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Full Audit Report

LamboCoin Token Security Assessment





LamboCoin Token Security Assessment

FULL AUDIT REPORT

Security Assessment by SCRL on Saturday, March 29, 2025

SCRL is deliver a security solution for Web3 projects by expert security researchers.



Executive Summary

For this security assessment, SCRL received a request on Thursday, March 27, 2025

Client	Language	Audit Me	ethod	Confid	ential	1	Network (Chain	Contr	act				
LamboCoin Token	Solidity	Whiteb	ох	Public		ı	Ethereu	m	<u>0x1</u> b	08B51A8	34ceA2823 <i>i</i>	A1D5a627	21209D10	1AE625d
Report Version	Twitter			Telegran	1				Webs	site				
1.1	https://x.com/la	mboc0in		https://t	.me/Lan	nboCoin(Official		https	://lamboc	oin.io/			
Scoring:	Scoring								+					
	0	1	2	3	4	5	6	7	8	9	10			

Vulnera	bilit	y Summary						
6		3 Total Findi	ngs	3 Inresolved	O Resolved	O Mitigate	3 Acknowledge	Q Decline
•	0	Critical				vulnerab	everity is assigned to seculities that pose a severe ontract and the entire bloom.	e threat to the
	0	High				to reduc	erity issues should be ac e the risk of exploitation nds and data.	' '
	0	Medium				reasonal	ntial to fix medium-seve ole timeframe to enhand of the smart contract.	,
	0	Low	-			still advi	w-severity issues can be sable to address them to ecurity posture of the sr	o improve the
	0	Very Low				concerns	v severity is used for mirs that have minimal imp y of low risk.	
•	1	Informational	1 unresolved			pose a d contract provide	categorize security findi irect security threat to t or its users. Instead, the additional information, endations	he smart
•	2	Gas- optimization	2 unresolved			improve	ons for more efficient al ments in gas usage, eve lready secure.	



Audit Scope:

File	SHA-1 Hash
LamboCoin.sol	cf92960093b9f398da34a35c1f7d10dc5d29c1a7

Audit Version History:

Version	Date	Description
1.0	Thursday, March 27, 2025	Preliminary Report
1.1	Saturday, March 29, 2025	Full Audit Report

Audit information:

Request Date	Audit Date	Re-assessment Date
Thursday, March 27, 2025	Saturday, March 29, 2025	-

Smart Contract Audit Summary



Security Assessment Author

Auditor: Mark K. [Security Researcher | Redteam]
Kevin N. [Security Researcher | Web3 Dev]
Yusheng T. [Security Researcher | Incident Response]

Document Approval: Ronny C. CTO & Head of Security Researcher

Chinnakit J. CEO & Founder

Digital Sign

ID: BFFEC64D-6067-40A6-9A22-80CFEBE26B38 Digitally signed by <contact@scrl.io> March 29, 2025 02:39 PM +07



Disclaimer

Regarding this security assessment, there are no guarantees about the security of the program instruction received from the client is hereinafter referred to as "Source code".

And **SCRL** hereinafter referred to as "**Service Provider**", the **Service Provider** will not be held liable for any legal liability arising from errors in the security assessment. The responsibility will be the responsibility of the **Client**, hereinafter referred to as "**Service User**" and the

Service User agrees not to be held liable to the **service provider** in any case. By contract **Service Provider** to conduct security assessments with integrity with professional ethics, and transparency to deliver security assessments to users The **Service Provider** has the right to postpone the delivery of the security assessment. If the security assessment is delayed whether caused by any reason and is not responsible for any delayed security assessments.

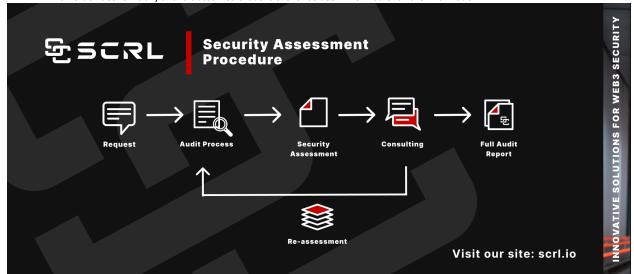
If the service provider finds a vulnerability The service provider will notify the service user via the Preliminary Report, which will be kept confidential for security. The service provider disclaims responsibility in the event of any attacks occurring whether before conducting a security assessment. Or happened later All responsibility shall be sole with the service user.

Security Assessment Is Not Financial/Investment Advice Any loss arising from any investment in any project is the responsibility of the investor.

SCRL disclaims any liability incurred. Whether it's Rugpull, Abandonment, Soft Rugpull, Exploit, Exit Scam.

