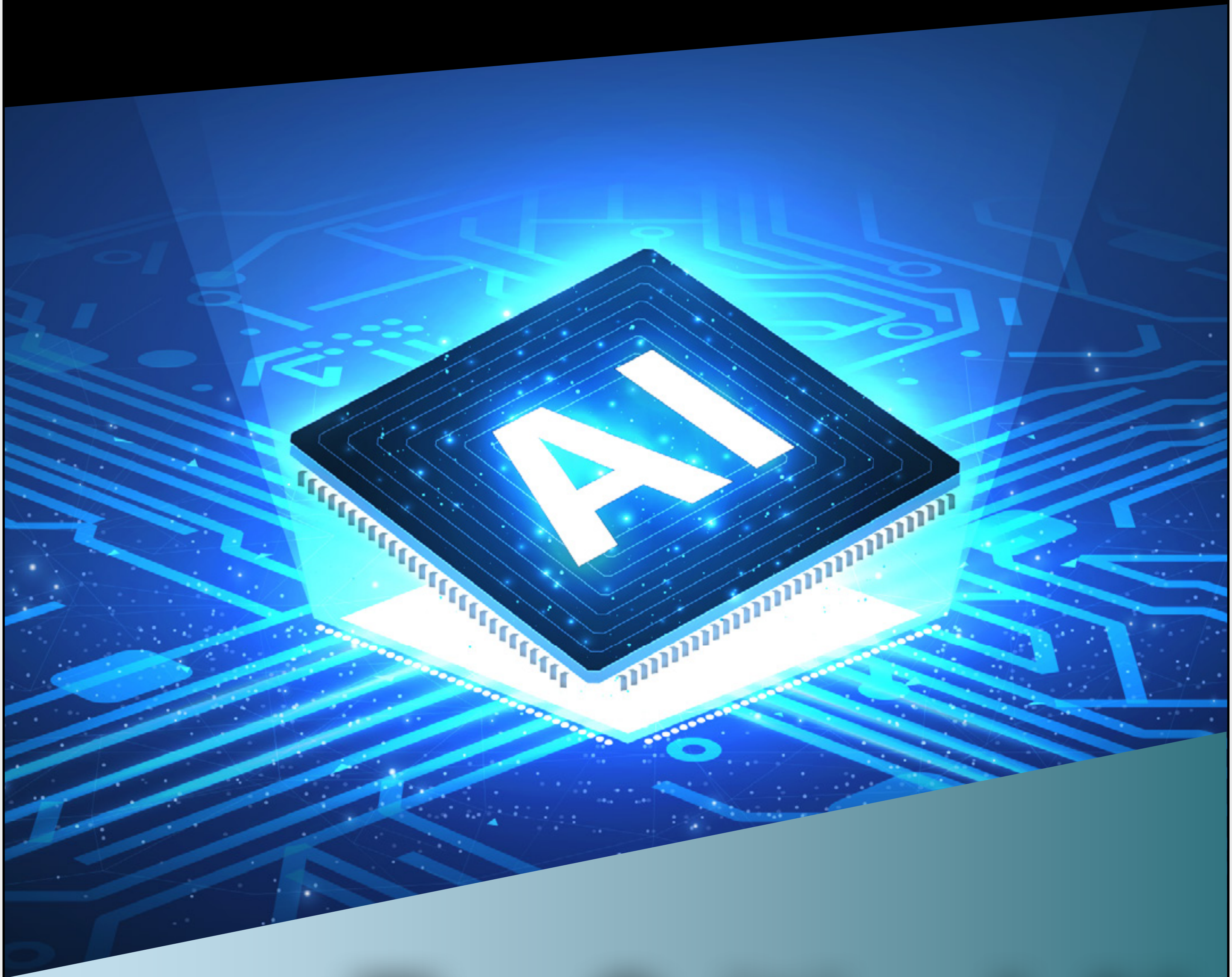
Southbank Growth Advantage

A SOUTHBANK INVESTMENT RESEARCH PUBLICATION



The Critical AI Component: A $25 Trillion Opportunity

28/08/2024

Important Risk Warnings:

Advice in Southbank Growth Advantage (previous name: Small Cap Investigator) does not constitute a personal recommendation. Any advice should be considered in relation to your own circumstances, risk tolerance and investment objectives. Before investing you should consider carefully the risks involved, including those described below. If you have any doubt as to suitability or taxation implications, seek independent financial advice.

