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To:
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Director, Defense Industrial Base Division
Office of Strategic Industries and Economic Security
Bureau of Industry and Security
U.S. Department of Commerce

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Subject: Public Comment on Section 232 National Security Investigation of Imports of Semiconductors and Semiconductor Manufacturing Equipment

The Crypto Council for Innovation (CCI) appreciates the opportunity to submit comments regarding the Section 232 investigation of imports of semiconductors, semiconductor manufacturing equipment, and derivative products. CCI is a global alliance of industry leaders within the digital assets industry and is committed to promoting the advantages of digital assets while showcasing their potential for transformation. CCI's members represent various sectors within the digital asset ecosystem and share a common objective: advocating for responsible global regulation of digital assets to unlock economic opportunities, enhancing quality of life, promoting financial inclusivity, safeguarding national security, and countering illicit activities. CCI firmly believes that achieving these objectives necessitates well-informed, evidence-driven policy choices achieved through collaborative participation.

Executive Summary

CCI appreciates this public comment opportunity to respectfully request that any measures taken by the Trump Administration to restrict imports of semiconductors and semiconductor manufacturing equipment exclude digital asset mining application-specific integrated circuits (ASICs)[1] and their related derivative products, including mining hardware. We urge the Administration to support the fast developing U.S. ecosystem of mining hardware designers and manufacturers, as well as U.S. mining companies, who are at a critical time as they seek to establish U.S. leadership in this market.

This comment letter addresses several of the criteria listed in § 705.4 of the National Security Industrial Base Regulations as they relate to ASICs and the mining hardware products they are contained within, such as rigs.[2] Applying broad tariffs to both of these specialized segments

[1] An Application-Specific Integrated Circuit is a specialised microchip designed to excel at one specific task with remarkable efficiency. In Bitcoin mining, that task is calculating SHA-256 hashes, a core component of the cryptographic algorithm that ensures the Bitcoin network's security and functionality. Given the competitive nature of mining and the financial rewards at stake, miners are driven to use the most powerful and efficient hardware available to maximise their chances of earning rewards while keeping costs low. *See Cambridge Digital Mining Industry Report ("Cambridge Report")*, April 2025, available at: https://www.jbs.cam.ac.uk/wp-content/uploads/2025/04/2025-04-cambridge-digital-mining-industry-report.pdf

[2] As background, bitcoin mining is the process by which new bitcoins are introduced into circulation and transactions are verified and added to the blockchain. It involves solving complex math problems that are essential for the network's operations. Bitcoin operates on a decentralized platform, meaning that it does not rely on a central authority like a bank. Instead, the network is maintained by a global pool of miners who use their computational power to validate transactions and secure the network. In return for their efforts, miners are rewarded with newly minted bitcoins and transaction fees, which incentivizes them to continue mining and supporting the network. *See, e.g., What is Bitcoin Mining and how does it work?*, Sep. 9, 2024, available at: https://cryptoforinnovation.org/what-is-bitcoin-mining-and-how-does-it-work/

would undermine American leadership in the emerging digital asset economy while failing to address the core national security concerns that prompted this investigation. Tariffs on ASICs or the hardware used for digital asset mining will directly make American companies less competitive than foreign competitors and undercut President Trump's desire to make the U.S. the "crypto capital of the world"[3] and ensure that bitcoin is "mined, minted, and made in America."[4]

The digital asset mining market is at a historic turning point – and the U.S. has the opportunity to overtake foreign competitors, specifically China.[5] Today, American digital asset mining companies remain dependent on foreign supply chains and companies, particularly Chinese designers and manufacturers, for specialized mining ASICs and hardware. In 2024 alone, Chinese mining machines produced approximately 295,650 Bitcoins, valued at an estimated $24.24 billion.[6] While this reliance is not ideal for long-term national security or economic resilience, it reflects the historical dominance of Chinese firms in the mining hardware sector, an imbalance that American companies are actively working to correct. American firms are investing heavily to build domestic capacity, developing next-generation mining ASICs and hardware based on American-innovation, and bringing the value of the industry back to American soil. Companies like Block, Core Scientific, Marathon Digital Holdings, and Riot Platforms are leading these efforts, forming a U.S.-based ecosystem that is designing, manufacturing, and using new U.S.-led ASICs design and hardware that will challenge foreign incumbents and promise to establish the U.S. as a global leader in mining technology. Indeed, the application of tariffs may cede not only American leadership in the digital asset mining hardware space, but may fundamentally undermine U.S.-based miners, which could lead to the U.S. becoming reliant on foreign-based miners for the safety and security of the Bitcoin network.

