

# **Blockchain Security | Smart Contract Audits | KYC**

MADE IN GERMANY

v1.0: 19. November, 2021

# Audit

Security Assessment 04. December, 2021

For



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Version	Date	Description
1.0	19. November 2021	<ul><li>Layout project</li><li>Automated- /Manual-Security Testing</li><li>Summary</li></ul>
2.0	04. December 2021	• Audit

### Network

Binance Smart Chain (BEP20)

### Website

https://zonoswap.com/

### **Telegram**

https://t.me/zonoswap

### **Twitter**

https://twitter.com/ZonoSwap

### **Facebook**

https://www.facebook.com/Zonoswap

### **Github**

https://github.com/Zonoswap/

### **Description**

A decentralized exchange (DEX) is a cryptocurrency exchange that operates without a central authority, allowing users to transact peer-to-peer from wallet-to-wallet whilst maintaining complete control of their assets. DEXs reduce the risk of price manipulation, as well as hacking and theft, because crypto assets are never in the custody of the exchange itself.

# **Project Engagement**

During the 15th of November 2021, **ZonoSwap Team** engaged Solidproof.io to audit smart contracts that they created. The engagement was technical in nature and focused on identifying security flaws in the design and implementation of the contracts. They provided Solidproof.io with access to their code repository and whitepaper.



### **Contract Link**

### **v1.0**

MasterChef: <a href="https://bscscan.com/address/">https://bscscan.com/address/</a> 0xaff2b0031aa7a5c19c9cba9589817a704234d492#code

TokenAddress: <a href="https://bscscan.com/address/">https://bscscan.com/address/</a> 0x8d08dcb48d59216ae5d0515aa6622c9beb42b76b#code

RouterAddress: <a href="https://bscscan.com/address/">https://bscscan.com/address/</a> 0x1a547b5ce91ba3b65305e7979a12c8bc8a3d4962

FactoryAddress: <a href="https://bscscan.com/address/">https://bscscan.com/address/</a>
0xd43f10afc9b2dcb7b85e612734958e12124ac84f#code

### **V2.0**

TokenAddress: <a href="https://bscscan.com/address/">https://bscscan.com/address/</a> 0xAc97796B45F9627e16da9C93e608579ceEb410a4#code

# **Vulnerability & Risk Level**

Risk represents the probability that a certain source-threat will exploit vulnerability, and the impact of that event on the organization or system. Risk Level is computed based on CVSS version 3.0.

Level	Value	Vulnerability	Risk (Required Action)
Critical	9 - 10	A vulnerability that can disrupt the contract functioning in a number of scenarios, or creates a risk that the contract may be broken.	Immediate action to reduce risk level.
High	7 – 8.9	A vulnerability that affects the desired outcome when using a contract, or provides the opportunity to use a contract in an unintended way.	Implementation of corrective actions as soon aspossible.
Medium	4 – 6.9	A vulnerability that could affect the desired outcome of executing the contract in a specific scenario.	Implementation of corrective actions in a certain period.
Low	2 – 3.9	A vulnerability that does not have a significant impact on possible scenarios for the use of the contract and is probably subjective.	Implementation of certain corrective actions or accepting the risk.
Informational	0 – 1.9	A vulnerability that have informational character but is not effecting any of the code.	An observation that does not determine a level of risk

# Auditing Strategy and Techniques Applied

Throughout the review process, care was taken to evaluate the repository for security-related issues, code quality, and adherence to specification and best practices. To do so, reviewed line-by-line by our team of expert pentesters and smart contract developers, documenting any issues as there were discovered.

