March 11, 2024

Stamps Protocol

Monthly Update. March 2024 Release

sqrr.xyz

SQRR

Content

Key Takeaways 02

Stamps Protocol: Refresher 03

Key Stats 03

Network Fees and Layer 1 Usage of the Stamps Protocol 08

Recent Developments 11

Concluding Remarks 12

Provide Feedback 13

Disclaimer 13

Note to Readers: *This PDF report contains hyperlinks to various reference sources and additional reading material for your convenience and further education. We have carefully selected these sources, believing them to be credible and genuine in their content. Please take advantage of these links to expand your understanding of the subject matter.*

Key Takeaways

- For this month's update, it has been one year since MikeInSpace created the first Stamp for the Stamps Protocol. Over the past twelve months, we have seen some exciting developments, and SQRR has been reporting on the protocol's progress since May of last year.

- As we kick off 2024, we're noticing a steady increase in protocol activity and ecosystem development into February. Specifically, creators have minted 43,478 Stamps throughout the month, most belonging to the SRC-20 type. As of now, the protocol has achieved a significant milestone of over 350,000 Stamps minted.

- MikeInSpace proposed a new Stamp specification called "Octet Linked Graphics & Artifacts (OLGA)," which is a Stamps-aware version of JP Janssen's Counterparty proposal named "File Storage in P2WSH Outputs." This specification can potentially accelerate the creation of Classic Art due to its cost-effective features, making it cheaper to mint these stamps.

- BitVM included Stamps as a Data Validation layer, allowing Bitcoin Layer 2 developers to roll up their transactions to Layer 1 as Bitcoin Stamps. BitVm was also developing an SRC-20 bridge.

Stamps Protocol: Refresher

Stamps is a blockchain protocol created by MikeInSpace that enables storing images on-chain on Bitcoin transaction outputs. It utilizes the Counterparty platform, a long-standing Bitcoin meta layer, to broadcast Stamping transactions to the Bitcoin Network. The protocol enables the creation of Bitcoin NFTs, especially low-resolution pixel art.

In our initial research paper, we dived into the details of the Stamps Protocol, accessible via this link. We cordially recommend studying the comprehensive report.

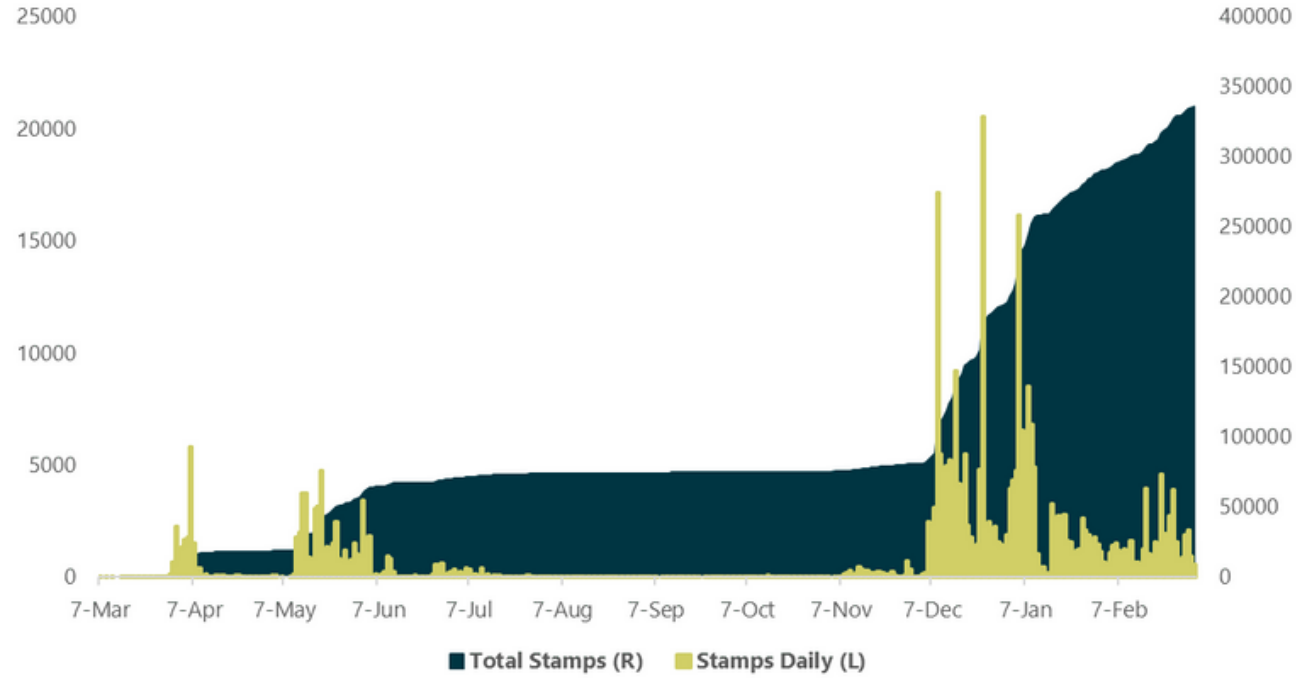
Our monthly update reviews important milestones and developments in February 2024. If you missed our last reports, please visit this link to catch up.

