Kema Coin White Paper

Fast • Efficient • Secure

William Corless

8/16/2018

Kema (rhymes with “Emma”) Coin is a lightweight coin that is based on Bitcoin/Dash/PIVX. It is designed to be fast, safe, and secure.

Background

Bitcoin was the first cryptocurrency that allowed users to send coins to each other without the need for a centralized authority. The network uses a program called a wallet that connects to other wallets through a peer to peer (P2P) system. Once loaded on your computer, users mine those wallets to obtain a Block reward through a process called Proof of Work. Proof of Work was the method to secure the network and a public record (blockchain) to prevent double spending of coins. As more and faster methods were created to mine those blocks which originally started with CPU’s then Graphics cards (GPUs), then ASICs[1] it became necessary for users to band together to form pools in order to obtain the more difficult to receive block rewards. Each of the newer and faster methods to mine blocks use more and more electricity to get the same result. Bitcoin is vulnerable to a 51% attack, that is if you employ 51% of the hash power, you can manipulate or control the network. Although Bitcoin was the first, many other improvements were devised by alternative coins known as AltCoins.

Peercoin is an altcoin based on Bitcoin, and made Proof of Stake (PoS) rather than Proof of Work (PoW) as its method of securing the network. The concept of proof of stake is that if you own coins you have a “Stake” in them, and if you are an attacker, you are less likely to want to destroy

[1]Application Specific Integrated Circuit (ASIC) is an integrated circuit (IC) customized for a particular use, rather than intended for general-purpose use.

the network as it would go against your own interest. Proof of stake generates coins for those who have coins kept in their wallet for a period of time. This encourages people to HODL[2] them. Once the coin reaches its "coin age" then it is ready to generate new coins. Proof of Stake uses much less electricity to generate coins and doesn't need expensive mining equipment to accomplish this. As a result Proof of Stake coins are not subject to a 51% attack, and are more environmentally friendly.

Dash is an altcoin based on bitcoin that introduced the concept of Masternodes. The concept of a masternode is that users would setup a Virtual Private Server (VPS) and install a headless[3] wallet on it so it would be running all of the time, not just when the users' computer is turned on for the day. This concept makes for a more stable network. Masternodes help secure the network, and receive a reward for the service. Other features including voting for projects to be funded, etc. In order to obtain a Masternode users "Lock" a certain amount of coins up in order to secure the masternode. This has the effect of taking those coins out of circulation and helps to raise the value of the coin. It also serves as a way HODLing coins. Dash has increased in value, and Masternodes are very valuable. As of this writing they are worth over a Quarter of a Million Dollars each, making masternodes a great investment.

PIVX introduced Proof of Stake (PoS) to Dash. PIVX has many characteristics that are favorable (in our opinion) that make it a winning combination. It has all the great features of Dash, plus a Proof of Stake algorithm that makes generating coins easier and more energy efficient than Proof of Work algos. PIVX also incorporated zPIV an implementation of Zerocoins anonymous transactions. However it has gone through a number of changes requiring modifications to the code at certain blocks. We wanted all the benefits of PIVX starting fresh in a new coin. Hence the need for Kema Coin.

Blockchain Balloon

One thing that happens when a coin runs for a while is the blockchain, which contains all of the transaction history for the network, continues to grow. Some coins like Ethereum and others store contracts or other information on the blockchain. All of this extra information causes the blockchain to balloon in size, taking up more and more disk space, which can cause hard drives to crash.

[2] HODL which is tongue in cheek for holding on to coins.
[3] Headless Wallets refer to wallets that do not have a Graphical User Interface (GUI) and are therefore more compact in size.

You wouldn’t want to keep other people's paperwork on your computer would you?

The trend for new Altcoins is to add more and more features which then cause the blockchain to continue to grow ever larger. This is counterproductive in our opinion, so we are proposing to remove the extra information making Kema Coin sleek and efficient.