General - Your capital is at risk when you invest, never risk more than you can afford to lose. Past performance and forecasts are not reliable indicators of future results. Bid/offer spreads, commissions, fees and other charges can reduce returns from investments. There is no guarantee dividends will be paid.

Small cap shares - Shares recommended may be small company shares. These can be relatively illiquid meaning they are hard to trade and can have a large bid/offer spread. If you need to sell soon after you bought, you might get back less that you paid. This makes them riskier than other investments. Small companies may not pay a dividend.

Overseas shares – Some recommendations may be denominated in a currency other than sterling. The return from these may increase or decrease as a result of currency fluctuations. Dividends from overseas companies may be taxed at source in the country of issue.

Taxation - Profits from share dealing are a form of capital gain and subject to taxation. Tax treatment depends on individual circumstances and may be subject to change in the future.

Editors: Sam Volkering and James Allen. Editors or contributors may have an interest in shares recommended. Information and opinions expressed do not necessarily reflect the views of other editors/contributors of Southbank Investment Research Limited.

Full details of our complaints procedure, privacy policy and terms and conditions can be found at, www.southbankresearch.com.

Southbank Growth Advantage is issued by Southbank Investment Research Ltd. Registered in England and Wales No 9539630. VAT No GB629 7287 94. Registered Office: Basement, 95 Southwark Street, London SE1 0HX.

ISSN 2976-8403

Contact Us: To contact customer services, please call us on 0203 966 4580, Monday to Friday, 10am - 5pm

Southbank Investment Research Ltd is authorised and regulated by the Financial Conduct Authority. FCA No 706697. https://register.fca.org.uk/.

...continued on next page...

The Critical AI Component: A $25 Trillion Opportunity

Sam Volkering, Editor, *Southbank Growth Advantage*

Elon Musk is quite possibly the most impactful, controversial and pioneering person on earth. Aside from having a hand in the creation of PayPal, then Tesla, then SpaceX, then Starlink, then Neuralink, then buying Twitter (now X.com) he's also leading the charge with xAI and its artificial intelligent "brain" Grok.

Recently Elon gave a little insight as to the unbelievable power and hardware needed to help train Grok learn as all artificial intelligent systems need to do.

On a podcast recently Elon said,

> *"Grok was trained on 8,000 A100s running at peak efficiency and Grok's going to get a lot better, by the way, we will be more than doubling our compute every couple months for the next several months."*

The A100s he was talking about are Nvidia's A100 GPUs. These A100s vary in price, but there's a rough estimate that they cost around $10,000 per chip.

So if Grok is trained on 8,000 of them, that's a cool $80 million outlay from the outset.

The other thing is that they will be *doubling their compute* every couple of months!

8,000 becomes 16,000, which becomes 32,000, which then becomes 64,000 pretty quick. Before long Elon will be spending $1 billion on keeping Grok alive!

And that's exactly what he went on to do…

Elon then went on to announce in 2024 that his xAI team had the "most powerful AI training cluster in the world," operating on 100,000 Nvidia H100 GPUs. The H100s are an upgrade from the A100s. And soon they'll be upgraded again to B100s. It's a never-ending cycle.

...continued on next page...

Source: *[Elon Musk via X.com]*

For what it's worth, that's around $3 billion in Nvidia GPUs.

What this is helping people to understand is the immense demand for AI hardware or for what I call "AI-grunt".

