



I[⚡]VM

International Bitcoin Virtual Machine

A Next-Generation Layer 2 Scaling
Solution for Bitcoin

Executive Summary

IBVM CHAIN is an innovative Layer 2 rollup and scaling solution built on Bitcoin, designed to enhance Bitcoin's efficiency, scalability, and usability while maintaining its base-layer security. By integrating zk-Rollups, UTXO Partitioning, and Ethereum compatibility, IBVM enables fast, low-cost, and decentralized transactions while introducing smart contract functionality to Bitcoin. IBVM preserves Bitcoin's security and enables programmable transactions without modifying Bitcoin's core rules.

We have integrated several key functionalities— like decentralized escrow, lending services, and a unified swap platform, which positions IBVM as an attractive infrastructure for DeFi and mainstream financial applications. This whitepaper outlines IBVM CHAIN's technical architecture, economic model, tokenomics, and roadmap, offering a clear vision for investors seeking exposure to next-generation blockchain scalability.

Key Features: –

- ▶ IBVM CHAIN scales Bitcoin via ZK-Rollups
- ▶ BitVM based programmability to create a robust ecosystem for larger adaptability
- ▶ Inherent sidechain, bridging BTC to IBVM, targeting thousands of TPS with low fees
- ▶ Ready to use solutions like Decentralized Escrow
- ▶ Decentralized lending through BTC rollups
- ▶ Cross chain swaps and interoperability between blockchains

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Problem Statement

The IBVM Chain is being developed to address critical challenges in blockchain scalability, security, enterprise adoption, and decentralized computing infrastructure. The current state of blockchain technology presents significant bottlenecks, risks, and inefficiencies that hinder mainstream adoption, particularly in enterprise and government sectors.

1. Ethereum Congestion, Security Risks, and Market Inefficiencies

Ethereum, despite being a dominant smart contract platform, faces major congestion issues due to limited transaction throughput and high gas fees. With an estimated \$600 million to \$1 trillion lost annually to hacks, flash loan exploits, and smart contract vulnerabilities, the security risks in the current blockchain ecosystem are substantial. These vulnerabilities create trust issues for institutions, preventing broader enterprise and governmental adoption.

IBVM Chain addresses these issues by leveraging Bitcoin's security while introducing a high-performance, scalable Layer 2 solution that supports efficient transactions, enhanced security mechanisms, and institutional-grade compliance.

2. Governmental and Enterprise Adoption of Bitcoin: The Need for Scalability and Energy Efficiency

As governments increasingly adopt Bitcoin as a reserve asset and financial instrument, enterprises must integrate Bitcoin-based infrastructure to remain competitive. However, Bitcoin's base layer lacks the required transaction speed and programmability for large-scale enterprise use.

Additionally, the global monetary crisis and energy crisis necessitate decentralized financial alternatives that are both sustainable and scalable. A notable reference is Karbun's white paper, which highlights green investment incentives for sustainable blockchain solutions—this approach could attract environmentally conscious investors and policymakers to the IBVM ecosystem.

IBVM Chain introduces efficient transaction processing (high TPS) and computing solutions that address these enterprise needs, enabling Bitcoin's adoption without compromising scalability or security.



3. Custodian Sidechains and Centralized Trust Risks

A major challenge in institutional blockchain adoption is the reliance on custodian-based sidechains, where funds are held in centralized entities that introduce counterparty risks. These structures create single points of failure, regulatory uncertainties, and potential loss of funds, as seen in several high-profile collapses of centralized custodians.

IBVM Chain eliminates these risks by offering a decentralized escrow and smart contract-based security model, ensuring trustless transactions while maintaining regulatory compliance.

4. Growing Market for DePIN (Decentralized Physical Infrastructure Networks)

While DePIN is mentioned in the latter part of the document, it should be emphasized as a core pillar of IBVM's strategy. The DePIN market is rapidly growing, with decentralized computing, storage, and AI processing becoming essential components of the digital economy.

A critical issue is public inclusion in DePIN—ensuring that everyday users, not just enterprises, benefit from decentralized infrastructure. Europe's €200 billion investment in decentralized computing highlights the global shift towards these solutions.

5. AI Job Displacement and the Need for Passive Income Incentives

By 2030, AI is projected to displace 20–30% of white-collar jobs, posing a major socioeconomic challenge. To counter this, IBVM Chain introduces a passive income model where users can contribute computational power from their phones, tablets, laptops, PCs, cars, and even smart TVs to earn rewards. This democratized infrastructure ensures that the economic benefits of blockchain and AI integration are distributed among the public, rather than concentrated in centralized entities.

Conclusion: Why We Are Building IBVM Chain

The IBVM Chain is designed to solve the scalability, security, and adoption challenges of blockchain while creating a sustainable, decentralized computing economy. By leveraging Bitcoin's security, integrating DePIN, and enabling public participation in decentralized computing, IBVM Chain ensures a future-proof financial and infrastructure solution that benefits enterprises, governments, and individual users alike.

Introduction & Project Background



Overview

Bitcoin's unparalleled security has come at the cost of scalability. With growing network congestion and escalating transaction fees, a scalable solution is imperative. IBVM CHAIN addresses these challenges by migrating transaction processing to a secure, efficient Layer 2 environment, by aggregating transactions off-chain and verifying them with succinct zero-knowledge proofs on-chain, IBVM CHAIN dramatically increases throughput while preserving the security of Bitcoin's Layer 1. IBVM provides a holistic solution for BTC based transactions, and uses BitVM for scalability and greater adoption.

Our Solution: Statistically Explained

The current BTC blockchain on an average, consumes 438GWh per day.

$$438 \times 1,000,000 = 438,000,000 \text{ kWh}$$

To put this into context, this is equivalent of running power required for run 21.9Million households per day, as

Average Consumption per household = 20 kWh per Day

Households that can be supported from 438 Gwh per day

$$\frac{\text{Avg BTC consumption}}{\text{Avg consumption per household}} = \frac{438,000,000 \text{ kWh}}{20 \text{ kWh}} = 21,900,000$$

Our IBVM solution saves 99.5% of power consumption, meaning that for the same number of Bitcoin transactions, IBVM's Rollup technology will consume just 2.19 GWh per day or 438.51 Gwh less, which equates to an amount of power to run 21.8 million households per day.

Assuming the cost of electricity is USD 0.25 per KWh, this equates to saving consumers approx. \$109M per day, or USD 39.8 Billion per year.



Market Opportunity

Market Need

According to Michael Saylor, founder and chairman of MicroStrategy, Bitcoin represents only a tiny fraction, **roughly \$1 trillion or 0.1%** of the estimated global wealth of around \$900 trillion, implying a vast growth potential for Bitcoin and other digital assets.

Bitcoin layer 2 Scaling solutions

Projected to surpass **\$47 billion** by 2030 as Bitcoin-based DeFi and smart contracts gain adoption.