Key Stats

The number of Stamps minted in February 2024 decreased to 43,478 compared to the previous month. This month was the third largest in terms of the overall number of mints. Despite this drop, the protocol activity remains robust, with the total number of mints crossing 350,000 Stamps as of the time of writing.

Although the number of mints has decreased, which is normal in any protocol's lifecycle, we have observed a strong momentum toward continued ecosystem expansion. In the past month, several significant developments have taken place that are expected to contribute to the ecosystem's ongoing growth.

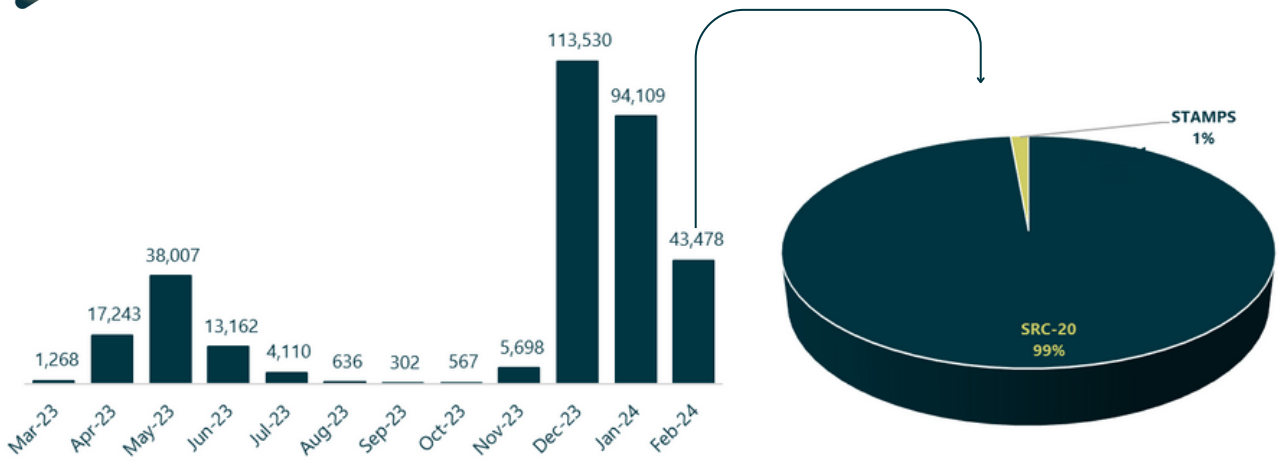
Total Bitcoin Stamps Minted



Source: SQRR Research. Data: stampchain.io.
Data as of 03 March 2024.

In February, 98.6% of total minting activity was from SRC-20 assets, while Classic Stamps accounted for only 1.4%. SRC-721 had the lowest number of mints since the specification was introduced.

Minting Trend (monthly) & February 2024 Mint Types

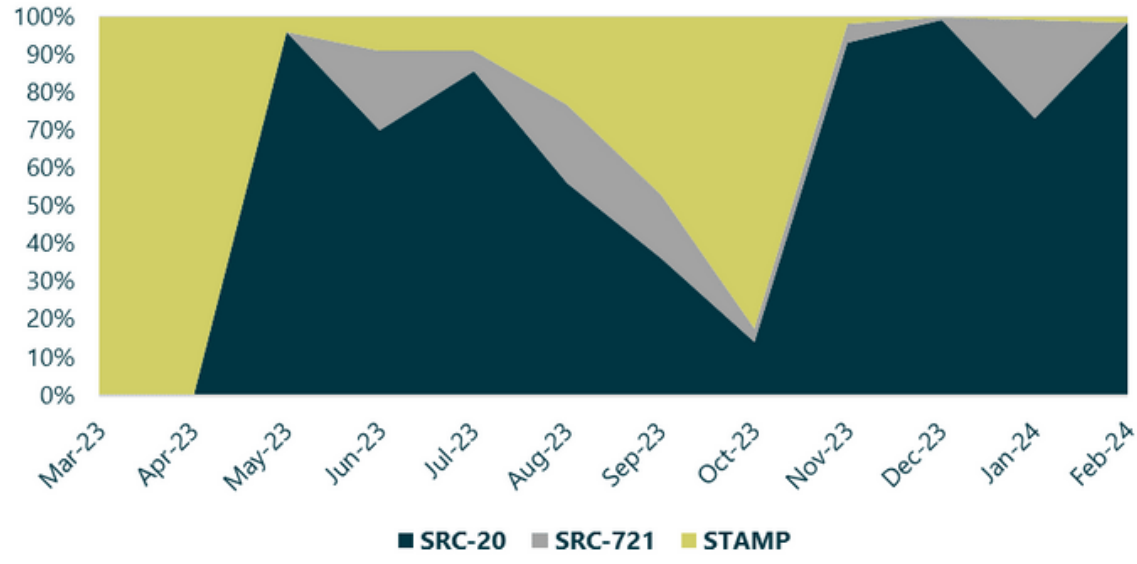


Source: SQRR Research. Data: stampchain.io.
Data as of 29 February 2024.

