KISHIELD

Security Audit

SUPREME Token

April 1, 2022

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Audit Summary

This report has been prepared for SUPREME Token on the Binance Chain network. KISHIELD provides both client-centered and user-centered examination of the smart contracts and their current status when applicable. This report represents the security assessment made to find issues and vulnerabilities on the source code along with the current liquidity and token holder statistics of the protocol.

A comprehensive examination has been performed, utilizing Cross Referencing, Static Analysis, In-House Security Tools, and line-by-line Manual Review.

The auditing process pays special attention to the following considerations:

- Ensuring contract logic meets the specifications and intentions of the client without exposing the user's funds to risk.
- Testing the smart contracts against both common and uncommon attack vectors.
- Inspecting liquidity and holders statistics to inform the current status to both users and client when applicable.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Verifying contract functions that allow trusted and/or untrusted actors to mint, lock, pause, and transfer assets.
- Thorough line-by-line manual review of the entire codebase by industry experts.





Project Overview

Token Summary

Parameter	Result
Address	0x983B9Ab65CCDccFdAEA3F7A973De6Fed4E0546B3
Name	SUPREME
Token Tracker	SUPREME (SUP)
Decimals	18
Supply	5,000,000,000
Platform	Binance Chain
compiler	v0.7.6+commit.7338295f
Optimization	Yes with 200 runs
LicenseType	None
Language	Solidity
Codebase	https://bscscan.com/ address/0x983B9Ab65CCDccFdAEA3F7A973De6Fed4E0546B3
Url	https://supremefinance.xyz/

Main Contract Assessed

Name	Contract	Live
SUPREME.sol	0x983B9Ab65CCDccFdAEA3F7A973De6Fed4E0546B3	Yes





Smart Contract Vulnerability Checks

Vulnerability	Automatic Scan	Manual Scan	Result
Unencrypted Private Data On-Chain	Complete	Complete	✓ Low / No Risk
Code With No Effects	Complete	Complete	✓ Low / No Risk
Message call with hardcoded gas amount	Complete	Complete	✓ Low / No Risk
Hash Collisions With Multiple Variable Length Arguments	Complete	Complete	✓ Low / No Risk
Unexpected Ether balance	Complete	Complete	✓ Low / No Risk
Presence of unused variables	Complete	Complete	✓ Low / No Risk
Right-To-Left-Override control character (U+202E)	Complete	Complete	⊘ Low / No Risk
Typographical Error	Complete	Complete	✓ Low / No Risk
DoS With Block Gas Limit	Complete	Complete	✓ Low / No Risk
Arbitrary Jump with Function Type Variable	Complete	Complete	✓ Low / No Risk
Insufficient Gas Griefing	Complete	Complete	✓ Low / No Risk
Incorrect Inheritance Order	Complete	Complete	✓ Low / No Risk
Write to Arbitrary Storage Location	Complete	Complete	✓ Low / No Risk
Requirement Violation	Complete	Complete	✓ Low / No Risk
Missing Protection against Signature Replay Attacks	Complete	Complete	⊘ Low / No Risk
Weak Sources of Randomness from Chain Attributes	Complete	Complete	✓ Low / No Risk





Vulnerability	Automatic Scan	Manual Scan	Result
Authorization through tx.origin	Complete	Complete	✓ Low / No Risk
Delegatecall to Untrusted Callee	Complete	Complete	✓ Low / No Risk
Use of Deprecated Solidity Functions	Complete	Complete	✓ Low / No Risk
Assert Violation	Complete	Complete	✓ Low / No Risk
Reentrancy	Complete	Complete	✓ Low / No Risk
Unprotected SELFDESTRUCT Instruction	Complete	Complete	✓ Low / No Risk
Unprotected Ether Withdrawal	Complete	Complete	✓ Low / No Risk
Unchecked Call Return Value	Complete	Complete	✓ Low / No Risk
Outdated Compiler Version	Complete	Complete	✓ Low / No Risk
Integer Overflow and Underflow	Complete	Complete	✓ Low / No Risk
Function Default Visibility	Complete	Complete	✓ Low / No Risk

Contract Ownership

The contract ownership of SUPREME is not currently renounced. The ownership of the contract grants special powers to the protocol creators, making them the sole addresses that can call sensible ownable functions that may alter the state of the protocol.

The current owner is the address 0xE28A3c2Feb553DC3C29f2982D15f92309041f5F9 which can be viewed from:

HERE

The owner wallet has the power to call the functions displayed on the priviliged functions chart below, if the owner wallet is compromised this privileges could be exploited.

We recommend the team to renounce ownership at the right timing if possible, or gradually migrate to a timelock with governing functionalities in respect of transparency and safety considerations.