# Methodology

The auditing process follows a routine series of steps:

- 1. Code review that includes the following:
  - i) Review of the specifications, sources, and instructions provided to SolidProof to make sure we understand the size, scope, and functionality of the smart contract.
  - ii) Manual review of code, which is the process of reading source code line-byline in an attempt to identify potential vulnerabilities.
  - iii) Comparison to specification, which is the process of checking whether the code does what the specifications, sources, and instructions provided to SolidProof describe.
- 2. Testing and automated analysis that includes the following:
  - i) Test coverage analysis, which is the process of determining whether the test cases are actually covering the code and how much code is exercised when we run those test cases.
  - ii) Symbolic execution, which is analysing a program to determine what inputs causes each part of a program to execute.
- 3. Best practices review, which is a review of the smart contracts to improve efficiency, effectiveness, clarify, maintainability, security, and control based on the established industry and academic practices, recommendations, and research.
- 4. Specific, itemized, actionable recommendations to help you take steps to secure your smart contracts.

# **Used Code from other Frameworks/Smart Contracts (direct imports)**

### Imported packages:

### **V1.0**

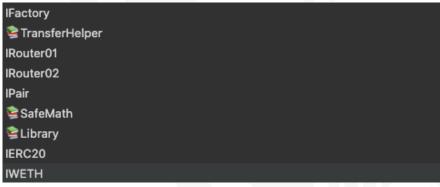
### MasterChef:



### TokenAddress:

Context
Ownable
IBEP20
SafeMath
Address
BEP20

### RouterAddress:



### FactoryAddress:



### **v2.0**

### TokenAddress

Context

Ownable

SafeMath

IERC20

Section 4 Personal Address 2 Per

ERC20

IUniswapV2Factory

IUniswapV2ERC20

IUniswapV2Router01

IUniswapV2Router02

### **Tested Contract Files**

This audit covered the following files listed below with a SHA-1 Hash.

A file with a different Hash has been modified, intentionally or otherwise, after the security review. A different Hash could be (but not necessarily) an indication of a changed condition or potential vulnerability that was not within the scope of this review.

### **v1.0**

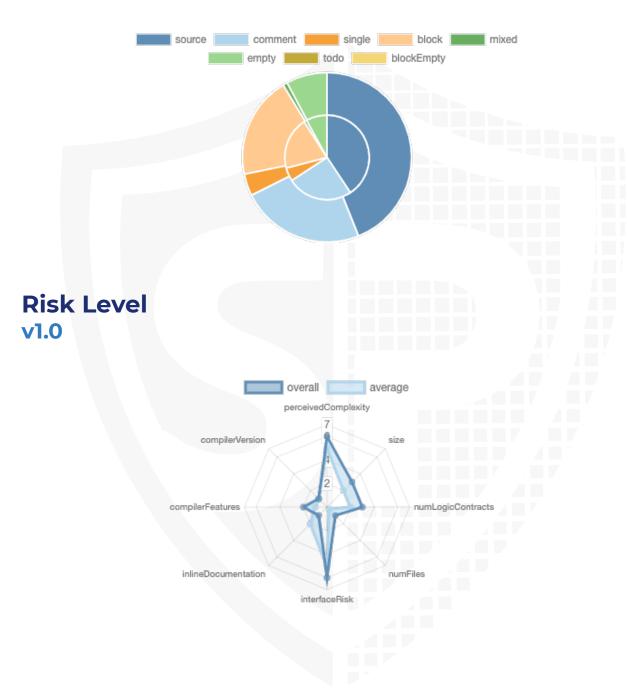
File Name	SHA-1 Hash
contracts/MasterChef.sol	b6372a9c416d45deff971f0b9067e1b95db39002
contracts/Router.sol	5408b5aebd904cc3b95e8fed6edea1348de4a077
contracts/ZONOToken.sol	746f59ea97247a977b0ec27ad91db3494946ec81
contracts/Factory.sol	41362b6b8b16cba3e0f4a5dc3d937458891da69a

### **V2.0**

File Name	SHA-1 Hash
contracts/ZONOToken.sol	636c0fb32947dc412de60a5e025bf8468da83bc5

# **Metrics**

# Source Lines v1.0



# **Capabilities**

# Components

Version	Contracts	Libraries	Interfaces	Abstract
1.0	13	11	13	0

File (version)	Contracts	Libraries	Interfaces	Abstract
ZONOToken (2.0)	3	2	5	1

# **Exposed Functions**

This section lists functions that are explicitly declared public or payable. Please note that getter methods for public stateVars are not included.