In February, the number of SRC-20 mints dropped by 38% to 42,864, and the Classic Stamps count decreased by 35% to 602 assets. Only 12 SRC-721 Stamps were minted.

The use of Classic Stamps is expected to continue to grow steadily due to the recent launch of new creative mint types, e.g., OLGA-type minting (discussed below).

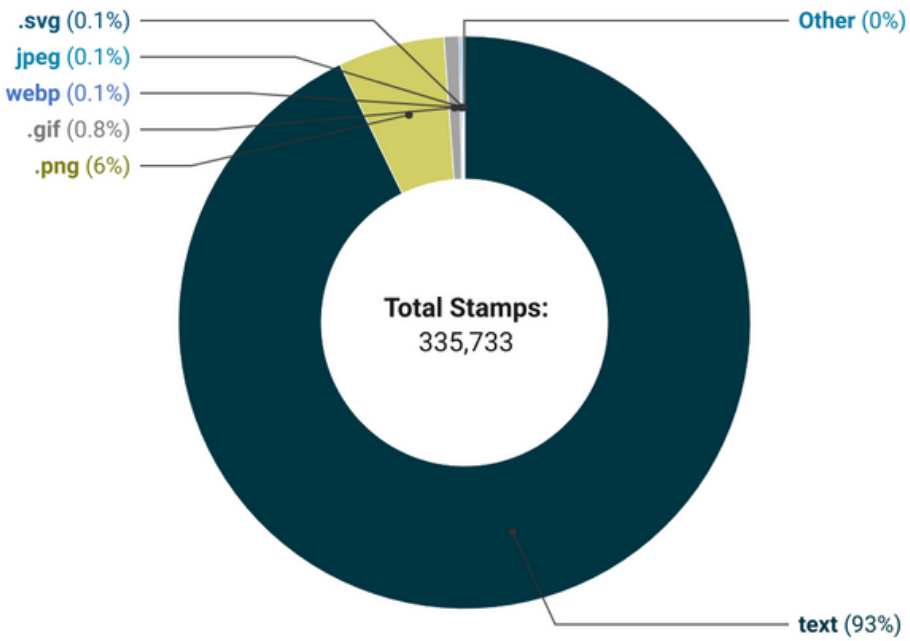
Minting Trend of Stamp Types



Source: SQRR Research. Data: stampchain.io.
Data as of 29 February 2024.

Looking at the monthly distribution of MIME types, we can see that the 'Text' type dominates, with 98% of the mints falling into that category due to SRC-20's dominance. This trend is expected to continue in light of recent developments that support SRC-20's momentum. Following 'Text,' we notice that 'png' MIME type accounts for 1.2% of the distribution. Two other MIME types that caught our attention were 'svg' and 'html'. These MIME types are noteworthy due to their increasing presence in recent use cases, such as data validation for BVM Network and the generative type of Stamps. The recent OLGA-type minting could also drive 'svg' usage, which is considered more visually appealing.

