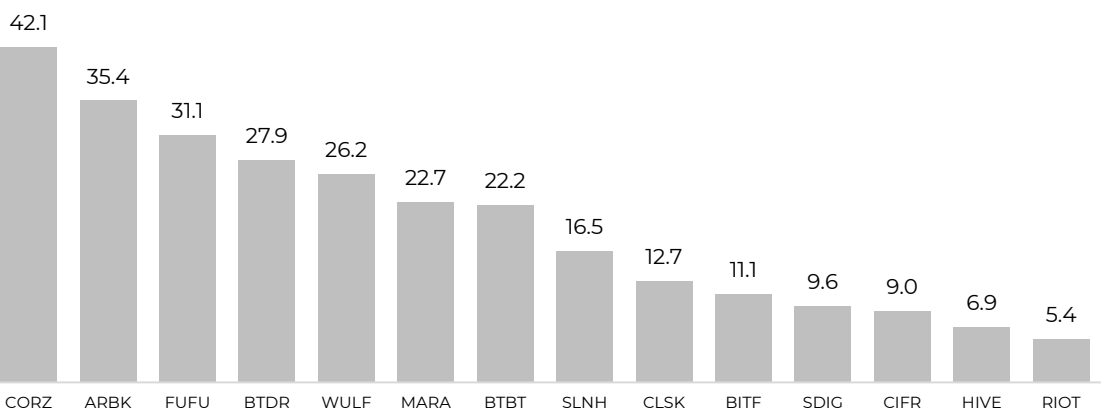
EV / Current Proprietary Hashrate (\$M / EH/s)



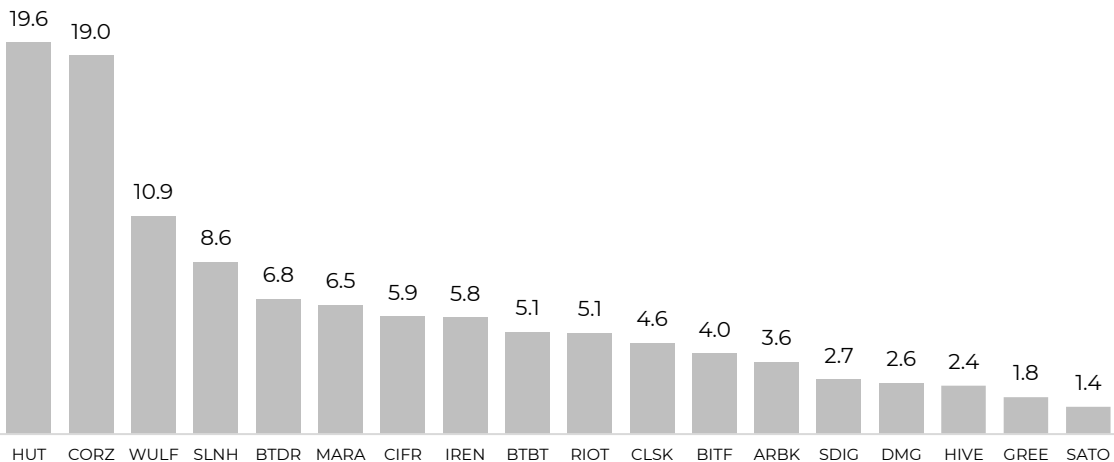
EV / Current Installed Capacity ('000 / MW)



EV / Hashspread⁽¹⁾ (x)



EV / Annualized BTC Production⁽²⁾ (x)