Decentralised Escrow Solutions

Estimated to grow from **\$2.4 billion** in 2024 to \$17.91 billion by 2033 at a CAGR of 20%.

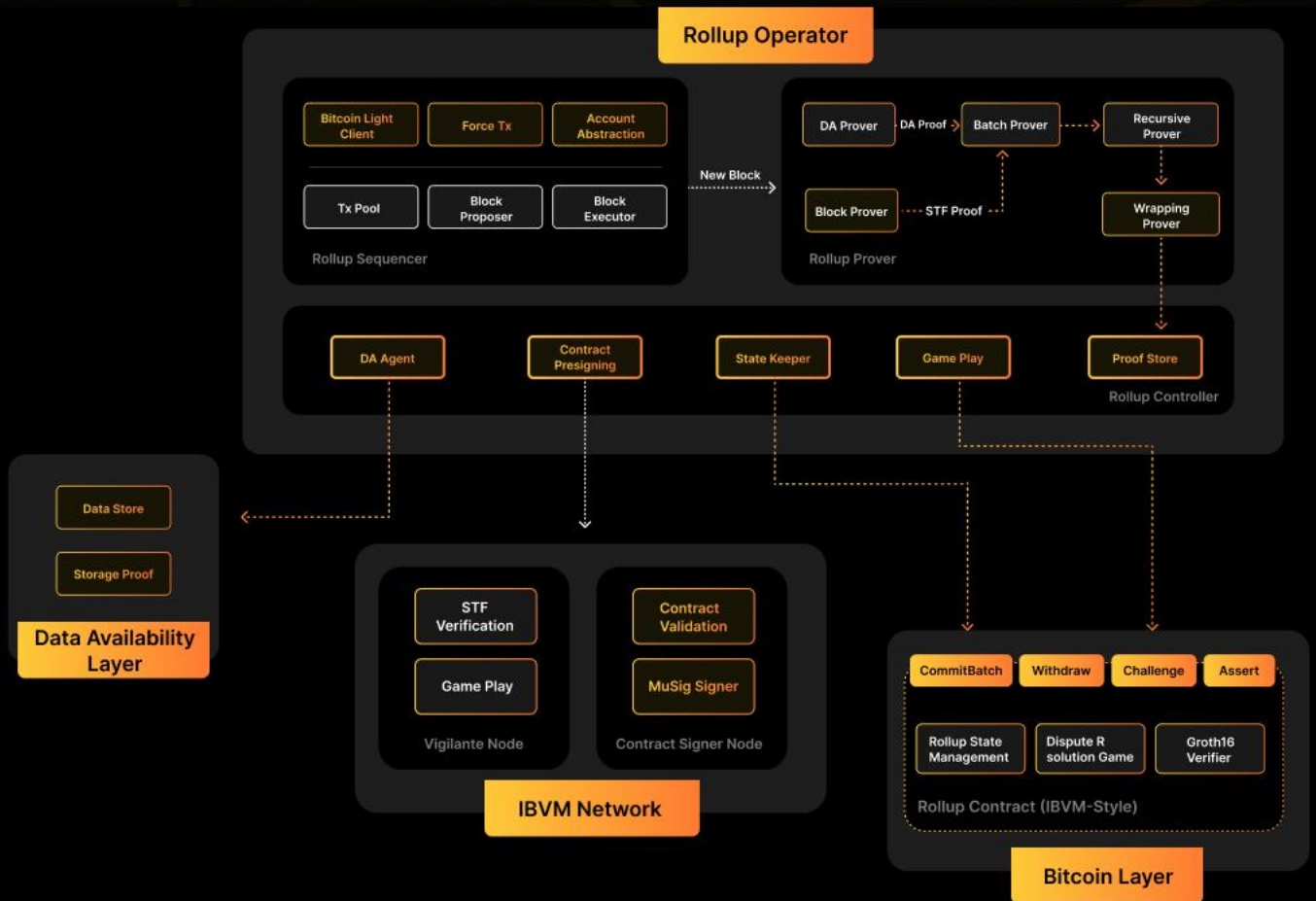
Bitcoin based lending solutions

Projected to surpass **\$47 billion** by 2030 as Bitcoin-based DeFi and smart contracts gain adoption

The increasing demand for decentralized financial applications (DeFi), and high-frequency payment services necessitates a solution that can process thousands of transactions per second (TPS) at a fraction of traditional fees. BTC Layer 2 solutions are expected to handle more than 25% of the transactions on the BTC chain, as compared to roughly 1-2% currently, implying huge potential for the layer 2 BTC solutions. IBVM CHAIN not only meets these needs but also opens new possibilities for institutional applications such as trustless escrow and decentralized lending.

Technical Architecture & Operations

Technical Overview of the Architecture



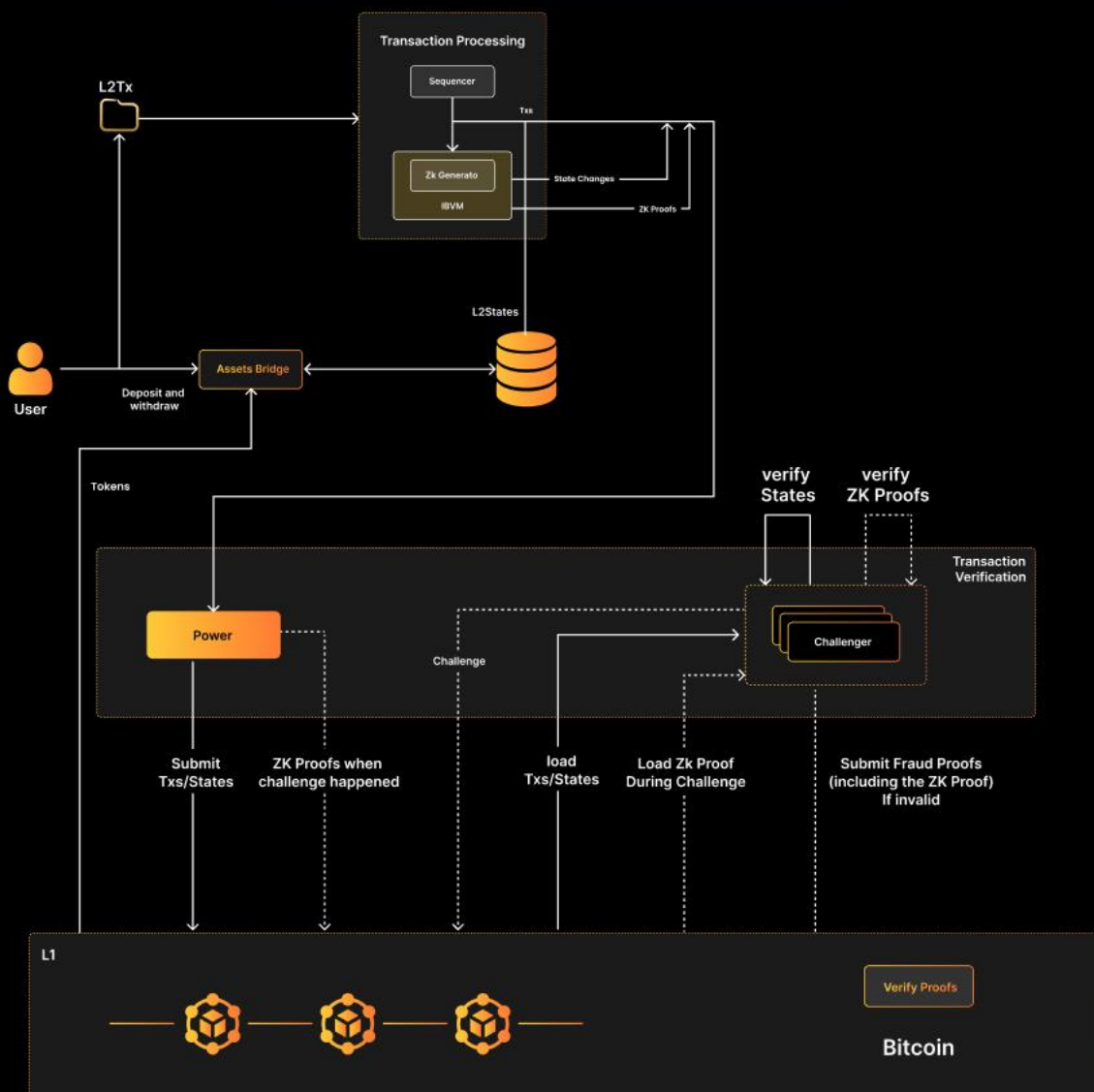
At IBVM, we are developing an innovative Layer 2 solution on the Bitcoin, to maintain the core aspect of the BTC chain, its decentralization and security. We are aiming to increase the efficiency by increasing the transaction throughput of the BTC chain by integrating a ZK-rollup technology, along with our unique "International Bitcoin virtual machine", which is inspired by BitVM.