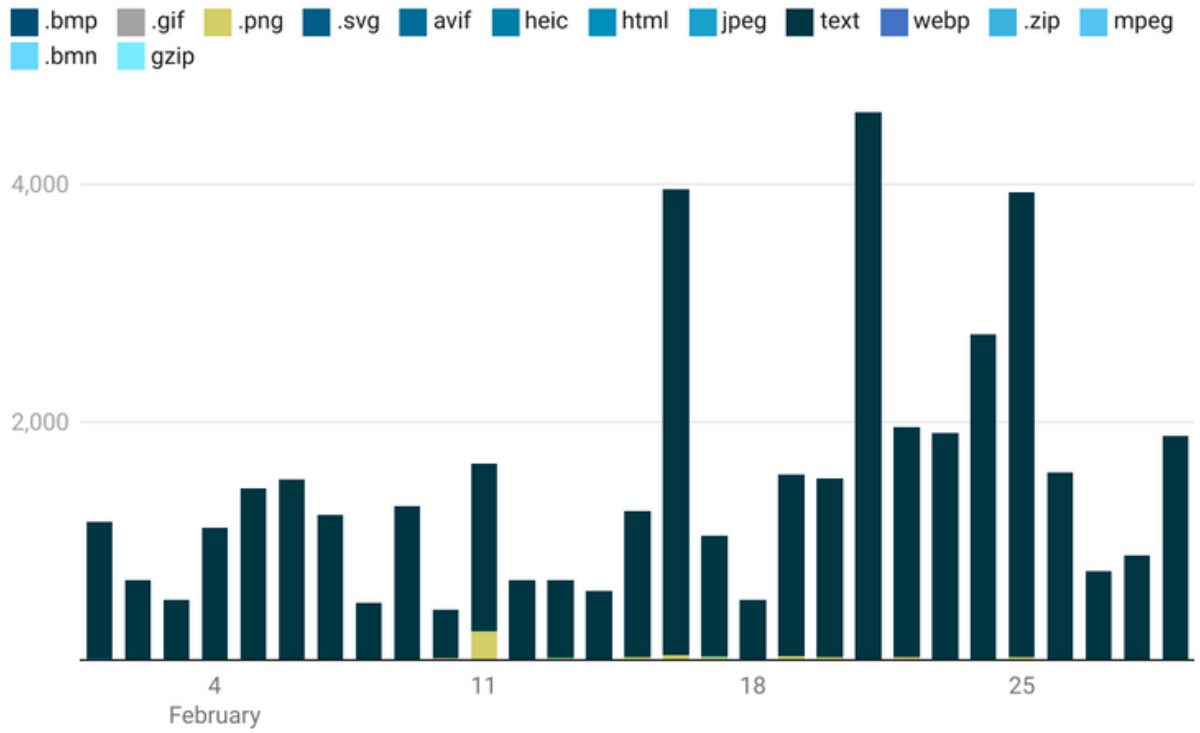
Bitcoin Stamps by Type



Source: SQRR Research. Data: stampchain.io. Created with: Datawrapper. Data as of 03 March 2024.

As network fees were relatively cheaper than last month, minting Classic Stamps in February made economic sense. However, despite the decreased fees, the absolute number of Classic Stamps mints remained lower than January.

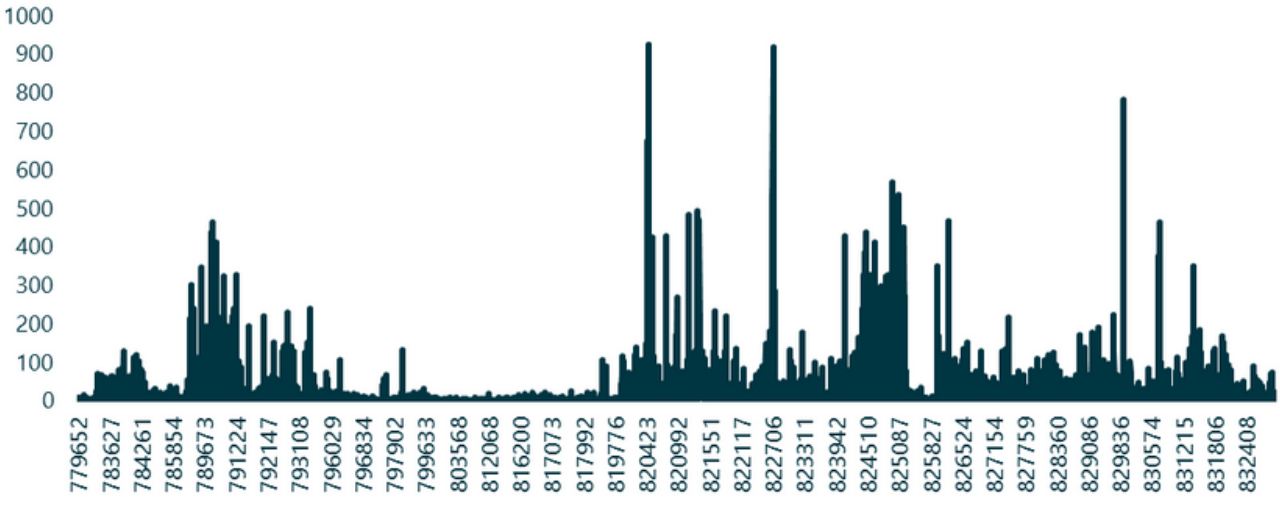
Bitcoin Stamps by Type (overtime)



Source: SQRR Research. Data: stampchain.io. Created with: Datawrapper.
Data as of 03 March 2024.

As of March 03, 2024, blockchain data indicates that information related to Stamps is available in 21,018 blocks. Interestingly, Stamps were present in 85% of the blocks created in February 2024.

Number of Stamps by Block

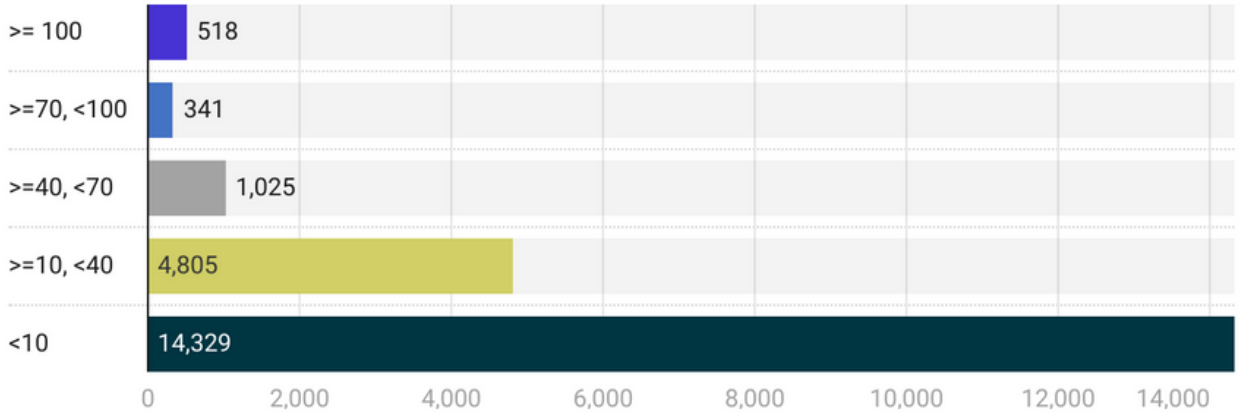


Source: SQRR Research. Data: stampchain.io.
Data as of 03 March 2024.