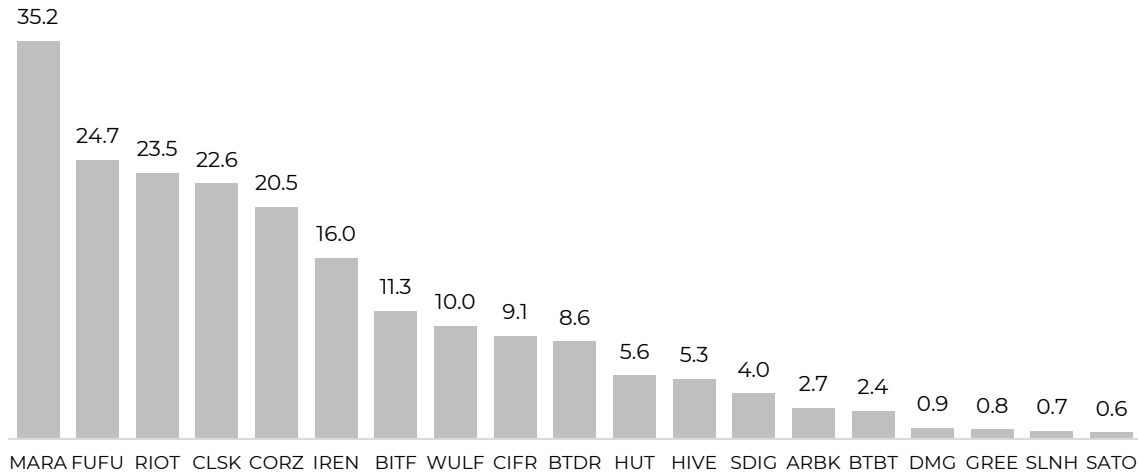
Source: FactSet, investor presentations, press releases and other public filings. Market data as of September 18, 2024. Mining metrics as of August 2024

(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 \$63,500 per Bitcoin and production figure annualized based on August production

Operating Metrics

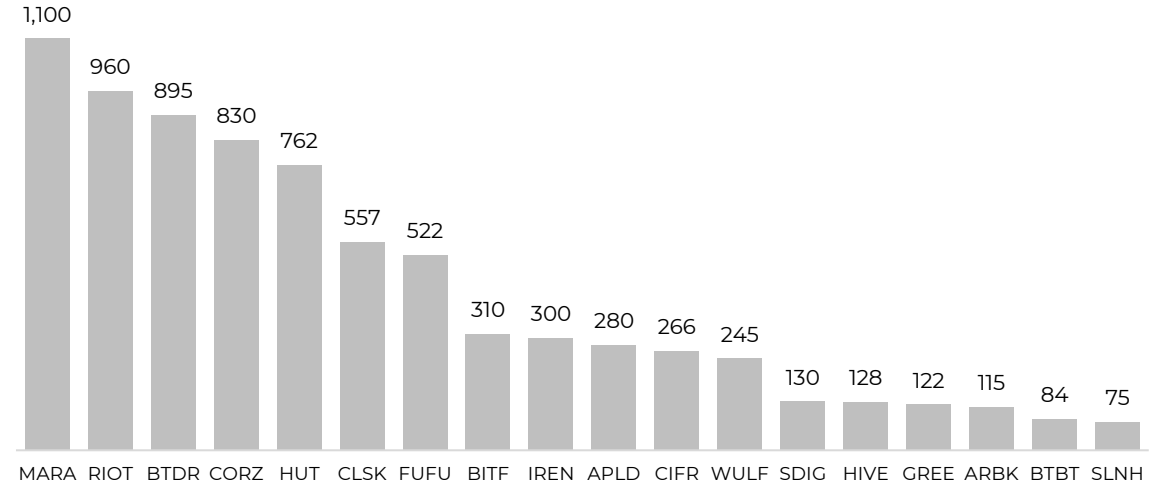
Current Proprietary Hashrate (EH/s)

(EH/s)