Version	Public	Payable
1.0	254	10

File (version)	Public	Payable
ZONOToken (2.0)	88	5

Version	External	Internal	Private	Pure	View
1.0	192	278	8	61	105

File (version)	External	Internal	Private	Pure	View
ZONOToken (2.0)	54	95	6	18	28

# **State Variables**

Version	Total	Public
1.0	63	41

File (version)	Total	Public
ZONOToken (2.0)	33	21

**Capabilities** 

Version	Solidity Versions observed	Experim ental Features	Can Receive Funds	Uses Assembl Y	Has Destroya ble Contract s
1.0	0.6.12 =0.6.6 =0.5.16		yes	yes (8 asm blocks)	

File (version)	Solidity Versions observed	Experim ental Features	Can Receive Funds	Uses Assembl Y	Has Destroya ble Contract s
ZONOToken (2.0)	^0.6.0		yes	yes (2 asm blocks)	

Version	Transf ers ETH	Low- Level Calls	Delega teCall	Uses Hash Functi ons	ECRec over	New/ Create/ Create 2
1.0	yes			yes	yes	yes → Ass embly Call: Name: creat e2

File (version)	Tran sfer s ETH	Low- Level Calls	Delega teCall	Uses Hash Functi ons	ECRec over	New/ Create/ Create 2
ZONOToken (2.0)	yes					



### **Scope of Work**

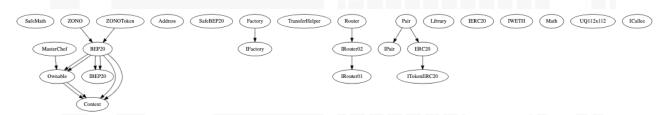
The above token Team provided us with the files that needs to be tested (Github, Bscscan, Etherscan, files, etc.). The scope of the audit is the main contract (usual the same name as team appended with .sol).

We will verify the following claims:

- 1. Correct implementation of Token standard
- 2. Deployer cannot mint any new tokens
- 3. Deployer cannot burn or lock user funds
- 4. Deployer cannot pause the contract
- 5. Overall checkup (Smart Contract Security)

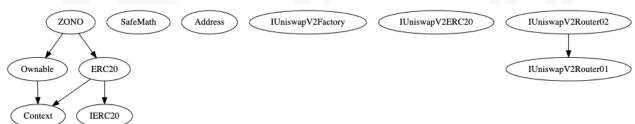
# **Inheritance Graph**

### **v1.0**



### **V2.0**

### ZONOToken



# **Verify Claims**

# **Correct implementation of Token standard**

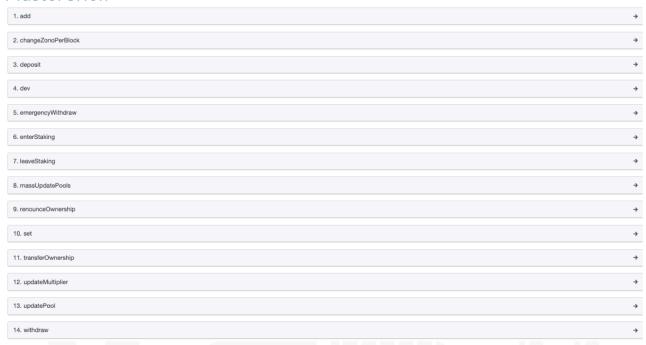
Tested	Verified
$\checkmark$	$\checkmark$

Function	Description	Exist	Tested	Verified
TotalSupply	provides information about the total token supply	$\checkmark$	$\checkmark$	<b>√</b>
BalanceOf	provides account balance of the owner's account	<b>√</b>	<b>√</b>	<b>√</b>
Transfer	executes transfers of a specified number of tokens to a specified address	<b>√</b>	<b>√</b>	<b>√</b>
TransferFrom	executes transfers of a specified number of tokens from a specified address	<b>√</b>	<b>√</b>	<b>√</b>
Approve	allow a spender to withdraw a set number of tokens from a specified account	<b>√</b>	<b>√</b>	<b>√</b>
Allowance	returns a set number of tokens from a spender to the owner	1	1	<b>√</b>