During the month of February, a total of 3,542 blocks contained Stamps transactions. The block that contained the highest number of stamps had 784 SRC-20 asset transactions.

The highest-paying block in February rewarded miners with $3,472.44 in fees for including Stamps transactions. It is worth noting that the highest-paying block from the previous month paid $12,636.87 in fees. Furthermore, only six blocks paid miner fees over $2,500.

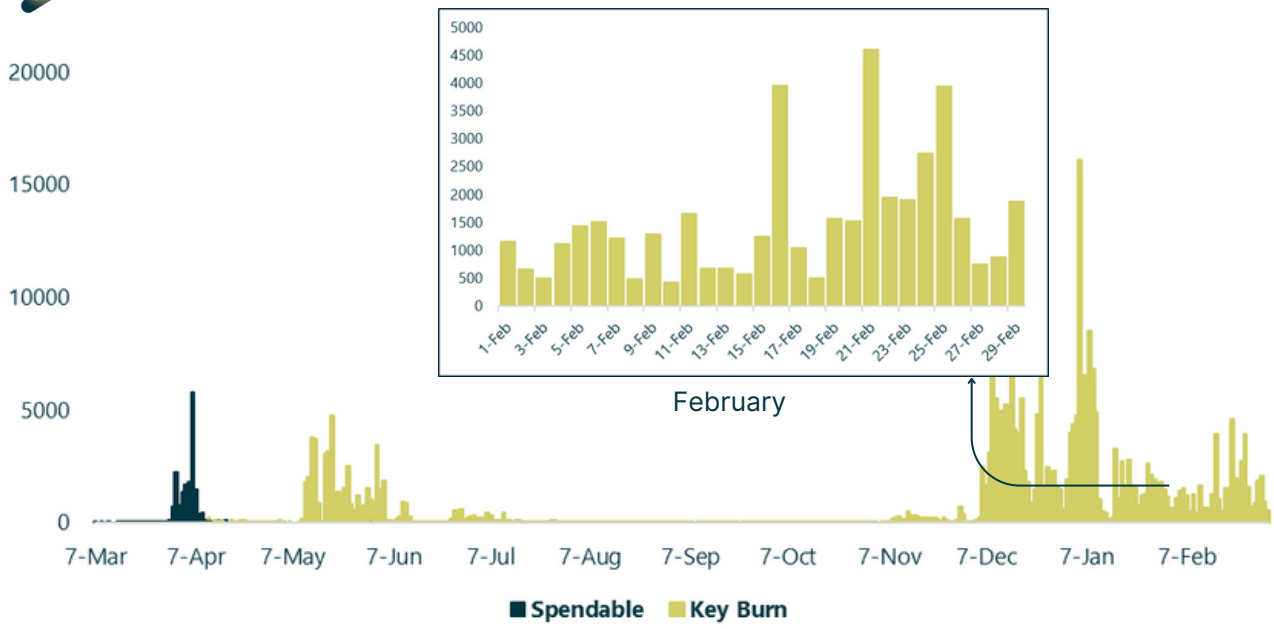
Number of Blocks with Stamps (in Slabs)



Source: SQRR Research. Data: stampchain.io. Created with: Datawrapper. Data as of 03 March 2024.

The data shows that out of all the Stamps, only 17 sent the outputs to spendable addresses, while the rest sent them to burn addresses in the month.