At the core, by using this technology, we are able to conduct arbitrary types of cryptographic operations through ZK-proofs and rollup execution mechanisms. Verification of the validity of transactions and cryptographic computations are conducted on the Bitcoin. Such a mechanism allows us to enable smart contracts on the BTC chain as they are done on the EVM chains, which opens a lot of possibilities for the bitcoin chain adaptation for different kinds of the dAPPs and DeFi solutions, without compromising on the decentralized nature of the bitcoin.

Technical Overview of the Architecture

Since we follow ZK proof generator as the methodology, based on STARK protocols, we ensure that the security is nearly as high as the bitcoin chain itself, but efficiency is increased drastically, due to better utilization of the computational power. Main advantage of using this kind an architecture is that we are not compromising on the decentralized nature of the bitcoin, as the most sidechains of BTC, as the sidechains typically use independent consensus mechanisms, which are not as robust as that of the BTC chain.

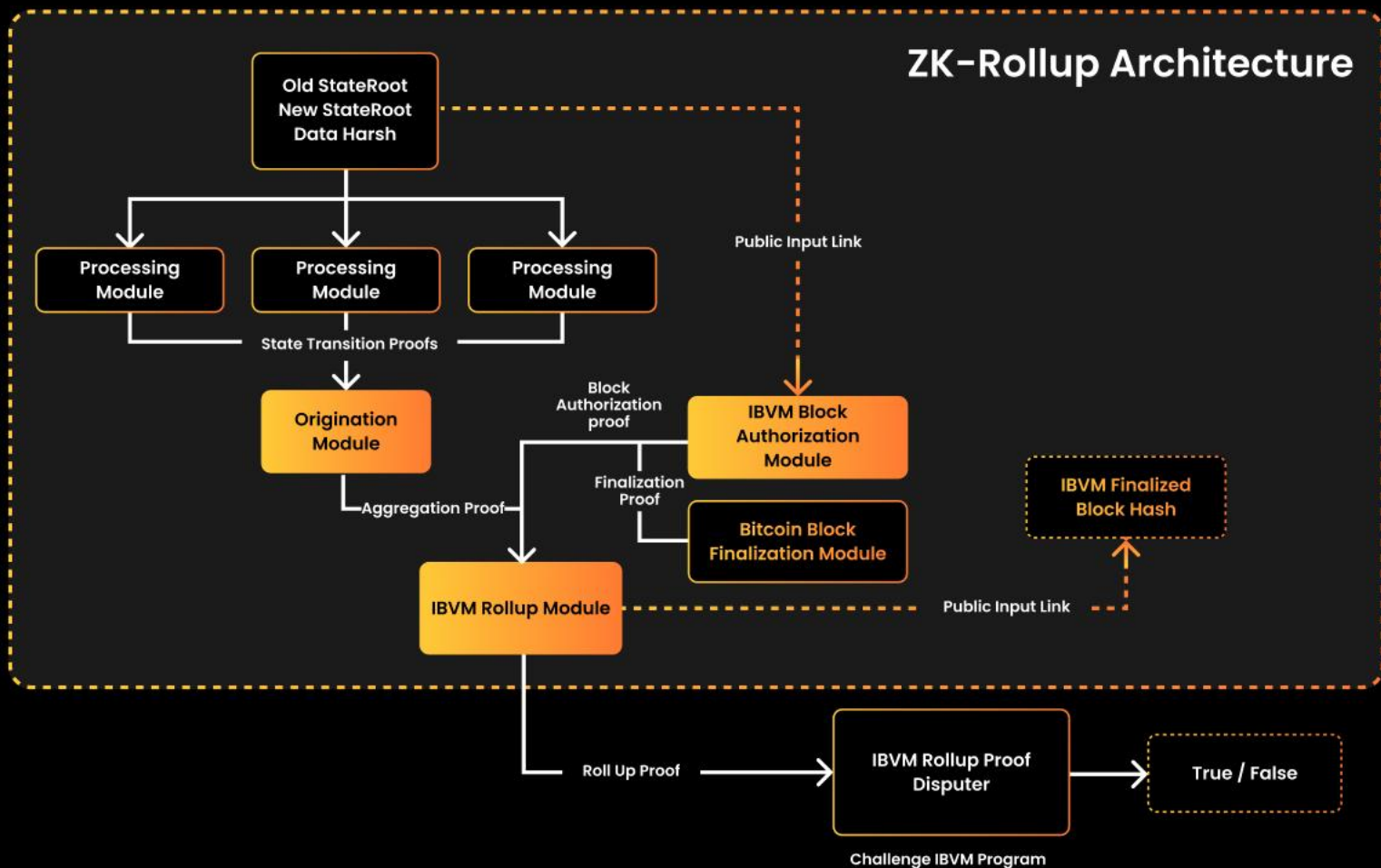
We also have a secure asset bridging mechanism for our products, which uses a decentralized asset bridge between the IBVM and Bitcoin chains, enabling cross chain capabilities. We have combined this bridge with optimistic discreet log contracts, which enhances the security. Going forward, we plan to enhance the system by opening up to DePIN to enhance the possibilities of adoption further.