The Problems

- Bitcoin is notorious for its slow confirmations and high fees.
- Sending Bitcoin to an exchange can result in 30 minute to 3 hour waiting periods and 25 dollar transaction fees.
- Peercoin takes too long to generate new coins. With a wait time of 30 days or more, it's just too long to wait.
- Dash with its DAO and other features storing unnecessary information causes the blockchain to balloon in size.
- PIVX which solves the 51% attack also suffers from a ballooning blockchain.

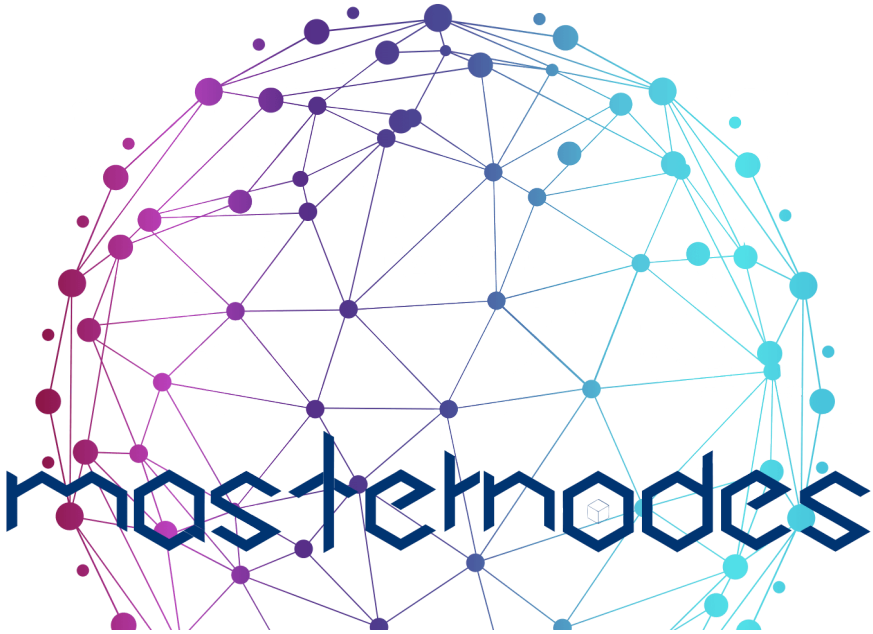
The Solution

- Fast Transactions - Sending coins should be as fast as sending email.
- Lightweight - Storing less information on the blockchain saves hard disk space.
- Proof of Stake - Uses less electricity and is environmentally friendly.
- Masternodes - Secures the network and is a great investment opportunity.
- Supports eCommerce - eCommerce applications can be built on top of the network.

Additional Features

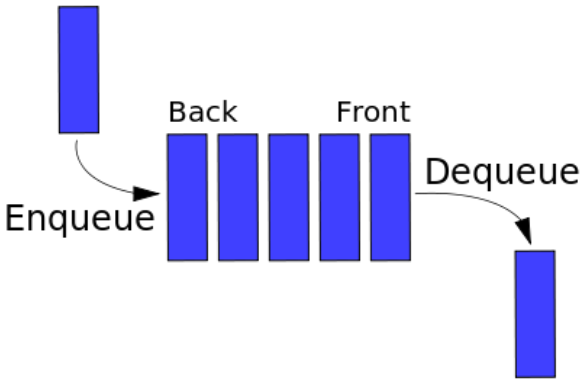
- InstantX - Kema Coin uses InstantX technology that allows users to send coins instantly. Great for e-commerce where vendors can be paid for their merchandise.
- Darksend - Darksend is the original obfuscation method to make your transactions less public and more anonymous.
- Masternodes pay 70% of block reward.
- One minute blocktimes and 6 confirmations mean faster confirmation times.