Key Burn vs Spendable Outputs

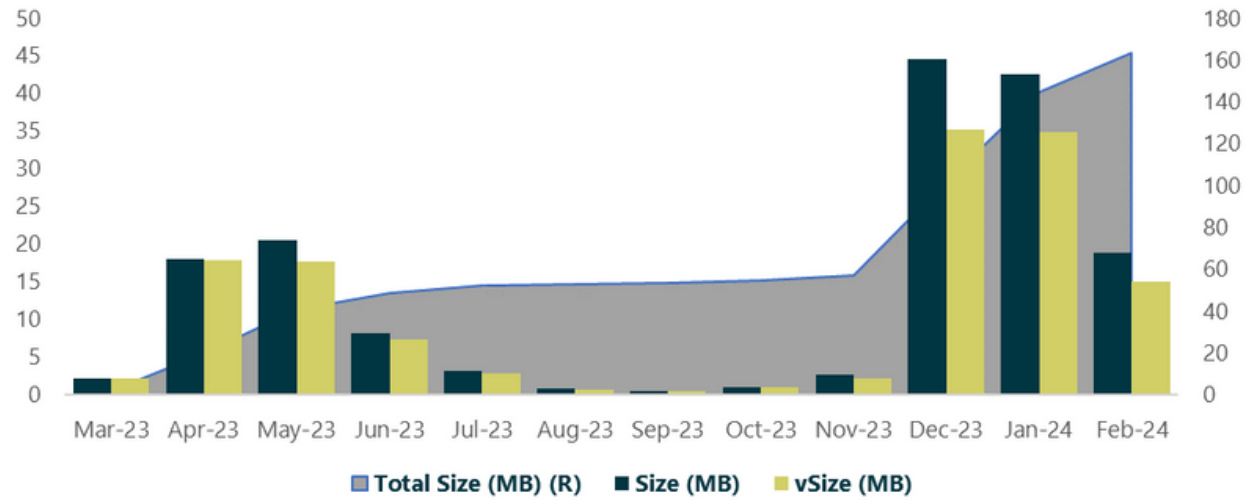


Source: SQRR Research. Data: stampchain.io. Data as of 03 March 2024.

Network Fees and Layer 1 Usage of the Stamps Protocol

In February, Stamps Protocol contributed significantly less data to the blockchain, adding only 19 megabytes to the chain size. This is a 55% decrease compared to the previous month when 43 megabytes of data were added. However, despite this decrease, the overall size of the Bitcoin Network grew at a similar pace to the previous month, adding approximately 7.5 gigabytes of data, representing a growth rate of about 1.4%. This means that the Stamps Protocol only contributed 0.25% of the month's chain size growth. As of the end of February, Stamps Protocol's total contribution to the blockchain was 163.54 megabytes, representing approximately 0.03% of the total chain size.

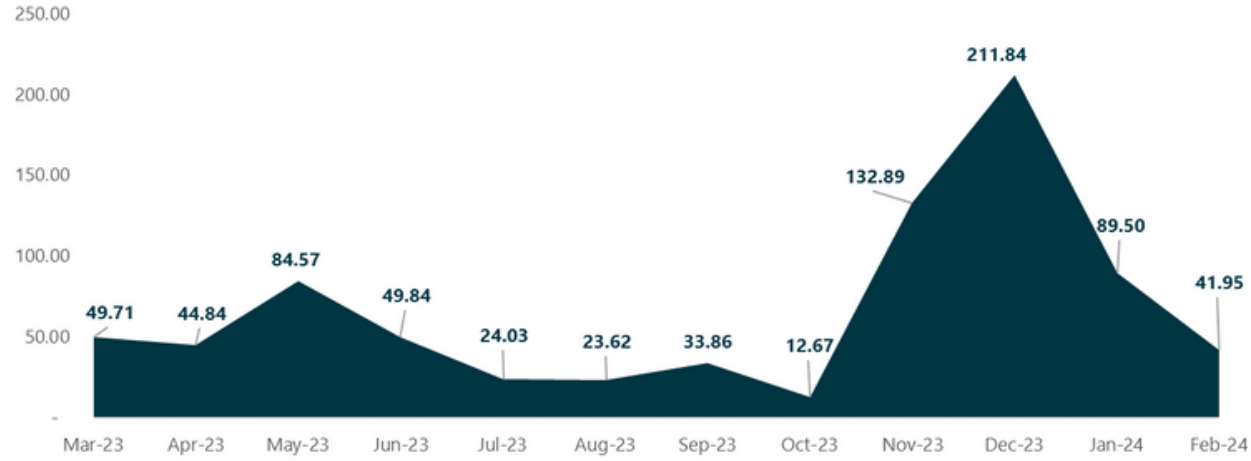
Addition to the Blockchain Size (in Megabytes)



Source: SQRR Research. Data: stampchain.io, Flipsidecrypto.
Data as of 29 February 2024.

The cost of minting Stamps, measured by the fee in Sats per Byte, continued to decrease in February, dropping by 53% month-over-month to 41.95 Sats/Byte. The data indicates that the fee reached its highest point in December at 211.84 Sats/Byte. Since then, there has been an 80% decrease in the fee for February.

Fee (Sats) per Byte



Source: SQRR Research. Data: stampchain.io, Flipsidecrypto.
Data as of 29 February 2024.

The Stamps asset 301321 stood out as the asset with the largest size, requiring 19,716 bytes to mint. It also took 171 multisig outputs, the most multisig outputs, to encode the data. The most expensive stamp cost the minter $630.06 in fees and locked in $47.30 worth of Sats in 138 multisig outputs.

