PQC

PQC

White Paper

V1.0

summaries

At present, the importance of arithmetic power has been elevated to a new level. As a new productive force in the era of digital economy, arithmetic power plays an important role in promoting the progress of science and technology, the digital transformation of industries, and the economic and social development of mankind. The development of global arithmetic power is facing challenges such as diversification of applications, imbalance between supply and demand, and the rise of artificial intelligence, digital twins, meta-universes, and other emerging fields, which promote rapid growth in the scale of arithmetic power, diversified innovation in computing technology, and reconstruction and reshaping of the industrial landscape.

The scale of arithmetic power continues to expand, and the super arithmetic chain becomes the main driving force. From the infrastructure side, global data centers and intelligent computing centers are accelerating deployment, and the global infrastructure arithmetic scale will reach 500EFLOPS in 2023. The global scale of data center racks in use exceeds 10,000 standard racks, and nearly 100 intelligent computing centers are in operation.

Arithmetic industry is booming, arithmetic innovation capability is constantly improving, the scale of computing industry accounts for about 20% of the electronic information manufacturing industry, with more than 10,000 enterprises above the scale, and the market share of the whole machine is constantly climbing, forming an industrial ecosystem covering the bottom layer of hardware and software, the whole system and application, and a batch of advanced computing technological innovations have emerged, nd breakthroughs have been continuously made in the links of computing chip,

computing system, computing software, etc., and emerging computing platforms and systems have accelerated innovation, and many breakthroughs have been made in cutting-edge computing technologies. The company has made continuous breakthroughs in computing chips, computing systems and software, accelerated innovation in emerging computing platforms and systems, and made breakthroughs in cutting-edge computing technologies.

This whitepaper will reveal in-depth the development vision of PQC tokens: exploring the relationship and interaction between the arithmetic needs of industries such as AI, Big Data, Web 3.0, DePIN and PQC tokens, as well as the future role and direction of PQC in the digital age.

To fulfill the promise of solving the global arithmetic supply and demand balance more efficiently and intelligently, PQC will forge new cornerstones for the upcoming Web 3.0 world.

This is the mission of PQC.

catalogs

I. Industry overview

1.1 The power base of the digital world will undergo a transformation

Arithmetic power is a new productive force in the era of digital economy, which has become the core force to promote the development of digital economy and a solid foundation to support the development of digital economy, and plays an important role in promoting scientific and technological progress, facilitating the digital transformation of industries as well as supporting economic and social development. According to reports, every dollar invested in arithmetic power will lead to an economic output of 3 to 4 dollars.

Currently, the development of arithmetic power faces the challenges of application diversification and imbalance between supply and demand. On the one hand, entering the era of artificial intelligence, the rapid emergence of emerging technologies, the explosive growth of massive data and the increasing diversification of application scenarios have inspired hundreds or thousands of times the growth of arithmetic power and accelerated the diversification and upgrading of arithmetic power. On the other hand, the improvement of arithmetic power is facing multi-dimensional challenges, and there is still a huge gap between the transformation from chips to arithmetic power. The growth rate of arithmetic power that can be brought about by upgrading the existing computing technology is only a few times per year, and there is still a big gap between supply and demand, and there is an urgent need for change in the development of computing technology, whether at the level of hardware or at the level of architecture.

In the era of digital economy, the scale of arithmetic is an important indicator of the development level of national and regional digital productivity, which is the productivity; the arithmetic industry is the base pedestal of national scientific and technological development, which is the competitiveness; the arithmetic technology is the source of arithmetic innovation and development, which is the traction force.

tThe arithmetic technology and arithmetic industry represented by advanced computing provide solid support for the development of arithmetic scale, the arithmetic environment provides soil for the development of arithmetic scale, arithmetic technology and arithmetic industry, arithmetic application pulls the growth of arithmetic scale and arithmetic industry, and drives arithmetic technology upgrading, and the five elements promote each other and develop synergistically.

Arithmetic is the new productivity in the digital era, the demand for computing in the era of intelligence of all things is increasing by hundreds and thousands of times, the rapid rise of scientific research, artificial intelligence, digital twins, and meta-universe and other emerging fields, promote the rapid growth of global arithmetic scale, drive the multiple innovations of arithmetic technology and products, and drive the reconstruction and reshaping of the industrial pattern, arithmetic has become a new engine for the development of the global digital economy and a new focus of the strategic competition of all countries. Arithmetic power has become a new engine for the development of global digital economy and a new focus of strategic competition among countries.

1.2 Stable growth in the size of the computing power

The global arithmetic scale maintains a high and stable growth trend, and in the context of the digital economy era characterized by the perception of everything, the interconnection of everything, and the intelligence of everything, the total global data volume and arithmetic scale continue to show a high growth trend. According to the data of the National Data Resource Survey Report, the total global data output in 2021 was 67ZB, with an average growth rate of more than 26% in the past three years. According to the data study, the total scale of global computing device arithmetic power reached 615EFlops in 2021, with a growth rate of 44%, of which the scale of basic arithmetic power was 369EFlops, the scale

of intelligent arithmetic power was 232EFlops, and the scale of supercomputing arithmetic power was 14EFlops.

It is predicted that mankind will usher in the YB data era in 2030, with the global arithmetic scale reaching 56ZFlops, with an average annual growth rate of 65%, of which the basic arithmetic reaches 3.3ZFlops, with an average annual growth rate of 27%; the intelligent arithmetic reaches 52.5ZFlops, with an average annual growth rate of more than 80%; and the supercomputing arithmetic reaches 0.2ZFlops, with an average annual growth rate of more than 34%.

Diversified demand accelerates the upgrading of arithmetic power diversification. Diversified intelligent scenarios require diversified computing power, and the rapid rise of artificial intelligence, scientific research, and emerging fields such as meta-universe all put forward higher requirements for computing power. Taking the meta-universe as an example, Intel predicts that the meta-universe needs to increase its computing power by a thousand times, and NVIDIA believes that the real-time rendering arithmetic under the immersive experience is still a million times short.

In terms of basic arithmetic, cloud computing has basically recovered to the level of pre-epidemic growth. According to IDC data, the global cloud computing IaaS market size grew to $91.35 billion in 2021, up 35.64% year-on-year, and the cumulative IaaS+PaaS market amounted to $159.6 billion, a year-on-year increase of 37.08%. Cloud computing will become the mainstream general-purpose computing model in the future, not only providing basic support for new technologies such as big data, artificial intelligence and 5G, but also providing a power source for industrial digital transformation and intelligent upgrading. In terms of intelligent arithmetic, there is a contradiction between the demand for massive

and complex data processing and the supply of single arithmetic power. More than 80% of the rapidly expanding data in the world is unstructured data (text, pictures, voice, video, etc.), and as Moore's Law and Dennard's Law of Scaling slow down, the performance of chips represented by CPUs has increased by less than 15% annually, making it difficult to meet the demand for processing unstructured data, such as videos, pictures, and so on. It is difficult to meet the demand for processing unstructured data such as videos and pictures, and there is an urgent need for diversified intelligent computing power. In terms of super-computing arithmetic, the law of a thousand times in ten years is still continuing, and the new supercomputer Frontier of the Oak Ridge National Laboratory (ORNL) of the United States has surpassed Japan's Fugaku with a performance of 1.102 EFlops (ten billion floating-point operations per second) on the Linpack benchmark, becoming the world's first publicly recognized ten billion supercomputer, and the global supercomputer has officially entered the era of E-level computing. The world's supercomputers have officially entered the E-class computing era.

