Smart Contract

Security Assessment

For SupChain
Airdrop
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Cryptocurrencies and any technologies by extension directly or indirectly related to cryptocurrencies are highly volatile and speculative by nature. All reasonable due diligence and safeguards may yet be insufficient, and users should exercise considerable caution when participating in any shape or form in this nascent industry.

The audit report has made all reasonable attempts to provide clear and articulate recommendations to the Project team with respect to the rectification, amendment and/or revision of any highlighted issues, vulnerabilities or exploits within the contracts provided. It is the sole responsibility of the Project team to sufficiently test and perform checks, ensuring that the contracts are functioning as intended, specifically that the functions therein contained within said contracts have the desired intended effects, functionalities and outcomes of the Project team.

Auditor retains full rights over all intellectual property (including expertise and new attack or exploit vectors) discovered during the audit process. Auditor is therefore allowed and expected to re-use this knowledge in subsequent audits and to inform existing projects that may have similar vulnerabilities. The auditor may, at its discretion, claim bug bounties from third-parties while doing so.

Executive Summary

Severity	Found
High	0
Medium	0
Low	0
Informational	38
Total	42

We performed an independent technical audit to identify Smart Contracts uncertainties. This shall protect the code from illegitimate authorization attempts or external & internal threats of any type. This also ensures end-to-end proofing of the contract from frauds. The audit was performed semi-manually. We analyzed the Smart Contracts code line-by-line and used an automation tool to report any suspicious code.

The following tools were used:

- Truffle
- Hardhat
- Remix IDE
- Slither
- Sol2UML

Overview

This report has been prepared for SupChainAirdrop for the Ethereum Network. This audit provides a user-centered examination of the smart contracts to look for vulnerabilities, logic errors or other issues from both an internal and external perspective.

Summary

Project Name	SupChainAirdrop
Platform	Ethereum
Language	Solidity

Contracts Assessed

Name	Location
SUPC_AIRDROP	Not Published
IERC20Permit	In SUPC_AIRDROP
Address	In SUPC_AIRDROP
SafeERC20	In SUPC_AIRDROP
IERC20	In SUPC_AIRDROP
Context	In SUPC_AIRDROP
Ownable	In SUPC_AIRDROP

Findings Summary

Severity	Found
High	0
Medium	0
Low	0
Informational	38
Total	38

Classification of Issues

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 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.
Informational	Consistency, syntax or style best practices, Generally pose a negligible level of risk, if any.

Manual Review

Issues Checking Status

Issue Description	Checking Status
Compiler errors	PASS
Race conditions and Reentrancy. Cross-function race conditions.	PASS
Possible delays in data delivery.	PASS
Oracle calls.	PASS
Front running.	PASS
Timestamp dependence.	PASS
Integer Overflow and Underflow.	PASS
DoS with Revert.	PASS
DoS with block gas limit.	PASS
Methods execution permissions.	PASS
Economy model of the contract.	PASS
The impact of the exchange rate on the logic.	PASS
Private user data leaks.	PASS
Malicious Event log.	PASS
Scoping and Declarations.	PASS
Uninitialized storage pointers.	PASS

Arithmetic accuracy.	PASS
Design Logic.	PASS
Cross-function race conditions.	PASS
Safe Open Zeppelin contracts implementation and usage.	PASS
Fallback function security.	PASS

Functional Test Status

Function Name	Type/Return Type	Score
Context		
_contextSuffixLength	internal	PASS
_msgSender	internal	PASS
_msgData	internal	PASS
Ownable		
_checkOwner	internal	PASS
_transferOwnership	internal	PASS
constructor	internal	PASS
renounceOwnership	public	PASS
transferOwnership	public	PASS
IERC20Permit		
DOMAIN_SEPARATOR	external	PASS
nonces	external	PASS
permit	external	PASS
SafeERC20		
callOptionalReturn	private	PASS
forceApprove	internal	PASS
safeDecreaseAllowance	internal	PASS
safeIncreaseAllowance	internal	PASS
safeTransfer	internal	PASS
safeTransferFrom	internal	PASS