Masternodes



Masternodes are the backbone of Kema Coin. Masternodes provide stability to the network by having nodes that run 24 hours a day, seven days a week. Masternodes

provide security with anonymizing transactions and additional functionality. In addition, masternodes are paid rewards for this service in the form of passive income. Kema Coin Masternodes receive 70% of the block reward of 100 Kemas (70 Kemas). Masternodes are paid similar to a network scheduler queuing algorithm based on evenly distributed basis based on the time since last payment.

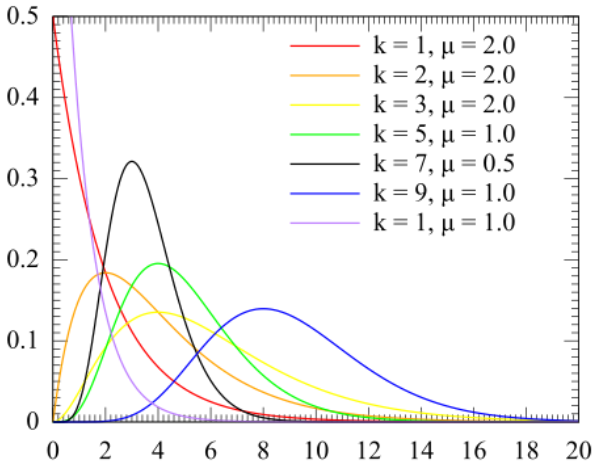


The queue refers to a single server with one demand rate delta, one dropout rate mu, and one rate of service sigma, for which the length of the queue *L* is defined as:

$$L = \frac{\delta - \sigma}{\mu}$$

The distribution method is similar to an Erlang model using a probability function method where k is the shape, lamba is the rate and mu is the scale.

$$f(x; k, \lambda) = \frac{\lambda^k x^{k-1} e^{-\lambda x}}{(k-1)!} \quad \text{for } x, \lambda \geq 0,$$



In lay terms, masternodes are paid in turn. Kema Coin pays 100 coins per block reward with 70% or 70 coins going to Masternode owners and 30% to miners. No coins go to a “Treasury”, so we have opted for a Premine and coin sale to defray our startup costs.

Information Table

Premine	100,000 Kemas
Block Reward	100 Kemas
Required Coins for Masternode	5000 Kemas
P2P Port	650705
RPC Port	650706
Testnet Port	650707

Roadmap

1. Coin Sale - The coin sale will be offered soon
2. Exchanges - Expect to see Kema Coin available on several exchanges
3. Web Wallet - On our website we will offer a web wallet
4. Paper Wallet - Paper wallets allow users to carry a paper wallet
5. Mobile App - Android and Apple apps
6. ATMs - ATM Integration
7. Point of Sale - Users will be able to purchase items at stores.
8. Bank Deposits - Users will be able to transfer fiat from their bank account to their Kema Coin account.

Securities Statement

In 1946 United States Supreme Court case known as SEC vs. Howey Co., the Supreme Court created a simple test for determining if a transaction is considered an "investment contract" and is therefore subject to securities law and regulations. According to The Howey Test, a transaction is an "investment contract" if…

1. Money is invested in a common enterprise or company
2. The investor expects profits from the investment
3. The profit comes from the efforts of someone other than the investor

In this simple test we can say that Kema Coin is not a security for the following reasons:

1. Purchasing Kema Coins is not investing in a common enterprise or company.
2. Kema Coins have a utility purpose such as purchasing other items as a cryptocurrency.
3. Users should not expect a profit in simply purchasing Kema Coins.
4. Users of Kema Coin earn profits by their own efforts, not based on the efforts of others such as:
    - 4.1. Mining additional coins[4]
    - 4.2. Obtaining and managing masternodes
    - 4.3. Trading on exchanges (when applicable)
5. Some users will earn more with Kema Coin than others based on those efforts.

To find out more regarding this matter see our Securities Framework questionnaire available on our website at www.kema.io.

Join our Team

Join Kema coin, Fast, Efficient, Secure.

[4] Proof of Stake requires users to have coins in order to mine additional coins.