



Hedera™ Hashgraph

Certificate of Blockchain Proof

Powered by **Proven**^{DB}

hh-hbar-coin-economics-paper-060320-v3.pdf

Hedera Hashgraph (email user: contact@hedera.com)

This certificate constitutes proof that a document has been anchored to a Blockchain using the Hedera Hashgraph Protocol on [Mon, 21 Dec 2020 12:52:56 GMT](#) thereby proving that the document existed in its current form on the date at which the Blockchain entry was created.

You can use this proof to attest that:

- (a) the document has not been altered in any way.
- (b) the document existed in its current form on the specified date.



An online version of this proof can be found at:

<https://app.provodb.com/app/document/share/b048c7b775fe10b89c6f315d265a2a96a65b9f22558db81ba94aa489f783a484574ca2c49b14ec7978f82c12d8a98a4140b613282d3e6f1e37d53f2522eb1c04365aae05c27b64344b548624c58caf5c0be0eafdf7ac4179a441aa88442d31e05c91d140659a89d4bf934f5c19b258547e95bd007ea55898be15cc5ccd3b65b36a844d428ff7e0323969267a00c144/compliance>



Details of the document being proved

The document was uploaded by Hedera Hashgraph (email user: contact@hedera.com) at [Mon, 21 Dec 2020 12:52:53 GMT](#)

The document name when hashed was "hh-hbar-coin-economics-paper-060320-v3.pdf"

You can view a copy of this document [here](#)
(permissions may be required to view the document)

The cryptographic hash of the document is:
`89d2d2246ff2a2e08c2f81eeb7bc6a98ecfa028bd1230b955c1a69989d7114db`

See [Schedule 1](#) for details of the hashing algorithm employed.

Blockchain proof details

The document hash was included within the [Hedera Hashgraph](#) proof at
<https://explorer.kabuto.sh/mainnet/transaction/1e0b076a3f05a64f5591a7397a0563a2417aad93f701a28f9eec7c2ae3b3360441657542eeb36f40081fa0bf793513b9>

See [Schedule 2](#) for a detailed cryptographic proof.

The Hedera Hashgraph proof was anchored to the Blockchain in transaction
`1e0b076a3f05a64f5591a7397a0563a2417aad93f701a28f9eec7c2ae3b3360441657542eeb36f40081fa0bf793513b9` at: [Mon, 21 Dec 2020 12:52:56 GMT](#)

Summary

The document `hh-hbar-coin-economics-paper-060320-v3.pdf` with hash value `89d2d2246ff2a2e08c2f81eeb7bc6a98ecfa028bd1230b955c1a69989d7114db` was anchored to the Hedera Hashgraph Blockchain by Hedera Hashgraph (email user: contact@hedera.com) at: [Mon, 21 Dec 2020 12:52:56 GMT](#). Providing that the document continues to hash to that value, you can be certain that the document existed in its current form on or before that date.

Schedule 1: Document hashing

The document hash of `89d2d2246ff2a2e08c2f81eeb7bc6a98ecfa028bd1230b955c1a69989d7114db` was obtained by performing a [SHA-2 256 bit](#) hash on the document [here](#) (permission may be required to view this document).

The hash was calculated on the document and its metadata as stored in the ProvenDB system.

You can download a copy of the document and its metadata (permissions required) [here](#). You can independently validate the document proof by using the open source validation tool at <https://app.provencdb.com/homepage/downloads>.