Interesting Stamps (February 2024)

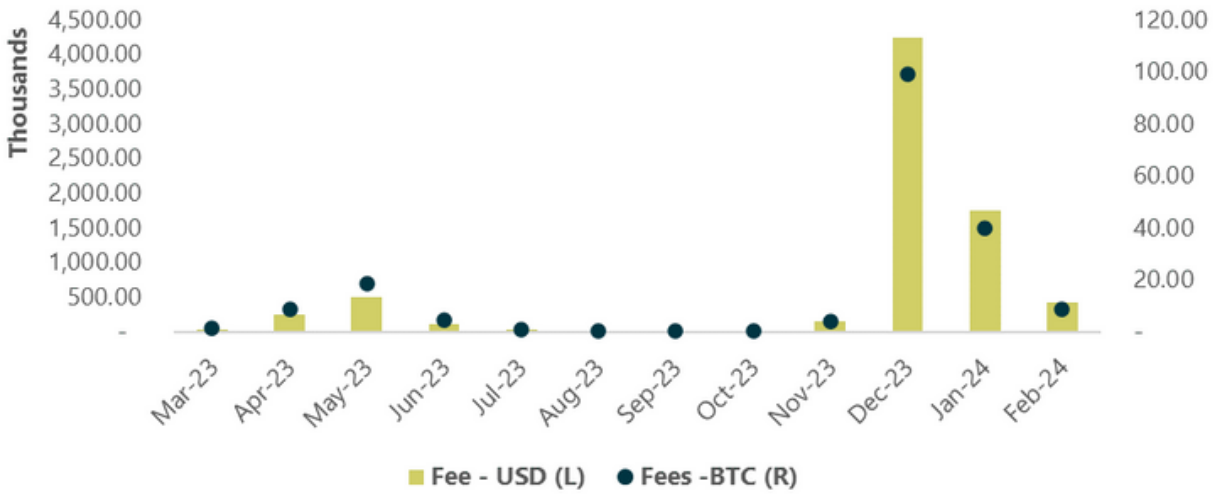
Item	Size (Bytes)	Fees (BTC)	Fees ($)	Multi-sig Outputs	Dust (BTC)	Dust ($)	Stamp ID
Largest Size	19,716	0.0075	375.35	171	0.0014	67.89	301321
Most Expensive	15,955	0.0146	630.06	138	0.0011	47.30	290224
Most Multi-sig outputs	19,716	0.0075	375.35	171	0.0014	67.89	301321

Source: SQRR Research. Data: stampchain.io, Flipsidecrypto, Bitcoinvisuals. Data as of 29 February 2024.

Bitcoin miners earned 8.34 bitcoins in fees by including transactions from Stamps in the blockchain. This amount is the fifth-largest monthly fee earned by miners. However, it represents a 79% decrease from the 40 bitcoins in fees earned in January. With this, the Stamps minters have now paid 184.74 bitcoins in miner fees since the protocol's inception.

The cost of minting an SRC-20 asset decreased significantly in February, dropping from an average of $14.41 in the previous month to $9.36. The cost of minting Classic Stamps and SRC-721 also experienced even sharper declines. The average cost of minting a Classic Stamp fell by 54% to $39.29, while the cost of minting an SRC-721 decreased by 58% to $11.66 compared to the previous month.

Monthly Total Fees (in BTC and USD)

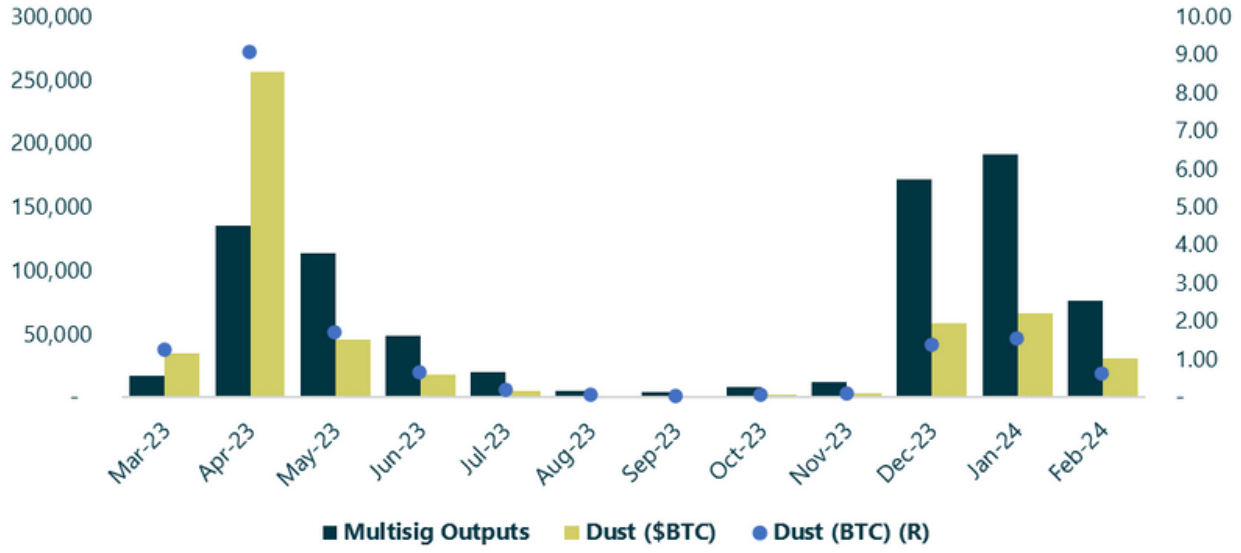


Source: SQRR Research. Data: stampchain.io, Flipsidecrypto, Bitcoinvisuals. Data as of 29 February 2024.