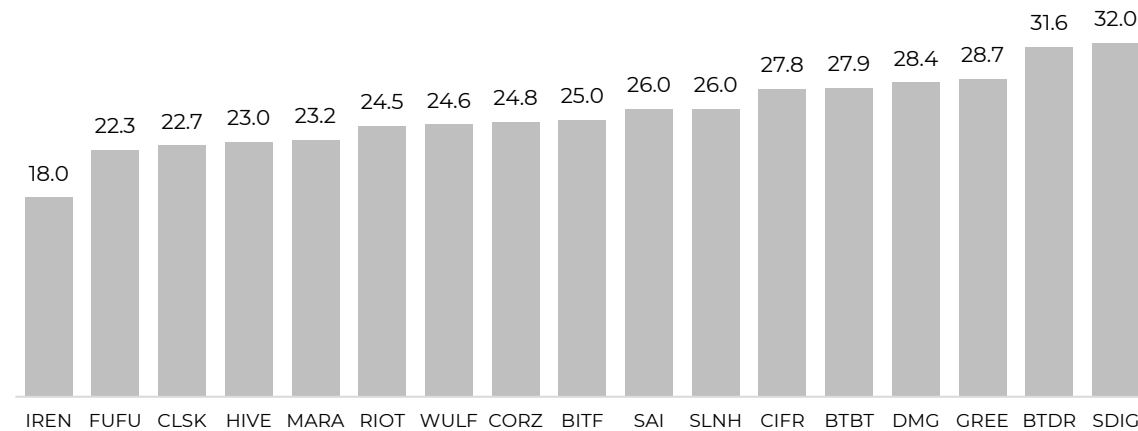
Current Installed Capacity (MW)

(MW)



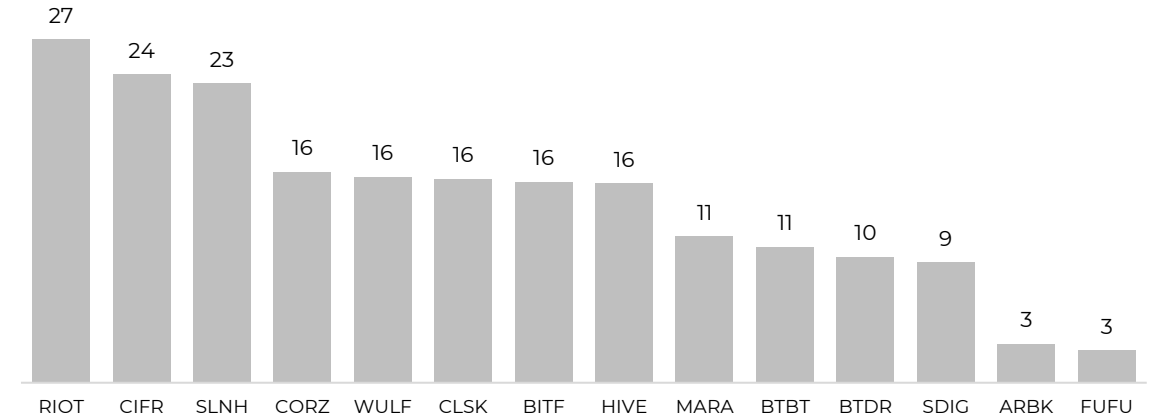
Current Fleet Efficiency (J/TH)

(J/TH)



Hashspread⁽¹⁾

(\$/PH/Day)