Bitcoin is good for the United States because like the underlying infrastructure of the internet, it has enabled new productive ways for individuals and organizations to interact globally, independent of intermediaries. It is a monetary network that anyone can use, but its integrity depends on a robust, distributed base of miners. The U.S. has a strategic interest in ensuring that the Bitcoin network remains decentralized and resilient, with meaningful domestic participation. Protecting and strengthening U.S.-based mining helps anchor that security here at home.

The U.S. has a rare opportunity to lead in mining ASICs and hardware design and innovation, but that leadership will not happen overnight. It will require thoughtful, deliberate policies that

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[3] *Fact Sheet: President Donald J. Trump Establishes the Strategic Bitcoin Reserve and U.S. Digital Asset Stockpile*, Mar. 6, 2025, available at: https://www.whitehouse.gov/fact-sheets/2025/03/fact-sheet-president-donald-j-trump-establishes-the-strategic-bitcoin-reserve-and-u-s-digital-asset-stockpile/.

[4] *Trump calls for US to be 'crypto capital of the planet' in appeal to Nashville bitcoin conference,* July 27, 2024, available at: https://apnews.com/article/donald-trump-bitcoin-cryptocurrency-stockpile-6f1314f5e99bbf47cc3ee6fc6178588d

[5] *See Cambridge Report*. "The Bitcoin mining industry stands at a critical juncture, with the traditional revenue model facing challenges, prompting miners to explore business diversification and innovative energy strategies to ensure their long-term sustainability."

[6] Estimates using data obtained from *Make America Mine Again: How Donald Trump's Plan for U.S. Bitcoin Dominance Could Trigger a New Digital Gold Rush*, Aug. 5, 2024, available at: https://blog.coinshares.com/make-america-mine-again-on-donald-trumps-plan-for-u-s-bitcoin-dominance-26d7ab981d11 and *Bitcoin Mining Industry Created Over 31K US Jobs: Report*, Feb. 16, 2025, available at: https://bitbo.io/news/bitcoin-mining-us-jobs/. By comparison, promoting bitcoin mining in the U.S. could lead to more than $60 billion in direct and indirect economic activity. It could also sustain 31,000 direct jobs and up to 198,400 indirect jobs across the country today, numbers that could grow to 51,000 direct and 326,400 indirect jobs as domestic mining expands.

nurture domestic mining capabilities – both hardware designers and mining companies – rather than stifle them prematurely. Heavy-handed intervention risks making the country less competitive and less resilient at precisely the moment when this emerging sector needs domestic support to scale. While achieving self-sufficient domestic supply may take longer, ensuring U.S.-based companies are able to compete in the market requires only policies that do not undermine American startups as they rapidly scale to compete with large, Chinese-orientated firms on price and performance. In turn, these companies will then be able to provide a clear source of demand for U.S.-based manufacturing resources in due course, aiding in achieving self-sufficient domestic supply.

Digital asset mining hardware is poised to become just as foundational to the future of digital infrastructure. Prematurely severing access to necessary components would only entrench foreign dominance and jeopardize the chance of American leadership at a pivotal moment.

Addressing Specific Criteria Under § 705.4

A. Current and Projected Demand for Semiconductors in the United States

The U.S. digital asset mining industry has a distinct and rapidly growing demand for highly specialized ASICs and mining hardware. U.S.-based mining operations currently account for approximately 40% of global Bitcoin mining activity,[7] underscoring the country's central role in securing and operating decentralized blockchain networks. Unlike chips used in consumer electronics or machine learning applications, mining ASICs are engineered to perform a singular function with maximum efficiency: cryptographic hashing. Their design priorities – speed, energy efficiency, and thermal resilience – demand distinct semiconductor architectures, process nodes, and materials compared to other chip types. However, similar to other advanced chips, these do not rely on legacy manufacturing processes, but are constantly working and innovating at the cutting edge - currently defined as the 3nm process - to drive performance. As such, digital asset mining ASICs represent a specialized but highly innovative market within the broader semiconductor ecosystem, with unique production and technological requirements.

