

QuickCash stable currency system white paper



V2.0 2019

QuickCash team

<http://quickcash.com>

Content

1. BACKGROUND	3
2. QUICKCASH STABLE CURRENCY SYSTEM	4
2.1 QUICKCASH STABLE COINS.....	4
2.2 QUICKCASH ROADMAP	4
3. QC	5
3.1 COLLATERALIZED DEBT POSITIONS (CDP)	5
3.2 CDP CLEARANCE CLEARING.....	7
3.3 PRICE STABILIZATION MECHANISM	7
3.4 RISK PARAMETER.....	8
3.5 IMPORTANT EXTERNAL PARTICIPANTS.....	9
4 POTENTIAL MARKET	9
5 MAIN RISK.....	10
6 CONCLUSION	10
7 GLOSSARY OF TERMS.....	11

1. Background

Bitcoin, Ethereum and other popular digital currencies want to become a currency recognized by the mainstream market, must have higher profit, and this high-yield behind is greater volatility, while the value of money has a value scale that excludes this High volatility. Therefore, the stable currency represented by USDT was on the stage. Specifically, these digital currencies are either exchanged at a fixed rate for a particular asset, or the currency is stabilized by an algorithm that regulates the money supply and is therefore called a stable currency.

There are two demand for stable currency. One is safe-haven demand. When the digital currency falls, the requirement for stable currency is very strong. Investors need to convert the digital currency they hold into stable currency to reduce losses. The second is, Since the development of digital currency, it has to enter the circulation field, and the circulation field needs a currency with relatively stable value.

At present, the stable currencies in the current market can be mainly divided into three types:

- Fiat currency credit guarantee
- Digital asset collateral guarantee
- Unsecured algorithm release

No matter by what means, a stable currency should try to solve exchange rate stability, free flow problem, and give money over, so that all users have reached their Aconsensus of values. The unsecured algorithm issuance is difficult to guarantee the stability of the exchange rate because it lacks the underlying trust foundation. The legal currency credit guarantee and the digital asset mortgage guarantee are two more mainstream methods. Aside from the problem that the legal currency credit guarantee itself is too centralized, it also has certain drawbacks as a currency attribute.

The stable currency market is fundamentally different from other cryptocurrency markets (such as Ethereum, EOS, etc.). The stable currency market is the money market, while other cryptocurrencies are closer to the stock market. The money market is fundamentally different from the stock market. The stock market is to provide risk sharing, while the currency is the market to provide liquidity. The stable currency such as TUSD and GUSD lies in the fact that once the market is deflated, due to its strong supervision, it requires cumbersome steps such as KYC, which leads to the inability to issue more currencies in a short time to meet market demand, resulting in large price fluctuations. TUSD is on the line, and the increase of 30% in half a day can be seen.

Digital asset mortgage guarantee is a possible breakthrough point, presenting a more rational equilibrium paradigm . This requires a fundamental difference between the USDT (above the regulatory and auditing levels) and efficient liquidity.

2. QuickCash stable currency system

QuickCash is one of the first projects and institutions in the world to offer stable currency solutions. With the continuous development of blockchain technology, we have been exploring and optimizing our stable currency solutions to provide better use of stable coins for the market with the aim of decentralization, free circulation, exchange rate stability and safety compliance. Create a frictionless, faster global trading network.

QuickCash 's design philosophy is based on smart contracts that provide liquidity at a low cost (anyone can gain liquidity through over-collateralized digital assets). The issuance model of asset collateral on the chain has stimulated people to spontaneously collateralize funds, enrich the source of liquidity, and eliminate the need for centralized gateways and hosting, eliminating the need for central institutions to question (since the mortgage process is on the chain, provided Sufficient transparency) .

2.1 QuickCash stable coins

At present, the market is mainly a stable currency anchoring the US dollar, which is actually not friendly to countries whose fiat currency is not US dollar . Based on the QuickCash stable currency system, we offer different products and solutions for users in different regions of the world to reduce exchange friction.

