



# **Smart Contract Security Audit**

<u>TechRate</u> August, 2021

### **Audit Details**



**Audited project** 

**ElonTech** 



Deployer address

0x82B9F1dCBF5e62d79ae22775A7657568E1403782



**Client contacts:** 

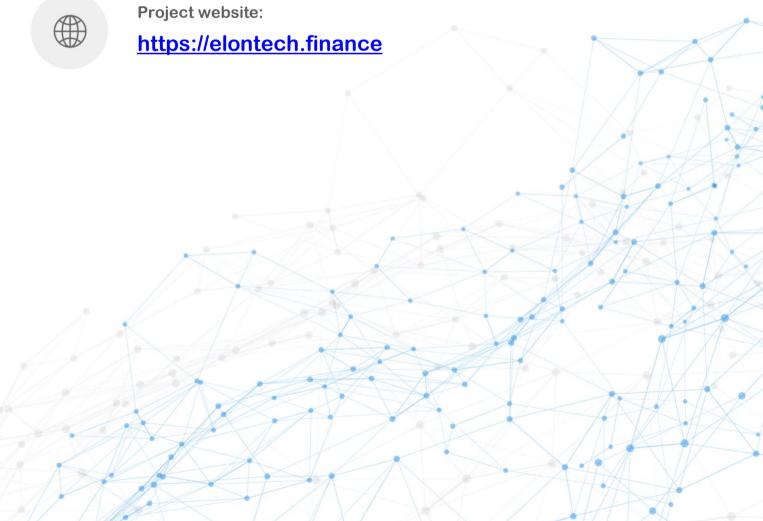
ElonTech team



Blockchain

**Binance Smart Chain** 





### **Disclaimer**

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the below disclaimer below – please make sure to read it in full.

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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

### **Background**

TechRate was commissioned by ElonTech to perform an audit of smart contracts:

 $\frac{https://bscscan.com/address/0xc66c8b40e9712708d0b4f27c9775dc934b65f0d9\#code}{e}$ 

#### The purpose of the audit was to achieve the following:

- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

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## **Contracts Details**

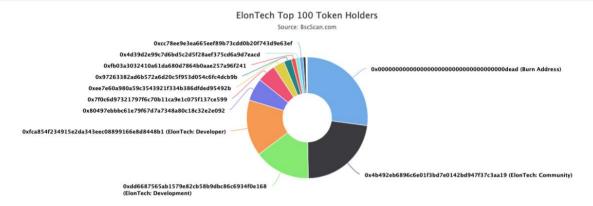
#### Token contract details for 03.08.2021

Contract name	ElonTech
Contract address	0xC66c8b40E9712708d0b4F27c9775Dc934B65F0d9
Total supply	34,979,803,438,049.375
Token ticker	ETCH
Decimals	18
Token holders	8,980
Transactions count	55,417
Top 100 holders dominance	99.91%
Minting finished	true
Contract deployer address	0x82B9F1dCBF5e62d79ae22775A7657568E1403782
Contract's current owner address	0x3b73405bfaa9eda4d3971590c475148d2551a443

### **ElonTech Token Distribution**

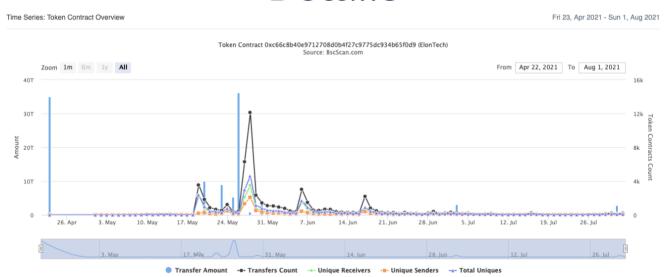
The top 100 holders collectively own 99.91% (34,947,547,291,692.80 Tokens) of ElonTec

▼ Token Total Supply: 34,979,803,438,049.38 Token | Total Token Holders: 8,986



(A total of 34,947,547,291,692.80 tokens held by the top 100 accounts from the total supply of 34,979,803,438,049.38 token)