Security Assessment Procedure

- 1. Request The client must submit a formal request and follow the procedure. By submitting the source code and agreeing to the terms of service.
- 2. **Audit Process**Check for vulnerabilities and vulnerabilities from source code obtained by experts using formal verification methods, including using powerful tools such as Static Analysis, SWC Registry, Dynamic Security Analysis, Automated Security Tools, CWE, Syntax & Parameter Check with AI, WAS (Warning Avoidance System a python script tools powered by SCRL).
- 3. **Security Assessment** Deliver Preliminary Security Assessment to clients to acknowledge the risks and vulnerabilities.
- 4. **Consulting**Discuss on risks and vulnerabilities encountered by clients to apply to their source code to mitigate risks.
 - a. **Re-assessment** Reassess the security when the client implements the source code improvements and if the client is satisfied with the results of the audit. We will proceed to the next step.
- 5. **Full Audit Report** SCRL provides clients with official security assessment reports informing them of risks and vulnerabilities. Officially and it is assumed that the client has been informed of all the information.





Risk Rating

Risk rating using this commonly defined: Risk rating = impact * confidence

Impact The severity and potential impact of an attacker attack

Confidence Ensuring that attackers expose and use this vulnerability

Confidence	Low	Medium	High
Impact [Likelihood]			
Low	Very Low	Low	Medium
Medium	Low	Medium	High
High	Medium	High	Critical

Severity is a risk assessment It is calculated from the Impact and Confidence values using the following calculation methods,

 $Risk\ rating = impact * confidence$

It is categorized into

7 categories severity based



For Informational & Non-class/Optimization/Best-practices will not be counted as severity

Category

Naming Conventions Centralization Economics Risk Authorization Centralization Risk is The Economics Risk is Authorization is Mathematical **Naming Conventions** risk incurred by Risks that may affect Logical Issue is that Possible pitfalls from Any erroneous naming variables that a sole proprietor, weak coding allows may affect code the economic can cause errors to arithmetic operations such as the Owner being mechanism system, core processing, such unrelated people to affect the operation of understanding or able to change such as the ability to as any prior operations take any action to the system or lead to naming inconsistencies something without increase Mint token that cause background modify the values. erroneous values. permission processes to crash. Security Risk Gas Optimization Dead Code Coding Style Best Practices Optimization Security Risk of loss Dead Code having Coding Style is Tips Best Practices is Optimization is Gas Optimization is or damage if it's coding for efficiency suggestions for performance increase performance unused code This may no mitigate performance improvement improvement to avoid expensive gas result in wasted resources and gas fees.



Table Of Content

Summary

- Executive Summary
- Scoring
- Vulnerability Summary
- Audit Scope
- Audit Version History
- Audit Information
- Smart Contract Audit Summary
- Security Assessment Author
- Digital Sign
- Disclaimer
- Security Assessment Procedure
- Risk Rating
- Category

Source Code Detail

- Dependencies / External Imports
- Visibility, Mutability, Modifier function testing

Vulnerability Finding

- Vulnerability
- SWC Findings
- Contract Description
- Inheritance Relational Graph
- UML Diagram

About SCRL



Source Units in Scope

Source Units Analyzed: 1

Source Units in Scope: 1 (100%)

Ty pe	File	Logi c Cont racts	Inter face s	Li ne s	nLi ne s	nS LO C	Com men t Line s	Com plex. Scor e	Capa bilitie s
₩ (src/Lamb oCoin.sol	3	2	42 3	35 3	154	210	125	∻ Σ
₽	Totals	3	2	42 3	35 3	154	210	125	* Σ

Legend: [-]

- 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, ...)



Visibility, Mutability, Modifier function testing

Components

Contracts	≦ Libraries	Interfaces	Abstract
1	0	2	2

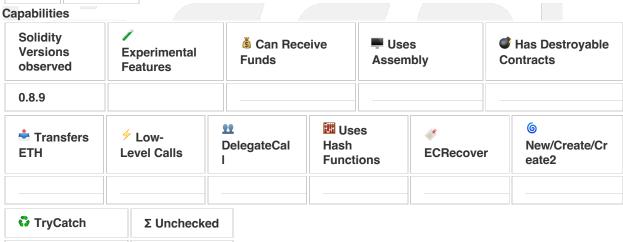
Exposed Functions

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



StateVariables





Dependencies / External Imports

Dependency / Import Path Count

yes



Vulnerability Findings

ID	Vulnerability Detail	Severity	Category	Status
CEN-01	Token Distribution	Informational	Centralization	Acknowledge
GAS-01	Use Custom Errors	Gas-optimization	Gas Optimization	Acknowledge
GAS-02	Use != 0 instead of > 0 for unsigned integer comparison	Gas-optimization	Gas Optimization	Acknowledge





CEN-01: Token Distribution

Vulnerability Detail	Severity	Location	Category	Status
Token Distribution	Informational	Check on finding	Centralization	Acknowledge

Finding:

Despite the Token Contract <u>not containing any malicious functions</u> that can be executed by the Owner, But, it has been identified that token contracts do not adequately define token distribution, with only one token holder **owning 100% as of Thursday, March 27, 2025**. This presents a significant risk of centralization, and all potential participants must give careful consideration to this matter.