1.3 The Arithmetic Industry is Booming

Benefiting from the rapid economic recovery, the global server market continues to grow. As for the whole machine, 2021 global server market shipments and sales amounted to 13.539 million units and US$99.22 billion, up 6.9% and 6.4% year-on-year, respectively. HPE/Xinhua ranked first in the global server market with a 15.6% market share, while Dell, Wave, Lenovo, and Huawei were ranked second to fifth, with a 15.4%, 8.9%, and 1.9% market share, respectively, Dell, Wave, Lenovo and Huawei ranked second to fifth with market shares of 15.4%, 8.9%, 6.4% and 1.9% respectively. In terms of chips, the server chip market has been dominated by the X86 architecture for a long time, with Intel and AMD's market shares of 81% and 16% respectively. With the weakening of Intel's dominant position in servers, AMD's market share will continue to increase. In addition, ARM server chip products are gradually rising,

NVIDIA, Amazon, Huawei, Ali and other domestic and foreign giants have launched their own ARM server CPUs, and it is expected that the market share of ARM servers will also continue to rise, approaching 10% by 2024, becoming an important complementary force for general-purpose computing power.

The increasing scale of training data and model complexity has pushed the demand for AI servers to grow rapidly. In terms of the whole machine, according to IDC statistics, in 2021, the global AI server market size reached $15.6 billion, a year-on-year growth of 39.1%, exceeding the growth rate of the overall global AI market (including hardware, software and services) by 22.5%, and becoming the driving force for the growth of the overall AI market.

In the global AI server market in 2021, Wave, Dell, and HPE ranked among the top three with a market share of 20.9%, 13.0%, and 9.2% respectively, and the total market share of the three vendors amounted to 43.1%, while Huawei (5.8%) and IBM (4.1%) ranked fourth and fifth. In terms of chips, traditional chip giants have accelerated the improvement of the AI chip product system, and have continued to promote the construction of the full capacity to seize the dominance of the diverse arithmetic ecosystem. Intel released a new generation of high-performance deep learning AI training processor Habana Gaudi2, with an arithmetic speed 2 times that of the previous generation.AMD, after completing the acquisition of Xilinx, plans to incorporate Xilinx's FPGA AI engine into its CPU. NVIDIA pushed a new architecture GPU with TSMC's 4nm process that integrates 80 billion transistors, dramatically increasing AI computing speed.

E-level supercomputing era has come, supercomputing equipment manufacturers have to speed up the pace of industrialization. In terms of the whole machine, supercomputing equipment manufacturers have strengthened industrial integration and layout, in the TOP

500 list, Lenovo is currently the largest supercomputer manufacturer, with a total of 161 units, accounting for 32.2% of the world; HPE has 96 units shortlisted, accounting for 19.2% of the second; Wave, Atos, Dawning with 50 units, 42 units, 36 units in the third to fifth place, accounting for 10%, Wave, Atos and Dawning ranked third to fifth with 50, 42 and 36 units, accounting for 10%, 8.4% and 7.2%.

HPE launches Frontier, its first E-class supercomputer, after acquiring Cray for $1.3 billion, and expects to launch a supercomputer with more than 2 EFlops of performance by 2023. France's Atos launched a new supercomputer, BullSequana XH3000, which will realize E-class traditional digital simulation and 10E-class AI-accelerated computing. In terms of chips, CPUs are still dominated by Intel and AMD, with as many as 388 supercomputers on the TOP 500 list using Intel CPUs, accounting for 77.6%, and 93 using AMD processors. In addition, heterogeneous computing chips are increasingly used in supercomputers, with a total of 168 supercomputers on the TOP 500 list using accelerator/co-processor technology, of which 154 use NVIDIA chips and 8 use AMD chips.

1.4 Arithmetic technologies are in dire need of diversified innovation

Advanced computing technology can only consolidate the cornerstone of arithmetic development. In the era of artificial intelligence, the massive data flood and the outbreak of diverse application demands have driven the exponential growth of the scale of arithmetic power and the continuous adjustment of the arithmetic power structure, so it is difficult for a single technological upgrade path to match the demand for high-quality development of arithmetic power, and advanced computing technologies characterized by diversification and convergence have ushered in a new round of development wave. Facing the information processing needs of massive data, real-time response, ubiquitous diversity, green security and other scenarios, through the integration of computational theory, computational

devices, computational components, computational systems and other fusion innovations and subversive reconfiguration, the formation of computational technologies and products with higher computing power, higher energy efficiency, more diversified, more flexible computing technology and products will help to realize the enhancement of the performance of single-point computation and the efficient utilization of the computing system, and to solve the challenges of arithmetic power and break the post-Moore era. challenges and break the arithmetic crisis in the post-Moore era. On the one hand, advanced computing, as a new driving force for technological innovation, has pushed the classical computing technology based on silicon-based semiconductors to continue to evolve forward, and has gradually changed chip design thinking with systematic thinking to form diverse computing architectures. On the other hand, disruptive computing technologies such as quantum computing, storage-computing integration, optical computing, and brain-like computing have made breakthroughs, promoting non-classical computing from theory to practice. With the continuous development of advanced computing technology, the existing arithmetic scale will be effectively enhanced, arithmetic cost will be significantly reduced, arithmetic utilization efficiency will be improved, and the arithmetic system will be subject to disruptive changes.

Computing chips are accelerating breakthroughs. While the performance of CPU, GPU and other general-purpose chips continues to be upgraded, the development of specialization of computing chips continues. Artificial intelligence chips have entered the commercial landing stage, and the industry has formed chip solutions covering all scenarios, with NVIDIA GPUs occupying a major market share on the cloud training side and high-performance chip architectures diversifying on the cloud reasoning side; the end-side scenarios are highly fragmented, and a number of commercial landing products have been formed in the fields of automatic driving, video surveillance, smart home, etc. Data processing unit (DPU) chip has become a new hotspot for the industry to chase, the rapid growth of data-intensive

demand for the existing computing architecture in the cloud puts forward new requirements, focusing on data acceleration and processing as well as all kinds of resource management in the cloud DPU chip innovation is active, and has become an important driver to improve system performance. At present, chip vendors such as NVIDIA, Intel, and Meiman, cloud service providers such as Amazon and AliCloud, and emerging companies such as CoreQiYuan and Zhongke Harness Digital have all formed their own DPU products.