ZK-Rollup Architecture

IBVM CHAIN employs a cutting-edge ZK-Rollup design using Hash function, based on STARK. This is advantageous as compared to the elliptic curve pairing as the post quantum security is very high in STARK, they are also much more efficient. Although the current STARK systems use smaller finite fields, they allow us to directly operate the addition and subtraction operations. We employ the same optimistic execution mechanism as optimistic rollups, with zero-knowledge protocol, increasing transaction throughput, lowering costs, and ensures the security and decentralization of the bitcoin blockchain.

Rollup proofs are generated as per the diagram shown



ZK-Rollup Architecture

Processing module: As the name suggests, it processes state checkpoints, user transactions, encodes our IBVM state transition, implements logics and yields proof notes for verifying the accuracy of the state transactions.

Weaver module: Stitches and accepts multiple state transition proofs, wrapping ZK proof verification logics, generating weaved batch proof.

IBVM Origination Module: Finalized block hash are obtained from the bitcoin canonical chain, encoding the logic for IBVM's block derivation and its proof.

Bitcoin Authorization Module: this module accepts the finalized block hash as input from the Bitcoin chain. It also encodes the Bitcoin PoW logic and authorization logic, generating the authority proof.

Rollup Module: in this modules, all the proofs from the other modules are obtained and then encoded with a linking mechanism for the public inputs of these modules, resulting in the generation of the final proof

Transactions are handled by Systemize & IBVM. All the transactions are collated, sorted and made available to serve as an entry point for layer 2 transactions. IBVM is the computation module and is responsible for executing smart contracts and generating states, along with the ZK proofs.

Verification is done by a zero-knowledge-based optimistic mechanism between the "Certifier" and "Disputer". Certifier is responsible for submitting Layer 2 transactions and states of execution to the Layer 1 chain, along with the zkproofs on the chain when getting disputed. Similarly, the disputer is responsible for verifying the execution results submitted by the certifier through states of execution and zkproof verification method and in case of suspicion, a Dispute process is initiated to generate fraud proofs and submit them to the bitcoin chain.

Data compression: Transaction data is compressed significantly (e.g., reducing a typical Bitcoin transaction from ~110 bytes to ~12 bytes), allowing large batches of transactions to be processed concurrently.

Full Protocol Description

Let N, R be two non-negative integers. We set N to be the number of trace column polynomials and R to be the number of preprocessed polynomials.

- Among the set of polynomial constraints eA , we denote by $M, M', M'' \in \mathbb{Z}_{\geq 0}$ the number of inclusion arguments, permutation arguments and connection arguments, respectively.
- The Certifier parameters pp is composed of the finite field F , the domains G and H , the field extension K , the $eAIR$ instance eA , all the public values, the set of committed polynomials and the Merkle tree of preprocessed polynomials
- The Disputer parameters vp is composed of the finite field F , the domains G and H , the field extension K , the $eAIR$ instance eA , all the public values and the Merkle tree's root of preprocessed polynomials.

We split the protocol's description between the Certifier and Disputer algorithm and compose each round in the Certifier algorithm of the computation of the Certifier Disputers challenges and the actual messages computed by the Certifier.

Certifier ALGORITHM

Round 1: Trace Column Polynomials

Given the trace column polynomials $tr_1, tr_2, \dots, tr_N \in F^{<n}[X]$, the Certifier commits to them, as computing their associated Merkle root. During this step, It also computes the intermediate polynomials $im_1, \dots, im_K$ resulting from the subset of identity constraints.

The first output is $MTR(tr_1, \dots, tr_N)$.

Round 2: Inclusion Polynomials

The Certifier computes the reducing challenges $\alpha, \beta \in K: \alpha = H(\text{seed}, MTR(\{tr_i\}_i), 1), \beta = H(\text{seed}, MTR(\{tr_i\}_i), 2)$. Using α and β , the Certifier computes the inclusion polynomials $h_{i,1}, h_{i,2} \in K^{<n}[X]$ for each inclusion argument, with $i \in [M]$, and commits to them.

The second Certifier output is $MTR(h_{1,1}, h_{1,2}, \dots, h_{M,1}, h_{M,2})$.

Round 3: Grand Product and Intermediate Polynomials

The Certifier computes the permutation challenges $\gamma, \delta \in K$:

$$\gamma = H(\alpha, \beta, \text{MTR}(\{\{h_{i,j}\}_{i,j}\}, 1), \delta = H(\alpha, \beta, \text{MTR}(\{\{h_{i,j}\}_{i,j}\}, 2).$$

The Certifier uses γ, δ to compute the grand product polynomials $Z_i \in K^{<n}[X]$ for each argument, with $i \in [M + M' + M'']$. The Certifier also computes the remaining intermediate polynomials $im_{K+1}, \dots, im_{K+K'}$.

In this round, the Certifier commits to both the grand product polynomials and all the intermediate polynomials. To save one element in the proof, the Certifier uses the same Merkle tree for both the grand product and the intermediate polynomials.

The third Certifier output is $\text{MTR}(Z_1, \dots, Z_{M+M'+M''}, im_1, \dots, im_{K+K'})$.

Round 4: Trace Quotient Polynomials

The Certifier computes the combination challenge $\alpha \in K$:

$$\alpha = H(\gamma, \delta, \text{MTR}(\{Z_i\}_i), \text{MTR}(\{im_i\}_i)).$$

The Certifier uses α to compute the quotient polynomial $Q \in K^{<2n}[X]$:

$$Q(X) := \sum_{i=1}^T \alpha^{i-1} \frac{(C_i \circ \bar{P})(X)}{Z_G(X)},$$

and splits it into two polynomials Q_1 and Q_2 of degree lower than n . Then, the prover commits to these two polynomials.

Recall that Q_1, Q_2 satisfy the following relation with Q :

$$Q_1(X) + X^n \cdot Q_2(X) = \sum_{i=1}^T \alpha^{i-1} \frac{(C_i \circ \bar{P})(X)}{Z_G(X)}.$$

The fourth Certifier output is $\text{MTR}(Q_1, Q_2)$.

Round 5: DEEP Query Answers

The Certifier computes the evaluation challenge $z \in K$:

$$z = H(\alpha, \text{MTR}(Q_1, Q_2)).$$

If z falls either in G or H , then we introduce a counter as an extra input to the hash function H in the above equation and keep incrementing it until $z \in K \setminus (G \cup H)$. The probability that z is not of the expected form is proportional to $(|G| + |H|)/|K|$, which is sufficiently small for all practical purposes.

The Certifier computes the evaluation sets $\text{Evals}(z)$ and $\text{Evals}(gz)$.