AI-grunt is my way of explaining what AI systems need to help operate their applications.

Not everyone can throw tens of millions of dollars every couple of months at hardware they own for themselves like Elon can – and don't forget the ongoing costs to *run that hardware.*

But much like companies now run applications from "the cloud", we'll start to see more and more companies *renting* AI services from the cloud too.

That means for companies that own plenty of AI-grunt we could be looking at some serious upside as the world goes full AI.

In particular, we're starting to see a lot of *bitcoin mining* companies turning their attention (and AI-grunt) to the world of AI and HPC (high performance computing) services.

That's because bitcoin mining typically uses hardware like Nvidia GPUs to maintain efficiency and operational flexibility. And if the world has an insatiable appetite for Nvidia GPUs for their AI systems… well, it doesn't take much to put two and two together.

While they can make a mint from mining bitcoin, they can possibly make more mint from AI and HPC services.

For example in 2024, Iris Energy (NASDAQ:IREN) announced that it had entered a partnership with WEKA to "… optimize generative AI workloads…"

The announcement explains that it'll use WEKA's platform, but provide the AI-grunt from the Iris Energy data centres.

…continued on next page…

Daniel Roberts, co-founder and CEO of Iris Energy, said in an announcement in August 2023:

> *"Leveraging our next-generation data centers into generative AI is an exciting opportunity, particularly given current industry shortages in rack space and compute. We believe demand for sustainable computing is unlikely to go away, and feel we are uniquely positioned to capture ongoing growth in the broader industry; whether that be ASICs for Bitcoin mining, or GPUs for generative AI and beyond."*

This was part of the announcement saying it'd just dropped $10 million on a bunch of Nvidia H100 "AI" GPUs.

It's not the first bitcoin miner to do this, and I don't expect it will be the last either.

Another bitcoin miner, HIVE Digital Technologies, also released info about the potential of its GPU infrastructure when it came to AI and HPC.

Here's what HIVE had to say about the situation:

> *"GPU cloud is far more complex than mining Bitcoin with ASICs. It took us a few months to get the right hardware architecture in place and we've had a breakthrough in the last week. Our GPU server utilization rate has gone from 40-50% during our test phase to over 80% last week as our commercialization ramps up, allowing those GPUs to almost double their daily cash flow per server. The team has done an amazing job, and we're rapidly learning and advancing this business. We're quite bullish on the GPU cloud market, which we see as one of those rare opportunities which only come along every few decades. The demand is growing quickly."*

HIVE's HPC is generating 15x more revenue than bitcoin on a per-megawatt basis, and with demand for GPU compute growing rapidly, sounds like money for jam if you ask me.

That's no typo by the way. *Fifteen times more revenue than bitcoin*.

These two aren't the only ones either. In fact, just about every bitcoin miner is now looking to the AI and HPC market for opportunity.

But, why?

Well it's quite simple really. To mine bitcoin you need *really fast and powerful computers operating at peak energy efficiency.*

And to enable the growing AI and HPC industry you need *really fast and powerful computers operating at peak energy efficiency.*

Do you see the similarity?

Now, here's the thing…

Right now it's clear we're in the midst of an AI boom. I don't think there's any doubt about that.

...continued on next page...

But the other massive market boom that's shaping up and that is going to impact a select group of stocks is the impending bitcoin bull market.

Look, you don't need me to tell you that it's quite clear bitcoin is already on the charge in the last year:

Source: Coingecko

In just one year bitcoin's price has comfortably doubled. That's a pretty good indicator to see why pretty much every major bitcoin-related stock has been flying higher over the last year too.

So here we're talking about two massive investment opportunities that are converging, AI and HPC infrastructure, and bitcoin's next bull market.

It's *rare* that you get the "perfect storm", so to speak, with two gigantic market opportunities that are also so closely aligned in this way.

What it all means is that we're on the cusp of an investment opportunity that we've *never seen before*.

This collision between bitcoin and AI infrastructure is arguably a once-in-a-lifetime investment opportunity.