Heterogeneous computing has become the mainstream mode. Along with heterogeneous computing in the mobile Internet, artificial intelligence, high-performance computing and other types of typical applications accounted for a significant increase in the proportion of diverse, cross-system processor synergy has become an important means of improving the parallelism of computing and energy efficiency, which mainly involves the reconstruction and rebuilding of the hardware architecture, hardware-software fusion and synergy in two dimensions. Hardware architecture breaks through the CPU-centered system, the application dimension from the chip, node to the system level partition heterogeneity gradually deepened, the computing architecture from the "control chip + various types of special acceleration chip" typical model to the multi-system discrete exploration of new systems, is expected to achieve a larger scale of multi-system efficient parallel scheduling. Software collaboration takes cross-domain unification and flexible deployment as an important direction, integrating compilers, programming languages, acceleration libraries, development tools, etc. with the help of a unified heterogeneous software platform, providing programming models and application program interfaces for different computing architectures at the bottom, and realizing the unified management and scheduling of diverse and heterogeneous computing power, with typical representatives such as Intel OneAPI, Nvidia CUDA, and Huawei's BeiMei Diversified Computing Convergence Architecture. Typical representatives include Intel OneAPI, NVIDIA CUDA and Huawei Beiming Diversity Computing Convergence Architecture.

Deepening of ubiquitous collaborative computing applications. Ubiquitous collaboration is a broader concept of computing system innovation. Among them, center-edge collaboration has been applied in many scenarios, and gradually deepened from local data preprocessing to cloud-side collaboration support for application computing processes, AI training shifted from cloud-based to cloud-side collaboration, and reasoning moved from cloud- and end-based to edge-end collaboration. At present, cloud-side-end ubiquitous computing architecture and edge-side arithmetic realization are the focus of promotion. In the arithmetic network, cloud, edge and end together constitute a multi-layered and three-dimensional ubiquitous computing architecture, which constitutes a new type of infrastructure for the arithmetic network through deep integration with the network. Edge-side computing power realization is constrained by scenarios, and there are large differences in function definition and performance requirements, and it is currently in the preliminary stage of common requirements sorting and architecture clarification. As the commercial scale of cloud-side-end collaboration, edge computing, multi-device collaboration and other multi-dimensional collaboration systems continues to expand, the proportion of edge computing deployment will continue to increase.

The first exploration of industrialization of cutting-edge computing. Computing technology and mathematics, physics, biology and other multidisciplinary cross-fertilization, resulting in storage and computing, optical computing, quantum computing and other cutting-edge subversive computing technology innovation is active, and has become an important direction for future exploration, and some of the fields are now beginning to move towards the industrialization of exploration. The storage-calculation integration architecture realizes computation in the storage unit, which is expected to overcome the bottleneck of "memory wall", and a number of startups have emerged in the industry, such as ZhiCun Technology, and the related products have been applied in the Internet of Things and

wearable devices. Optical computing using optical devices refraction, interference and other optical characteristics of computing, product prototypes have begun to trial in the data center, is expected to launch commercial products within two years, ecological construction has become the focus of the future development and breakthroughs. Quantum computing demonstrates superiority of arithmetic power in solving specific problems such as random circuit sampling and bosonic sampling, and research institutions are trying to apply it in encryption and decryption, chemical simulation, drug development and other scenarios.

1.5 Arithmetic empowerment continues to deepen

Arithmetic power has a significant driving effect on the development of digital economy and GDP, accelerating the innovation and development of information technology industry such as electronic information manufacturing, software and information technology service industry, Internet industry, communication industry, etc. on one hand, and boosting the digital transformation and upgrading of traditional industries such as manufacturing, transportation, retail, etc. on the other hand, and bringing about extended benefits such as growth of industrial output value, improvement of production efficiency, innovation of business model, optimization of user experience, and so on. Benefits.

Arithmetic power drives the development process of digital industrialization. At present, arithmetic power, as an important base support for the core industries of the global digital economy, drives the development of upstream and downstream industry chains, especially in the fields of integrated circuits, servers, cloud computing and so on. In terms of integrated circuits, the global sales of computing and storage-related integrated circuits in 2021 will be about 200 billion U.S. dollars, an increase of more than 20% over last year. As for servers, the investment in data center infrastructure will continue to rise in 2021, with global server market shipments and sales at 13.539 million units and $99.22 billion respectively, up 6.9% and 6.4% year-on-year. In terms of cloud computing, driven by arithmetic power to empower

the digital transformation of the industry, cloud-native technologies continue to land, leading to an all-round improvement in technical architecture, application effectiveness and cloud benefits, and the global cloud computing market scale rteached $408.6 billion in 2021, up 29.0% year-on-year, maintaining high growth and rapid innovation.

Arithmetic power has become a key engine for steady growth in industrial digitization. Continuous investment in arithmetic power provides the original impetus for the digital transformation of industries, and establishes a solid foundation for achieving production efficiency improvement, service capability optimization, and business model innovation. Among them, the digital transformation of the manufacturing industry is a field with a high degree of dependence on computing power and a more significant improvement in production efficiency, and the investment in computing power represented by cloud computing, edge computing, and intelligent computing is conducive to the creation of a highly synergistic intelligent manufacturing ecosystem. Siemens, the international manufacturing giant, successfully built the first factory completely based on the concept of digital enterprise in 2021, using digital twin technology in the process of planning, analysis, simulation, testing, verification, etc. With the support of strong arithmetic power, it realized a 50% increase in replenishment speed, a 40% increase in spatial efficiency, a 30% increase in batch production flexibility, and a 20% increase in productivity.

There is a positive correlation between the scale of computing power and the level of economic development in countries around the world. At present, with the continuous consolidation of the base of arithmetic power, the supporting role of arithmetic power on the development of digital economy and digital transformation of thousands of industries is more and more prominent, and it has become an important indicator to measure the degree of economic and social development of a region. Among them, the arithmetic power has a significant driving effect on the development of the digital economy and GDP, with the

global arithmetic power scale growing by 44% in 2021, and the scale of the digital economy and nominal GDP growing by 15.6% and 13% respectively. The scale of global computing power is closely related to the level of economic development, and the higher the level of economic development, the larger the scale of computing power. 17 of the top 20 countries in 2021 are among the top 20 economies in the world, and the top five rankings are consistent. Compared with 2020, the United Kingdom, the Netherlands, Italy, Australia, Singapore and other countries have improved their ranking.