The fifth Certifier output is $(\text{Evals}(z), \text{Evals}(gz))$.

Round 6: FRI Protocol

The Certifier computes the combination challenges $\varepsilon_1, \varepsilon_2 \in K$:
 $\varepsilon_1 = H(z, \text{Evals}(z), \text{Evals}(gz), 1)$, $\varepsilon_2 = H(z, \text{Evals}(z), \text{Evals}(gz), 2)$.

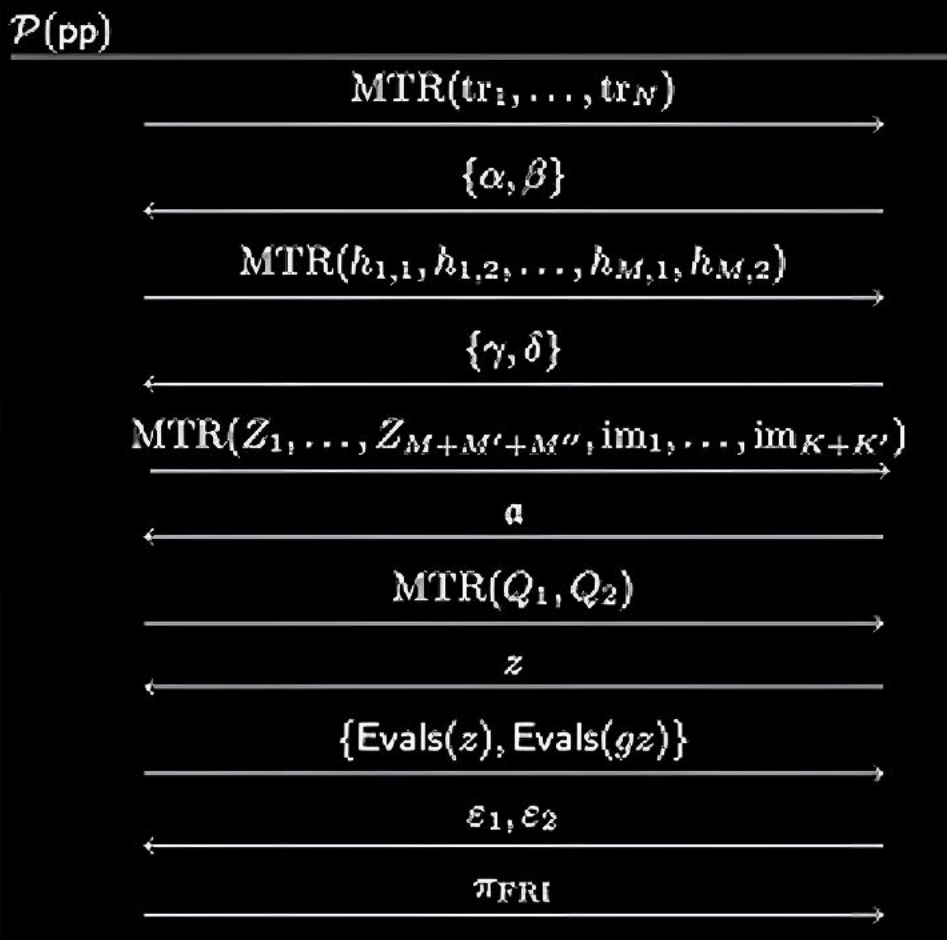
Among the set of polynomials in P , respectively denote by f_i and h_i those whose evaluation respectively belong to $\text{Evals}(z)$ and $\text{Evals}(gz)$. The Certifier computes the polynomials $F_1, F_2 \in K[X]$:

$$F_1(X) := \sum_{i=1}^{|\text{Evals}(z)|} \varepsilon_2^{i-1} \frac{f_i(X) - f_i(z)}{X - z}$$

$$F_2(X) := \sum_{i=1}^{|\text{Evals}(gz)|} \varepsilon_2^{i-1} \frac{h_i(X) - h_i(gz)}{X - gz},$$

after which he computes the polynomial $F(X) := F_1(X) + \varepsilon_1 \cdot F_2(X)$. Finally, the Certifier executes the (non-interactive version of the) FRI protocol to prove the low degree of the F polynomials, after which he obtains a FRI proof π_{FRI} .

The sixth Certifier output is π_{FRI} .



The Certifier returns:

$\pi_{\text{eSTARK}} = (\text{MTR}(\text{tr}_1, \dots, \text{tr}_N), \text{MTR}(h_{1,1}, h_{1,2}, \dots, h_{M,1}, h_{M,2}), \text{MTR}(Z_1, \dots, Z_{M+M'+M''}, \text{im}_1, \dots, \text{im}_{K+K'}), \text{MTR}(Q_1, Q_2), \text{Evals}(z), \text{Evals}(gz), \pi_{\text{FRI}})$

Disputer Algorithm

To verify the STARK, the Disputer performs the following steps:

1. Checks that $\text{MTR}(\text{tr}_1, \dots, \text{tr}_N)$, $\text{MTR}(h_{1,1}, h_{1,2}, \dots, h_{M,1}, h_{M,2})$, $\text{MTR}(Z_1, \dots, Z_{M+M'+M''}, \text{im}_1, \dots, \text{im}_{K+K'})$, $\text{MTR}(Q_1, Q_2)$ are all in K .
2. Checks that every element in both $\text{Evals}(z)$ and $\text{Evals}(gz)$ is from K .
3. Computes the challenges $\alpha, \beta, \gamma, \delta, \epsilon_1, \epsilon_2 \in K$ from the elements in seed and π_{eSTARK} (except for π_{FRI} , which is used to compute the challenges within FRI).
4. All Consistency. Checks that the trace quotient polynomials Q_1 and Q_2 are consistent with the trace column polynomials $\text{tr}_1, \dots, \text{tr}_N$, the preprocessed polynomials $\text{pre}_1, \dots, \text{pre}_R$, the inclusion-related polynomials $h_{1,1}, h_{1,2}, \dots, h_{M,1}, h_{M,2}$, the grand product polynomials $Z_1, \dots, Z_{M+M'+M''}$ and the intermediate polynomials $\text{im}_1, \dots, \text{im}_{K+K'}$. The Disputer achieves so by means of equation on round 4 of the certifier and the evaluations contained in $\text{Evals}(z)$ and $\text{Evals}(gz)$.
5. Batched FRI Verification. Using π_{FRI} , it runs the batched FRI verification procedure on the polynomial F .

If either of the previous steps fails at any point, the Disputer aborts and rejects. Otherwise, the Disputer accepts



Functional Capabilities

1. Decentralized Applications (dApps)

Fully decentralized Escrow Automation on BTC

Traditional escrow services rely on centralized entities, increasing costs and risks. With our fully decentralised escrow services, financial institutions can now easily trade amongst themselves, without having to worry about the security of their large ticket funds.

