

Starch Industries Miner Whitepaper

Version 1.1

@abstractpotato

<https://abstractpotato.com>

<http://starch.one>

Abstract

The Starch Miner is the first native asset miner on Cardano, utilizing a UTXO sidechain called the STARCH-CHAIN a Proof of Work system for mining \$STRCH, each block stores a random color that is used as the nonce value when mining new blocks. To participate in the system a user must own a miner token.

Token Distribution

Unlike most other tokens \$STRCH does not have an initial token distribution for founders or developers, all tokens can and will only be mined.

Halving happens every 215,000 blocks, approximately once a year. This is to ensure that mining can continue for the next 10+ years. There's a limiting factor that ensures only ~24.5 blocks are minted every hour.

Tokenomics

There will only ever be 43M \$STRCH on the STARCH-CHAIN sidechain and a total supply of 43T on the Cardano blockchain, to ensure a limited supply all tokens have been minted and stored in a wallet which is used to distribute tokens into Cardano.

Staking with the Starch Industries Stake Pool doubles your rewards. When the stake pool is online delegators will receive double rewards when mining.

Sustainability

Because of the limiting mechanism and simplicity of this system it can continue running on lower end hardware for a sustained amount of time thus bringing down maintenance and overall overhead costs.

PoW on PoS

Because the STARCH-CHAIN is its own blockchain connected to Cardano the tokenomics and consensus mechanism can be changed to whatever the system requires at that time. PoW was chosen not because of its utility, but because it is competitive and fun in ways that PoS is not.

The Miner

To participate in mining users must hold a Starch Miner NFT in their wallets, since each miner is an NFT this means owners are able to move the NFT to other wallets and also trade the miner.

Redeeming

Redeeming \$STRCH tokens means removing the tokens from the sidechain and into a holder's Cardano wallet, this also removes the tokens from the miner balance.

Developer Support

API Documentation and code examples will be provided to developers to be able to create their own mining software. The restful API is open for use.