Domestic manufacturers such as Block's Proto[8] and other entrants are designing mining hardware specifically tailored to American miners' needs, emphasizing efficiency, performance, regulatory compliance, and operational transparency. These U.S.-designed alternatives offer the potential for miners to drive significant cost and product lifetime efficiency savings whilst reducing foreign dependency, but achieving widespread adoption will hinge on two factors. Firstly, the ability of home-grown American innovation to gain a foothold in the market and compete on price and availability. Second, the continued growth and profitability of domestic mining operations with easy access to cutting-edge mining rigs and ASICs.

Moreover, as Bitcoin and other proof-of-work networks become increasingly integrated into broader technological and financial systems, the demand for reliable, domestically controlled mining infrastructure will grow not just in absolute terms, but also in strategic importance. The

[7] *US accounts for over 40% of global Bitcoin hashrate: Report, Jan. 3, 2025, available at: https://cointelegraph.com/news/us-accounts-over-40-percent-bitcoin-hashrate-2024*

[8] *Block's New Bitcoin Mining Chip to Be Part of an Ongoing Project with Core Scientific to Decentralize Mining Hardware, July 10, 2024*, available at: https://block.xyz/inside/press-release-block-core-scientific-agreement

invention of Bitcoin represented a breakthrough in computer science and digital infrastructure by solving a longstanding challenge: enabling peer-to-peer value transfer over the internet without requiring a centralized intermediary like a bank. This innovation laid the foundation for a new, open financial system, one that allows individuals anywhere in the world to transact securely and directly, without relying on traditional financial gatekeepers. By reducing friction and expanding access, Bitcoin introduces the possibility of an open, more efficient, decentralized, and resilient financial architecture – principles that align with U.S. values of innovation, freedom, and global leadership.

Mining facilities are already evolving beyond their traditional roles, increasingly co-locating with artificial intelligence (AI) data centers, offering demand-response services to energy grids, and supporting national resiliency in critical infrastructure. In particular, bitcoin mining can be an important bridge to much-needed investments and market support. These mining operations, or data centers that power the Bitcoin network, are uniquely suited to address some of the country's energy challenges due to their unique combination of flexibility, consistency, and transparency.[9] Failing to support this growing demand through stable, forward-looking policies risks ceding leadership to foreign jurisdictions eager to capture the associated economic, technological, and national security advantages. Meeting the semiconductor needs of the U.S. mining sector is therefore not simply an industry challenge, it is a strategic imperative.

B. Domestic Production Capacity vs. Demand

Currently, domestic design and production of digital asset mining ASICs and hardware is limited but growing. Industry estimates suggest that the U.S. accounted for approximately 12% of the total revenue share in the global mining equipment market in 2023, reflecting early but meaningful efforts to establish a foothold in a market historically dominated by foreign manufacturers. Revenue share, however, does not equate to manufacturing share. U.S.-based design and production of mining hardware and ASICs remains a small fraction of global output in volume terms, with the majority of hardware still being produced abroad.

Emerging domestic designers and manufacturers represent promising developments that could reshape the future of mining hardware. These firms are innovating rapidly in areas such as energy efficiency, chip design optimization for cryptographic hashing, and integration with a wide range of energy sources. Scaling operations from prototype and pilot production to full commercial manufacturing requires significant time, capital investment, supply chain integration, and workforce development. Fabricating high-performance, cutting-edge mining chips demands advanced semiconductor manufacturing capabilities, access to specialized fabrication nodes, a stable supply of critical materials, and a workforce skilled in niche disciplines such as thermal management, power systems integration, and cryptographic engineering. Even with strong

[9] Further, numerous studies have found that a flexible load on renewable-powered grids can be a key solution minimizing the mismatch of supply and demand. Bitcoin mining operations are flexible on two critical axes: (1) location and (2) demand. This means that they can access stranded sources of energy and power up and down, depending on grid conditions. Similarly, sustained demand at-scale is important. Typical demand for energy varies based on several factors such as time of day, population, etc. Consequently, markets for renewable energy sources can face periods of low demand, which affects their market prices and business models. Mining can serve as a consistent source of demand, reducing the need for costly curtailment. Bitcoin, and crypto more broadly, provide a new model for engagement with energy more broadly. The transparency of the industry means that data that can be used to inform decision-making – and, it can provide a model for greater accountability. See, e.g., *Proof of Work & Enabling the Energy Transition – Case Studies*, Jun. 1, 2023, available at: https://cryptoforinnovation.org/proof-of-work-enabling-the-energy-transitions/

investment and policy support, reaching a self-sufficient domestic supply will likely take years, especially as U.S.-based manufacturing resources are likely to be immensely oversubscribed with demand as they start to ramp up.