1.6 Increasing Competition for Calculation Power

Major countries and regions around the world have deepened their development paths for arithmetic power. Arithmetic power has become an important means for countries to seize development dominance, and major countries and regions around the world have accelerated the process of strategic layout. The United States attaches great importance to the development of emerging technologies in computing power, and leads the direction of technological innovation by updating the list of technologies, and continues to consolidate the global leadership of the United States in the field of arithmetic technology.2022 The U.S. White House released a new version of the List of Critical and Emerging Technologies in February 2022, which covers fourteen key technologies such as advanced computing, and five areas of emerging technologies, of which advanced computing includes six major subfields: supercomputing, edge computing, cloud computing, data storage, computing architecture, and data processing and analysis. , computing architecture, data processing and analytics six sub-fields. Japan has formulated strategies for the development of quantum and artificial intelligence technologies at the national level. In terms of quantum technology, it has set up eight "quantum technology innovation bases" and established the "Quantum Technology New Industry Creation Council" (Q-STAR) to promote the research and development and industrialization of quantum technology, and has proposed to build the first Japanese quantum computer by 20224 in the "Vision of Quantum Future Society". In the "Vision

of Quantum Future Society", the first Japanese-made quantum computer will be built in 20224, and the number of quantum technology users will reach 10 million by 2030. In terms of artificial intelligence technology, Japan has released the "AI Strategy 2022", which accelerates the development of AI technology and industry by focusing on five strategic objectives: human resources, industrial competitiveness, technological system, international cooperation, and responding to urgent crises. The EU keeps increasing the investment in arithmetic infrastructure construction and key technology R&D. In September 2021, the EU planned to invest 177 billion U.S. dollars in data infrastructure, 5G, quantum computing and other fields; in February 2022, the EU released the European Chip Act with an investment amount of more than 43 billion euros, which proposes to focus on a new generation of processors, AI, and edge computing and other chip technologies, and to develop FinField Effect Transistor (FinFET) technology. Field Effect Transistor (FinFET), Full Surround Gate Transistor (GAA), Fully Depleted Silicon on Insulator (FD-SOI) and other semiconductor process technologies, to strengthen the competitive advantages of the EU countries in high-end chip design and semiconductor production processes, and to increase the EU's chip production capacity from the current 10% of the world's share to 20% by 2030.

Global arithmetic competition has become increasingly heated. Arithmetic level, the United States, China, Europe, Japan in the global arithmetic scale share of 34%, 33%, 14% and 5%, respectively, of which the global basic arithmetic competition to the United States and China as the first echelon, and the gap between China and the United States is shrinking, the United States in the global basic arithmetic ranked first, its share of 37%, intelligent arithmetic, China, the United States is in the lead, the arithmetic of the global share of 45% and 28%; the United States, Japan, the total arithmetic share of 48%, 22%, 18%, respectively. In terms of smart computing power, China and the United States are in the lead, with a global share of computing power of 45% and 28% respectively; the United States and Japan, with a total computing power share of 48%, 22% and 18% respectively.

1.7 Diverse digitalization needs drive innovation in the arithmetic industry

Traditional arithmetic services are becoming less and less adapted to more digital transformation needs. This change is not only the internal differentiation of the arithmetic service market, but more critically, the pushback from digital demand. In the past, enterprise data, may just be a backup, upload and storage of important data, nowadays, enterprise data often faces multiple demands such as data mining, data identification, data distribution, data processing, data application, etc. Especially in new scenarios such as artificial intelligence, blockchain, AI smart transportation, industrial internet, smart city, etc., the demand for arithmetic is more demanding, such as higher arithmetic power capacity, security capacity, lower latency, smarter algorithms, and so on. As a result, traditional computing power services must seek new paths to meet diversified market demands.

II. Introduction to the platform

2.1 Introduction to the PrismNET platform

PrismNET aims to provide cheap arithmetic and sustainable super power for global AIGC entrepreneurs and developers in AI field, to promote the development of AI industry through the construction of distributed arithmetic cluster network and arithmetic leasing service under the trustworthy network, and the platform interest pass PQC, and at the same time, to provide global investors with a convenient way to participate in the AI track and AI income path. As a global experiment, PrismNET supercomputing protocol allows users to purchase AI supercomputing network mapping servers, and enjoy dividends from the corresponding servers according to the protocol's mining allocation mechanism.

PrismNET business covers IDC data center, data security, cloud computing, DNS & CDN, system R&D, etc. PrismNET will provide multi-centered supercomputing arithmetic leasing services for clients, Web3 organizations, enterprise-level users, and build supercomputing clusters with arithmetic supply network system arithmetic server as the cornerstone through the blockchain chain model, mainly constructing a de-centered The main construction of decentralized digital intelligence fusion AI arithmetic system, and PQC tokens circulated in each ecosystem, to serve the global AI enterprises and digital economy enterprises.

2.2 Creating a butterfly effect led by PrismNET

PrismNET is able to provide users with pooled arithmetic services compared to traditional cloud computing services. PrismNET connects decentralized arithmetic from all over the world, and the input and use of idle resources makes the arithmetic cost of AI more significantly reduced.

In addition, PrismNET adopts the model of "on-chain consensus and off-chain computing". Among them, the off-chain computing nodes are not constrained by the consensus

algorithm, and can combine the computing power of multiple nodes through concurrent programming, so that even in the face of the heavy computational tasks of artificial intelligence, PrismNET can provide a constant flow of computing power for it.

PrismNET is built on a trusted execution environment, which means that even malicious nodes cannot steal AI data or manipulate the execution of its automated programs to provide false results. Through the de-trusted computing environment provided by PrismNET, people can solve the privacy protection and other types of problems that may exist in the process of AI application through the underlying technical framework without worrying about centralized control, thus establishing a reliable and de-trusted AI ecosystem.

Low-latency AI interaction

Theoretically, for developers, AI seeks speed, and these speeds include aspects such as the speed of training the model, the speed of reasoning about the application of the model, and the elimination of undifferentiated heavy tasks in deep learning applications that are constantly iterated at a fast pace. While the interaction speed of AI depends on the performance of the computing node device itself, PrismNET utilizes models executed down the chain to achieve millisecond request responses, so low-latency interactions can be achieved through continuous iteration and training of PrismNET technology.

Easily accessible super internet

Artificial intelligence plays an important role in data processing, management and structuring when accessing the Internet.

Artificial intelligence tools simplify the assimilation, modification and management of data to effectively provide more comprehensive and intelligent utility services to the Internet and its users. And PrismNET's core technology allows for built-in Internet access and access to any

Web2 and Web3 data and services. Moreover, PrismNET's cross-chain technology connects multiple blockchain ecosystems so that even data and assets on different chains can interoperate, allowing AI to accomplish easily accessible Internet services and respond to a wider range of network requests.

In short, the decentralized supercomputing network built by PrismNET not only has the functions of traditional smart contracts, but also the important thing is that the "separation of consensus and computation" makes the scale of off-chain computation, off-chain data requests and real-time response a reality, and it can scale to carry high-density, low-latency, real-time interaction, off-chain interconnection and other applications. It provides a solid infrastructure base for the development of artificial intelligence technology.

