[PDF Database Document] - BTCC Cryptocurrency Exchange

Original:
https://www.btcc.com/en-US/academy/research-analysis/what-is-monad-developer-focused-layer1-smart-contract-platform

What Is Monad: Developer-Focused Layer1 Smart Contract Platform

Monad, an upcoming layer-1 blockchain designed to rival the EVM, promises a remarkable transaction throughput of 10,000 transactions per second (tps).

This innovative platform provides app developers with an unparalleled blend of portability and performance, opening up new horizons for decentralized application development.

Its pipelined execution of Ethereum transactions introduces a novel paradigm, allowing complex and high-usage distributed apps to function seamlessly in a decentralized setting.

This article delves into the workings of the Monad project and explores how it's introducing parallel execution to the EVM Layer 1 system, thereby revolutionizing the blockchain industry and enhancing the capabilities of decentralized applications.

Project Background and Funding History

Monad Labs, co-founded by Keone Hon, James Hunsaker (CTO), and Eunice Giarta (COO), designed this cutting-edge project that rapidly gained momentum. With a powerful backing from venture capital firm Paradigm, the project secured $225 million in funding, bolstered by contributions from Electric Capital, Coinbase Ventures, and GSR Ventures.

After a series of successful internal tests demonstrating a remarkable 10,000 transactions per second (TPS), the highly anticipated layer 1 native blockchain launched its developer network (devnet) on March 14, 2024.

This significant milestone positions the project to enhance Ethereum's functionality and scalability, paving the way for a new era in blockchain technology.

Meanwhile, in the Monad ecosystem, exciting updates have emerged. As anticipation builds around Monad's upcoming testnet, protocols building on the platform have announced their funding rounds. aPrior, an MEV-powered liquid staking platform, has secured $10 million in funding led by Pantera Capital.

Kuru Exchange, a decentralized exchange featuring a central limit order book (CLOB), has raised $2 million with Electric Capital at the helm. Additionally, liquid staking protocol Kintsu has unveiled a $4 million funding round led by Castle Island Ventures.

These developments highlight the growing interest and investment in the Monad ecosystem, paving the way for further innovation and growth in the cryptocurrency and finance industry.

Key Features

10,000 Transactions per Second (TPS): Monad boasts an impressive capacity of handling 10,000 TPS, vastly enhancing throughput potential and facilitating the smooth operation of more intricate and heavily-utilized decentralized applications.

Its Superscalar Architecture revolutionizes the decentralized platform landscape by bridging the gap with traditional systems, leveraging pipelined execution and smart transaction scheduling.

Monad also showcases Portability and Core Composability, offering seamless integration for EVM developers through full compatibility with EVM bytecode and the Ethereum RPC API, paving the way for robust, interconnected applications.

Moreover, Monad's Fundamental EVM Optimization elevates performance, ensuring high throughput and reduced fees, while maintaining backward compatibility with existing Ethereum smart contracts.

Lastly, its Ultra-Efficient Consensus Mechanism, a Tendermint variant, coupled with further optimizations, effectively eliminates bottlenecks in state machine replication, thus bolstering overall system efficiency.

Importance and Problem-solving

Monad strives to overcome the constraints of existing blockchain platforms by presenting a high-performance Layer 1 solution compatible with Ethereum. We prioritize boosting the efficiency and scalability of decentralized applications (dApps) without compromising the core decentralization values.

This approach ensures that Monad effectively handles the demands of a rapidly growing blockchain ecosystem, paving the way for a more robust and scalable future for dApps.