However, there is a clear opportunity for the U.S. in the interim to take a leading role in mining ASIC and hardware design and innovation. While achieving self-sufficient domestic supply may take longer, ensuring U.S.-based companies are able to compete in the market requires only policies that do not prematurely undercut startups as they rapidly scale to compete with large, Chinese-orientated firms on price and performance. In turn, these companies will then be able to provide a clear source of demand for U.S.-based manufacturing resources in due course, aiding in achieving self-sufficient domestic supply.

Given these realities, the current gap between domestic production and demand necessitates continued reliance on imports in the near to medium term, although this reliance will help to nurture the environment in which the U.S. can come to be a major force in the bitcoin mining market Foreign-manufactured ASICs and mining hardware are – for now – essential for American miners to maintain competitiveness, sustain operations, and continue expanding domestic bitcoin mining capacity. Disrupting access to these imports through tariffs or trade restrictions would not only harm existing operations but could also stifle the growth of the same domestic manufacturing capacity that U.S. policymakers seek to promote.

The application of tariffs to digital asset mining equipment or operations risks ceding American leadership in the rapidly growing and strategically important digital asset mining space. By increasing the cost of mining domestically, such tariffs could disincentivize investment in U.S.-based mining infrastructure, driving companies to relocate or expand operations abroad where costs are lower and regulatory environments more favorable. This shift could have broader implications beyond economics, as it may lead to greater U.S. reliance on foreign-based miners for the stability, safety, and security of the Bitcoin network. Given that Bitcoin's network integrity depends on a decentralized and geographically distributed base of miners, a diminished U.S. presence could reduce domestic influence over this critical layer of the digital asset ecosystem.

Recognizing the protracted timelines inherent in semiconductor manufacturing, long-term thinking is critical to ensuring that the U.S. can bridge the gap between today's foreign supply chains and tomorrow's domestic self-sufficiency. In the meantime, preserving access to foreign-manufactured ASICs and mining hardware will be central to any realistic strategy to build a resilient, globally competitive U.S. digital asset mining sector.

C. Role of Foreign Fabrication in Meeting U.S. Demand

Foreign manufacturing currently plays a critical role in meeting U.S. demand for digital asset mining ASICs and mining hardware. The global supply chain for mining hardware and chips remains heavily concentrated in Asia, with the majority of production facilities located in Taiwan, Vietnam, Thailand, and Malaysia.[10]

[10] *Bitcoin miners pivot to South-east Asia after China crackdown*, June 15, 2024, available at: https://www.businesstimes.com.sg/international/asean/bitcoin-miners-pivot-south-east-asia-after-china-crackdown

For American miners, this foreign production is not merely a matter of economic convenience – it is a practical necessity. Developing the specialized expertise, fabrication capacity, and economies of scale required to produce ASICs and mining hardware domestically will take several years. In the interim, consistent access to foreign-manufactured hardware is vital for U.S. companies - those who make the hardware, and those who use them to mine - to maintain competitiveness, meet existing contractual obligations, and expand operations to serve the growing global demand for blockchain-based services.

Of particular importance is the fact that mining ASICs are not legacy chips. Instead, they work and innovate at the cutting edge – currently defined as the 3nm process – to drive performance. At present, there are only two semiconductor fabrication plants in the world that can produce this level of technical chip. Although companies like the Taiwan Semiconductor Manufacturing Company have made significant plans to build fabrication plants in the United States, these would at present not have the ability to undertake the 3nm process in the short-term. Therefore, although U.S. self-sufficiency in such chips could be achieved in the medium-term, applying significant tariffs in the interim would not drive production to the U.S., simply because there is currently no production capacity there.

It is also important to recognize that digital asset mining ASICs are distinct from other types of semiconductors. Mining ASICs are designed for a singular, narrow function: executing cryptographic hashing operations to validate transactions on blockchain networks like Bitcoin. Their application outside of cryptocurrency mining is extremely limited, and they pose minimal dual-use risks. They do not enable AI or advanced military capabilities, for example, in the way that other semiconductors might. Therefore, we recommend that mining ASICs and related mining hardware is considered as a unique, material *market* challenge, rather than a predominantly national-security orientated risk.

Further, securing and stabilizing interim access to foreign ASICs production is a strategic necessity. It allows U.S. miners to strengthen their position in the global Bitcoin network today, ensuring that future innovations, efficiencies, and even governance discussions around blockchain technologies reflect American leadership and values. Prematurely disrupting these supply chains would not accelerate domestic production; it would merely restrict U.S. miners, slow the growth of domestic blockchain infrastructure, and hand competitive advantage to foreign jurisdictions that face no similar barriers.