2.3 Constructing a new arithmetic production relationship

What is different between PrismNET and traditional cloud computing is that it utilizes blockchain technology to build a brand-new production relationship and innovatively solves the problem of arithmetic supply; by reconstructing the arithmetic industry chain, it will turn the traditional arithmetic, such a closed system dominated by giants, into an open system in which everyone can participate in the co-construction and sharing of benefits, so as to jointly build the infrastructure for the era of Artificial Intelligence+Web3+5G.

As the arithmetic demand of AI+Web3+5G exceeds the traditional arithmetic supply, PrismNET's arithmetic characteristics (high performance, high density, low latency, low cost, and full coverage) are shown more and more strongly. PrismNET has data centers from all over the world to meet the business development needs, and will schedule and manage data centers at different levels (geographic nodes, edge nodes) to PrismNET will schedule and manage different levels of data centers (geographical nodes and edge nodes) to create a unified global supercomputing performance cluster to better meet the business needs of the

global computing power market and improve the utilization efficiency of computing power resources at the same time.

2.4 Breaking the Boundaries of Artificial Intelligence

In order to solve the contradiction between the real demand of embedded front-end to run artificial intelligence and its own performance, PrismNET provides an elastic deployment of distributed artificial intelligence (AI) arithmetic architecture system.PrismNET through a set of well-designed network communication program, embedded data need to be computed to send to the cloud, and then utilize the cloud's GPU workstation cluster for high-speed computation. PrismNET can efficiently manage the operation of each workstation in the cloud, and its elastic deployment makes it easy to increase or decrease the arithmetic power according to different computing loads, thus realizing energy saving and optimization of arithmetic power. the characteristics of distributed supercomputing of PrismNET make the system have certain disaster recovery redundancy characteristics, which effectively avoids the collapse of some computing nodes leading to the paralysis of the whole system, and the cluster system is also used. The characteristics of PrismNET distributed supercomputing make the system have certain disaster recovery redundancy characteristics, effectively avoiding the collapse of a few computing nodes to paralyze the whole system.

III. PQC Ecology

3.1 Building a global supercomputing network and open fire ecology

PrismNET will create a DePIN high-performance supercomputing space network, which will enable exponential growth of current supercomputing center clusters more efficiently through distributed arithmetic clusters and the Ai AI engine, thereby reducing computing costs and increasing commercialization value.

3.2 Efficient, reliable and secure sharing of computing resources for users worldwide

The PrismNET supercomputing protocol ecology includes a variety of participants such as nodes, developers and applications. People who use computers as mapping server nodes and miners to support network security and availability by providing computational resources. Developers create and publish applications that utilize computational resources on the PrismNET supercomputing protocol for computation and processing, providing an efficient, reliable, and secure computing resource platform for users worldwide.

3.3 Providing solutions for artificial intelligence

With the new wave of global artificial intelligence and the scale of AI application, PrismNET infrastructure platform with the ability of "higher, faster, stronger" is favored by enterprises.PrismNET is applicable to the AI AIGC field, and it can provide the computing power service, data service and algorithmic service required by AI applications. PrismNET is applicable to the AI AIGC field, and can provide computing power services, data services and algorithm services required by AI applications. Through the production, aggregation, scheduling and release of computing power, it can be used as a proprietary API or open-source checkpoint to provide large-scale model training computing power up to tens of millions of dollars or billions of dollars, and to promote the development of AI industry aggregation.

3.4 Provide training programs for modeling algorithms

PrismNET provides cluster one-stop solution, integrating GPU topology awareness, affinity scheduling, high IO parallel file system and other underlying technologies, supporting a variety of model training methods, compatible with mainstream AI frameworks, expanding and customizing the industry's mainstream distributed training solutions, enhancing the amount of training data, and shortening the model delivery cycle; providing customized algorithmic frameworks, adopting code generation and other methods, and providing a wealth of built-in Provide customized algorithm framework, using code generation and other methods, built-in to provide a wealth of operators to simplify the data set import, feature engineering processing, pre-training model dependency and other steps, to improve the efficiency of AI training and development; for the training of large models in distributed environments, the use of memory optimization, such as ZeRo and other technologies, to break the gap between the memory and the memory to reduce the memory overhead of the training.

IV. Innovative technologies

The PrismNET supercomputing protocol provides a blockchain-based distributed computing method and system through technological innovation in order to overcome the problem of difficulty in ensuring data security while performing distributed computing on large-scale data in existing technologies.

4.1 Super Arithmetic Program

writing a smart contract based on a computational requirement, publishing said smart contract to a blockchain, said smart contract containing a distributed computation function and a result aggregation function to enable each slave node in the blockchain to perform a distributed computation based on said distributed computation function in said smart contract and a local dataset, and uploading the computation results to the blockchain; obtaining the computation results of each slave node from the blockchain, and aggregating the computation results of all slave nodes based on the the result aggregation function in said smart contract to aggregate the calculation results of all the slave nodes.

4.2 Task release module and results summary module

A task release module for writing a smart contract according to the computational requirements, releasing the smart contract to the blockchain, and the smart contract contains a distributed computation function and a result aggregation function to enable each slave node in the blockchain to perform distributed computation according to the distributed computation function in the smart contract and the local dataset and upload the computational results to the blockchain; and a result aggregation module for obtaining from the blockchain the computational results of each calculation results of the slave nodes, and summarize the calculation results of all the slave nodes according to the result summarization function in the smart contract.

4.3 Specific implementation modalities

The PrismNET supercomputing protocol writes smart contracts based on the computational requirements, publishes the smart contracts to the blockchain, and the smart contracts contain distributed computation functions and result aggregation functions to enable each slave node in the blockchain to carry out distributed computation based on the distributed computation functions in the smart contracts and the local dataset, and uploads the results of the computation to the blockchain;

PrismNET supercomputing protocol specifically, when a node in the blockchain has a computational need, that node is used as a master node, based on which the master node writes a smart contract based on its computational needs. It should be noted that a smart contract is a special protocol that is used when formulating a contract within a blockchain, which contains program code functions, and is also capable of interacting with other contracts, making decisions, storing information, and transmitting Ether coins, among other functions. In embodiments of the present invention, the smart contract contains a distributed computation function and a result aggregation function. It is understood that the distributed computing function in the smart contract indicates what kind of distributed computing is performed on the data, and the result aggregation function in the smart contract indicates how to summarize the results of the distributed computing, and the distributed computing function and the result aggregation function in the smart contract together form a distributed computing framework. In addition, the smart contract also includes the description of the smart contract, which summarizes the main content of the smart contract.

Further, the master node publishes the written smart contract to the blockchain, and other nodes in the blockchain can view the smart contract from the blockchain, and the other nodes in the blockchain can determine whether or not they have computing resources by viewing the description of the smart contract. In the embodiment of the present invention,

the nodes having computing resources are treated as slave nodes, and each slave node, after viewing the smart contract, will adopt a claiming mechanism to obtain the smart contract from the blockchain and store it locally, while the obtaining operation of the smart contract by each slave node will be recorded in a ledger of the blockchain for permanent deposit. After acquiring the smart contract, each slave node performs distributed computation based on the distributed computation function in the smart contract and the local dataset, i.e., inputting the local dataset into the distributed computation function for distributed computation. Eventually, each slave node uploads its respective computation results to the blockchain.

