



Decentralized Exchange

AI-Powered DeFi, Built for Everyone

WHITEPAPER

Version 1.0

2025

blupdex.com

Registered in Nigeria

1. Abstract

Blup is an AI-powered decentralized exchange (DEX) built on the Cedra blockchain, designed to make decentralized finance (DeFi) safe, accessible, and intuitive for all users. Unlike traditional DEXs where users execute transactions blindly and often fall victim to front-running attacks, wallet drains, malicious token contracts, and other on-chain exploits, Blup introduces a pre-transaction AI intelligence layer that analyzes every swap before it is confirmed.

At its core, Blup believes that users should fully understand what they are doing before they do it. This principle drives every design and product decision, from the AI-powered transaction scanner to the clean, beginner-friendly interface.

Blup's native token, BLP, powers governance, staking rewards, and platform fee participation. With a total supply of 567 billion BLP tokens, the protocol is designed to be community-driven and sustainable long term.

Built on Cedra's Rust-powered Move infrastructure, Blup combines speed, security, and AI intelligence into a unified DeFi platform. The roadmap includes the launch of a staking platform, a lending protocol, a community governance platform, and multi-chain expansion to Solana, EVM-compatible networks, and Stellar.

2. Introduction

2.1 The Problem with Current DeFi

Decentralized finance has opened access to financial services for millions of people globally. However, the current landscape of DEXs is riddled with dangers that disproportionately harm everyday users:

- **Front-running attacks:** Bots monitor the mempool and insert transactions ahead of users, extracting value before a trade settles.
- **Wallet drain exploits:** Malicious token approvals trick users into signing transactions that empty their wallets.
- **Honeypot tokens:** Tokens designed so users can buy but never sell, locking funds permanently.
- **Rug pulls:** Liquidity providers withdraw all funds suddenly, leaving traders with worthless tokens.
- **Opaque transactions:** Users approve complex smart contract interactions without understanding what they are authorizing.

These issues have eroded trust in DeFi and created a high barrier to entry. The average user lacks the technical knowledge to protect themselves, and existing tools are too complex or inaccessible.

2.2 Why Blup Exists

Blup was built on a simple but powerful premise: users should know what they are doing before they do it. Every transaction on Blup is analyzed by an AI engine before it is executed. The AI flags risks, explains what a transaction will do, identifies suspicious contracts, and gives users the confidence to trade safely.

Blup removes the information asymmetry that exists between sophisticated on-chain actors and everyday users. It democratizes access to the kind of pre-trade intelligence that was previously only available to professional traders and blockchain security researchers.

2.3 Vision & Mission

Vision

To become the most trusted and accessible decentralized exchange, where anyone, regardless of technical background, can participate in DeFi safely and confidently.

Mission

To build AI-powered DeFi infrastructure on Cedra that protects users, simplifies on-chain interactions, and grows a community-driven ecosystem of financial tools accessible to everyone.

3. Market Overview

3.1 The State of Decentralized Exchanges

The DEX market has grown dramatically, processing hundreds of billions of dollars in volume annually. Platforms such as Uniswap, PancakeSwap, and Raydium have demonstrated that non-custodial trading is viable at scale. However, as volume has grown, so has the sophistication of on-chain attacks and exploits.

MEV (Maximal Extractable Value) bots, sandwich attacks, and phishing smart contracts have become commonplace, costing users billions of dollars per year. The tools to combat these threats are fragmented, technical, and inaccessible to the majority of DeFi participants.

3.2 The Accessibility Gap

Most DEX platforms are designed for users who already understand concepts like gas fees, slippage, liquidity pools, token approvals, and smart contract interactions. This creates a significant accessibility gap. Hundreds of millions of potential users are effectively locked out of DeFi not due to lack of interest, but due to lack of understandable, safe tooling.

Blup identifies this gap as its primary opportunity. By making DeFi understandable and safe at the point of transaction, Blup can onboard the next wave of global crypto participants.

3.3 The Role of AI in Financial Technology

Artificial intelligence is transforming how financial services detect fraud, analyze risk, and serve customers. In DeFi, AI can play an equally transformative role by analyzing smart contract behavior in real time, identifying patterns consistent with known attack vectors, and presenting plain-language summaries of complex on-chain actions to users.

Blup is among the first DEX platforms to natively integrate multi-model AI intelligence directly into the transaction flow, making AI-powered protection a standard feature rather than an afterthought.

4. The Blup Protocol

4.1 Core Architecture

Blup is a non-custodial, smart contract-based decentralized exchange. Users retain full control of their private keys and assets at all times. Trades are executed on-chain via Cedra smart contracts, while the AI analysis layer operates as a pre-execution middleware that intercepts and evaluates each transaction before it is submitted to the network.

