



WEBSITE

<https://www.Suppercoin.io>

TELEGRAM

<https://t.me/suppercoinmoon>

SMART CONTRACT AUDIT



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Blockchain technology and cryptographic assets present a high level of ongoing risk. Vital Block Solidity’s position is that each company and individual are responsible for their own due diligence and continuous security. Vital Block Solidity’s goal is to help reduce the attack vectors and the high level of variance associated with utilizing new and consistently changing technologies, and in no way claims any guarantee of security or functionality of the technology we agree to analyse

What is a Vital Block Audit report?

- A document describing in detail an in-depth analysis of a particular piece(s) of source code provided to Vital Block Solidity by a Client.
- An organized collection of testing results, analysis and inferences made about the structure, implementation, and overall best practices of a particular piece of source code.
- Representation that a Client of Vital Block Solidity has indeed completed a round of auditing with the intention to increase the quality of the company/ product’s IT infrastructure and or source code.

Overview



Project Summary

Project Name	SUPPERCOIN MOON
Description	Suppercoinmoon is the one-stop gaming token that will facilitate all forms of gaming with a transparent, provably fair and widely used mechanism for funding and integrating to disparate gaming opportunities.
Platform	Binance Mainnet
Mainnet Contracts:	0xD05BE2B7c178ac584a40147C02802a9CDDAD59a *SUPPERCOINMOON (SUPPERMOON)*
Files:	SUPPERCOINMOON.sol

Audit Summary

Delivery Date	June 24 2022
Method of Audit	Security Static Analysis
Timeline	Story Points 100

Vulnerability Summary

Total Issues Found	1
Total Issues Resolved	0
Total Critical	0
Total High	1
Total Medium	2
Total Low	0
Total Informational	2

Our Audit Methodology

- **STEP 1**

A manual line-by-line code review to ensure the logic behind each function is safe and secured against common attack vectors.

- **STEP 2**

Simulation of hundreds of thousands of Smart Contract Interactions on a test and Mainnet blockchain using a combination of automated test tools and manual testing to determine if any security vulnerabilities exist.

- **STEP 3**

Consultation with the project team on the audit report pre-publication to implement recommendations and resolve any outstanding issues.

The following grading structure is used to assess the level of vulnerability found within all Smart Contracts:

THREAT LEVEL	DEFINITION
Critical	Severe vulnerabilities which compromise the entire protocol and could result in immediate data manipulation or asset loss.
High	Significant vulnerabilities which compromise the functioning of the smart contracts leading to possible data manipulation or asset loss.
Medium	Vulnerabilities which if not fixed within in a set timescale could compromise the functioning of the smart contracts leading to possible data manipulation or asset loss.
Low	Low level vulnerabilities which may or may not have an impact on the optimal performance of the Smart contract.
Informational	Issues related to coding best practice which do not have any impact on the functionality of the Smart Contracts

Description



SUPPERCOIN MOON (\$SUPPERMOON) is the one-stop gaming token that will facilitate all forms of gaming with a transparent, provably fair and widely used mechanism for funding and integrating to disparate gaming opportunities.

Buy Trading Fees 10.0% - LP

Sell Trading Fees 10.0% - LP

Initial supply is 100,000,000,000,000,000 Tokens.



SUPPERCOIN MOON TOKENOMICS

Transferring Reward = 1 %

Every holder can get 1% of tokens back when transferring tokens to another wallet, which stimulates SupperCoin token as a payment cryptocurrency.

Reflection Reward ≥ 0.6 %

A portion of transaction volume (1.2% for selling tokens and 0.6% for other cases) will be distributed to every SupperCoin token holder. You will get the reward by the token shares ratio among all shareholders.

Burning Rate ≥ 0.2 %

A small portion of transaction volume (0.4% for selling tokens and 0.2% for other cases) will be burnt to boost SupperCoin token value. And the total supply will keep reducing.

Staking Preserve Rate ≥ 0.2 %

A small portion of transaction volume will be withheld by SupperCoin Bank which is for paying the staking rewards. All rewards are paid without minting new tokens in order to prevent inflation.

Low Gas Fee

Since the SupperCoin smart contract is running on BSC (Binance Smart Chain), the gas fee is much lower than the transactions on Ethereum Network.

Liquidity Pool Locked

The Liquidity Pool for SupperCoin token is locked to keep the value of SupperCoin token in holder's wallets while rewards are still being gained.



Vulnerability 1: Total Supply cant exceed MAX_SUPPLY

Threat level: Medium

Description:

Not a honeypot transaction simulation is success at the moment. Always DYOR before investing.