It obtains the calculation results of each slave node from the blockchain and summarizes the calculation results of all slave nodes according to the result summarization function in the smart contract. After each slave node uploads its respective computation results to the blockchain, the master node can obtain the computation results of each slave node from the blockchain, based on which the master node determines whether or not the distributed computation task in the smart contract is completed based on the computation results of all the slave nodes, and if the distributed computation task in the smart contract is completed in its entirety, the master node will summarize the computation results of all the slave nodes based on the result summarization function in the smart contract. nodes according to the result aggregation function in the smart contract.

It should be noted that the PrismNET supercomputing protocol utilizes the nodes in the blockchain to carry out distributed computation and result aggregation, because any operation of the nodes in the blockchain will be recorded in the blockchain ledger, and the data in the blockchain has the property of not being tampered with.

The PrismNET supercomputing protocol provides a blockchain-based distributed computing method, in which the master node in the blockchain writes a smart contract according to its own computational needs and publishes the smart contract to the blockchain in order to make the slave nodes in the blockchain carry out distributed computation according to the local computational resources and the distributed computation function in the smart contract, and finally, the master node summarizes the computational results of all the The computation results of all the slave nodes are aggregated according to the result aggregation function in the smart contract. The method is redesigned and improved on the basis of the existing blockchain system, transforming the transaction process of the entire blockchain into a distributed computing framework, so as to realize distributed computation of large-scale data while also effectively realizing the safe sharing of data to ensure the security of data and prevent data leakage.

The PrismNET supercomputing protocol also provides a blockchain-based distributed computing method that aggregates the computation results of all slave nodes according to a result aggregation function in the smart contract, which previously also includes: screening the computation results of all slave nodes using a predetermined algorithm, and obtaining all the computation results after the screening; accordingly, aggregating the computation results of all slave nodes according to the result aggregation function in the smart contract, specifically: aggregating all the computation results after the screening according to a predetermined algorithm; and computational results are summarized, specifically: all computational results after screening are summarized according to the result aggregation function in the smart contract.

On the basis of the above technical solution, if there are dishonest nodes among all the slave nodes, it will lead to possible abnormal data in the calculation results; at the same time, if there is an error in the local dataset of certain slave nodes, it will also lead to possible

abnormal data in the calculation results. In view of this, the master node of the PrismNET supercomputing protocol, after obtaining the computational results of all slave nodes, utilizes a preset algorithm to screen the computational results of all slave nodes, and obtains all the computational results after screening, and based on this, the master node then aggregates all the screened computational results according to the result aggregation function in the smart contract. Among them, the predetermined algorithm may be an outlier detection algorithm, which may be set according to actual needs.

The master node of PrismNET supercomputing protocol utilizes a predefined algorithm to filter the computational results of all slave nodes, which is implemented as follows:
Since the historical calculations participated by each slave node in the blockchain are recorded in the blockchain ledger, the master node may obtain the historical calculation record of each slave node from the blockchain ledger. Among other things, the historical calculation record of each slave node contains a number of historical calculations in which each slave node participates, a number of data entries involved in each historical calculation, and a time from the present for each historical calculation. The master node determines a weight of each slave node based on the number of historical calculations in which each slave node participates, the number of data entries involved in each historical calculation, and the time at which each historical calculation is distant from the present contained in the historical calculation record of each slave node. Assuming that the weight of a slave node is P, the specific formula for P is:

Where n denotes the number of history calculations in which the slave node is involved; si denotes the number of data entries involved in the ith (i is not greater than n) history calculation; ti denotes the time of the ith (i is not greater than n) history calculation from the present.

The weight of each slave node can be determined by the above method steps, on the basis of which the master node determines a local outlier factor corresponding to the calculation result of each slave node according to the outlier point detection algorithm and the weight of each slave node. Therein, in the outlier point detection algorithm, let the set of samples be D, and the distance between sample o and sample p be d(o,p), defining dk(o) as the kth distance of point o. dk(o) = d(o,p) when the following conditions are satisfied: (1) there exist k points p′∈D\{o} in the set of points, such that d(o,p′)≤d(o,p); (2) there exist k-1 points p′ ∈ D\{o} such that d(o,p′)<d(o,p); i.e., p is the kth point closest in distance to o. Define Nk(p) as the kth distance neighborhood of point p satisfying Nk(p) = {p′∈D\{o}|d(o,p′)≤dk(o)}. Define the kth reachable distance from point p to point o as dk(o,p) = max{dk(o),d(o,p)}.

Define the local outlier factor LOFk(o) for point o as:
Combining the above formulas, the local outlier factor of each sample in the sample set D can be calculated, and the larger the local outlier factor of a sample is, the more likely it is to be an anomalous sample.

Based on the above outlier detection algorithm, the PrismNET supercomputing protocol takes the combination of the computation results of all slave nodes as a sample set, and takes the computation result of each slave node as a sample in the sample set. On this basis, the POS algorithm is chosen to improve the distance in the above outlier detection algorithm. Let the new distance be the POS distance: d′(o,p), then the new distance where Pn denotes the weight of the nth slave node. For each slave node's computation result, the local outlier factor corresponding to each slave node's computation result can be found by substituting the POS distance corresponding to each slave node's computation result into the outlier detection algorithm.

Ultimately, the master node screens the computation results of all the slave nodes according

to the local outlier factor corresponding to each of the computation results of all the slave nodes. Specifically, a local outlier threshold may be set in advance, based on which, if the local outlier factor corresponding to the computation results of a slave node is greater than the local outlier threshold, the computation results of the slave node are deleted; if the local outlier factor corresponding to the computation results of a slave node is not greater than the local outlier threshold, the computation results of the slave node are retained. In addition, the calculation results of all the slave nodes can be filtered by means of a pre-set proportion of abnormal data, which can be set according to actual needs.

V. Business value and applications

The PrismNET supercomputing protocol organizes and incentivizes supercomputing supply facilities from around the world, allowing individuals to participate in contributing and to withdraw at any time. In turn, it provides a solid supercomputing infrastructure for artificial intelligence AI.

5.1 PrismNET supercomputing protocol has significant efficiency advantages over traditional cloud computing

The gross profit of the centralized cloud has reached more than 40%, and with industrial electricity costs industrial bandwidth, PrismNET supercomputing protocol decentralization is civilian electricity civilian bandwidth costs, which reduces the explicit cost of at least 50% or more.