The protocol consists of four primary components:

- AI Transaction Intelligence Layer — pre-trade risk analysis engine
- Swap Engine — smart contract-based token swapping with smart order routing
- Liquidity Pool System — automated market maker (AMM) with LP token mechanics
- Governance & Community Module — on-chain voting and proposal system (Q1 2026)

4.2 Smart Contract Design

Blup's smart contracts are written in the Move programming language and deployed on the Cedra blockchain. Move's resource-oriented model ensures that tokens and assets cannot be accidentally duplicated or lost, providing a strong security foundation at the contract level.

All smart contracts have been audited by Gense AI Studios prior to mainnet deployment. Audit reports will be made publicly available to the community.

4.3 Liquidity Pool Mechanism

Blup uses an Automated Market Maker (AMM) model where liquidity is provided by users who deposit token pairs into pools. In exchange, liquidity providers (LPs) receive LP tokens representing their share of the pool and earn a proportion of the swap fees generated.

A key feature of Blup's liquidity model is its anti-rug pull mechanism: 30% of LP tokens are permanently burned. This ensures that a portion of liquidity can never be withdrawn by any single party, protecting traders from sudden liquidity removal events.

4.4 Smart Order Routing

Blup's routing engine automatically identifies the most efficient path for each swap across multiple liquidity pools. Multi-hop swaps, where a token must pass through an intermediate asset to reach its destination, are handled seamlessly and invisibly to the user. This ensures optimal pricing on every trade without requiring manual route selection.

5. AI-Powered Transaction Intelligence

The AI transaction intelligence layer is Blup's most defining feature and it's most important contribution to the DeFi ecosystem. Every transaction is scanned and evaluated before the user confirms it.

5.1 How the AI Engine Works

Blup's AI engine is powered by a multi-model ensemble approach, integrating Google Gemini, Anthropic Claude, and OpenAI ChatGPT. This multi-model architecture ensures that transaction analysis is robust, cross-validated, and resistant to blind spots that any single model might have.

When a user initiates a swap, the following process occurs:

- The transaction parameters are extracted: token contracts, amounts, routing path, and approvals required.
- Before any transaction is submitted to the network, it is simulated on-chain. The simulation executes the transaction in a sandboxed environment and returns the expected outcome, including token balances, fee costs, approval changes, and contract interactions, without committing anything to the blockchain.
- The simulation results, alongside the raw transaction parameters, are passed to the AI engine, which queries all three models with a structured prompt describing the full transaction context.
- Each model independently analyzes the transaction for known risk patterns, suspicious contract behaviors, swap efficiency, and anomalies detected in the simulation output.
- A consolidated risk report is generated and presented to the user in plain language before confirmation.
- The user can proceed, modify, or cancel the transaction based on the AI's findings.
- Beyond individual transaction analysis, Blup's AI engine also provides two additional intelligence tools:

AI Pool Analysis: Users can query any liquidity pool on Blup and receive an AI-generated breakdown covering pool health, liquidity depth, fee yield estimates, concentration risk, and historical behavior patterns. This helps liquidity providers make informed decisions before depositing funds.

AI Token Analysis: Users can analyze any token before trading it. The AI evaluates the token contract's source code verification status, holder distribution, liquidity lock status, transfer tax mechanics, sell restrictions, and similarity to known scam or honeypot contracts, giving users a comprehensive risk profile of any asset before they commit funds.

5.2 Risk Detection Capabilities

The AI engine is trained and prompted to detect the following categories of risk:

- **Front-running vulnerability:** Identifying transactions likely to be targeted by MEV bots based on size and token popularity.
- **Wallet drain contracts:** Detecting token approvals that grant unlimited spending permissions to unverified contracts.
- **Honeypot tokens:** Flagging token contracts with sell restrictions or hidden transfer taxes.
- **Suspicious routing paths:** Alerting users when a swap route passes through unknown or newly deployed contracts.
- **Slippage anomalies:** Warning when expected slippage exceeds safe thresholds.
- **Contract verification status:** Indicating whether the token contract source code is publicly verified.

5.3 Swap Efficiency Analysis

Beyond security, the AI also evaluates the economic efficiency of each swap, identifying whether the user is receiving fair value, whether fees are reasonable relative to the trade size, and whether an alternative route would yield better pricing.

5.4 Plain Language Transaction Summaries

One of Blup's most user-friendly features is the plain language summary generated for every transaction. Instead of showing raw hexadecimal data or technical contract parameters, Blup presents a human-readable explanation such as: "You are swapping 100 USDC for approximately 0.042 ETH. This transaction will cost 0.0002 CED in gas fees. No unusual permissions are being requested. Risk level: Low."

This feature is particularly impactful for new users who may not understand what they are approving when interacting with smart contracts.

6. Built on Cedra

6.1 Why Cedra?

Blup is built on Cedra, the first community-owned blockchain built on the Move language. Cedra was selected as Blup's foundation for several key reasons: its security-first Move language architecture, high-performance parallel execution, community-driven governance ethos, and its position as an emerging public-good infrastructure.