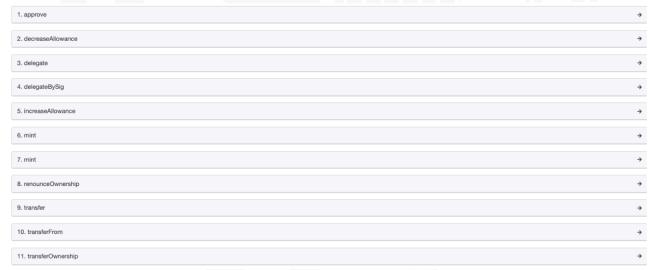
### Write functions of contract

### V1.0

### MasterChef:



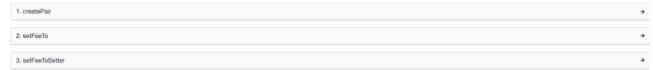
### TokenAddress:



### RouterAddress:

Codecii (adi ess.	
1. addLiquidity	÷
2. addLiquidityETH	<b>→</b>
3. removeLiquidity	<b>→</b>
4. removeLiquidityETH	<b>→</b>
5. removeLiquidityETHSupportingFeeOnTransferTokens	<b>→</b>
6. removeLiquidityETHWithPermit	÷
7. removeLiquidityETHWithPermitSupportingFeeOnTransferTokens	<b>→</b>
8. removeLiquidityWithPermit	<b>→</b>
9. swapETHForExactTokens	<b>→</b>
10. swapExactETHForTokens	<b>→</b>
11. swapExactETHForTokensSupportingFeeOnTransferTokens	<b>→</b>
12. swapExactTokensForETH	<b>→</b>
13. swapExactTokensForETHSupportingFeeOnTransferTokens	<b>→</b>
14. swapExactTokensForTokens	<b>→</b>
15. swapExactTokensForTokensSupportingFeeOnTransferTokens	<b>→</b>
16. swapTokensForExactETH	<b>→</b>
17. swapTokensForExactTokens	<b>→</b>

### FactoryAddress:



# v2.0

ONOToken	
approve	
acklistAddress	
changeCharityWallet	
changeMarketingWallet	
changePauseState	
decreaseAllowance	
excludeFromFee	
ncreaseAllowance	
nitMasterchef	
mint	
renounceOwnership	
setAutoBurnFee	
setCharityFee	
setFeeDecimals	
setLiquidityFee	
setMarketingFee	
transfer	
transferFrom	
transferOwnership	
transferXS	
updateBuyLimit	
updateFeeDisabled	
updateMinTokensBeforeSwap	
updateSellLimit	
i. updateSwapAndLiquifyEnabled	
vithdrawAnyToken	

### Deployer cannot mint any new tokens

Version	File	Name	Exist	Tested	Verified
	MasterChef	cannot mint	-	_	-
10	TokenAddress	cannot mint	$\checkmark$	<b>√</b>	X
1.0	RouterAddress	cannot mint	-	_	_
	FactoryAddress	cannot mint	-	_	_
2.0	ZONOToken	cannot mint	$\checkmark$	<b>√</b>	<b>√</b>

Max / Total Supply: 1.000.000.000

#### Comments:

### **v1.0**

- Owner of ZONOToken (<a href="https://bscscan.com/address/">https://bscscan.com/address/</a>
   Ox8d08dcb48d59216ae5d0515aa6622c9beb42b76b#code) is
   MasterChef (<a href="https://bscscan.com/address/">https://bscscan.com/address/</a>
   Ox838648d92d314f743fe333d73bc9900e2f51d624) and not the provided source file MasterChef (<a href="https://bscscan.com/address/">https://bscscan.com/address/</a>
   Oxaff2b0031aa7a5c19c9cba9589817a704234d492#code)
  - · Checked: Fri. 19. November 2021, 2:24 PM