5.2 PrismNET Supercomputing Protocol Distributed Computing

PrismNET supercomputing protocol because the ledger is a distributed smart contract, so the fault tolerance requirement is absolutely zero. The PrismNET supercomputing protocol is to split the arithmetic power of the cluster into segments and sub-task clusters for computation, and then summarize the results for output. For calculation errors or false calculations, only the corresponding checking and verification mechanism is required.

5.3 PrismNET supercomputing protocol application scope

PrismNET supercomputing protocol is not only applicable to Web3 applications, but also to AIGC; Web3 is the Internet of value, and the data value is going to produce a twist. PrismNET believes that AI is a singularity, and while existing dApps relying only on decentralized rectification of the Web2 application model belong to the conceivable size of the market, AI is a Web3 market with unknown ceilings.

As we all know, ChatGTP requires $7,000w of cloud computing power to train each model, and cloud computing has encountered a scaling bottleneck. Of course, 40% of this $7000w is given to Microsoft cloud for gross profit. Therefore, PrismNET supercomputing protocol will take over the computational needs of AIGC. And a wide range of AI + Web3 applications will also generate strong demand for PrismNET supercomputing protocol distributed computing.

5.4 PrismNET supercomputing protocol for Layer2 empowerment

PrismNET is essentially a computing network based on the blockchain distributed cloud computing platform, which is managed by smart contracts, while it is able to pass information as well as resources from the outside world to the chain in the form of a prophecy machine, i.e., it is able to dock the blockchain with secure external resources in a distributed manner, providing a bridge for blockchain developers to the off-chain world of data, APIs, and computational power to help blockchain applications and services including DeFi. In this way PrismNET can dramatically improve the performance and reduce the cost of the main chain to achieve scalability.

PrismNET itself can integrate mapping servers and provide Layer2 services, which means that PrismNET can provide services for the expansion of many mapping servers including Ether.PrismNET plans to provide Layer2 solutions for Ether and Algorand first, and in the future, it will also integrate with many blockchain systems, including Boca, Cosmos, and other blockchain systems. PrismNET plans to provide Layer2 solutions for Ether and Algorand first, and in the future will also integrate with other blockchain systems including Boka and Cosmos. After integrating and bridging many blockchain systems, PrismNET can also act as a hub for different blockchain systems, helping different ecosystems to realize cross-chaining based on PQC tokens, and promoting the positive development of DeFi and other boards in various ecosystems while expanding capacity.

While traditional Layer 2 is more focused on smart contracts lying more within the blockchain system, PrismNET not only provides a Turing-complete Layer 2 computational predicator solution that allows PrismNET to run code in any language (e.g., Python, GO, or C++, etc.), but will also pre-configure a variety of computational templates in the network and establish a third-party DAPP marketplace for computation services, allowing blockchain developers to quickly invoke them simply and easily. What's more, PrismNET also has an off-chain PrismNET platform that already has a huge number of nodes and computing resources as Layer-3 support, while the PrismNET platform also provides cloud computing services for real-world users, which truly realizes the interconnection between the real world and the blockchain while solving the current blockchain's scalability problem. In summary, with PrismNET, anyone can sell and consume decentralized computing resources through blockchain smart contracts or more traditional cloud computing APIs.

VI. Introduction of advantages

In addition to resources such as global supercomputing clusters, PrismNET also distributes computing demand to numerous nodes in the system, breaking up computing power and distributing it to individual users to create value. In addition, PrismNET also integrates global idle computing resources to provide supercomputing services for enterprises, and builds a buyer and seller market for computer computing power based on Token economy. Compared with traditional computing power services, PrismNET supercomputing protocol reduces the threshold and cost of supercomputing services, and will bring efficient computing power services to artificial intelligence, blockchain and other fields in the future.

6.1 Achieving debris resource availability

The PrismNET supercomputing protocol enables everyone to receive a monetary return for sharing their personal computing space (e.g., a hard disk). This monetary return is paid directly to the individual by the tenant, and the platform providing the service only charges a tiny service fee.

6.2 The power of broad popular participation

Everyone has access to the data on the PrismNET supercomputing protocol public blockchain, and everyone can issue transactions waiting to be written to the blockchain. Participants in the consensus process maintain the security of the database through cryptographic techniques as well as built-in economic incentives.

6.3 Can be used without the permission of a particular company or organization, i.e., code mobility

The PrismNET supercomputing protocol is open, transparent and open source on the web. There is no need to go through any agency or organization, and you can upload and download the information you need anytime, anywhere. This is crucial for application services,

there is no need to be standoffish and politically correct, as long as they meet the access criteria of the cloud computing protocol, the services they develop can survive for a long time. For example, US tech giants Apple, Google and Amazon have blocked Parler, a social platform that gathers many Trump supporters, which, according to BuzzFeedNews, pays AWS more than $300,000 a month for hosting. However, some analysts believe that even if you don't use cloud services, building your own data center is difficult and there may not be other hosting providers willing to offer their services.

6.4 High security and convenience

Traditional cloud computing companies buy or rent servers to store their customers' files while using RAID schemes or a multi-data center approach to protect data security. With PrismNET supercomputing protocol there is no need for centralization, no need to buy expensive equipment and maintenance manpower.

6.5 Security of personal privacy

Under the current computing paradigm, all companies that "go to the cloud" default to cloud platforms such as Aliyun and AWS, which legally protect the confidentiality of corporate data and user privacy. But in reality, although centralized cloud platforms use a lot of R&D costs to build privacy protection systems, their data ownership still belongs to the enterprise, and the actual physical control belongs to the cloud platform. However, in the PrismNET supercomputing protocol, we can see a system that can completely demarcate data ownership and data usage from the protocol layer to the physical layer, which is a key attribute that distinguishes whether a cloud service is a "next-generation" product or not.

VII. Token economy

7.1 PQC TOKEN

PrismNET equity pass PQC, is based on the PrismNET supercomputing protocol before the launch of a community behavior contribution value of the record, but also the value of the platform pass, the future will be circulated in the ecological applications, the record will be on the occasion of the launch of the supercomputing protocol to get a huge benefit.

Token name: PQC

Total number of pieces issued: 1,000,000,000.00 (one billion pieces)

Issue price: 0.01 USDT per coin

Distribution method:

90% mined out through GPU arithmetic

2% Official Team: 18-month lock-in period after tokens go live, then 36 months of linear vesting

5% institutional financing: 12-month lock-up period after tokens go live, then 24-month linear vesting

3% PrismNET Foundation: tokens go live with an 18-month lock-in period followed by 48 months of linear vesting

Contract address: 0xaac8a6e94f62f8bd0af54863d4c19100b7401c78

7.2 PQC's eight value-added logics

01 AI arithmetic fuel applications

02 Withdrawal fuel application

03 Pledge Dredging Fuel Application

04 Mechanism destruction, unlimited applications

05 GenQIP Fuel Applications

06 Decentralized dual-pool control mechanism

7.3 PQC Token Blockchain Ecological Applications

PQC tokens will be applied to DeFi, RWA, Metaverse, DePIN, Layer2, GameFi, BRC-20, NFT, DEX, CEX, SocialFi, Cross-Chain Bridge, Exchanges CEX, AI, Web3.0, Wallets, etc. in the future as the PrismNET ecosystem continues to grow. and other various ecological segments.