D. Concentration of Import Sources and Associated Risks

The digital asset mining ASICs and hardware market does face company-based concentration risks, with companies such as China's Bitmain and MicroBT dominating global production. Major manufacturers, however, are diversifying their production footprints. In response to geopolitical pressures and supply chain vulnerabilities, companies that historically operated exclusively out of China have begun establishing production facilities in countries such as Malaysia, Thailand, and Vietnam.[11] This trend toward geographic dispersion reduces the risk of supply disruptions concentrated in a single nation and provides U.S. miners with access to more secure and diversified supply chains.

[11] *Id.*

Nonetheless, that does retain a risk of secondary overconcentration in the mining market; given their majority position in the market, these companies could restrict supply or create bifurcated pricing strategies to U.S. miners on short-order.[12] However, U.S.-based companies are responding to a clear need and demand from miners to reduce this risk, developing new innovations in mining ASIC design and related hardware to provide - for the first time - real competition.[13] We expect that U.S.-led products will launch this year and continue to gain significant market share in the next 1-5 years.

In sum, these developments demonstrate that the digital asset mining hardware market is becoming progressively less concentrated, more competitive, and more geographically diversified. The progress towards a diverse marketplace, however, could easily be undermined by premature or poorly calibrated policy interventions that restrict access to critical hardware or destabilize the commercial environment for mining operations.

Rather than imposing abrupt trade barriers, policymakers should recognize and support the organic diversification already underway. Encouraging continued investment, fostering competition among new and existing manufacturers, and maintaining predictable access to a variety of suppliers will better serve U.S. national security interests, economic competitiveness, and technological leadership in the blockchain ecosystem.

E. Potential for Export Restrictions by Foreign Nations

This investigation seeks to establish particular national security risks faced by the U.S. regarding semiconductors, and semiconductor supply chains. Digital asset mining ASICs represent a distinctly different risk profile than other semiconductor categories because (1) mining ASICs are purpose-built for a specific function with limited alternative applications outside blockchain technology; (2) the global and decentralized nature of digital asset networks means that even significant disruptions to U.S. mining operations would not disable the networks themselves; and (3) the growth of domestic design and manufacturing options creates a pathway to reduced dependency on foreign sources over time.

U.S. digital asset mining companies maintain critical supplier relationships to secure mining hardware, infrastructure components, and other specialized materials essential for their operations. Due to the technological complexity involved in developing mining hardware, as well as the significant balance sheet required to fund such innovation, there are currently only a few suppliers globally that can design and produce ASICs and mining hardware at scale. Many U.S. mining companies, by necessity, source mining equipment from foreign manufacturers, including MicroBT and other Chinese-based suppliers. Orders placed with these suppliers often have delivery schedules that extend many months into the future, requiring U.S. miners to commit to purchasing hardware well in advance of anticipated deployment dates.

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[12] *See Cambridge Report*. "This concentrated market structure is unsurprising to those familiar with the industry. The dominance of a few key players has long been a topic of debate, raising questions about market power and the potential for disruption. While new manufacturers continue to announce their intentions to enter the market, the barriers to entry remain formidable."

[13] *Id.* "Competing effectively with entrenched incumbents requires substantial capital investment, deep technical expertise, and critical access to semiconductor foundries. Despite these challenges, some new entrants, such as Bitdeer, Auradine, and Proto, are gaining traction with notable pre-orders and backing from established digital mining firms. The future will tell whether the ASIC market is indeed ripe for disruption, or the concentration among a few manufacturers will remain."

Expansion and modernization of mining facilities also require significant quantities of electrical infrastructure components, construction materials, and specialized cooling technologies. For example, immersion-cooled bitcoin mining, a cutting-edge practice to improve efficiency and reduce energy waste, relies on large volumes of specialized non-conductive fluids, which are manufactured by a limited number of suppliers globally. Ensuring timely access to these critical inputs is essential for maintaining operational competitiveness and for scaling mining capacity on accelerated timelines.

Moreover, the development and expansion of mining facilities require reliable access to specialized production equipment and components, including transformers, switchgear, and other energy distribution equipment that is often subject to global supply constraints. Digital asset mining companies in the United States closely monitor these supply chain dynamics to assess risks and adapt expansion plans accordingly, but abrupt policy changes that further disrupt access to critical hardware would exacerbate existing vulnerabilities.