QuickCash's stable currency is QuickCash CNY, referred to as QC. The 1 QC's value is \$0.15 (\approx 1CNY) and is issued through digital currency overcollateralized credit guarantees.

QC is divided into two versions, Qtum and ETH. Qtum is released earlier, with larger circulation and transaction volume. ETH is a new system, and its smart contracts issued by pledge are more excellent. Together with the integrity and acceptance of the Ethereum ecosystem, the scope of use of QC is further expanded.

2.2 QuickCash Roadmap

2.2.1 Phase I : Application stage

This phase is a transitional mechanism based on product and market demand . In the past, our first QC stable currency was released on Qtum and tested for its stable and safe features in long-term market circulation.

Now, we are releasing a stable currency in ERC-20 mode through smart contracts on Ethereum . And the choice of Ethereum Square because of its diverse ecology, the high demand for a stable currency and ERC-20 token is satisfied that most mining center and to the center of the exchange. QuickCash supports Ether Assets to issue stable currencies for mortgages. Supported Ether assets include ETH and our selection of stable currencies such as TUSD, GUSD, USDC, PAX, etc.

The QuickCash system can be quickly extended to any blockchain platform that can implement smart contracts. Soon we will also release the corresponding version of QuickCash stable currency on EOS and TRX .

2.2.2 Phase II : Governance and upgrade

In the coming year, we will launch our public blockchain QuickCash , cross-chain integration, support multi-chain digital asset mortgage to obtain stable currencies in different 1 to many different chains. The evolution from Phase I to Phase II is smooth.

Everyone can easily mortgage BTC, ETH and ERC20 stable currencies, EOS and other popular mainstream digital assets to obtain QuickCash stable currency in different main chain versions.

At the same time, we will continue to integrate with the global financial market to diversify the mortgage assets and include other digital assets such as gold certificates and stocks in the QC mortgage assets basket.

The greater significance QuickCash Chain is that QuickCash 's governance will be fully transferred to community autonomy, with a more transparent, fairer and broader QuickCash stable currency.

3. QC

QC is our decentralized stable currency product based on Ethereum Smart Contract. With the extensive market acceptance of Ethereum and rich stable currency ecology, it will become our key product to be built and launched at this stage. In this section, we will set forth in detail the process of QNCY issue of price stabilization mechanisms and risk control.

3.1 Collateralized Debt Positions (CDP)

Anyone can do a leveraged mortgage assets generated QC on QuickCash platform, through QuickCash Collateralized Debt Positions(CDP).

The CDP holds the mortgage assets stored by the user and allows the user to generate QC, but generating QC means generating a debt. The debt will lock the mortgage

assets in the CDP until the user repays the QC before returning the mortgage assets. Effective CDP are all over-collateralization, which means the value of the collateral is higher than the value of debt.

The entire CDP process can be represented by the following figure:



Figure 1 : CDP business diagram

QC pledged debt warehouse use process:

Step 1: Create a CDP and store the collateral

The user first sends a transaction to QuickCash create CDP, and then sends another transaction details and collateral type and quantity of assets used to generate QC stored in the CDP. At this point, CDP has a mortgage.

Step 2: Generate QC from CDP

The CDP holder sends a transaction and details the amount of QC that will be generated from the CDP, and the CDP will also generate the same amount of debt, which will lock the collateral until the outstanding debt is paid.

Step 3: Repayment of debt and stabilization costs

When users want to redeem mortgage assets, they need to repay the debt in the CDP and the stable cost of the debt. Stabe fees can be paid in QC and ETH. When the user pays the QC and the stable fee to the CDP, the debt in the CDP will be paid off.

Step 4: Take back the mortgaged assets and close the CDP

When debt and stable fee are repaid, CDP holders can send a transaction to the QC platform and get back all the mortgaged assets.