### **V2.0**

- ZONOToken
  - Only MasterChef can mint Tokens

# Deployer cannot burn or lock user funds

Version	File	Name	Exist	Tested	Verified
		Deployer cannot lock	<b>√</b>	<b>√</b>	✓
	MasterChef	Deployer cannot burn	-	_	-
	TokenAddres s	Deployer cannot lock	<b>√</b>	<b>√</b>	✓
10		Deployer cannot burn	<b>√</b>	<b>√</b>	✓
1.0	RouterAddre	Deployer cannot lock	$\checkmark$	<b>√</b>	<b>√</b>
	SS	Deployer cannot burn	_	_	_
	FactoryAddre	Deployer cannot lock	✓	<b>√</b>	<b>√</b>
	SS	Deployer cannot burn	-	_	-
2.0	ZONOTokon	Deployer cannot lock	✓	<b>√</b>	X
2.0	ZONOToken	Deployer cannot burn	✓	<b>√</b>	<b>√</b>

### Comments:

### **v1.0**

- RouterAddress
  - Uses IPair burn function
  - Uses IPair mint function
- MasterChef
  - Uses ZONO token to mint

### **V2.0**

- If is from/to address is not excluded, fee is enabled and is not in swap and liquify
  - · Transfer will burn tokens
- Deployer can lock user funds
  - · If contract is paused by the owner
  - If address is blacklisted

# **Deployer cannot pause the contract**

Version	File	Name	Exist	Tested	Verified
	MasterChef	Deployer cannot pause	-	-	-
10	TokenAddress	Deployer cannot pause	-	_	-
1.0	RouterAddress	Deployer cannot pause	-	_	-
	FactoryAddress	Deployer cannot pause	-	-	-
2.0	ZONOToken	Deployer cannot pause	<b>√</b>	<b>√</b>	X

# **Overall checkup (Smart Contract Security)**

Tested	Verified
$\checkmark$	$\checkmark$

### Legend

Attribute	Symbol
Verfified / Checked	$\checkmark$
Partly Verified	
Unverified / Not checked	X
Not available	-

# OnlyOwner functions V1.0

### MasterChef:

```
changeZonoPerBlock
updateMultiplier
add
set
```

#### Comments:

- changeZonoPerBlock
  - · zonoPerBlock can be set without any limitations
- updateMulitplier
  - BONUS\_MULTIPLIER can be set without any limitations

#### TokenAddress:

mint

#### RouterAddress:

- Ensure modifier
  - require(deadline >= block.timestamp, "Router: Expired")

addLiquidity
addLiquidityETH 
s
removeLiquidity
removeLiquidityETH

### removeLiquidityETHSupportingFeeOnTransferTokens

swapExactTokensForExactTokens
swapExactETHForTokens 
swapExactETHForTokens 
swapExactETH
swapExactTokensForETH
swapETHForExactTokens 
swapExactTokensForTokensSupportingFeeOnTransferTokens
swapExactETHForTokensSupportingFeeOnTransferTokens 
swapExactTokensForETHSupportingFeeOnTransferTokens

#### Comments:

- addLiquidity
  - · IPair is minting here
- addLiquidityETH (payable)
  - · IPair is minting here
- removeLiquidity
  - · IPair is burning here

### FactoryAddress:

- Only FeeToSetter can set following state variables
  - feeTo
    - Is used in Pair contract
      - \_mintFee function
  - feeToSetter