# ElonTech Contract Interaction Details



# **ElonTech Top 10 Token Holders**

Rank	Address	Quantity (Token)	Percentage
1	Burn Address	9,479,527,631,711.3375	27.1000%
2	ElonTech: Community	7,908,854,616,839.566251766655706185	22.6098%
3	ElonTech: Development	5,246,970,515,707.406	15.0000%
4	ElonTech: Developer	5,246,970,515,707.406	15.0000%
5	0x80497ebbbc61e79f67d7a7348a80c18c32e2e092	2,098,788,206,282.9625	6.0000%
6	0x7f0c6d97321797f6c70b11ca9e1c075f137ce599	1,746,836,424,132.675848892184782736	4.9938%
7	0xee7e60a980a59c3543921f334b386dfded95492b	1,049,394,103,141.48125	3.0000%
8	0x97263382ad6b572a6d20c5f953d054c6fc4dcb9b	716,287,160,065.912310796391429503	2.0477%
9	0xfb03a3032410a61da680d7864b0aae257a96f241	400,000,000,000	1.1435%
10	0x4d39d2e99c7d6bd5c2d5f28aef375cd6a9d7eacd	355,170,637,135.864216303119143965	1.0154%



### **Contract functions details**

#### + [Int] IERC20 - [Ext] totalSupply - [Ext] balanceOf - [Ext] transfer # - [Ext] allowance - [Ext] approve # - [Ext] transferFrom # + ERC20 (IERC20) - [Pub] allowance - [Pub] transferFrom # - [Pub] approve # + [Lib] SafeMath - [Int] mul - [Int] div - [Int] sub - [Int] add + Ownable - [Pub] <Constructor># - [Pub] renounceOwnership # - modifiers: onlyOwner - [Pub] transferOwnership # - modifiers: onlyOwner - [Int] transferOwnership # + BasicToken (IERC20, Ownable) - [Pub] \_\_AllowTokenTransfer # - modifiers: onlyOwner - [Pub] totalSupply - [Pub] totalSupplyCheck # - [Pub] transfer # - [Pub] balanceOf + StandardToken (ERC20, BasicToken) - [Pub] transferFrom # - [Pub] approve # - [Pub] allowance - [Pub] increaseApproval # - [Pub] decreaseApproval # + MintableToken (StandardToken) - [Pub] \_\_basicTokenTransferable # - modifiers: onlyOwner - [Pub] stop\_mint # - modifiers: onlyOwner - [Pub] mint # - modifiers: hasMintPermission,canMint - [Pub] finishMinting #

- modifiers: onlyOwner,canMint

- + FreezableToken (StandardToken)
  - [Int] toKey
  - [Pub] freezingCount
  - [Pub] getFreezing
  - [Pub] releaseOnce #
  - [Pub] releaseAll #
  - [Int] freeze #
- + FreezableMintableToken (FreezableToken, MintableToken)
  - [Pub] mintAndFreeze #
    - modifiers: onlyOwner,canMint
- + Consts
- + MainToken (Consts, FreezableMintableToken)
  - [Pub] <Constructor> #
  - [Pub] \_\_name
  - [Pub] \_symbol
  - [Pub] \_\_decimals
  - [Pub] transferFrom #
  - [Pub] transfer #
- (\$) = payable function # = non-constant function

# **Issues Checking Status**

Issue description	Checking status
1. Compiler errors.	Passed
2. Race conditions and Reentrancy. Cross-function race conditions.	Passed
3. Possible delays in data delivery.	Passed
4. Oracle calls.	Passed
5. Front running.	Passed
6. Timestamp dependence.	Passed
7. Integer Overflow and Underflow.	Passed
8. DoS with Revert.	Passed
9. DoS with block gas limit.	Passed
10. Methods execution permissions.	Passed
11. Economy model of the contract.	Passed
12. The impact of the exchange rate on the logic.	Passed
13. Private user data leaks.	Passed
14. Malicious Event log.	Passed
15. Scoping and Declarations.	Passed
16. Uninitialized storage pointers.	Passed
17. Arithmetic accuracy.	Passed
18. Design Logic.	Passed
19. Cross-function race conditions.	Passed
20. Safe Open Zeppelin contracts implementation and usage.	Passed
21. Fallback function security.	Passed

### **Security Issues**

High Severity Issues

No high severity issues found.

No medium severity issues found.

Low Severity Issues

No low severity issues found.

# Owner privileges (In the period when the owner is not renounced)

Owner can mint and freeze if mintingFinished is set to false.

```
function mintAndFreeze(address _to, uint _amount, uint64 _until) public onlyOwner canMint returns (bool) {
   totalSupply_ = totalSupply_.add(_amount);

   bytes32 currentKey = toKey(_to, _until);
   freezings[currentKey] = freezings[currentKey].add(_amount);

   freezingBalance[_to] = freezingBalance[_to].add(_amount);

   freeze(_to, _until);
   emit Mint(_to, _amount);
   emit Freezed(_to, _until, _amount);
   emit Transfer(msg.sender, _to, _amount);
   return true;
}
```

#### Conclusion

Smart contracts do not contain high severity issues!

#### TechRate note:

Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.