3.2 CDP clearance clearing

When the mortgaged Equity Asset falls to the liquidation ratio and the mortgaged user does not add collateral before then, it will enter the short-selling smart contract to perform the liquidation and liquidation. The pledge after the bankruptcy will enter the auction, and the clearing commercial QC will quote and participate in the auction. Finally, the highest bidder will receive the pledge, and the QC paid by the clearer will pay the stable fee and fill in the liabilities arising from CDP (That is, destroy).

Liquidation ratio = value of pledged assets / (QC value of borrowing + stable fee)

Set different clearing ratios for different Ethereum assets, combined with their volatility characteristics :

- ETH: 150%
- US dollar stable currency PAX / GUSD / TUSD/USDC: 105%

3.3 Price stabilization mechanism

QC target price

In the QC system, the QC target price has two important functions:

1. The proportion of mortgage debt used to calculate the mortgage debt
2. Determine the value of the mortgaged asset that the QC holder will receive upon global liquidation.

QC's initial target price is equal to 1 CNY, and will gradually be anchored with CNY.

3.2.1 Target price feedback mechanism

When the market is unstable, the target price change rate feedback mechanism will be activated. The target price change rate feedback mechanism will allow QC to maintain the CNY price, but off a fixed percentage of the CNY.

The target price change rate feedback mechanism means that the QC stable monetary system mobilizes market forces to maintain the stability of the QC market price by adjusting the target price change rate. The target price change rate determines the change in the target price and can motivate people to hold QC (when the target rate of change is positive) or borrow QC (in case the target rate of change is negative). In the stage where the target price change rate feedback mechanism is not activated, the target price change rate will be set to 0%, meaning that the target price will not change, and QC and CNY are hard anchored.

When the target price change rate feedback mechanism is activated, the target price change rate and the target price itself will dynamically change to balance the demand and supply of QC to adjust the way users generate and hold QC incentives. This feedback mechanism moves QC's market price to the target price, mitigating price volatility in QC and providing liquidity in the event of a demand shock.

Under the target price change rate feedback mechanism, when the market price of QC is lower than the target price, the target price change rate will increase. This will raise the target price and make it more expensive to generate QC using CDP. At the same time, increase the target price rate of change will increase the return on capital QC hold, leading to increased demand for the purchase QC. Reduced supply and increased demand will increase the market price of QC and approach its target price.

The same mechanism applies when the market price of QC is higher than the target price: the target rate of change decreases, resulting in increased demand for QC and reduced demand for QC, thus causing QC's market price to fall and approaching the target price.

Such a mechanism is a reverse feedback loop: QC's market price deviates in one direction of the target price and also produces forces in the opposite direction.

3.4 Risk parameter

The QC CDP has multiple risk parameters. Each CDP category has its own unique risk parameter settings that determine the risk profile of the CDP type and will be public and require the participants to focus on it.

Key CDP risk parameters include:

Debt cap : The cap on debt is the maximum amount of debt a single type of CDP can create. Once the debt created by a certain type of CDP reaches the upper limit, it will not be able to create a new QC unless the existing CDP is redeemed. The debt ceiling is used to ensure that the mortgage portfolio is sufficiently diversified.

Liquidation ratio : The liquidation ratio is the ratio of mortgage/debt at the time the CDP is liquidated. A lower liquidation ratio means that the price of the mortgaged asset is less volatile, and a higher liquidation ratio means a higher price fluctuation of the mortgaged asset.

Stable fee : Stable fee are the fees that each CDP will pay. An annualized proportion of debt generated based on CDP must be paid by the CDP holder. Stable cost to QC price and payment, we will soon be implemented in other assets to pay Ethernet, Ethernet assets amount to be paid depends on the market price of the Ethernet assets of feed.

Penalty ratio : The penalty ratio is the clearing agent's fee when the CDP is liquidated, and the remaining mortgage assets in the CD P will be returned to the holder of the CDP before the liquidation .

3.5 Important external participants

In addition to the smart contract infrastructure, the QuickCash platform relies on some external participants to keep running. The acceptor and external participants will use the economic incentives of the QuickCash platform to act.

