451PCBcom (PCB)

token

whitepaper v3

open source hardware

INDEX:

1.- Intro

451PCBcom (PCB) is a token to promote, develop, make, share and exchange open source hardware.

The PCB token is not an speculative token, it has a lot of utility functions in the real world for the members of our open source hardware community of supporters.

TRC-20 or XRC-20 are the basic code standards for a blockchain token to implement some minimal token functions using a smart contract. PCB token is a public database ranking created by us for self-govern, and empower open source hardware users to interact with us, making easy the open source hardware exchange, share and distribution, with utility to all the token holders as a public blockchain database.

The PCB token is distributed to our members to use it as a tool to exchange open source hardware projects, to rank and give reputation to the community who support open source hardware and promote it in collaboration with us. It is utilized to obtain some external services necessary for the project maintenance and development.

When you hold PCB tokens, you are a member of our community of supporters, so you are collaborating to develop and make open source hardware, empowering our community to do it. Your support reputation rank depends on how many PCB tokens you hold.

Our community it is based on the PCB holder rank, knowledge and collaboration to make and promote open source hardware, and never by lucky or competitive games.

We are ready to develop the project entirely by ourselves as a DAO or other options, but we are in partnership with some companies for to do the hard work with the hardware and other services for us. The future and our community is open. Join us.

2.- Utility

The PCB token is distributed to reward our community with tokens which can be held to win community reputation and it is utilized to participate in our community of open source hardware supporters within the decentralized blockchain ecosystem with the PCB token utility for file and code sharing, participate in message boards, forums, chats, holder ranking, to make proposals and to vote about decisions, to swap it with other members, to win open source hardware rewards and many things more available with TRC-20 tokens. It is utilized to obtain some external services necessary for the project maintenance and development, when it is possible and necessary.

The PCB token can be utilized to be exchanged for physical open source hardware and for a secure exchange of hardware, including between our community members of PCB token holders, who can design, make, hold, exchange and distribute open source hardware.

This token of open source code is closing the process of open source hardware designed with open source code using this open source token to make, control and distribute hardware maked by our community of open source hardware supporters.

3.- Roadmap

This is our roadmap from 2018:

2018
- First version of the whitepaper approved.
- PCB Token creation and starting to test it.

2019
- Whitepaper v1.0 and v1.1 released.
- Whitepaper v1.2 released in English and Spanish.
- "451PCB Protoshield board v2" open source hardware released.
- Whitepaper v1.3 released in English and web page updates.

- PCB tokens and some physical boards of open source hardware distributed to our community of supporters and PCB token holders.

2020

- Web page and 451PCBcom (PCB) smart contract update released.

- Whitepaper v2 released in English.

- Release the open source hardware code of the "451PCB Protoshield board v2.1". Other open source hardware code by the community is wellcome: Postponed till 2021 due our voluntary physical activity reduction in solidarity with the struggle against COVID-19 virus.

- We improved our web page, publishing more info about our open source hardware, documents, pictures and use examples for the community and with their collaboration though our accounts on Twitter, Facebook, Telegram and Github.

- We distributed more PCB tokens and physical open source hardware boards to our community of supporters and PCB token holders.

2021

- Whitepaper v2 released in Spanish.

- Whitepaper v2.1 released in English and Spanish.

- Release the open source hardware code of the "451PCB Protoshield board v2.1".

- We continued distributing more PCB tokens and physical open source hardware boards to our support community who hold PCB tokens joining us.

2022

- Web page and projects documentation update.

- New project added to our web.

- We distributed some PCB tokens to reward our community.

2023

- Web page and projects documentation update.

- New PCB token XRC-20 deployed on IoTeX blockchain.

- We distributed some PCB tokens XRC-20 to reward our community.

2024
- Web page and project documentation update.

- Whitepaper v2.1.1 released in English and Spanish.

- Continue developing all serious proposals from our community:

  - Projects developments and updates.

  - Web page and projects documentation update.

- Rewards distribution stops due out of energy donated to the smart contract.

2025-2026
- Whitepaper v3 released in English only.

- Continue our complete development as a DAO with PCB tokens.

- Web page and project documentation update.

- Printed Circuit Board reward distribution ends as it was announced in our last whitepaper.

4.- PCB Token

The PCB token total supply is mintable to 1 Million tokens with 8 decimals in each blockchain.

All the token holder addresses and balances are public on the blockchain network, as the events of transfers and approvals, so the token activity can be checked by the community and we can't stop, block, decrease your balance of tokens, revert or change your transfers, your burns or yours approvals.

4.1 – TRON TRC-20 token

The 451PCBcom (PCB) TRC-20 token is being distributed on TRON blockchain to the community and has been deployed in this TRON smart contract address:

TMBshXBbETM9UPU4XJPueJR1o8PVm5NMDd

The PCB token TRC-20 smart contract info can be found and checked on tronscan.org:

https://tronscan.org/#/token20/TMBshXBbETM9UPU4XJPueJR1o8PVm5NMDd

The PCB token Solidity code TRC-20 is open source code too:

https://github.com/451PCBCOM/PCB-TRC20/blob/master/CODE/451PCBcom.sol

When the the smart contract or the creator haven't got the necessary donated energy or bandwidth, as probably now occurs, the PCB contract execution will discount to the user an amount around 40.000 units of energy and around 500 units of bandwith or burn some TRX by the TRON blockchain to cover the fees. It depends of the TRON blockchain network activity and execution fees. Our community donated energy to the PCB smart contract from the year 2018 till 2024 making executions very near to be free, but it is out of energy now. Energy or bandwidth donations to our smart contract to help to cover the blockchain fees will be ever welcome.

4.2 – IoTeX XRC-20 token

The 451PCBcom (PCB) XRC-20 token is being distributed on IoTeX blockchain to the community and have been deployed in this IoTeX smart contract address:

io1hy2g549daj65zh2xrwgvyqsslm4ntxp4pfl002

The PCB token XRC-20 smart contract info can be found and checked on iotexscan.io:

https://iotexscan.io/token/io1hy2g549daj65zh2xrwgvyqsslm4ntxp4pfl002

The PCB token Solidity XRC-20 code is open source code too:

https://github.com/451PCBCOM/PCB-XRC20/blob/main/451PCBcom-XRC20.sol

A PCB token transfer or other smart contract execution will cost to the user a little amount of IOTX to cover the contract execution fees. It depends of the IoTeX blockchain network activity. So you will need to burn some IOTX fees for transfer XRC-20 PCB tokens.

5.- About us

We are a non-profit association to promote open source hardware, art and technology. 451PCB is self financed by our members donations and only when it will be necessary, with the open source hardware distribution to our members as an typical associated consumers group. We don't give financial or investment advices.

We make the PCB token deploying smart contracts on blockchains to self-organizing our non-profit association and to promote open source hardware. We developed a voting system with PCB tokens to do it.

Our community is conformed by the PCB token holders. The ranking of PCB token holders can be checked following the token info links.

We don't store the users private data. So, all user private data sent to us will be destroyed as soon as possible to preserve the user privacy rights and never shared with others. When we have access to data stored in other platforms it will be managed by their own rights and rules, but we will preserve it private and it will never be shared, according to the applicable laws.

If you have any question about the 451PCBcom (PCB) token, don't hesitate to contact with us sending an e-mail to:

info@451pcb.com

For more info visit www.451pcb.com and join us.