

Snapshot		
Ticker	SRM	
Current Price:	\$7.01	
Market Cap:	\$934,418,508	
Circulating Supply:	Changing daily	
Token Type:	SPL	
Sector:	DEX	

Executive Summary

Serum is a decentralized exchange (DEX), built on the Solana blockchain, that boasts extremely low fees and high composability for applications that seek to build on top of it. Compared to the many other DEXs out there, Serum differentiates itself largely through its on-chain central limit orderbook (CLOB). Most DEXs are constrained by the blockchain that they rely on in the sense that it would simply not be feasible to run an entire orderbook on-chain. Serum, being built on Solana, can.

Serum has established itself as one of the premier projects built on Solana, already capturing a large amount of the total on-chain trading volume (over \$9 billion since inception), serving as the backend for a growing number of DeFi projects, and being backed by some significant market makers. It also has ready-to-use Github repos¹, ambitious long-term goals, and its own token, SRM. Despite all of this, Serum is still young. The token itself was released just over a year ago, in August 2020, and when you compare trading volumes to leading DEXs like Uniswap, there's a noticeably large gap. The Solana ecosystem is still young as well.

Another differentiating aspect of Serum: it is not built as a user-facing application. Instead, it seeks to provide an easy-to-integrate-with, on-chain backend for any application that wants to use it, providing them with exchange infrastructure that lowers development times and provides easy-to-access liquidity.

The idea for Serum was initially conceived by Sam Bankman-Fried, founder of FTX and Alameda Research, and it is now maintained and improved by the Serum Foundation. For those who don't know who these groups are: having them as project backers is a huge positive. FTX is a crypto exchange that has become known for tremendous growth and innovation (they also have their own token, FTT). The Solana team is solid as well and has a lot of previous experience working with similar, but non-blockchain, systems at a technical level.

In late 2020, Sam published an article detailing the long-term vision for Serum, including goals to expand far beyond crypto trading, that can be found here.

Serum is also backed by reputable investors including Sino Global Capital, Jump Trading, and CMS Holdings.

Tokenomics

Due Diligence Report: SRM

To make this section more readable, I'll divide it up into three parts: staking, burning, and supply/unlock schedule.

Staking

Serum allows token holders to stake their tokens and earn a portion of trading fees. The entire process takes place on-chain, and the current APR sits around 20%². A bit of semantics around staking SRM: there can only actually be 1,000 nodes staking at once, and it requires 1 million SRM to become one of these 1000. Any "non-node user" (anyone with SRM) can stake their own tokens with one of these nodes and earn rewards. Aside from encouraging users to hold tokens and allowing them to earn SRM, staking comes with a couple other benefits:

- -Reduced trading fees
- -Participation in governance decisions through voting power

Burns



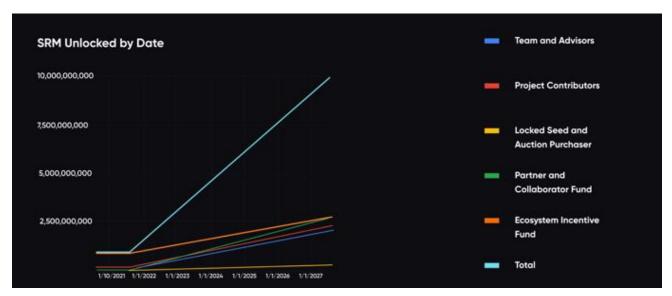


Figure 1: SRM Unlock Schedule³

SRM also has a mechanism for burning tokens in attempt to increase scarcity. 68% of fees go to "buy and burns", a process in which SRM is permanently removed from the supply (the other 32% of fees includes 20% for to the platform host, 10% for stakers, and 2% for EcoSerum, a "treasury" that provides grants to Serum ecosystem projects). We've been seeing 50k+ SRM burned weekly in recent weeks. The Serum twitter account⁵ tweets out updates on these burns.

Supply/Unlock Schedule

The total supply of Serum tokens is 10 billion; the actual unlocked supply will not reach that

number until late 2027 (see Figure 1). Until August 11th, 2021, 90% of tokens were locked.

Obviously, there's still a vast majority of tokens left to be unlocked. Different aspects of the situation like user growth, time horizons and frequency of selling by large holders (see Figure 2), staking incentives, and buy and burns will all play a role in how price reacts to the linear token unlock over time. 4 million tokens will be technically unlocked per day, but obviously not all will enter the market immediately as some (or many) holders continue to hold.

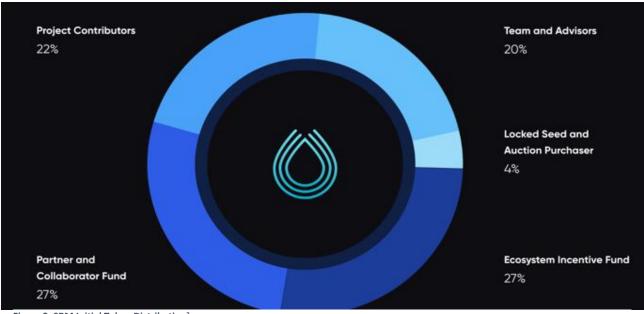


Figure 2: SRM Initial Token Distribution³



A final point to note here is that Solana, among other projects, have gone through large token unlocks and still done well. Now, these are obviously different projects and the unlock schedules are not the same, but it's worth noting that Serum is still so young and so ambitious that we could see many of those holding vested tokens simply hold on longer-term. We've also seen, in other projects, initial project backers dump large holdings immediately upon unlock. Thus far, the unlock has looked bearish for price, but it's ultimately up to the investor to form their own opinion.