VIII. PrismNET Foundation

PrismNET Foundation Foundation is jointly initiated and established by PrismNET Labs Labs, Inflection AI and other organizations, aiming at the development of the community, ecological investment and construction of ecological support. In order to better govern the community, and at the same time allow consensus holders to have proof of rights and interests therefore issue PQC tokens as circulation currency, the future will be through more ecological scenarios, circulation scenarios to build value for it, and to bring investment returns for the holders.

PrismNET Foundation Foundation manages assets/funds for, but not limited to, the following purposes:

01 AI Program Support Development

02 Supercomputer Provisioning Protocol Development and Maintenance

03 Research investments in cutting-edge AI technologies and thinking topics

04 DePIN eco-physical infrastructure build

05 For AI developer pre-funding

06 Research and Development in AI+DePIN Contexts

07 Application support for AI models

08 Development-related business and public goods inputs

09 Decentralization concept of global popularization of public interest inputs

10 Super Node Special Incentive

IX. Team members

PrismNET team is co-founded by senior AI practitioners, investors, and technology geeks from all over the world, the core members are experienced and passionate people from various fields in Silicon Valley, the members have led and pushed forward several AI projects to rapidly develop the global blockchain market, and created this globalized supercomputing supply system through their joint efforts.

Chris Watson

PrismNET CEO

Chris Watson is committed to applying AI technology on a global scale. As a veteran AI expert with a rich technical background and entrepreneurial experience, he has accumulated invaluable knowledge in the field of Artificial Intelligence while working at Google as a core member of the LaMDA system research.Chris Watson's vision is to provide sustainable superpower to global AIGC entrepreneurs and AI developers through the PrismNET supercomputing protocol to promote AI industry innovation and development.

Bruce Wagner

PrismNET CTO

Bruce Wagner is a technically accomplished and experienced technology leader. He has deep expertise and successful hands-on experience in the field of artificial intelligence and distributed systems, and has held key technical positions in several technology companies.Bruce Wagner is committed to applying cutting-edge technologies to PrismNET's supercomputing platform, driving the company's technological innovation and development, and providing reliable technical support for the global AI industry.

Pamela Ann

PrismNET COO

Pamela Ann is the Chief Operating Officer of PrismNET, with extensive operational management experience and exceptional execution capabilities. Having held executive positions at headline companies in multiple sectors, she has accumulated a wealth of management experience and business insights.Pamela Ann is committed to optimizing PrismNET's operational processes and business strategies to ensure that the company operates efficiently, achieves its business goals, and contributes to the development of the global AI industry.

X. Development planning

Phase I (infrastructure)

- Build a prototype of the PrismNET platform to implement basic arithmetic resource management and allocation functions.
- Conduct initial market research to understand user needs and industry trends
- Recruiting technical team to start developing a multi-node arithmetic grid-parallel system supporting x86 cluster architecture
- Enhance collaboration with hardware vendors to prepare to support granular allocation of single TPU resources

Phase II (scale-up)

- Increase marketing efforts to expand user base and partner network
- Begin preparation for the development of a multi-node arithmetic grid-parallel system supporting the ARM architecture
- Introduces NVMe+RDMA technology to improve storage performance and data access speed, optimizing system performance
- Customized deep learning and inference frameworks to meet individual user needs
- Expanding International Markets, Cross-Border Cooperation, and Enhancing Global Reach

Phase III (continuous innovation)

- Promote the implementation of a fine-grained allocation system for single GPU resources to improve the utilization of arithmetic resources
- Improve the storage solution to realize the application of NVMe+RDMA technology to improve the storage performance
- Expanding vertical applications and deepening application scenarios of AI in different industries
- Strengthen in-depth cooperation with industry partners to explore the future development of the supercomputing field

XI. Risk Warning and Disclaimer

Legal policy and regulatory risks

This white paper is intended to be a statement of the project only, and any actions are considered to be actions for which the individual voluntarily assumes all consequences.

The team makes no representations or warranties about PrismNET or the project license other than those stated in this white paper. The project is subject to the principles of voluntary participation at risk, responsibility, and self-financing.There are risks associated with the development, maintenance, and operation of PrismNET, which may be beyond the control of PrismNET. In addition to the contents of this white paper, users are asked to be aware of the risks described below and to assess the party's ability to assume the risks described below.The following risks may be associated with the development of the PrismNET project:

Insufficient information

As of the publication of this whitepaper, PrismNET is still under development. Its philosophy, consensus mechanisms, algorithms, code, and other technical details and parameters may be updated and changed frequently. While this whitepaper contains the latest key information about PrismNET, it is not absolutely complete, and PrismNET may still be tweaked and updated from time to time for specific purposes.PrismNET will endeavor to provide members of the community with as much information as possible about the development of the common-chain in every possible way, but it cannot ensure that all information will be transmitted in real time to every token holder.

Risks related to judicial oversight

Encrypted digital assets are or may be regulated by authorities in different countries/regions.PrismNET may from time to time receive inquiries, notices, warnings, orders or rulings from one or more competent authorities, and may even be ordered to suspend or terminate any development or action related to the NA Chain.

The development, marketing, promotion or other aspects of PrismNET may be materially affected, hindered or terminated. As regulatory policies may change at any time, PrismNET's existing regulatory licenses in any country may be temporary.

PrismNET makes no representations or warranties other than those expressly set forth in this White Paper. Any person's participation in PrismNET transactions is based on his/her own knowledge of PrismNET, laws and regulations, and the information in this White Paper. This document does not constitute any investment advice, and before making any investment decision, investors should consider the characteristics of the product, their own investment objectives, the level of risk they can bear, and other factors, and seek independent financial and professional advice as appropriate. professional advice as appropriate.

PrismNET hereby expressly disclaims and rejects the liability described below:

- Anyone who trades with PrismNET in violation of any country's anti-money laundering, anti-terrorist financing or other regulatory requirements;
- Any person who purchases PrismNET in violation of any representation, warranty, obligation, promise or other requirement set forth in this White Paper, and the resulting inability to use or withdraw PrismNET;
- For any reason, PrismNET's trading program was abandoned;
- Failure or abandonment of the development of PrismNET and the resulting failure to deliver or use of PrismNET;
- Postponements or delays in the development of PrismNET and the resulting inability to meet a pre-disclosed schedule;
- Errors, defects, flaws or other problems with the PrismNET source code;
- Failure, crash, paralysis, rollback, or hard fork of the PrismNET platform;
- PrismNET fails to fulfill any particular function or is not suitable for any particular purpose;
- Failure to make timely and complete disclosures regarding the development of PrismNET.