Schedule 2: Hedera Hashgraph proof

The Hedera Hashgraph proof uses a Trie structure for linking data to the public Blockchain. It aggregates multiple hash values into a single hash value which is then placed on the Blockchain. The following Hedera Hashgraph proof proves that the hash value of

`89d2d2246ff2a2e08c2f81eeb7bc6a98ecfa028bd1230b955c1a69989d7114db`

is associated with the root hash placed on the Hedera Hashgraph Blockchain in transaction

<https://explorer.kabuto.sh/mainnet/transaction/1e0b076a3f05a64f5591a7397a0563a2417aad93f701a28f9eec7c2ae3b3360441657542eeb36f40081fa0bf793513b9>

This proof can be downloaded (permissions required) [here](#)

Below is a binary representation of the Blockchain proof

```
eJy0k0GuG8QPXv+H+B+ABds0Y3vsmenqSVyBFZtgj20S6TWJkrTQZWHdtr0BtKgFIVaJfelxGFQ3isVTxEbJLae+X5jj7/v23d2001cx/HV1z/
cqsXtL3u3le/m6v7g9W5//ON//3/x3e35poghzyhN3EIBEH0iq4R2kpFkwxs3sy6WUFyYBD2qu0BYJXnx/W7/9rjWBbLcAbkXjYQQKZLdCgJbFR4oRJS
9XnRU2ZJmToCupZe0BjQrNm7XQESWINFMNJID0NFHjaruvY9JQMziQj55sHaNmQNVcmBHhRoPgYfzDVIvoKnpjAsWk0jQZmokydwwsosKRilpvSI
zVpHq5ESRAXYFrBUUWvcBg8QyuXNHL63KqFbZNUMDiAOMpOH02noF8MxCtE6ugEK19zLcU1uSaYNitVFqAS/SZuehqTygOQxoxbmVITQrGyOWa
2CTMeY0rAQtsTuhonmKINZGDihD3QQ7pSBb50YFJ1EiDpXscD2yQpYqrN0Yclp2TSPwUZFaDYI2Is1opCCadChjRi0D2sVA0a63DNGa8MV0PKtpV2
HFrN5Seh1zigyn4eltoXXgUKmG0IMygv2qw4Kzp8mMyaxVGNqMaDK8AIQvQaBigpmzdw4bREjpWY1Ssz9cyvsYnT
+65GgdHgddPdHNdhun1SVQu8PfkvXyxdv72vHIN290z/fxeurtj+
+vbz80USx0kQpC6vUZB6gjUbTwwKKFZqQD8pWQLHniJhtogYZkZRaqbhhxYiLY2spHVKLZRvEQDbePD1sji/Pr9an0/74eLm8f/rR/rDbpdptPNrsls/
isMnny4ezLP/rzt7dzN32FF+dfv+rty9p4492hy+Wc62b7X632Z6Wz+ju23765EPpzVqP6/
NNH46OWCUTFaP0idkhwppN0dFjphbs5oBUbDBPUBmjD2+XndvPF8xq46vtzuP8sWtBmjwXsw9eAMRYKGEuUFED3eaM
+tud5PjUnmxOp7hXrvT0KxYsC8AFwqeAjxkfs3z2AT93h3+Jvyj/Cf9nAAAA///NT95t
```

Schedule 3: List of printable links in the document

Document being proven:

<https://app.provendb.com/app/document/share/08dcd4418e0b04df4653a9b3c886f52cb5ea72bd566b69801e99874a3b2a566af3f59ad9872b7d9d80ada1c72a02c156606a566f63933be58760e7b12202e5b78c8636fed4475bd63a4a07d5e12aabe46d37cdde8b2b62090b4416c491a892d1eda9899af9d8ba60e032aa8df52f39f6daaf3e7c814f6e87873bec2bba3ce9d3e07f1b4b6d0d054825029da5fe394a/compliance>

Hedera Hashgraph

<https://www.hedera.com/>

Blockchain transaction:

[1e0b076a3f05a64f5591a7397a0563a2417aad93f701a28f9eec7c2ae3b3360441657542eeb36f40081fa0bf793513b9](https://app.provendb.com/app/transaction/1e0b076a3f05a64f5591a7397a0563a2417aad93f701a28f9eec7c2ae3b3360441657542eeb36f40081fa0bf793513b9)

Open source validation tool:

<https://app.provendb.com/homepage/downloads>