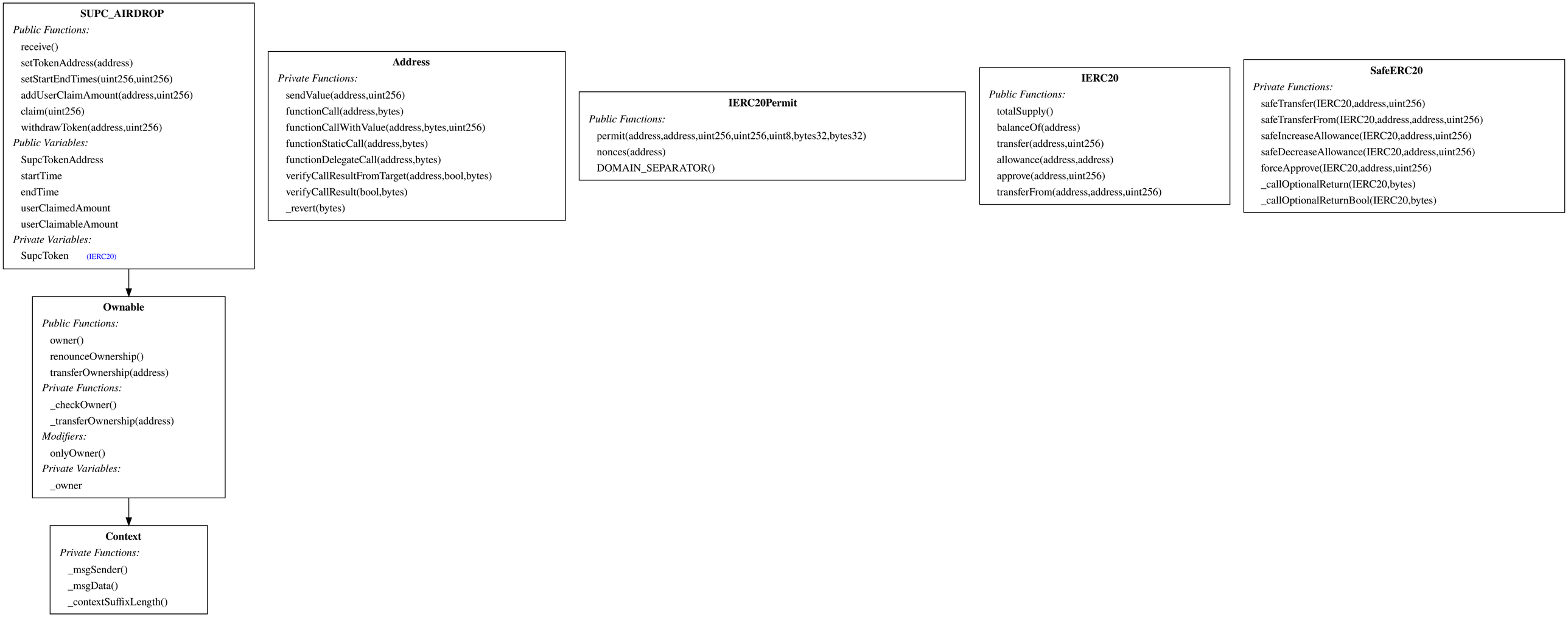
SUPC_AIRDROP		
addUserClaimAmount	public	PASS
claim	public	PASS
constructor	public	PASS
receive	external	PASS
setStartEndTimes	external	PASS
setTokenAddress	external	PASS
withdrawToken	external	PASS
Address		
_revert	private	PASS
functionCall	internal	PASS
functionCallWithValue	internal	PASS
functionDelegateCall	internal	PASS
functionStaticCall	internal	PASS
sendValue	internal	PASS
verifyCallResult	internal	PASS
verifyCallResultFromTarget	internal	PASS
IERC20		
allowance	external	PASS
approve	external	PASS
balanceOf	external	PASS
totalSupply	external	PASS

transfer	external	PASS
transferFrom	external	PASS
IERC20Metadata		
decimals	external	PASS
name	external	PASS
symbol	external	PASS
ERC20		
_approve	internal	PASS
_burn	internal	PASS
_mint	internal	PASS
_spendAllowance	internal	PASS
_transfer	internal	PASS
_update	internal	PASS
allowance	public	PASS
approve	public	PASS
balanceOf	public	PASS
constructor	internal	PASS
decimals	public	PASS
name	public	PASS
symbol	public	PASS
totalSupply	public	PASS
transfer	public	PASS
transferFrom	public	PASS

Omitted Results

Note: Any issues that have been omitted from this report have been deemed by the reviewing team as irrelevant, inapplicable, and/or negligible to the proper functioning of this contract. Thus, any omitted issues can be safely ignored.

Automated Review


SUPC_AIRDROP
Public Functions:
receive()
setTokenAddress(address)
setStartEndTimes(uint256,uint256)
addUserClaimAmount(address,uint256)
claim(uint256)
withdrawToken(address,uint256)
Public Variables:
SupcTokenAddress
startTime
endTime
userClaimedAmount
userClaimableAmount
Private Variables:
SupcToken (IERC20)
Ownable
Public Functions:
owner()
renounceOwnership()
transferOwnership(address)
Private Functions:
_checkOwner()
_transferOwnership(address)
Modifiers:
onlyOwner()
Private Variables:
_owner
Context
Private Functions:
_msgSender()
_msgData()
_contextSuffixLength()
Address
Private Functions:
sendValue(address,uint256)
functionCall(address,bytes)
functionCallWithValue(address,bytes,uint256)
functionStaticCall(address,bytes)
functionDelegateCall(address,bytes)
verifyCallResultFromTarget(address,bool,bytes)
verifyCallResult(bool,bytes)
_revert(bytes)
IERC20Permit
Public Functions:
permit(address,address,uint256,uint256,uint8,bytes32,bytes32)
nonces(address)
DOMAIN_SEPARATOR()
IERC20
Public Functions:
totalSupply()
balanceOf(address)
transfer(address,uint256)
allowance(address,address)
approve(address,uint256)
transferFrom(address,address,uint256)
SafeERC20
Private Functions:
safeTransfer(IERC20,address,uint256)
safeTransferFrom(IERC20,address,address,uint256)
safeIncreaseAllowance(IERC20,address,uint256)
safeDecreaseAllowance(IERC20,address,uint256)
forceApprove(IERC20,address,uint256)
_callOptionalReturn(IERC20,bytes)
_callOptionalReturnBool(IERC20,bytes)

Conclusion

The smart contracts reviewed in this audit contain no critical severity issues and all Medium to Low issues have either been corrected or acknowledged.

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.

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