Important Notes To The Users:

- Once the owner renounces ownership of the contract, none of the following are applicable.
- Owner has minter role and can mint tokens without restrictions.
- Owner can add and remove token minter wallets.
- Owner can add and remove user from the blacklist.
- Owner can set the next rebase time manually.
- Owner can change rewardYield and rewardDir without restrictions.
- Owner and addresses that have allow Transfer set to true can swap before the initial Distribution Finished.
- Owner can set wallets for fee exempt.
- Owner can change liquidityFee, RiskFreeValue, Treasury fees without restrictions.

Audit Passed







Findings Summary

Classification of Issues

All Issues Found are Informational

Severity	Description
High	Exploits, vulnerabilities or errors that will certainly or probabilistically lead towards loss of funds, control, or impairment of the contract and its functions. Issues under this classification are recommended to be fixed with utmost urgency
Medium	Bugs or issues with that may be subject to exploit, though their impact is somewhat limited. Issues under this classification are recommended to be fixed as soon as possible.
Low	Effects are minimal in isolation and do not pose a significant danger to the project or its users. Issues under this classification are recommended to be fixed nonetheless.
Info	Consistency, syntax or style best practices. Generally pose a negligible level of risk, if any.

Findings

Severity	Found
High	0
Medium	0
Low	0
Info	2
Total	2





Findings

Public function that could be declared external

ID	Severity	Contract	Function
01	Informational	SUPREME	Functions updateBlacklist, addMinter, removeMinter, rescueToken

Description

Gas Optimization. Public function that could be declared external

Recommendation

Public functions that are never called by the contract should be declared external to save gas.

Variables could be declared as constant

ID	Severity	Contract	Function
02	Informational	SUPREME	variables name, symbol, decimals

Description

Gas Optimization. Variables that are never changed could be declared as constant.

Recommendation

We recommend declaring those variables as constant.



Priviliged Functions (onlyOwner)

Function Name	Parameters	Visibility
renounceOwnership	none	public
transferOwnership	address newOwner	public
updateBlacklist	address _user, bool _flag	public
setNextRebase	uint256 _nextRebase	external
setRewardYield	uint256 _rewardYield, bool _rewardDir	external
transfer	none	external
transfer	none	external
setLP	address _address	external
transferFrom	none	external
swapBack	none	internal
decreaseAllowance	none	external
increaseAllowance	none	external
approve	none	external
setInitialDistributionFinished	none	external
enableTransfer	address _addr	external
setFeeExempt	address _addr	external
mint	none	external





Function Name	Parameters	Visibility
setSwapBackSettings	bool _enabled, uint256 _num, uint256 _denom	external
setTargetLiquidity	uint256 target, uint256 accuracy	external
addMinter	address account	public
removeMinter	address account	public
sendPresale	calldata recipients, calldata values	external
setFeeReceivers	address _autoLiquidityReceiver, address _TreasuryReceiver, address _RiskFreeValueReceiver	external
setFees	uint256 _liquidityFee, uint256 _RiskFreeValue, uint256 _Treasury, uint256 _feeDenominator	external
clearStuckBalance	uint256 amountPercentage, address adr	external
rescueToken	address tokenAddress, uint256 tokens	public



Statistics

Liquidity Info

Parameter	Result
Pair Address	0x84b0eDcEBC57535FC7E122B9f052FA2Ab8AEC1fc
SUP Reserves	0.00 SUP
BNB Reserves	0.00 BNB
Liquidity Value	\$0 USD

Token (SUP) Holders Info

Parameter	Result
SUP Percentage Burnt	0.00%
SUP Amount Burnt	0 SUP
Top 10 Percentage Own	100.00%
Top 10 Amount Owned	5,000,000,000 SUP
Top 10 Aprox Value	\$NaN USD





LP (SUP/BNB) Holders Info

Parameter	Result
SUP/BNB % Burnt	0.00%
SUP/BNB Amount Burnt	0 SUP
Top 10 Percentage Owned	0.00%
Top 10 Amount Owned	0 SUP
Locked Tokens Percentage	0.00%
Locked Tokens Amount	0 SUP

^{*} All the data diplayed above was taken on-chain at block 16558581

Liquidity Ownership

The token does not have liquidity at the moment of the audit, block 16558581







^{*} The tokens on industry-standard burn wallets are not included on the top 10 wallets calculations

Disclaimer

KISHIELD has conducted an independent audit to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the codes that were provided for the scope of this audit. This audit report does not constitute agreement, acceptance or advocation for the Project that was audited, and users relying on this audit report should not consider this as having any merit for financial advice in any shape, form or nature. The contracts audited do not account for any economic developments that may be pursued by the Project in question, and that the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are completely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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