### **v2.0**

- forMint
  - Mint
- onlyOwner

initMasterchef

setFeeDecimals

setLiquidityFee

setMarketingFee

setAutoBurnFee

setCharityFee

updateMinTokensBeforeSwap

updateFeeDisabled

updateSwapAndLiquifyEnabled

excludeFromFee

blacklistAddress

changePauseState

changeMarketingWallet

changeCharityWallet

withdrawAnyToken

transferXS

updateBuyLimit

updateSellLimit

#### Comments:

- Following fees can be set without any restriction
  - liquidityFee
  - \_marketingFee
  - \_autoBurn
  - \_charity
- · Owner can pause contract
- · Owner can blacklist addresses
- transferXS
  - · Owner can transfer address balance to a certain address
- · buyLimit and sellLimit can be set without any limitations



# CallGraph



# **Source Units in Scope**

# v1.0

Туре	File	Logic Contracts	Interfaces	Lines	nLines	nSLOC	Comment Lines	Complex. Score	Capabilities
<b>≥</b> €	contracts/MasterChef.sol	8	1	1481	1297	637	615	465	<b>■</b> • <b>Ⅲ</b>
<b>⊘\varepsilon</b>	contracts/Router.sol	4	6	785	413	352	31	577	. <u>Š</u> .
<b>≥</b> €	contracts/ZONOToken.sol	6	1	1099	937	396	530	270	
<b>≥</b> €	contracts/Factory.sol	6	5	503	409	324	53	432	<b></b>
<b> □ □ □ □</b>	Totals	24	13	3868	3056	1709	1229	1744	<b>■</b> § <b>-• ■</b>

### **V2.0**

Туре	File	Logic Contracts	Interfaces	Lines	nLines	nSLOC	Comment Lines	Complex. Score	Capabilities	
<b> ≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥ ≥ </b>	contracts/ZONOToken.sol	6	5	1370	1097	480	539	471	<b></b>	
<b>∌≧</b> Q	Totals	6	5	1370	1097	480	539	471	<b>■Š♣</b> *	

### Legend

9	
Attribute	Description
Lines	total lines of the source unit
nLines	normalized lines of the source unit (e.g. normalizes functions spanning multiple lines)
nSLOC	normalized source lines of code (only source-code lines; no comments, no blank lines)
Comment Lines	lines containing single or block comments
Complexity Score	a custom complexity score derived from code statements that are known to introduce code complexity (branches, loops, calls, external interfaces,)

# **Audit Results**

# **AUDIT PASSED**

### **Critical issues**

- no critical issues found -

# **High issues**

- no high issues found -

### **Medium issues**

- no medium issues found -

### Low issues

Issue	File	Type	Line	Description
#1	Factory Address	Contract doesn't import npm packages from source (like OpenZeppelin etc.)	-	We recommend to import all packages from npm directly without flatten the contract. Functions could be modified or can be susceptible to vulnerabilities
#2	MasterC hef	Contract doesn't import npm packages from source (like OpenZeppelin etc.)		We recommend to import all packages from npm directly without flatten the contract. Functions could be modified or can be susceptible to vulnerabilities
#3	RouterA ddress	Contract doesn't import npm packages from source (like OpenZeppelin etc.)		We recommend to import all packages from npm directly without flatten the contract. Functions could be modified or can be susceptible to vulnerabilities
#4	TokenA ddress	Contract doesn't import npm packages from source (like OpenZeppelin etc.)	-	We recommend to import all packages from npm directly without flatten the contract. Functions could be modified or can be susceptible to vulnerabilities

#5	Factory Address	Missing Zero Address Validation (missing- zero-check)	469, 494, 499, 319	Check that the address is not zero
#6	MasterC hef	Missing Zero Address Validation (missing- zero-check)	1257, 1477	Check that the address is not zero
#7	RouterA ddress	Missing Zero Address Validation (missing- zero-check)	362	Check that the address is not zero
#8	ZONOT oken (V2.0)	Missing Zero Address Validation (missing- zero-check)	1347, 1343, 1079, 1357	Check that the address is not zero
#9	ZONOT oken (V2.0)	Unused return values	1242	Ensure that all the return values of the function calls are used
#10	ZONOT oken (V2.0)	State variable visibility is not set.	989, 1009, 1020, 1021,	It is best practice to set the visibility of state variables explicitly