- **Underwriter**

The acceptor is an independent participant (often automated) that is driven by economic incentives to contribute to the decentralized system. The acceptor will trade QC around the target price. When the market price is higher than the target price, the acceptor will sell QC. Similarly, when the market price is lower than the target price, the acceptance providers will buy QC. This is done to benefit from the long-term price convergence of the market target price. In the QC stable currency system, the acceptor also participates in debt auctions and mortgaged asset auctions at the time of CDP liquidation, ie as a liquidator.

- **Price provider**

The QuickCash platform requires real-time price information on the mortgaged assets to determine when to trigger liquidation. The QuickCash platform also requires QC's market price to trigger a target price change rate feedback mechanism when it deviates from the target price. Mainstream platform for digital currency will be chosen to be QuickCash price of feed suppliers to ensure to avoid non-normal price.

- **Liquidator**

The liquidator is an external participant who participates in the auction at the time of CDP's liquidation auction. The clearer needs to hold a certain QC to ensure that it can quickly sell QC to the QuickCash platform for asset repurchase.

4 Potential market

As the preface, has a price stability of monetary encryption is the basic needs of the vast majority of decentralized applications, which makes it a potential market of at least QuickCash larger than the entire block chain industry. As a stable price encrypted digital currency and can be used as a decentralized leveraged trading platform, the following is a QuickCash stable monetary system ready for immediate use potential market (including the block chain industry and other industries) incomplete List:

Predicting Markets and Gaming Applications : In forecasts that are not related to betting currencies, people are reluctant to use a price-constant cryptocurrency to place a bet.

Especially for those who bet the price of an asset to future price instability for a long time dimension of gambling can not be achieved. Alternatively, similar to the QuickCash stable currency coins encrypted with the predicted market price stability for the user is betting and natural selection.

Financial markets : hedging risks, derivatives, leveraged trading, etc. CDP makes it easier for users to make leveraged transactions. QuickCash Stabilizer is a stable and reliable collateral asset that can be used in custom derivative smart contracts such as options and CFDs.

Business receipts, remittances and cross-border transactions: reducing foreign exchange fluctuations, and remove the middleman, which means that QuickCash stable currency able to significantly reduce the transaction costs of international trade.

Transparent accounting system: charitable, non-profit organizations and government departments can achieve more efficient and low corruption by using QuickCash stable currency accounting system.

5 Main risk

- Malicious hacking against smart contract infrastructure
- Competition & User Ease of Use
- Price error, irrational & unanticipated events
- Centralized architecture problem

6 Conclusion

QuickCash stabilizes the monetary system to address the important issue of stable value exchange in the blockchain economy and in the broader global financial markets. We believe QuickCash create a stable currency, repurchase transactions and mechanisms to effectively maintain price stability QuickCash stable currency. The QuickCash team has established a prudent management roadmap and governance approach that is suitable for both short-term agile development and long-term decentralized design. We have ambitious development plans, and to ensure a stable currency QuickCash responsibility can be widely used.

7 Glossary of terms

- **QuickCash** : A stable currency system for managing and distributing a variety of stable currency products. With the continuous development of blockchain technology and the continuous integration with traditional finance, the technical architecture and operation of QuickCash will continue to change.
- **QuickCash Team**: development and introduction of decentralized intelligence contract developer team QuickCash platform.
- **QC** : Ethereum ERC-20 token, QuickCash stable currency system based on the Ethereum smart contract issued and operated CNY stable currency products.
- **CDP**: for accepting asset-backed and issued the corresponding QC intelligence contracts.
- **Liquidation Auction**: sell mortgage assets to be liquidated in the CDP, first consider the design process in the CDP can pay the debt, and then returned to the owner's mortgage assets at the best price.
- **Risk parameters**: deciding when QC stable monetary system automatically determine a CDP risks are too high, and variable contracts allow only for its liquidation.
- **Target price rate of change feedback mechanism**: QC stable monetary system to adjust the target price rate of change makes the market price remained stable in the vicinity of the target price mechanism.