INFO! There is no liquidity with BNB. Honeypot added liquidity for test. Results with non-BNB pair may differ. If the token is not live yet, results may be different once the token is live. It is common for tokens to have 0% taxes before launching on DEX!

```
711 contract SUPPERCOINMoon is Context, IERC20, Ownable {
712     using SafeMath for uint256;
713     using Address for address;
714
715     mapping (address => uint256) private _rOwned;
716     mapping (address => uint256) private _tOwned;
717     mapping (address => mapping (address => uint256)) private _allowances;
718
719     mapping (address => bool) private _isExcludedFromFee;
720
721     mapping (address => bool) private _isExcluded;
722     address[] private _excluded;
723
724     uint256 private constant MAX = ~uint256(0);
725     uint256 private _tTotal = 1000000000000000 * 10**6 * 10**9;
726     uint256 private _rTotal = (MAX - (MAX % _tTotal));
727     uint256 private _tFeeTotal;
728
729     string private _name = "suppercoinMoon";
730     string private _symbol = "SUPPERMOON";
731     uint8 private _decimals = 9;
732
733     uint256 public _taxFee = 5;
734     uint256 private _previousTaxFee = _taxFee;
735
736     uint256 public _liquidityFee = 5;
737     uint256 private _previousLiquidityFee = _liquidityFee;
738
739     IUniswapV2Router02 public immutable uniswapV2Router;
740     address public immutable uniswapV2Pair;
741 }
```

Vulnerability 1: The owner can change the high fee setting function in the contract.

Threat level: High

Vulnerability 1: Gas optimisation

Threat level 2: Informational

Description: this smart-contract can be Modified by Deployer

This can always change! Do your own due diligence.

INFO! Owner can change trading tax fee up to 50 which is Really not a good call on the Smart Contract. Removal fee is private and calculate function

SUPPERCOINMOON (SUPPERMOON)

The owner of this smart-contract can modify the maximum amount that it is authorized to transfer.

No trading data available: either trading is disabled, or no Liquidity for the token Yet.

Recommendation:

The contract can be modified so that it can be done via a single call to save gas.

```
7 }
8
9 function deliver(uint256 tAmount) public {
10     address sender = _msgSender();
11     require(!_isExcluded[sender], "Excluded addresses cannot call this function");
12     (uint256 rAmount,,,,) = _getValues(tAmount);
13     _rOwned[sender] = _rOwned[sender].sub(rAmount);
14     _rTotal = _rTotal.sub(rAmount);
15     _tFeeTotal = _tFeeTotal.add(tAmount);
16 }
17
18 function reflectionFromToken(uint256 tAmount, bool deductTransferFee) public view returns (uint256) {
19     require(tAmount <= _tTotal, "Amount must be less than supply");
20     if (!deductTransferFee) {
21         (uint256 rAmount,,,,) = _getValues(tAmount);
22         return rAmount;
23     } else {
24         (uint256 rTransferAmount,,,,) = _getValues(tAmount);
25         return rTransferAmount;
26     }
27 }
28
29 function tokenFromReflection(uint256 rAmount) public view returns(uint256) {
30     require(rAmount <= _rTotal, "Amount must be less than total reflections");
31     uint256 currentRate = _getRate();
32     return rAmount.div(currentRate);
33 }
```


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



Conclusion



During the Vital block Audit process, the SUPPERMOON contract was analysed by manual review and automated testing. All issues identified was after deployment to mainnet. By submitting the contract for audit after Deployment, the team have displayed a strong commitment to security.

Whilst there are no obvious vulnerabilities or security risks identified within the main net contract, it is beyond the scope of this Vital Block Audit to comment upon any risks associated with tokenomics, adoption or platform longevity. Before placing funds in any defi protocol Vital Block encourages potential investors to exercise due diligence and research all projects thoroughly to assess plans for ongoing development and financial sustainability.

Finding Categories

Gas Optimization

Gas Optimization findings refer to exhibits that do not affect the functionality of the code but generate different, more optimal EVM opcodes resulting in a reduction on the total gas cost of a transaction.

Mathematical Operations

Mathematical Operation exhibits entail findings that relate to mishandling of math formulas, such as overflows, incorrect operations etc.

Logical Issue

Logical Issue findings are exhibits that detail a fault in the logic of the linked code, such as an incorrect notion on how `block.timestamp` works.

Control Flow

Control Flow findings concern the access control imposed on functions, such as owner-only functions being invoke-able by anyone under certain circumstances.

Volatile Code

Volatile Code findings refer to segments of code that behave unexpectedly on certain edge cases that may result in avulnerability.

Data Flow

Data Flow findings describe faults in the way data is handled at rest and in memory, such as the result of a `structassignment` operation affecting an in-memory struct rather than an instorage one.

Language Specific

Language Specific findings are issues that would only arise within Solidity, i.e. incorrect usage of `private` or `delete`.

Coding Style

Coding Style findings usually do not affect the generated byte-code and comment on how to make the codebase more legible and as a result easily maintainable.

Inconsistency

Inconsistency findings refer to functions that should seemingly behave similarly yet contain different code, such as a constructor assignment imposing different require statements on the input variables than a setter function.

Magic Numbers

Magic Number findings refer to numeric literals that are expressed in the codebase in their raw format and should otherwise be specified as constant contract variables aiding in their legibility and maintainability.

Compiler Error

Compiler Error findings refer to an error in the structure of the code that renders it impossible to compile using the specified version of the project.

Dead Code

Code that otherwise does not affect the functionality of the codebase and can be safely omitted.

VitalBlock

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