THE BCHIP

Bridging the gap between people and blockchains

thebchip.com

BChip LLC

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IMPORTANT DISCLOSURES & OTHER INFORMATION

Introduction

An essential precursor to the successful adoption of any transformative technology has first required the implementation of consumer-focused solutions, which removes key barriers to adoption and day-to-day application. The products and services of BChip LLC are centered on bridging the gap that inherently exists between people and blockchain protocols. BChips are a secure, durable, and economic solution for blockchain private keys, with a wide range of individual consumer and business product applications.

Using a Blockchain

Every transaction on a blockchain requires the use of a special cryptographic key that is generated either offline or online using industry standard cryptographic algorithms. The blockchain key, commonly referred to as a private key, is the sole required proof to properly authenticate all transactions linked to a unique public address, which is mathematically derived from the private key. Put simple – key pairs are generated, which produce two strings of data - **Private Key** and **Public Address**. The possessor of the private key is responsible for the proper handling and secure storage. The public address is then shared as needed for transactional purposes. An essential concept to emphasize is that the **public address is what you share**, the **private key is something you never share**. The secure creation, storage, and handling of blockchain private keys, if done incorrectly, is perhaps the single greatest vulnerability within all blockchain protocols.

Presently private keys are managed through either vulnerable software, expensive hardware, or fragile pieces of paper. This is where the BChip comes in to finally provide another option.

The BChip

The BChip leverages and builds upon existing industry standard technology to provide a wide range of economic options for the secure and durable creation, storage, and management of blockchain private keys. The BChip is a custom designed smart card, which uses a simple to use downloadable application to program and interact with every BChip.
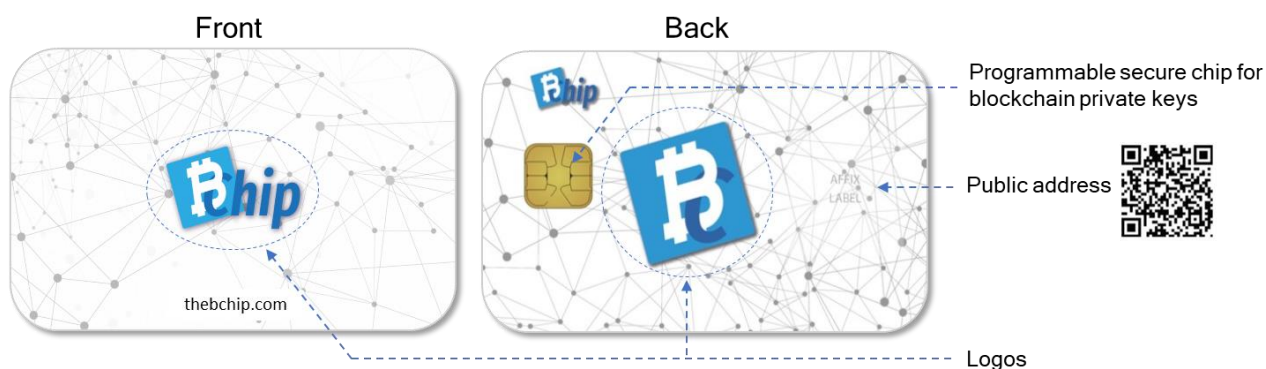

Figure 1

- The BChip shown in figure 1 can be purchased through either thebchip.com or www.amazon.com/shops/bchip.
- Contact the BChip team, if you are a business or project interested in a bulk purchase of BChips with a custom designed logo added to the card. We have a variety of options with our manufacturer and would love to work with you.

BChip Software

Use the BChip application to manage and interact with all BChips. The application can be downloaded from the thebchip.com and the complete source code is available for review on the BChip GitHub repository. The application is supported on Windows OS and provides the following features:

- Load data from a BChip
- Initialize or Erase a BChip
- Set Key Phrase
- Create a Private Key
- Import a Private Key
- View/Export Private Key
- View/Copy Public Address
- View BChip Metadata
- More features to come!

The smart cards do not come pre-loaded with any active private keys. We firmly believe this is a process you should never outsource, regardless of any claims a company documents on their process.

How It Works

Awesome! You have purchased and received your first BChip. Wasn't that nice how inexpensive it was? Let us walk through the process of how to get your first BChip setup and *HODLing* some private keys.

What you will need:

- A BChip
- Smart Card Reader (Current Supported Model: HID OMNIKEY 3021; share with us on Twitter what works for you)
- PC with Windows 7, 8, or 10 OS
- The BChip Application (Downloadable for free)

How to setup:

1. Open a web browser on a Windows computer and go to thebchip.com. Here you will see the instructions for the entire process listed but go to the step where it has the link to download the BChip application. Once the software is downloaded, go ahead and install the application.
2. Plug in your smart card reader (see supported models). Open the BChip application and insert a BChip into the smart card reader, ensure that the contact on the smart card is inserted correctly.
3. In the BChip application click Load BChip. Click Key Phrase and set a secret key phrase.
   a. Note: Losing this will require re-initializing the BChip, which will result in erasing all content on the BChip
4. After selecting the appropriate Key Type from the drop down, select one of the following options:
   a. Create Key: Generates a new private key on the BChip
   b. *Import Private Key: Provides the ability to import an existing private key from an external source*