How It Works:

- ▶ BTC is locked in our layer 2 escrow contract using hashlocks and timelocks
- ▶ Off-chain computation verifies contract conditions
- ▶ On-chain proofs ensure secured settlement
- ▶ IBVM acts as a Layer 2 adjudicator for faster throughput
- ▶ Smart contracts on IBVM provide additional flexibility.



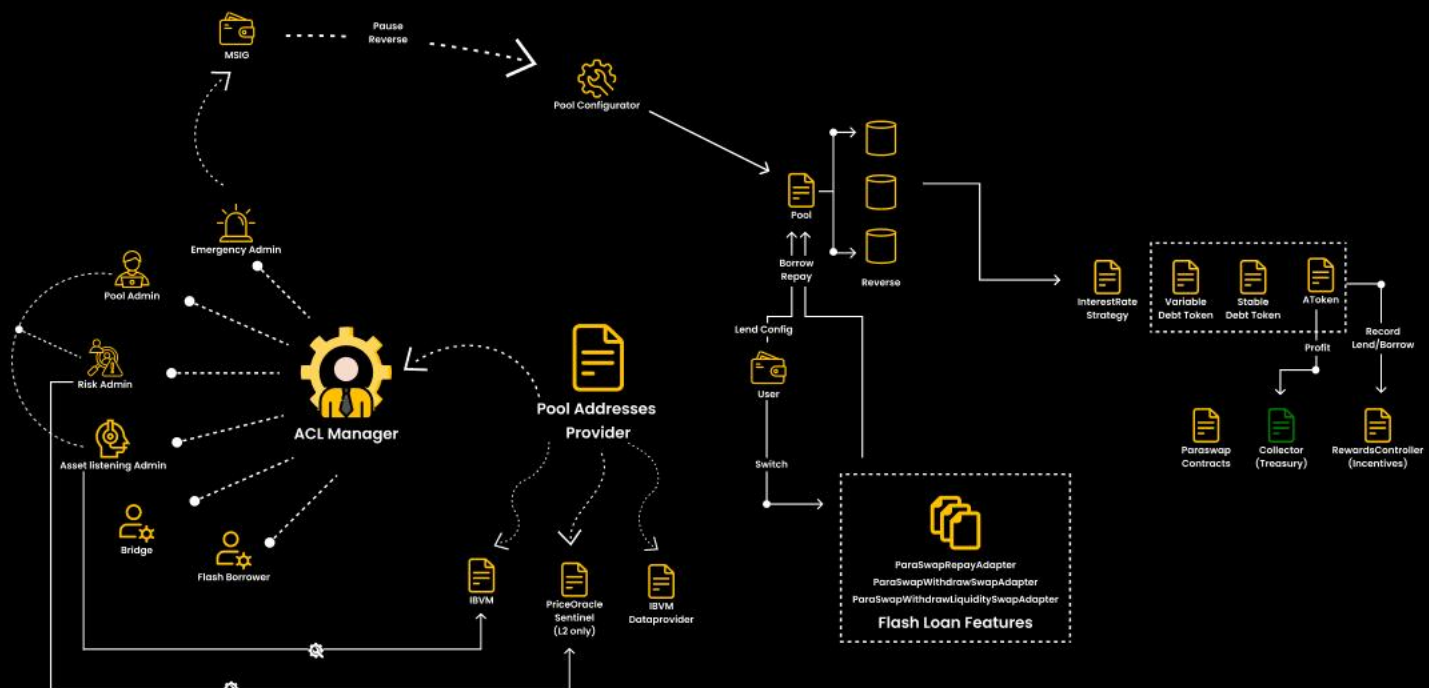
2. DeFi and Lending solutions

Current BTC DeFi platforms require wrapped BTC (wBTC, tBTC), which exposes them to the inherent centralization risks. Our solution will be actual layer 2 BTC chain, which will enable us to allow BTC lending without wrapping and without compromising decentralization and BTC chain's robust security features.

How It Works:

- ▶ BTC holders lock BTC in a lending contract
- ▶ Borrowers deposit collateral on IBVM
- ▶ Loan repayments and liquidations are fully decentralized
- ▶ Smart contracts manage interest rates, repayments, and collateralization
- ▶ Zero-knowledge proofs on STARKs ensures confidential loan terms
- ▶ Institutional lending is built using this framework

loan approval process through smart contracts



IBVM DePIN – Future Vision

- ▶ Build a **global** decentralized network transforming mobile phones & vehicles into micro data centers
- ▶ Enable trustless data relay, compression & verified compute using IBVM's proprietary **zk-rollup architecture**
- ▶ **Unlock passive earning** for users through uptime-based token rewards
- ▶ Smart Create a decentralized compute marketplace where enterprises pay to run workloads on distributed devices manage interest rates, repayments, and collateralization
- ▶ Power automated, smart contract-driven revenue sharing across node operators, developers & protocol treasury
- ▶ **Expand into real-world infrastructure:** Decentralized EV charging & satellite data relay networks



Validator Nodes & Staking

- ▶ **Deploy** a decentralized network of IBVM validator nodes to secure & validate IBVM transactions
- ▶ **Enable staking** of IBVM tokens to strengthen the validator network and offer yield to token holders
- ▶ **Empower token holders** to participate in network governance & earn IBVM staking rewards
- ▶ **Permit** enterprise DEPIN buyers to stake IBVM to secure operations & earn yield



IBVM Decentralized Wallet

- ▶ **Gasless transactions:** Users can perform IBVM-related operations without paying gas fees
- ▶ **Multisig capabilities:** Enhanced security with multiple signatures required for all sensitive wallet operations



Interoperability and Cross Layer Transactions

Bitcoin's current cross-chain bridges rely on custodians, creating inherent risks in the process. IBVM solution enables a BTC-native bridge without centralized intermediaries. This facilitates decentralized asset swaps across multiple chains without reliance on external bridges.

