



SOLARDEX

WhitePaper

ABSTRACT

In this WhitePaper, we propose Solar Dex, which Uses Serum Protocol based on Solana Blockchain. The Serum is a decentralized exchange (DEX) protocol and ecosystem that delivers decentralized finance on Solana Blockchain at exceptional speed and cheap transaction costs. It's based on Solana and requires no permissions. Serum's on-chain central limit order book allows ecosystem partners to exchange liquidity and enable market-based functionalities for institutional and retail customers.

BACKGROUND

DeFi provides users with a vast array of investment options, but the same characteristics that make those chances possible also make it difficult and intimidating for the typical user to take advantage of them. We want to improve the experience for those who are looking to invest their money, and we believe that an open, permissionless, and transparent platform can meet the needs of both experienced. Users looking for a more streamlined approach to portfolio management and novices looking for a passively managed strategy

The DeFi ecosystem is rapidly evolving, but three AMM models have emerged as the most popular: Uniswap, Curve, and Balancer.

- The most enduring AMM model on Ethereum is Uniswap's pioneering concept, which allows users to construct a liquidity pool using any pair of ERC-20 tokens in a 50/50 ratio[1].
- Curve specializes in putting together liquidity pools of comparable assets, such as stablecoins, and as a consequence, it can provide some of the lowest rates and most efficient trades in the business while also addressing the issue of restricted liquidity[2].
- Balancer pushes the boundaries of Uniswap by allowing users to establish dynamic liquidity pools of up to eight different assets in any ratio, greatly increasing the versatility of AMMs[3].
- Despite the fact that Automated Market Makers are a relatively new technology in accordance to traditional Market System, variations of it have already proven to be an important financial tool in the rapidly developing DeFi ecosystem and an indication of a maturing business.

INTRODUCTION

SolarDex is the first US-based Solana Dex that offers one of a kind safe platform. Solar eliminates the need for third-party Liquidity locks by making it mandatory for every liquidity pool to lock for 3 months. This means NO MORE RUG PULLS!

We want to make using the SolarDex platform seem like a first-class centralized investment tool while maintaining true to the Defi fundamental ideas by keeping fund administration completely non-custodial. We want people to feel protected knowing that their money is secure. SolarDex will allow any third-party manager to develop and supply actively managed funds or passive, automated investment pools, letting users engage in a wide range of assets and protocols, both native and off-chain, through SolarDex.

FEATURES

1. Auto Liquidity Lock:

Many decentralized exchanges (DEX), such as Uniswap, rely on liquidity pools. To form a market, users known as liquidity providers (LP) combine two tokens of equal value in a pool. In exchange for supplying their funds, they get trading fees equal to their percentage of overall liquidity from trades that take place in their pool.

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2. Swapping on SolarDex:

Users can start trading on a pool as soon as it is formed using the SolarDex swap instruction. Tokens are transferred from a user's source account to the swap's source token account, and then tokens are transferred from the swap's destination token account to the user's destination token account.

Because all accounts must be specified in the instruction for Solana programs, users must collect all account information from the pool state account, including the token A and B accounts, pool token mint, and fee account.

Furthermore, the user must allow the transfer of tokens from their source token account. SPL token:: is the best practice. instruction: Authorize a specific amount for a new throwaway Keypair, and then have the new Keypair sign the Solardex swap transaction. This restricts the number of tokens the software may take from the user's account.

3. Yield Farming on Solardex:

You'll need a wallet to hold your money before you start your adventure with Solardex. Unlike other blockchains, which may be accessed using a standard Metamask or a hardware wallet such as a Ledger or Trezor, SolarDex uses Solana that offers a variety of wallets from which to pick for keeping cash.

These wallets are all non-custodial, which means you have complete control over your cash, and they may be used to receive and transmit SOL and other Solana Program Library (SPL) tokens. Although all of them may be utilized without trouble, we recommend the Project Serum team's Soladex wallet since it is very compatible with most, if not all, of the projects that are now live on Solana.

4. Order books:

Our main product is the SolarDex Orderbook. It's a completely decentralized Layer 2 exchange with an order book developed on top of the Solana Network. While developing SolarDex Orderbook, we considered two types of traders:

- Traditional centralized exchange traders who appreciate the speed of transactions and ease of navigation but must accept risks and relinquish control of their assets by placing a high level of faith in a centralized operator.
- Traders using decentralized exchange platforms who trust the code to reduce the danger of losing their assets must put up with a clunky user interface, restricted functionality, and technology-specific difficulties.

5. Gas Fees Efficient:

Solardex uses Serum Protocol. Serum Protocol is based on Solana Blockchain and Solana is very gas efficient and has speed transaction throughput[4].

6. Liquidity Cap:

Most Defi projects are measured by their market caps [price per token x total supply]. Although this has been the standard norm with Cryptocurrency, this measurement is not an adequate reflection on how Defi projects should be measured. Liquidity is defined as the total amount of Network based token [BNB, Ethereum, Solana] integrated with projects token to give value per token. Liquidity Cap will be a transparent way to show how much liquidity is in that pool so investors are aware of the actual value of tokens.

SOLAR TOKEN USECASE

Solar Token will be the native Solana SPL Token on the Solar Dex exchange. It will have a total supply of a 100 million tokens and is non-mintable.

- Cover exchange fees
- Farming / Staking
- Lotto [Similar to PancakeSwap lotto function – may only be accessible at first to certain countries]
- IDO Participation on Solar Dex exchange
- Governance [Voting on proposed upgrades and listings].

RISK:

SolarDex is completely Decentralized, SolarDex Smart contracts and Application will be audited from multiple best of best auditors of the world before making it to the public.

There is no central entity controlling any part of the SolarDex Exchange. So there is no Risk Involved. And Automated Liquidity Lock gives more confidence to our users to trade risk-free in the Decentralized World.

TOKENOMICS:

Total Supply	100 Million
Presale	28%
Liquidity	15%
Centralized Exchange / Partnerships	18%
Staking	35%
Dev Team [Vetted for a Month]	2%
Airdrops	2%

REFERENCES

[1] Uniswap's AMM model on Ethereum. <https://hackmd.io/@HaydenAdams/HJ9jLsfTz#ERC20-to-Exchange>

[2] Curve's restricted liquidity. <https://curve.fi/files/stableswap-paper.pdf>

[3] Balancer's dynamic liquidity pools <https://balancer.fi/whitepaper.pdf>

[4] <https://solana.com/solana-whitepaper.pdf>