Fundamental Analysis

Serum inherits several advantages from being built on Solana. When the FTX team was looking at building a DEX with an orderbook, they had several boxes that Solana checked quite nicely. These include:

- -Transactions per second (TPS) of 50k+
- -Block times of 400ms
- -Average transaction fees of \$0.00001
- -Throughput can scale as technology increases and optimizations are made

Serum itself offers fundamental advantages as well:

- -As discussed earlier, an on-chain orderbook and high composability
- -No fragmentation of liquidity among layer 2s; all applications integrating Serum can access the same liquidity and functionality

- -Getting adoption: Raydium, Oxygen, PsyOptions, and others all integrate with Serum markets
 -Incentivizes applications to build on top of it: not only reduced development time, but by offering 20% of fees as well
- -Limit orders and other trade types built-in

Further, consider what could drive a narrative that boosts SRM price (shorter term) or what could boost volume significantly (longer term). Some that come to mind are:

-Popularization of on-chain alternatives to AMMS; institutions/market makers moving into crypto and being used to orderbooks rather than AMMs -Solana/Serum becoming the go-to backbone for major markets, like a US stock, due to Solana's scale and Serum's ready-to-use infrastructure -Gaming tokens taking over the narrative while Serum provides the market infrastructure to one or more major games

To wrap up fundamental analysis, a bit more about Serum's orderbook feature: Compared to automated-market-maker-based (AMMs base prices on algorithms/curves and oracles rather than matching buyers and sellers directly) DEXs, Serum's orderbook increases transparency, potentially reduces impermanent loss for market makers, and can provide more predictable slippage. It is also what many traders are used to. Note that I am by no means saying that AMMs will go extinct - they certainly offer their own advantages and are now very well established in crypto. Centralized exchanges also still offer



Figure 3: SRM vs BTC and SOL6

Due Diligence Report: SRM

speeds (for instance, for derivative pricing) that on-chain exchanges cannot currently match. However, having the choice between AMMs and orderbook DEXs is a good thing.

Technical Analysis

All-time High & Cycle Lows	
ATH	\$13.68
ATH Date	9/10/2021
Time From ATH	~1 month
% Down From ATH	49%
Cycle Low	\$2.4
Cycle Low Date	7/20/2021
Time From Cycle Low	~3 months
% Recovery From Low	192%

SRM looked strong just last month, hitting all-time highs and piggy-backing off of its own increased usage and the big Solana run. On a not-so-positive note, since then we've seen lower highs and lower volume overall; SRM is currently sitting at support right around \$6.8-\$7. Orderbooks show large amounts of orders at ~\$6.8 and look to back up the chart's indication that that level is support, so watch for a bounce here. If it breaks lower, the \$6.4 level would be another to keep an eye on (orders are strong here too, but that can change especially if price refuses to quickly bounce).

I the past 90 days, SRM is outperforming BTC by a shrinking margin but underperforming SOL (see Figure 3). This makes sense, as interest in Solana has skyrocketed. SOL and SRM have both cooled off a bit more recently, but SRM has lacked the continued strength and buy pressure that SOL has shown in the last couple weeks. Attention and confidence may be waning, to an extent, for the time being, and token unlocks may play a role here as well.

Risks

The technical advantages and great founding team of Serum do not necessarily mean that the Serum token will increase in price - that is heavily dependent on adoption/volume, macro market movements, and tokenomics as well. There are

also risks involved, such as:

- -Serum is less established and has less "network effects", based on TVL and volume, than large DEXs like Uniswap
- -Some UIs and specific functionality, like settling trades, can be confusing for newcomers
- -As discussed earlier, SRM has relatively aggressive token unlocks. Staking can mitigate some of the token dilution, but strong demand growth is also needed
- -The Rust programming language is used to program the on-chain aspects. This could actually be a pro and a con Rust is very popular (~27k GitHub commits versus ~8k for Solidity) and allows for optimizations at a lower level than Solidity, but many dApp developers are used to Solidity. There will be a learning curve for any who switch over and do not previously have Rust experience.
- -Potential delays for requested features: Certain desired features, such as closable markets, could be delayed

Summary

Serum is a very ambitious project, backed by the best, that picked a perfect blockchain to build on. Price wise, the asset has been hurting lately, but Serum feels like more of a longer-term play. As Sam said in his article describing a vision for Serum, "There's a lot more distance left to go; two steps forward, one step back. But I guess that's what it means to have an ambitious goal."

How to Buy

You can buy SRM on exchanges like Binance or FTX. You can also use one of a few Solana DEXs, such as Raydium or Orca, to buy it. How this would work is: you would buy SOL on a centralized exchange and then withdraw it to a Solana wallet, like Phantom. Then, go to a DEX and swap your SOL for SRM, or swap it for USDC and then swap USDC to SRM.

Regulations around those exchanges and DEXs varies depending on your jurisdiction, so be sure to check before considering either option.

Citations



Due Diligence Report: SRM

- ¹ https://github.com/project-serum
- ² https://serumpulse.com/main/staking
- ³ https://projectserum.com
- ⁴ https://projectserum.medium.com/an-

ultimate-vision-for-serum-473a16e77201

- ⁵ https://twitter.com/ProjectSerum
- ⁶ https://tradingview.com
- ⁷ https://forum.projectserum.com/

<u>Links</u>

White Paper:

https://projectserum.com/static/media/serum_w hite_paper.88d98f84.pdf

Website: https://projectserum.com/

CoinGecko Listing:

https://www.coingecko.com/en/coins/serum