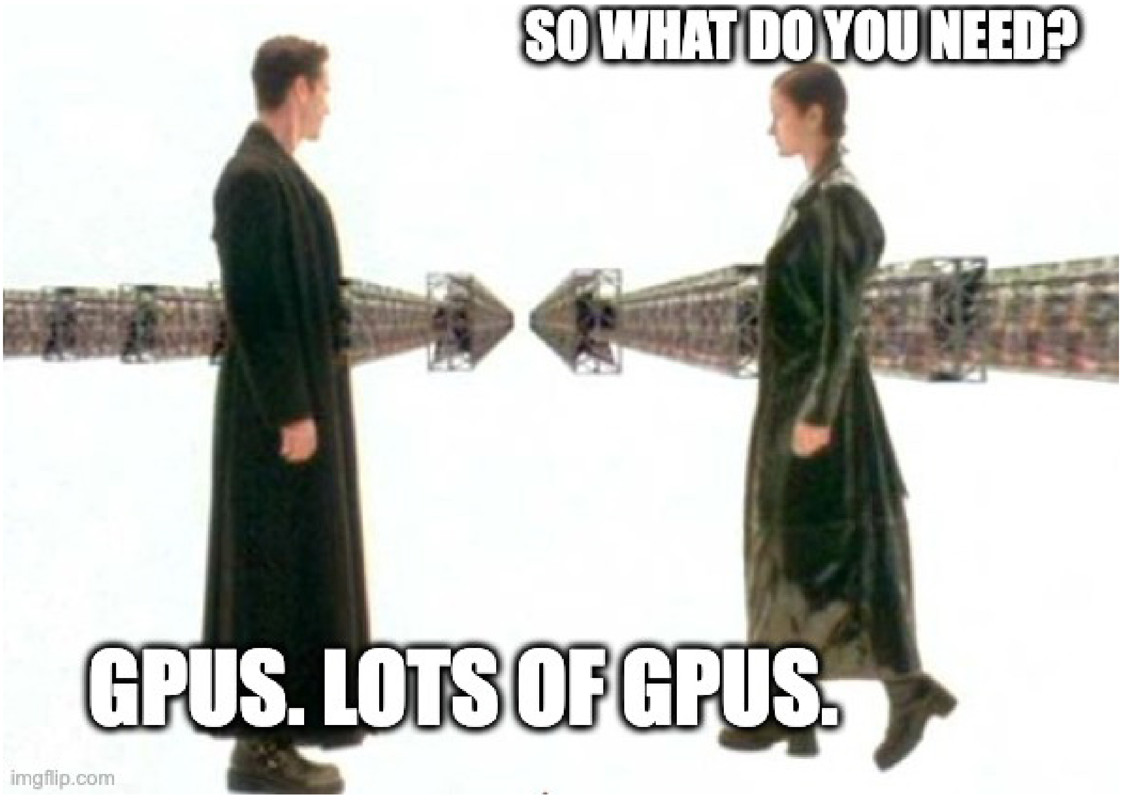
But right here, right now, what these companies have that no one else outside of the

...continued on next page...

mega-cap tech giants have is *the critical AI component needed for an AI future…*

GPUs.

Lots of GPUs.



What all this means is that when it comes to the most critical components of AI there is one set of companies that holds the master key – bitcoin miners.

They've spend years loading up on GPUs for bitcoin mining, and they've now discovered these are the most critical component for an AI revolution.

Which is why your next recommendation is a bitcoin miner that's now using its critical AI components for a future of AI.

The Critical AI Component Company: Hut 8 Corp (NASDAQ:HUT)

Hut 8 Corp is technically a relatively new company, having only hit the Nasdaq in late 2023.

That's because on 30 November 2023, a merger between Hut 8 Mining (the *old* Hut 8) and USBTC (another bitcoin miner) completed after months of hurdles to clear.

