

FixedCoin

Technical Whitepaper v29.1.1

The Ultimate Experiment in Digital Scarcity

Total Supply: 10,000 FIX

December 2025

<https://web.fixedcoin.org>

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1. Introduction

FixedCoin is an ultra-rare cryptocurrency with a total supply of only 10,000 FIX. Built on Bitcoin Core v29's proven codebase and secured by SHA-256 proof-of-work mining, FixedCoin represents the ultimate experiment in digital scarcity. With an accelerated halving schedule every 4,200 blocks, the emission curve is designed to reach final supply faster than Bitcoin while maintaining the same security guarantees.

1.1 Design Philosophy

FixedCoin prioritizes three core principles: extreme scarcity with only 10,000 coins ever to exist, proven security through SHA-256 mining compatible with Bitcoin ASICs, and decentralized distribution with community-focused tokenomics. The project demonstrates that meaningful value can exist in a cryptocurrency with a truly limited supply.

2. Technical Specifications

Parameter	Value
Ticker Symbol	FIX
Algorithm	SHA-256 (Proof of Work)
Total Supply	10,000 FIX
Block Time	10 minutes (target)
Initial Block Reward	1 FIX
Halving Interval	4,200 blocks
Difficulty Adjustment	ASERT (aserti3-2d)
Address Format	Bech32 (fix1...), P2SH, Legacy
Default P2P Port	24768
Default RPC Port	24761
Consensus	Bitcoin Core v29

Coinbase Maturity	100 blocks
Confirmations	6 blocks
SegWit	Enabled
Taproot	Enabled

FixedCoin supports multiple address formats: Bech32 (fix1...) for native SegWit with lower transaction fees, P2SH addresses for compatibility, and legacy addresses. Bech32 is recommended for optimal fee efficiency.

3. Tokenomics & Distribution

3.1 Supply Distribution

Category	Amount (FIX)	Percentage	Status
Circulating Supply	~8,396	83.96%	Active
Frozen UTXOs	1,604	16.04%	Permanently Frozen
Total Supply	10,000	100%	-

3.2 Halving Schedule

FixedCoin follows an accelerated halving schedule with block rewards halving every 4,200 blocks (approximately 29 days). The initial block reward is 1 FIX, reducing to 0.5 FIX, 0.25 FIX, and so on until all 10,000 FIX are mined. Track the halving countdown at <https://halving.fixedcoin.org>

4. Frozen UTXOs

4.1 Consensus-Level Enforcement

1,604.88628814 FIX are permanently frozen at the consensus level. This UTXO originated from a security incident and has been locked to protect the network. Transactions attempting to spend this output are rejected by all nodes during both mempool acceptance and block validation. This enforcement is implemented directly in the consensus layer (src/consensus/tx_verify.cpp) within the CheckTxInputs() function.

Total Frozen: 1,604.88628814 FIX

4.2 Frozen Output Details

Parameter	Value
Transaction ID	53968570e24004c7e1ec0b199766a4c088c219f2c319c7f43b6af74c69894147
Output Index (Vout)	0
Amount	1,604.88628814 FIX
Block Height	627
Freeze Activation	Block 628
Frozen Address	fix1qag72ae9zs75tfy0zyr9ql35544vgg4hwt4aukw

4.3 Technical Implementation

The freeze mechanism is implemented at the consensus layer in `src/consensus/tx_verify.cpp`. This location ensures that the freeze cannot be bypassed by any code path, as all transaction input validation passes through `CheckTxInputs()`. The implementation uses a static set of frozen outpoints that are checked against every transaction input.

```
// src/consensus/tx_verify.cpp
static const int FREEZE_ACTIVATION_HEIGHT = 628;
static const std::set<COutPoint> FROZEN_UTXOS = {
    COutPoint(Txid::FromUint256(uint256(
        "53968570e24004c7e1ec0b199766a4c088c219f2c319c7f43b6af74c69894147")),
    ),
};

// In CheckTxInputs():
if (nSpendHeight >= FREEZE_ACTIVATION_HEIGHT && FROZEN_UTXOS.count(prevout))
{
    return state.Invalid(TxValidationResult::TX_CONSENSUS,
        "bad-txns-frozen-utxo", ...);
}
```

4.4 Security Guarantees

The consensus-level implementation provides the strongest possible guarantee that frozen UTXOs cannot be spent. Unlike validation-layer checks which could potentially be bypassed in certain edge cases, consensus-layer enforcement means that any block containing a transaction spending a frozen UTXO will be rejected by all compliant nodes, making such transactions invalid by definition.

5. ASERT Difficulty Adjustment

5.1 Algorithm Overview

FixedCoin uses the ASERT (aserti3-2d) difficulty adjustment algorithm, originally developed for Bitcoin Cash. ASERT provides smooth, responsive difficulty adjustments that help maintain consistent block times even with volatile hashrate.

5.2 Key Parameters

Parameter	Value	Description
Target Block Time	600 seconds	10 minutes per block
Half-Life	172,800 seconds	2 days (2d)
Anchor Block	Block 999	Reference point for calculations
Activation Block	Block 1,000	ASERT activation height
Algorithm	aserti3-2d	Exponential moving average

5.3 Benefits

ASERT provides several advantages over traditional difficulty adjustment: faster response to hashrate changes, elimination of difficulty oscillations caused by auto-switching mining pools, predictable block times even during periods of hashrate volatility, and resistance to gaming or manipulation of the difficulty algorithm.

6. Consensus Rules

6.1 Block Validation

FixedCoin inherits Bitcoin Core v29's comprehensive consensus rules including SegWit validation, Taproot support, and strict transaction verification. Additional FixedCoin-specific rules include the frozen UTXO enforcement and custom block reward schedule.

7. Network Infrastructure

7.1 Seed Nodes

Official seed nodes ensure reliable network connectivity: node1.fixedcoin.org and node2.fixedcoin.org

7.2 Block Explorers

Multiple block explorers provide network transparency: Primary: <https://explorer.fixedcoin.org>
Secondary: <https://fixedcoinexplorer.com>

7.3 Mining Pools

Track available mining pools at <https://miningpoolstats.stream/fixedcoin>. FixedCoin is SHA-256 compatible with all Bitcoin ASIC miners.



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