In February, the Stamps Protocol added 76,084 multisig outputs to the blockchain, bringing the total number of multisig outputs to 803,275. These outputs held approximately 0.61 bitcoins, resulting in a total dust value of 16.58 bitcoins held in multisig outputs.

It has been observed that around 62% of the dust assigned to multisig outputs is held in spendable outputs, while the remaining balance is sent to the burn addresses, thus permanently locking the dust values in multisig outputs.

UTXO expansion and Dust Used in Multi-Sig Outputs



Source: SQRR Research. Data: stampchain.io, Flipside, Bitcoinvisuals. Data as of 29 February 2024.

Notably, at the current USD price of Bitcoin, which is around $69,000, the total value of the assigned dust is approximately $1.14 million.

UTXO expansion and Dust Used in Multi-Sig Outputs (Aggregate)

Item	Multi-sig Outputs	Dust (BTC)	Dust ($)
Spendable	174,455	11.5455	324,530.31
Burn	635,865	5.0908	202,334.31
Total	**810,320**	**16.6362**	**526,864.62**

Source: SQRR Research. Data: stampchain.io, Flipside, Bitcoinvisuals. Data as of 29 February 2024.

Recent Developments

The Stamps Development Fund

There was no activity reported in the Stamps Development Fund, and the wallet balance remained unchanged from the previously reported figure of 0.18282994 bitcoin, currently worth about $12,521.29.

Ecosystem and Project Updates

Octet Linked Graphics & Artifacts (OLGA)

A new specification for Stamps has been introduced to provide a cheaper method of storing data compared to the current practice of storing data in multisig Bitcoin transactions, as seen in Classic Stamps. This new method is called "Octet Linked Graphics & Artifacts (OLGA)," and it is named after JP Janssen's OLGA, which was one of the first NFTs. OLGA is essentially a Stamps-adapted version of a method proposed by JP Janssen in the "File Storage in P2WSH Outputs" Counterparty Proposal.

OLGA transactions have several advantages over Classic Stamps:

- They only require 1 SigOp in Bitcoin blocks, so they are not subject to the SigOps penalty.
- The data is stored in transaction outputs in burn addresses that are not easily identifiable, unlike in Classic Stamps where multisig outputs are sent to known burn addresses.
- The output transactions require very low amounts of Sats to be sent to them, making OLGA transactions relatively cheaper than Classic Stamps.
- OLGA-Stamps transactions can be done with the 'OP-RETURN' method, which contributes to low-cost minting, unlike Classic Stamps, which uses the 'Bare Multisig' method.
- Currently, the specification supports file types such as 'png', 'jpg', 'gif', and 'svg'.

BitVM and Stamps Protocol

Recently, BitVM—the Bitcoin Virtual Machine—announced that it had added Stamps as a second option for data validation for Bitcoin L2s. With the addition of Stamps as a Data Validation module, developers can now roll up their transactions to Bitcoin as Bitcoin Stamps. Additionally, BitVM has announced that it is building an SRC-20 bridge to allow different use cases for Bitcoin L2s.

SRC-20 Listing

Centralized Exchange KuCoin announced the listing of SRC-20 asset STAMP on its spot trading platform.

Concluding Remarks

The Stamps Protocol has now completed its first year since its inception in March 2024. During this time, the protocol has undergone two distinct phases of growth. In the first phase, there was a low activity level, while the second phase saw an increase in activity, leading to further experimentation and ecosystem growth. Throughout the year, the community played a significant role in funding and contributing to the protocol's growth. It is safe to say that the ecosystem has benefited from a highly engaged community during this period.

Looking ahead, we believe that recent developments hold great potential for expanding the ecosystem and could facilitate the emergence of additional Classic Art use cases. However, the viability of the use case for Stamps as a Data Validation layer is closely linked to the adoption of Bitcoin Layer 2, which still needs to be determined. Only time will tell us more about this.

Provide Feedback

We value your feedback and strive to enhance our content and offerings based on your suggestions. Let us know what you enjoyed about this report and if there is anything we may have overlooked. We're eager to receive feedback and encourage you to share your thoughts with us at **research@sqrr.xyz**.

Disclaimer

The document generated by SQRR is for informational purposes only and should not be considered financial, investment, or legal advice, or an offer or the solicitation of an offer to buy or sell securities or other assets. The information in this report should be viewed alongside other professional evaluations and analyses as part of a comprehensive due diligence process. Readers should seek additional sources and consult professionals before making any decisions based on the information provided.

No guarantee is made for the accuracy or completeness of any information provided in the document. Any opinions, estimates, or recommendations expressed herein are subject to change without notice and constitute judgment as of the date of publication.

In this report, any mention of a particular project, commercial product, process, brand, or service, or the use of any trade, firm, or corporation name is solely for the purpose of providing information and convenience to the readers. It should not be interpreted as an endorsement, recommendation, or preference by SQRR.


SQRR