● Deposit/Withdraw -

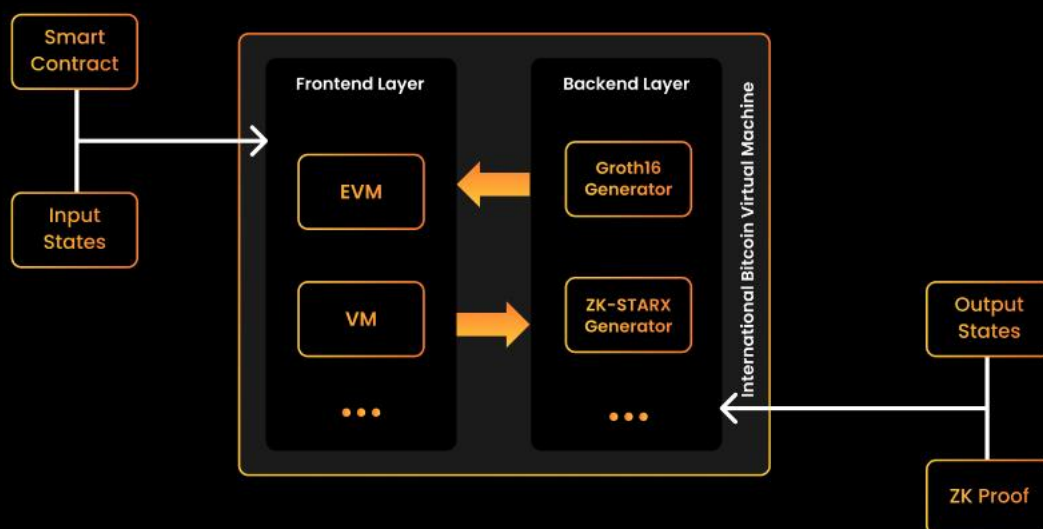
IBVM CHAIN supports seamless fund movements between Bitcoin's Layer 1 and the Layer 2 network. Deposits are verified on Bitcoin, while withdrawals require confirmation via ZK proofs.

● Interoperability -

Users can perform transfers and swaps within the IBVM CHAIN ecosystem, including support for Bitcoin, Ethereum and USDT tokens. Multi-chain interoperability is further enabled via cross-rollup mechanisms for All in one Swap which is ready to explore.

How It Works:

- ▶ Users lock BTC in a IBVM governed smart contract
- ▶ BTC-backed tokens are minted on IBVM
- ▶ BTC is redeemed without custodial risk
- ▶ Eliminates the need for centralized BTC bridges
- ▶ Ensures Bitcoin-backed assets remain secure and decentralized
- ▶ Enhances IBVM role as a Bitcoin-native DeFi hub.



IBVM Features Comparison

Features	Bitcoin BTC	Ethereum ETH	Liquid LBTC	IBVM
Average confirmation time	10 min	15 sec (Ghost)	60 sec	2 sec
Security threshold (due to selfish mining or collusion)	-30%	Lower than 30%	50 %	50%
Turing complete smart-contracts	✗	✓	✗	✓
Add value to Bitcoin	-	✗	✓	✓
Integration with Bitcoin	-	✗	Sidechain	Layer2
SPV clients	✓	✓	✓	✓
Hardware wallet integration	✓	✓	✗	✓
Confidential transactions	✗	Via contract	✓	Via contact
Scalability (tps)	3 (6 with sedwit)	Unbounded Currently 15	3(6 with sedwit)	Unbounded 4000
Blockchain size	200GB	>1.5 TB	~300 MB	~11GB
Token peg security	-	-	Federation	Federation
Gas Price	~\$0.1	~\$0.03	-	~\$0.0000001
Token	BTC	ETH	LBTC	IBVM

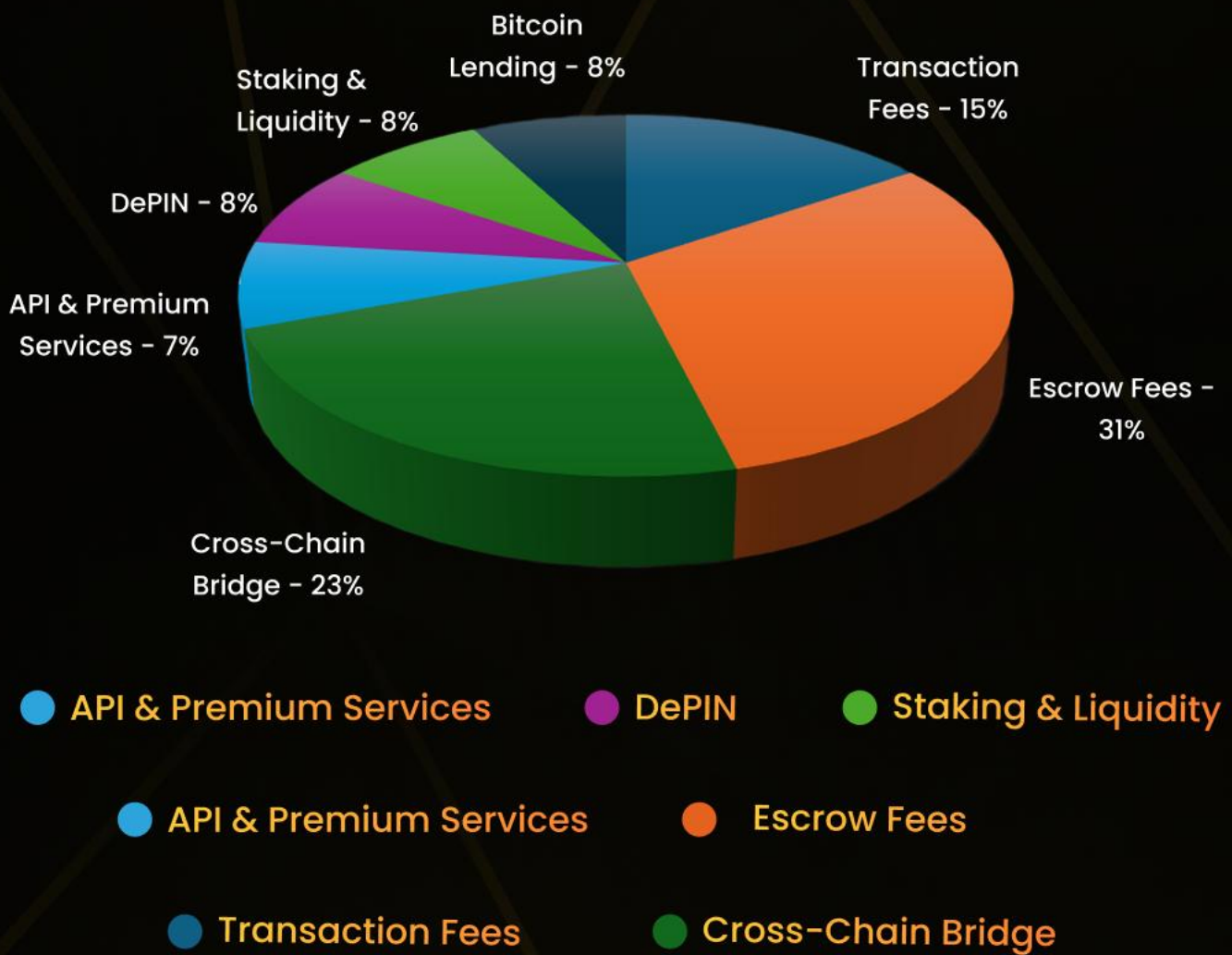
Revenue Streams

We have sustainable revenue streams emanating from our products and services on the IB VM chain with several revenue streams,

- ▶ Transaction fees: Layer 2 Transfers and Withdrawals
- ▶ Escrow fees
- ▶ Cross chain / Bridge fee
- ▶ Integrations, API and premium subscriptions
- ▶ Staking and liquidity fee
- ▶ DeFi solutions (lending on BTC)
- ▶ DePIN