As Cedra approaches mainnet, Blup is positioned as one of its flagship DeFi applications, launching its token and full suite of features in conjunction with the Cedra mainnet launch.

6.2 Move Language & Asset Safety

Move is a programming language designed specifically for safe asset management on blockchains. Unlike Solidity (used on EVM chains), Move treats digital assets as resources, objects that cannot be copied, only moved. This eliminates entire categories of smart contract vulnerabilities that have cost DeFi users billions of dollars.

Blup's smart contracts inherit all of Move's safety guarantees, providing a more secure foundation than equivalent EVM-based DEXs.

6.3 Block-STM Parallel Execution

Cedra uses Block-STM (Software Transactional Memory), a parallel execution engine adapted from the Diem research lineage. Block-STM dynamically detects transaction conflicts and executes non-overlapping smart contract calls simultaneously, achieving high throughput on standard hardware. For Blup users, this translates to fast transaction confirmations and low latency swaps.

6.4 Community-Owned Infrastructure

Cedra operates as a public good, where funding, development, and governance are conducted in open collaboration with core contributors, a non-profit foundation, and a global network of builders. Blup shares this ethos and intends to progressively decentralize its governance in alignment with Cedra's community-first principles.

7. Product Suite

7.1 Token Swapping

The core product of Blup is its AI-analyzed token swap interface. Users can swap any supported Cedra-based token pair with confidence, knowing that every transaction has been evaluated for risk before confirmation. The interface is designed to be clean, fast, and beginner-friendly, with no unnecessary technical complexity.

7.2 Liquidity Provision

Users can provide liquidity to Blup's pools and earn a share of swap fees. Liquidity providers receive LP tokens representing their pool share. As noted, 30% of LP tokens are permanently burned at the protocol level, providing structural protection against rug pulls and ensuring long-term liquidity stability.

7.3 Staking Platform (Q4 2025)

Blup will launch a staking platform where users can stake BLP tokens to earn passive rewards. The staking system will feature:

- Flexible staking pools with variable lock-up periods
- AI-optimized staking insights to help users maximize yield
- Real-time reward tracking dashboard
- Compounding reward options

7.4 Lending Protocol (Q4 2025)

The Blup lending protocol will enable users to lend and borrow assets in a decentralized, trustless manner. Key features include:

- Secure on-chain lending with transparent smart contract architecture
- Flexible collateralized borrowing
- AI-powered risk analysis for loan health monitoring
- Future exploration of under-collateralized lending mechanisms

7.5 Community Governance Platform (Q1 2026)

Blup will launch a dedicated on-chain community platform where BLP token holders can submit proposals, discuss protocol changes, and vote on governance decisions. This platform is the primary venue through which the Blup protocol will be progressively decentralized and handed over to its community.

8. Security

8.1 Smart Contract Audits

All Blup smart contracts have been audited by Gense AI Studios prior to mainnet deployment. Security audits cover:

- Reentrancy vulnerabilities
- Integer overflow and underflow
- Access control and permission management
- Liquidity manipulation vectors
- Token approval exploit patterns

Audit reports will be published in full and made permanently accessible to the public.

8.2 Two-Factor Authentication (2FA)

Blup's platform includes two-factor authentication for wallet-connected sessions, adding an additional layer of security beyond standard wallet signing. This helps protect users from session hijacking and unauthorized transaction approvals.

8.3 Anti-Rug Pull Mechanism

Blup's protocol-level burn of 30% of LP tokens is a structural anti-rug pull mechanism. By permanently removing a portion of liquidity provision capability, Blup ensures that no liquidity provider, including the Blup team, can unilaterally drain a pool. This is enforced at the smart contract level and cannot be reversed.

8.4 AI Threat Detection

As described in Section 5, the AI transaction intelligence layer serves as the primary real-time security layer for end users. This system is continuously updated with new threat signatures and contract patterns as the DeFi threat landscape evolves.

8.5 Wallet Integration Standards

Blup currently supports Cedra-compatible wallets. All wallet integrations follow secure connection standards, ensuring that private keys are never exposed to or stored by the Blup application. Users maintain full self-custody of their assets at all times.

9. Tokenomics

9.1 Token Overview

The BLP token is the native utility and governance token of the Blup protocol.