# Informational issues

Issue	File	Type	Line	Description
#1	RouterA ddress	Functions that are not used	26	Remove unused functions
#2	ZONOT oken (V2.0)	State variables that could be declared constant	1003, 1002, 1018	Add the `constant` attributes to state variables that never change
#3	ZONOT oken (V2.0)	Functions that are not used	1189, 1194, 1172, 1156	Remove unused functions
#4	ZONOT oken (V2.0)	Unused state variables	534, 1003	Remove unused state variables

# **Commented Code exist**

There are some instances of code being commented out in the following files that should be removed:

File	Line	Comment
MasterCh ef	136	// assert(a == b * c + a % b); // There is no case in which this doesn't hold

RouterAd dress	27, 33	// bytes4(keccak256(bytes('approve(address,uint256)')));
RouterAd dress	39	// bytes4(keccak256(bytes('transferFrom(address,address,uint256)')));
ZONOTok en (V2.0)	225	// assert(a == b * c + a % b); // There is no case in which this doesn't hold
ZONOTok en (V2.0)	1064	//_marketingWallet = msg.sender;
ZONOTok en (V2.0)	1068	//_charityWallet = msg.sender;

### Recommendation

Remove the commented code, or address them properly.

### **Audit Comments**

### 19. November 2021:

For more information read report

### 04. December 2021

- · IBEP interface changed to IERC20
- BEP20 changed to ERC20
- Uniswap added
- Minting for 5 addresses in constructor
  - . 1.000.000.000

```
// deployer should go seed the pair with some initial liquidity

mint(0x851f6a04961B0cc8A71a332Ba9e2b114EDd5e20b, 350000000 * 10**18);

mint(0x32A144320E23989dB581F325A5350C8E5C759e4F, 300000000 * 10**18);

mint(0xDE9b559E3024cB64b7078cA35C5f13a710F524f4, 1000000000 * 10**18);

mint(0xB21ABAde9927e0fD78D4Bd57072982A41211A1bc, 200000000 * 10**18);

mint(0x1Ad77C6215592F96338067638e672b62bC1eB11C, 500000000 * 10**18);
```

# **SWC Attacks**

ID	Title	Relationships	Status
<u>SW</u> <u>C-13</u> <u>6</u>	Unencrypted Private Data On-Chain	CWE-767: Access to Critical Private Variable via Public Method	PASSED
<u>SW</u> <u>C-13</u> <u>5</u>	Code With No Effects	CWE-1164: Irrelevant Code	PASSED
<u>SW</u> <u>C-13</u> <u>4</u>	Message call with hardcoded gas amount	CWE-655: Improper Initialization	PASSED
<u>SW</u> <u>C-13</u> <u>3</u>	Hash Collisions With Multiple Variable Length Arguments	CWE-294: Authentication Bypass by Capture-replay	PASSED
<u>SW</u> <u>C-13</u> <u>2</u>	Unexpected Ether balance	CWE-667: Improper Locking	PASSED
<u>SW</u> <u>C-13</u> <u>1</u>	Presence of unused variables	CWE-1164: Irrelevant Code	NOT PASSED
<u>SW</u> <u>C-13</u> <u>0</u>	Right-To-Left- Override control character (U+202E)	CWE-451: User Interface (UI) Misrepresentation of Critical Information	PASSED
<u>SW</u> <u>C-12</u> <u>9</u>	Typographical Error	CWE-480: Use of Incorrect Operator	PASSED
<u>SW</u> <u>C-12</u> <u>8</u>	DoS With Block Gas Limit	CWE-400: Uncontrolled Resource Consumption	PASSED