Revenue Stream	Potential Fee(%)	Estimated Volume (year 1)	Projected Annual Revenue
Transaction Fees	0.1%	\$10B in transactions	\$10M
Escrow Fees	1%	\$2B in escrow trades	\$20M
Cross-Chain Bridge	0.3%	\$5B in bridge volume	\$15M
API & Premium Services	Subscription	Subscription	\$5M
Staking & Liquidity	Variable	\$1B staked liquidity	\$5M
Bitcoin Lending	\$0.5%	\$1B lending	\$5M
DePIN	Variable	\$ 0.1% of Total Market	\$5M

Proposed Fee Structure and Estimated Initial Annual Revenues



TOKENOMICS

Total Supply

Fixed Supply: 1,000,000,000 IBVM Tokens (no additional issuance permitted)

Category	Tokens	% of Supply	TGE Unlock	Cliff (M)	Vest After Cliff (M)
Genesis / Community Round (Complete)	1,000,000	0.10%	10%	3	6
Private Round (Complete)	260,000	0.03%	50%	0	2
Strategic VC & Institutional (uncommitted)	3,740,000	0.374%	20%	0	4
Public / TGE / Exchanges Phase 1	30,000,000	3.00%	100%	0	0
Market Maker Reserve	10,000,000	1.00%	100%	0	0
Market Maker Reserve (Uncommitted)	15,000,000	1.50%	0%	0	0
Validators & Security Incentives	80,000,000	8.00%	0%	3	24
DePIN & Staking Rewards	150,000,000	15.00%	0%	3	24
Founder Tokens (12-Month Cliff)	150,000,000	15.00%	0%	12	36
DAO Treasury & Governance	170,000,000	17.00%	0%	6	36
Ecosystem, Community & Grants	120,000,000	12.00%	0%	6	24
Marketing / PR / Strategic Partnerships	135,000,000	13.50%	0%	3	24
Technology, R&D & Products	100,000,000	10.00%	0%	3	24
Tminter Agent Fee Reserve & Other products Related incentives	35,000,000	3.50%	0%	3	12
TOTAL	1,000,000,000	100.00%			

Roadmap & Future Developments



A. Research & Architecture (2023–2025) — COMPLETED

- Designed Bitcoin-native ZK-rollup architecture
- Built UTXO-based execution and smart contract framework (UTXO Partitioning)
- Developed core protocol and scalability model



B. Testnet & Early Traction (2025) — COMPLETED

- Devnet and Testnet launched with smart contract capabilities
- Whitepaper released
- Integrated cross-layer and interoperability features (bridges to 60+ networks, 1,500+ assets)
- Token Generation Event (TGE) completed; launched mobile wallet apps on iOS and Android



C. Mainnet & Market Readiness — LIVE (Current Phase)

- Mainnet is live: Bitcoin's first EVM-compatible ZK rollup
- 10,000+ TPS, ~\$0.00003 gas, 2-second finality (live performance figures)
- 10,000+ smart contracts deployed on mainnet
- Audited by QuillAudits
- Tminter — AI agent for automated smart contract creation — LIVE
- Gasless transaction feature — LIVE
- Web-
- based multisig wallet feature — LIVE
- Market maker agreement finalized
- Wallet infrastructure and ecosystem onboarding ongoing

Roadmap & Future Developments



D. Exchange Expansion (Q4 2026) — UPCOMING

- Top exchange listing scheduled for Q4, 2026
- Distributed sequencer and prover nodes
- Enhanced governance mechanisms
- Advanced monitoring and analytics tools



E. Protocol Enhancements (Q4 2026 – Q1 2027)

- Further throughput scaling beyond current 10,000+ TPS baseline
- Advanced ZK-proof system integrations
- Expanded cross-chain interoperability



F. Ecosystem Expansion (2027 & beyond)

- Full-scale dApp and enterprise ecosystem
- Cross-chain hub development
- Privacy enhancements (e.g., homomorphic encryption)
- DePIN-based decentralized compute infrastructure (AI workloads, storage, compute)



Team and Contributors

Core Team

Dr. John Sajadi – Founder & President

- Ph.D. in Computer Science and Blockchain
- Global blockchain architect
- Web3/DeFi thought leader
- Keynote speaker on decentralized technology
- Expert in distributed systems and cryptographic protocols

Alok Agrawal – Founder & VP

- Technical driving force of IBVM implementation
- Director at Quest Global Technologies
- Extensive enterprise blockchain experience
- Oversees engineering team and development pipeline
- Expert in blockchain protocol development

Romil Jain – Founder & VP

- Deep expertise in blockchain architecture and smart contracts
- EVM systems specialist
- Director at Quest Global Technologies
- Leads Bitcoin-EVM hybrid design and optimization
- Expert in modular systems and cross-chain interoperability

Steve Dew – CO- Founder

- Commercial Manager Director at Blue Apachel, Business development, Commercial Relations , Software and Cloud Specialist.

Rosa Pagani – Advisory Board Member

- CEO of WhiteBit Exchange Australia , Co-founder of EffortX , Co-founder of Seed list , Director of ATM Operators.

Paul Barrett– Advisory Board Member

- CEO+ Chairman of X-WRK Group, CEO of Pegasus Capital , Portfolio & Partnerships AFEX.

Development Team: Quest Global Technologies Team

- Blockchain protocol developers (rollup logic, cryptography)
- Front-end and mobile developers (wallet apps, DApp platform)
- Testing and QA engineers (performance and security testing)
- Award-winning development capabilities
- Proven track record in enterprise blockchain delivery

Strategic Partners

We collaborate with industry leaders and trusted organizations to deliver innovative solutions and exceptional services. Our partners share our vision for quality, reliability, and customer satisfaction, helping us create a strong network that drives success. Together, we strive to bring the best to our clients and communities.




SecondLive
AI Metaverse (4.7M+ users)



Ox Labs
Ox Labs
Infra



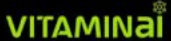
SMAT
SMAT



Zyra
ZK Social Mining



Stormrake
Infra



VITAMINAI
Vitamin AI



PesaFlix
Fintech/OTT in 4 African nations



Fireblocks
Fireblocks
Infra



Rollman



Programmers Point
Education with Revenue Sharing



ZEROCAP
Zerocap
Infra



Pegasus FO

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Conclusion

IBVM CHAIN represents a significant technological leap in scaling Bitcoin without sacrificing security. By leveraging advanced zero-knowledge proof technology and a robust economic model, it creates a highly efficient and secure platform for decentralized financial applications. We invite investors and community members to join us in shaping the future of blockchain scalability.

For further inquiries, partnership opportunities, or additional details, please contact us at [\[info@IBVM.io\]](mailto:info@IBVM.io)

Thank you for considering IBVM CHAIN as your next investment in blockchain innovation.