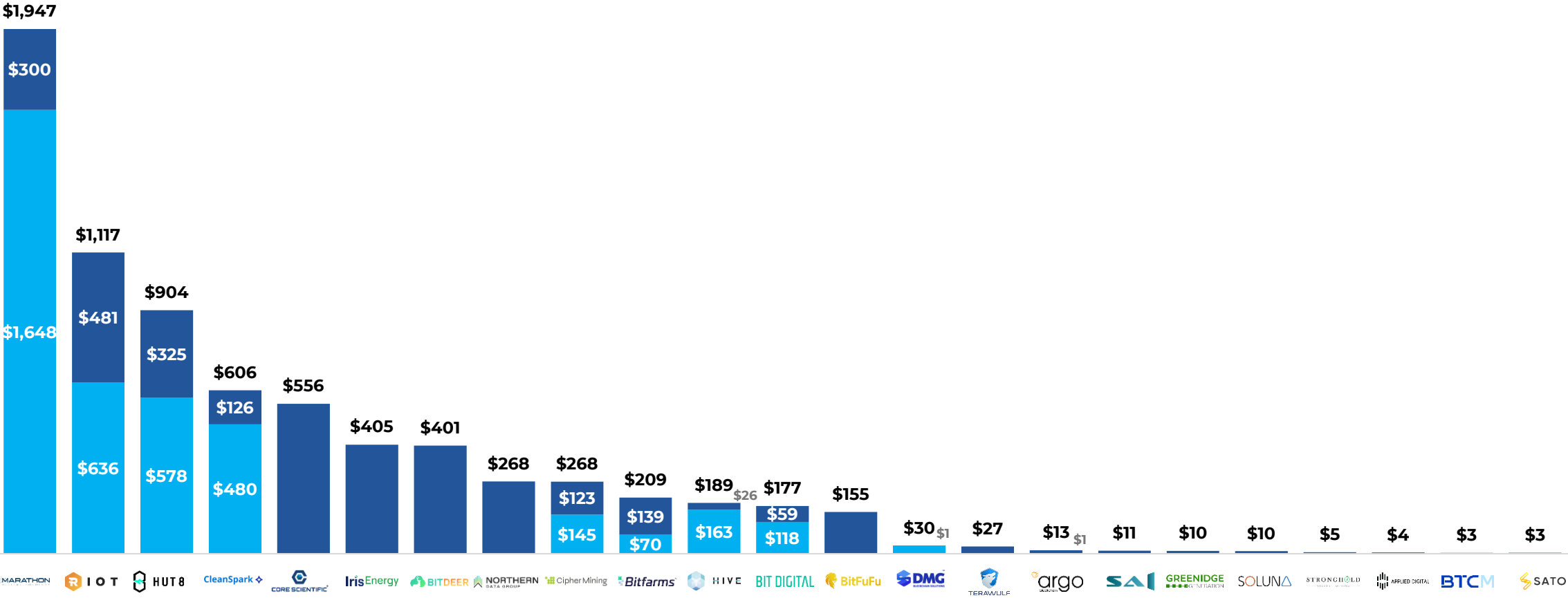
Note: Hut 8 capacity includes capacity under management

Source: FactSet, investor presentations, press releases and other public filings. Market data as of September 18, 2024. Mining metrics as of August 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 \$63,500)