<u>SW</u> <u>C-12</u> <u>7</u>	Arbitrary Jump with Function Type Variable	CWE-695: Use of Low-Level Functionality	PASSED
<u>SW</u> <u>C-12</u> <u>5</u>	Incorrect Inheritance Order	CWE-696: Incorrect Behavior Order	PASSED
<u>SW</u> <u>C-12</u> <u>4</u>	Write to Arbitrary Storage Location	CWE-123: Write-what-where Condition	PASSED
<u>SW</u> <u>C-12</u> <u>3</u>	Requirement Violation	CWE-573: Improper Following of Specification by Caller	PASSED
<u>SW</u> <u>C-12</u> <u>2</u>	Lack of Proper Signature Verification	CWE-345: Insufficient Verification of Data Authenticity	PASSED
<u>SW</u> <u>C-12</u> <u>1</u>	Missing Protection against Signature Replay Attacks	CWE-347: Improper Verification of Cryptographic Signature	PASSED
<u>SW</u> <u>C-12</u> <u>0</u>	Weak Sources of Randomness from Chain Attributes	CWE-330: Use of Insufficiently Random Values	PASSED
<u>SW</u> <u>C-11</u> <u>9</u>	Shadowing State Variables	CWE-710: Improper Adherence to Coding Standards	PASSED
<u>SW</u> <u>C-11</u> <u>8</u>	Incorrect Constructor Name	CWE-665: Improper Initialization	PASSED
<u>SW</u> <u>C-11</u> <u>7</u>	Signature Malleability	CWE-347: Improper Verification of Cryptographic Signature	PASSED

<u>SW</u> <u>C-11</u> <u>6</u>	Timestamp Dependence	CWE-829: Inclusion of Functionality from Untrusted Control Sphere	PASSED
<u>SW</u> <u>C-11</u> <u>5</u>	Authorization through tx.origin	CWE-477: Use of Obsolete Function	PASSED
<u>SW</u> <u>C-11</u> <u>4</u>	Transaction Order Dependence	CWE-362: Concurrent Execution using Shared Resource with Improper Synchronization ('Race Condition')	PASSED
<u>SW</u> <u>C-11</u> <u>3</u>	DoS with Failed Call	CWE-703: Improper Check or Handling of Exceptional Conditions	PASSED
<u>SW</u> <u>C-11</u> <u>2</u>	Delegatecall to Untrusted Callee	CWE-829: Inclusion of Functionality from Untrusted Control Sphere	PASSED
<u>SW</u> <u>C-111</u>	Use of Deprecated Solidity Functions	CWE-477: Use of Obsolete Function	PASSED
<u>SW</u> <u>C-11</u> <u>O</u>	Assert Violation	CWE-670: Always-Incorrect Control Flow Implementation	PASSED
<u>SW</u> <u>C-10</u> <u>9</u>	Uninitialized Storage Pointer	CWE-824: Access of Uninitialized Pointer	PASSED
<u>SW</u> <u>C-10</u> <u>8</u>	State Variable Default Visibility	CWE-710: Improper Adherence to Coding Standards	NOT PASSED
<u>SW</u> <u>C-10</u> <u>7</u>	Reentrancy	CWE-841: Improper Enforcement of Behavioral Workflow	PASSED
<u>SW</u> <u>C-10</u> <u>6</u>	Unprotected SELFDESTRUC T Instruction	CWE-284: Improper Access Control	PASSED

<u>SW</u> <u>C-10</u> <u>5</u>	Unprotected Ether Withdrawal	CWE-284: Improper Access Control	PASSED
<u>SW</u> <u>C-10</u> <u>4</u>	Unchecked Call Return Value	CWE-252: Unchecked Return Value	NOT PASSED
<u>SW</u> <u>C-10</u> <u>3</u>	Floating Pragma	CWE-664: Improper Control of a Resource Through its Lifetime	NOT PASSED
<u>SW</u> <u>C-10</u> <u>2</u>	Outdated Compiler Version	CWE-937: Using Components with Known Vulnerabilities	PASSED
<u>SW</u> <u>C-10</u> 1	Integer Overflow and Underflow	CWE-682: Incorrect Calculation	PASSED
<u>SW</u> <u>C-10</u> <u>0</u>	Function Default Visibility	CWE-710: Improper Adherence to Coding Standards	PASSED



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