Given the reliance on a limited set of global suppliers and the complexity of sourcing critical materials, as well as the unique differences between digital mining ASICs and other semiconductors, it is vital that any trade or national security actions taken by the Department of Commerce account for the unique realities of the digital asset mining sector. A gradual, strategically managed transition that reduces strategic dependency is necessary to allow American companies sufficient time to build new robust supply chains and manufacturing capacity and provide a market-based solution to these risks, strengthening both national security and the resilience of emerging digital infrastructure.

F. Feasibility of Increasing Domestic Capacity

Increasing domestic digital asset mining ASICs and hardware production is both an achievable and strategically important goal, but it will require time, sustained investment, and supportive policies to maintain American competitiveness. Current challenges include significantly higher production costs in the U.S. compared to established Asian manufacturing hubs, slower production speeds at existing U.S. facilities, and a relatively limited domestic base of specialized expertise in the highly technical processes required for producing high-efficiency mining ASICs. Furthermore, it will require a viable U.S.-based ecosystem of both ASIC and hardware design companies, as well as U.S.-based miners themselves, to create both new sources of supply and demand for domestic capacity.

Rather than imposing broad tariffs that would raise costs across the entire sector and risk driving mining operations offshore and undercutting innovative U.S. design companies as they begin to take market share from foreign companies, policymakers should prioritize targeted incentives to catalyze domestic manufacturing growth. Tax credits, R&D grants, and public-private partnerships focused on next-generation ASICs and hardware design and production would more effectively close the gap between U.S. firms and their foreign competitors. With a thoughtful, phased approach, the U.S. can position itself as a global leader in mining hardware manufacturing, enhance economic resilience, and ensure that the future of digital asset infrastructure is built on American soil.

G. Impact of Trade Policies on Production and Capacity

The imposition of substantial tariffs on mining ASICs would have several counterproductive effects that could significantly weaken the U.S. digital asset mining sector at a critical juncture. U.S.-based mining operations would face sharply higher equipment costs, undermining their ability to compete on the global stage. In a sector where efficiency margins are thin and hardware acquisition is a primary operational expense, even modest cost increases can tilt competitive dynamics against American firms. Imposing higher input costs on U.S. miners would directly erode their profitability, slow expansion plans, and dampen the incentives for further infrastructure investment within the U.S.

Moreover, the contraction of U.S.-based mining activity would directly impact the emerging domestic manufacturing sector. Companies like Block, which are investing heavily in developing U.S.-designed mining equipment, depend on a strong, growing domestic customer base to justify and sustain their operations. If the overall U.S. share of global mining activity declines further, then America would fall further behind in its capacity to help secure decentralized networks that are becoming increasingly central to global finance, communications, and critical infrastructure. Surrendering leadership in this space would weaken U.S. influence over the standards, practices, and security frameworks that govern the next generation of digital infrastructure. It would also cede strategic advantage to foreign jurisdictions that recognize, and are actively moving to capitalize on, the importance of digital asset mining in the broader geopolitical landscape.

H. Domestic Workforce Talent Gaps

The digital asset mining industry faces clear and pressing workforce challenges across several specialized disciplines. Expertise in chip design specifically tailored for high-efficiency hashing operations is in short supply domestically, as is manufacturing experience at advanced node sizes appropriate for cutting-edge mining applications. In addition, mining operations require advanced power systems engineering to integrate effectively with the energy grid, especially in regions prioritizing renewable energy sources. Oversight of mining facilities also needs specialized knowledge in thermal management to maintain efficiency in high-density computing environments. These areas of technical specialization are critical to building and sustaining a globally competitive mining hardware sector in the U.S.

Addressing these talent gaps will require more than educational programs and training initiatives; it will require a robust and growing industry to attract, retain, and reward highly skilled engineers, designers, and operators. Without a viable, expanding domestic mining and mining hardware ecosystem, the U.S. risks falling behind not only in manufacturing capacity but also in the development of the intellectual capital that drives technological innovation. Policymakers must recognize that support for domestic mining operations is inextricably linked to cultivating a workforce capable of sustaining American leadership in digital infrastructure technologies over the long term.

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CCI appreciates the opportunity to provide these comments. We would be pleased to further engage on the feedback detailed in this letter and ways to ensure the responsible growth of the digital asset industry.

Respectfully submitted,

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