- Token Name: Blup
- Ticker Symbol: BLP
- Total Supply: 567,000,000,000 BLP (567 Billion)
- Blockchain: Cedra
- Token Standard: Move-based asset

9.2 Token Distribution

Allocation	Percentage	Tokens (BLP)	Notes
Public Sale	50%	283,500,000,000	Primary distribution
Investors	15%	85,050,000,000	Strategic partners
Team	10%	56,700,000,000	Core contributors
Treasury	15%	85,050,000,000	Protocol reserve
Community	10%	56,700,000,000	Ecosystem incentives
Total	100%	567,000,000,000	

9.3 Vesting Schedule

All token allocations, including the public sale, investors, and the core team are subject to the following vesting terms:

- Cliff Period: 1 month from Token Generation Event (TGE). No tokens are released during this period.
- Vesting Duration: 3 months total (including the cliff period).
- Release: Tokens are released linearly over the remaining 2 months after the cliff period ends.

This uniform vesting schedule applies equally to all participants, including the founding team, ensuring alignment between all stakeholders and protecting against immediate sell pressure at launch.

9.4 Token Utility

BLP tokens serve three primary functions within the Blup ecosystem:

- **Governance:** BLP holders can propose and vote on protocol changes, fee adjustments, new feature priorities, and treasury allocations through the community governance platform (launching Q1 2026).
- **Staking Rewards:** BLP tokens can be staked to earn yield from protocol fee revenue and staking pool emissions.
- **Platform Fee Participation:** BLP tokens provide fee discounts and enable participation in premium platform features.

10. Fee Structure

10.1 Swap Fees

Blup charges a flat swap fee of 0.2% on all token swaps. This fee is competitive with leading DEX platforms and is designed to be sustainable without discouraging trading activity.

10.2 Fee Distribution

The 0.2% swap fee is distributed as follows:

Recipient	Share	Purpose
Liquidity Providers	60%	Reward for supplying liquidity
Treasury	10%	Protocol sustainability & development
Token Burn	30%	LP tokens burned to prevent rug pulls

The 30% burn allocation is applied to LP tokens rather than BLP tokens, permanently reducing the capacity for liquidity removal and strengthening the protocol's anti-rug pull guarantees.

11. Governance

11.1 Governance Framework

Blup is committed to progressive decentralization. In its initial phase, the core team will make product and protocol decisions to ensure fast, coherent execution during the critical early period. Beginning Q1 2026, governance will transition to an on-chain model where BLP token holders hold decision-making authority.

11.2 On-Chain Voting

All governance proposals will be submitted and voted on through Blup's Community Platform. Voting power is proportional to BLP holdings, with measures in place to prevent centralization of governance power. Quorum requirements will be established to ensure that significant decisions reflect broad community participation.

11.3 Proposal Types

The following categories of decisions will be governed by BLP token holders:

- Protocol parameter changes (fees, slippage limits, burn rates)
- New feature prioritization
- Treasury fund allocation
- Chain expansion decisions
- Partnership and integration approvals
- Emergency security responses

11.4 Treasury

The 15% treasury allocation (85,050,000,000 BLP) is held by the protocol for long-term sustainability. Treasury funds may be used for development grants, security audits, marketing initiatives, and ecosystem growth, all subject to governance approval once the community platform launches.

12. Roadmap

Phase	Timeline	Milestones
Phase 1 — Foundation	Q3 2025	Token launch on mainnet, Core swap functionality, AI transaction analysis live, Cedra wallet integration
Phase 2 — DeFi Expansion	Q4 2025	Staking platform launch, Lending protocol release, Enhanced AI routing engine, LP rewards program
Phase 3 — Governance & Community	Q1 2026	Community Platform launch, On-chain governance (voting), DAO proposal system, Community-led development
Phase 4 — Multi-Chain	Q2 2026+	Solana integration, EVM-compatible chains, Stellar network bridge, Cross-chain liquidity pools

All dates are targets and may be adjusted based on the Cedra mainnet launch schedule and development progress. The community will be kept informed of any changes through official channels.

13. Legal Disclaimer

Blup is a decentralized exchange protocol registered in Nigeria. This whitepaper is provided for informational purposes only and does not constitute financial advice, investment advice, trading advice, or any other form of advice.

The BLP token is a utility token designed for use within the Blup protocol ecosystem. Purchasing BLP tokens does not constitute an investment contract, equity stake, or ownership interest in Blup or any associated entity.

Participation in DeFi protocols carries inherent risks including but not limited to: smart contract vulnerabilities, market volatility, liquidity risk, and regulatory uncertainty. Users are encouraged to conduct their own due diligence and consult qualified professional advisors before participating.

The Blup team makes no representations or warranties regarding the accuracy or completeness of the information contained in this whitepaper. The protocol and its features are subject to change without notice.

This whitepaper may not be distributed, reproduced, or used without the express written consent of the Blup team.

14. References & Resources

- Official Website: blupdex.com
- Twitter / X: [@BlupDex](https://twitter.com/BlupDex)
- Telegram Community: t.me/BlupDex
- Cedra Blockchain Documentation: docs.cedra.network
- Smart Contract Audit: Gense AI Studios (report to be published at launch)
- Cedra Block Explorer: cedrascan.com (testnet)