…continued on next page…

This merger, which is now Hut 8 Corp, was "the largest merger and acquisitions (M&A) activity that has ever transpired within [the crypto mining industry]," according to the company announcement.

It is, as you would expect, a serious player in the bitcoin mining space. I think a key part of its strategy that fits in with the upcoming spate of exchange-traded fund (ETF) approvals is the fact that it's fully US domiciled, with mining facilities in the US and Canada.

That might seem like it's not a good thing considering a lot of the pushback against bitcoin and crypto from US regulators and politicians. But I think there will be growing demand from the ETFs in the US to "buy US bitcoin".

Another way of looking at it, is that these US ETFs won't want to hold bitcoin that's come through, perhaps, Russia via Gaza, as a polite way of putting it. I think buying bitcoin from miners that are a known quantity will become increasingly important. In fact, it may become the *only way* that some of these US ETFs are allowed to add bitcoin if the regulators have their way.

Nonetheless, on top of its mining operations, Hut 8 – like many bitcoin miners – also utilises its high-performance hardware for the emerging AI and high-performance computing industry too.

Bitcoin miners typically use high-power, high-performance hardware like application-specific integrated circuit (ASIC) hardware that is dedicated to bitcoin mining. Many also use high-performance GPUs, like the ones that come from chip giant Nvidia.

This hardware needed to mine bitcoin is at its most basic principles, just really fast computers. That means they can be used to do other things that require really fast computers, like processing data needed for the AI industry. This has already started to provide fruitful with a deal inked in June 2023 for Hut 8 to provide HPC infrastructure for Interior Health based out of Canada.

And in June 2024 Hut 8 secured a $150 million investment from an investment fund to build out its "next generation AI infrastructure platform."

As Hut 8 explains in the announcement:

> *"Hut 8 believes it can leverage its proven ability to develop and operate complex energy infrastructure to address unmet demand and emerge as a leader in the AI infrastructure market."*

This kind of flexibility and adaptability adds a further string to the bow of these miners, as it means they're not completely a one-trick pony.

However, it is also the bitcoin mining that makes Hut 8 even more valuable.

That's because of Hut 8's recent combination with USBTC, but also the huge holding Hut 8 has in bitcoin. As of its second quarter 2024 update it held 9,102 BTC ($546 million at $60,000 per BTC).

...continued on next page...

In its second quarter of 2024 it mined 279 bitcoin as well. And when bitcoin mining and AI revenues came together, Hut 8 noted a jump in year-on-year revenue for the quarter from $20.5 million in 2023 to $35.2 million in the 2024 quarter.

You can see, however, that if bitcoin's price explodes higher, and if the demand for AI services continues to skyrocket, how Hut 8 stands to benefit. Add its healthy BTC holdings and this makes the company excitingly placed for a new bull market in both bitcoin and AI.

Risks

In terms of risks, as outlined earlier, the key thing here is bitcoin's price. If it skyrockets, then we know what to expect.

But if bitcoin's price does nothing, or worse, falls, then you will likely lose money in this stock. Bitcoin's price goes down, so does Hut 8. The volatility day to day, means you can expect to see big price swings – sometimes, double digits in a day.

Hence if bitcoin's price stagnates or heads significantly lower, then the decrease in mining dollar revenue may also drag the stock price lower.

This is a volatile stock, high risk, and it's tied to two very powerful but also very risky themes in bitcoin and AI.

If either trend sees investor sentiment fall away, or if the broader market puts selling pressure on high-growth stocks like Hut 8, then the stock price is likely to head south.

Only use risk capital here that you can stomach seeing wild fluctuations in price with.

Still, my view is that with both the bitcoin and AI investment themes in play, Hut 8 is poised to be a leader in two of the biggest investment trends of our lifetime.

Action to take: BUY Hut 8 Corp (NASDAQ:HUT). Please refer to the latest buy list instructions here.

Sam Volkering
Editor, *Southbank Growth Advantage*