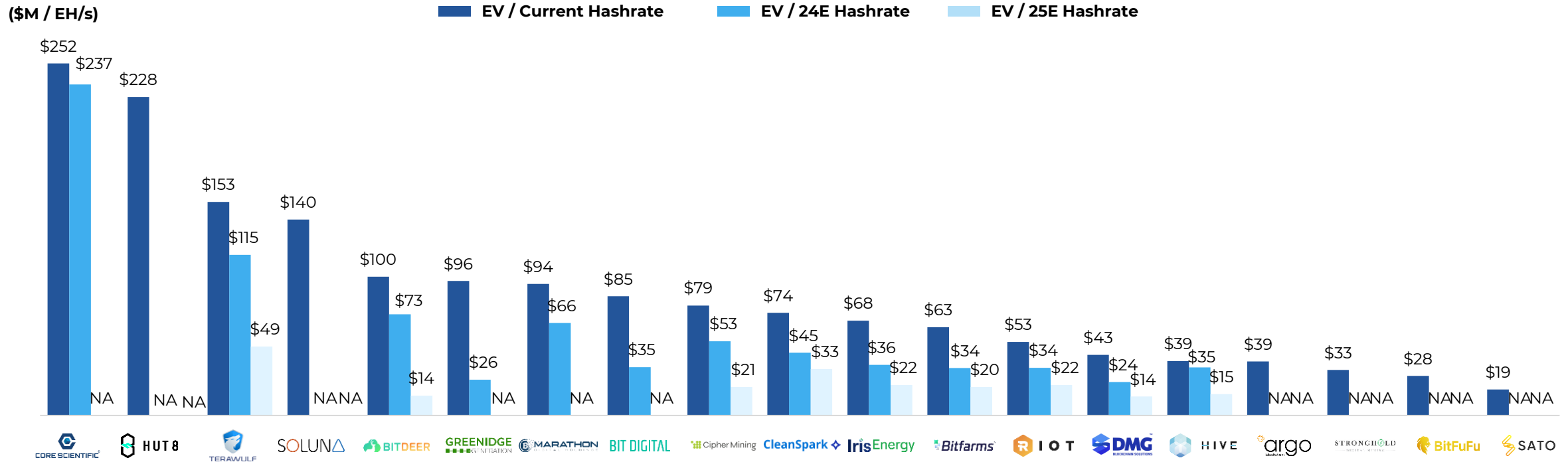


# of BTC Holdings	25,945	10,019	9,105	7,558	NA	NA	NA	NA	2,284	1,103	2,567	1,858	NA	453	NA	10	NA	NA	NA	4	NA	NA	43
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*NA: Company does not disclose number of BTC

Source: Investor presentations, press releases and other public filings. Market data as of September 18, 2024. Bitcoin on balance sheet as of August 2024

EV / Hashrate Multiples – Bitcoin Miners



	Hashrate (EH/s)																			
Current	20.5	5.6	10.0	0.7	8.6	0.8	35.2	2.4	9.1	22.6	16.0	11.3	23.5	0.9	5.3	2.7	4.0	24.7	0.6	
2024E	21.8	NA	13.3	NA	11.8	3.0	50.0	6.0	13.5	37.0	30.0	21.0	36.3	1.7	6.0	NA	NA	NA	NA	
2025E	NA	NA	31.0	NA	60.0	NA	NA	NA	35.0	50.0	50.0	35.0	56.6	3.0	13.5	NA	NA	NA	NA	

*NA: Company does not disclose projected Hashrate

Recent Larger Financings by Bitcoin Miners

Closed Date	Issuer	Gross Proceeds (\$M)	Size as a % of Market Cap	Financing Type	Investor	Maturity	Interest	Conversion Price / Premium	Warrants / % Coverage	Warrant Terms	Expected Dilution %	Δ% in Stock Since Closing
9/5/2024	Applied Digital Corporation	\$160	31.4%	Common Stock	Nvidia & Related Companies	-	-	Priced at 9/5 Market Price	-	-	31.4%	+71.6%
8/30/2024	Applied Digital Corporation	\$50	8.7%	Convertible Preferred Stock	Yorkville Advisors	-	8.00%	\$7.00; 92%	-	-	4.5%	+45.5%
8/20/2024	Bitdeer Technologies Group	\$173	18.0%	Convertible Unsecured Senior Notes	Syndicated	8/15/2029	8.50%	\$8.55; 35%	-	-	13.2%	(1.3%)
8/19/2024	Core Scientific	\$460	18.8%	Convertible Unsecured Senior Notes	Syndicated	9/1/2029	3.00%	\$11.00; 30%	-	-	16.2%	+15.1%
8/14/2024	Marathon Digital Holdings	\$300	6.0%	Convertible Unsecured Senior Notes	Syndicated	9/1/2031	2.125%	\$18.89; 11%	-	-	5.4%	(0.3%)
7/1/2024	Hut 8 Corporation	\$150	13.4%	Convertible Notes	Coatue	7/1/2029	8.00%	\$16.34; 45%	-	-	10.1%	(23.7%)
6/7/2024	Applied Digital Corporation	\$125	20.7%	Promissory Note w/ \$75M Accordion	CIM Group	6/7/2027	12.00%	-	9.3M; 7.4% Warrant Coverage	\$4.80 Strike; 5 Years	2.2%	+13.0%
5/24/2024	Applied Digital Corporation	\$43	7.6%	Convertible Unsecured Debentures	Syndicated	5/24/2025	None	Floating; Lower of \$8 and 95% VWAP	-	-	4.3% at \$8 Conversion Price; 11.4% at \$3 Floor Price	+30.8%
3/27/2024	Applied Digital Corporation	\$50	11.0%	Convertible Unsecured Debentures	Syndicated	4/8/2025	None	Floating; Lower of \$6 and 95% VWAP	-	-	7.8% at \$6 Conversion Price; 15.7% at \$3 Floor Price	+28.4%
11/28/2023	Bitfarms Limited	\$44	13.7%	Common Stock + Warrants	Syndicated	-	-	Priced at a 15% Discount to Market Price	22.2M; 50% Warrant Coverage	\$1.17 Strike; 3 Years	24.0%	+91.5%

Source: SPAC Insider, FactSet.

Data as of September 19, 2024

Note: Includes deals >\$40M in size; treasury stock method utilized to calculate warrant share dilution

Bitcoin Mining Transactions Since June 2017

Date	Buyer	Target	Target Location	Deal Value (\$M)	EV / MW (\$K)
9/17/2024	CleanSpark	Two Bitcoin Mining Sites and Associated Land	Clinton, MS	\$6	N/A
9/16/2024	Soluna Holdings	Power and Land Acquisition for Rosa Data Center	Texas	N/A	N/A
9/11/2024	CleanSpark	Seven Bitcoin Mining Facilities	Knoxville, TN	\$28	N/A
8/27/2024	Cipher Mining	300 MW Data Center Site in West Texas	West Texas	\$68	\$225 ⁽¹⁾
8/21/2024	Bitfarms	Stronghold Digital Mining	Kennerdell, PA	\$175	\$1,061 ⁽²⁾
8/20/2024	Gryphon Digital Mining	2.9 MW of bitcoin mining operations	Louisiana	\$2	\$517
8/13/2024	Cipher Mining	Reveille datacenter site	Cotulla, TX	N/A	N/A
8/13/2024	Cipher Mining	Reveille datacenter site	Cotulla, TX	N/A	N/A
7/23/2024	Riot Platforms	Block Mining	Kentucky	\$93	\$597 ⁽³⁾
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, OH	N/A	N/A
6/27/2024	CleanSpark	GRIID Infrastructure	Cincinnati, OH	\$155	\$1,047 ⁽⁴⁾
6/18/2024	CleanSpark	Five New Bitcoin Mining Facilities in Georgia	Georgia	\$26	\$430
6/13/2024	Bitfarms	120MW site in Sharon, Pennsylvania	Sharon, PA	\$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, TX	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, ND	N/A	N/A
3/5/2024	Undisclosed Buyer	Mirabel Facility of Argo Blockchain	Mirabel, Canada	\$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) ⁽⁵⁾	Cheyenne, WY	\$1	\$200
4/11/2023	Bitfarms	Baie-Comeau, Quebec Hydro Power Facility	Baie-Comeau, Canada	\$2	\$82

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) Deal value represents cash payment only, excluding the variable fee of \$3/MWh for the initial five years after the energization of the site (2) Bitfarms acquired 165 MW of currently operational power capacity. Accounting for an additional 307 MW of contracted near-term capacity, the acquisition price per MW is ~\$371k / MW (3) Multiple based on 155MW developable at Commerce Drive and Blue Steel sites. Excludes earnout (4) Multiple based on capacity of 148MW. Includes capacity at Lenoir City as well as at the new facility in Tennessee (5) Acquisition includes substantial non-Bitcoin mining operations or assets

Bitcoin Mining Transactions Since June 2017 (cont'd)

Date	Buyer	Target	Target Location	Deal Value (\$M)	EV / MW (\$K)
2/7/2023	Hut 8 Mining	U.S. Bitcoin Corp (WholeCo, Mining Only) ⁽¹⁾	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 Energia Sociedad Anonima (WholeCo, Includes Non-Mining Assets) ⁽²⁾	Alajuela, Costa Rica	\$3	\$3,438
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) ⁽³⁾	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) ⁽³⁾	Miami Beach, FL	\$12	N/A
6/14/2017	HIVE Blockchain Technologies	Certain Assets of Genesis Mining	Reykjanes, Iceland	\$45	N/M
Median					\$491

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) 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 (2) Acquisition includes substantial non-Bitcoin mining operations or assets (3) Location of operations not disclosed, displaying HQ location

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