We strongly urge all participants **always promptly to verify token holdings** at https://etherscan.io/token/0x1b08b51a84cea2823a1d5a62721209d1c1ae625d#balances

Address	Quantity	Percentage
0xd8039DC99b06a785477878F9c850215d9a9389d3	12,000,000,000	100%

***Note: Please note that SCRL is not responsible for any investments. And this document is not an investment recommendation document. If any project is in the pre-sale stage, please participate it at your own risk. https://chat.scrl.io/hc/scrl-help-center/articles/1717548722-understand-the-risk-of-de-fi-web3



Recommendation:

We recommend creating a distribution token & liquidity lock contract to clearly define the distribution ratio for tokens such as Developer, Marketing, Liquidity, and further considerations below.

In terms of timeframes, there are three categories: short-term, long-term, and permanent.

For short-term solutions, a combination of timelock and multi-signature (2/3 or 3/5) can be used to mitigate risk by delaying sensitive operations and avoiding a single point of failure in key management. This includes implementing a timelock with a reasonable latency, such as 48 hours, for privileged operations; assigning privileged roles to multi-signature wallets to prevent private key compromise; and sharing the timelock contract and multi-signer addresses with the public via a medium/blog link.

For long-term solutions, a combination of timelock and DAO can be used to apply decentralization and transparency to the system. This includes implementing a timelock with a reasonable latency, such as 48 hours, for privileged operations; introducing a DAO/governance/voting module to increase transparency and user involvement; and sharing the timelock contract, multi-signer addresses, and DAO information with the public via a medium/blog link.

Finally, permanent solutions should be implemented to ensure the ongoing security and protection of the system.





GAS-01: Use Custom Errors

Vulnerability Detail	Severity	Location	Category	Status
Use Custom Errors	-	Check on finding	Gas Optimization	Acknowledge

Finding:

```
File: LamboCoin.sol
184:
         require(newOwner != address(0), 'Ownable: new owner is the zero address');
313:
         require(currentAllowance >= amount, 'ERC20: transfer amount exceeds
allowance');
340:
         require(currentAllowance >= subtractedValue, 'ERC20: decreased allowance
below zero');
356:
         require(sender != address(0), 'ERC20: transfer from the zero address');
         require(recipient != address(0), 'ERC20: transfer to the zero address');
357:
         require(senderBalance >= amount, 'ERC20: transfer amount exceeds balance');
360:
388:
         require(account != address(0), 'ERC20: burn from the zero address');
391:
         require(accountBalance >= amount, 'ERC20: burn amount exceeds balance');
417:
         require(from != address(0), 'ERC20: approve from the zero address');
418:
         require(to != address(0), 'ERC20: approve to the zero address');
```



Recommendation:

Replace error strings with custom errors to reduce deployment and runtime costs. This approach can lead to significant gas savings in Solidity 0.8.4 and above, as custom errors consume less gas than error strings. More information can be found in the Solidity documentation on custom errors.

Alleviation:

-





GAS-02: Use != 0 instead of > 0 for unsigned integer comparison

Vulnerability Detail	Severity	Location	Category	Status
Use != 0 instead of > 0 for unsigned integer comparison	Gas-optimization	Check on finding	Gas Optimization	Acknowledge

Finding:

```
File: LamboCoin.sol
355: require(amount > 0, 'ERC20: transfer amount zero');
...
```

Recommendation:

Using != 0 for checking if an unsigned integer is greater than zero can save gas compared to using > 0.

Alleviation:

-



SWC Findings

SVVC I IIIdili			
ID	Title	Scanning	Result
SWC-100	Function Default Visibility	Complete	No risk
SWC-101	Integer Overflow and Underflow	Complete	No risk
SWC-102	Outdated Compiler Version	Complete	No risk
SWC-103	Floating Pragma	Complete	No risk
SWC-104	Unchecked Call Return Value	Complete	No risk
SWC-105	Unprotected Ether Withdrawal	Complete	No risk
SWC-106	Unprotected SELFDESTRUCT Instruction	Complete	No risk
SWC-107	Reentrancy	Complete	No risk
SWC-108	State Variable Default Visibility	Complete	No risk
SWC-109	Uninitialized Storage Pointer	Complete	No risk
SWC-110	Assert Violation	Complete	No risk
SWC-111	Use of Deprecated Solidity Functions	Complete	No risk
SWC-112	Delegatecall to Untrusted Callee	Complete	No risk
SWC-113	DoS with Failed Call	Complete	No risk
SWC-114	Transaction Order Dependence	Complete	No risk



	T	T	
SWC-115	Authorization through tx.origin	Complete	No risk
SWC-116	Block values as a proxy for time	Complete	No risk
SWC-117	Signature Malleability	Complete	No risk
SWC-118	Incorrect Constructor Name	Complete	No risk
SWC-119	Shadowing State Variables	Complete	No risk
SWC-120	Weak Sources of Randomness from Chain Attributes	Complete	No risk
SWC-121	Missing Protection against Signature Replay Attacks	Complete	No risk
SWC-122	Lack of Proper Signature Verification	Complete	No risk
SWC-123	Requirement Violation	Complete	No risk
SWC-124	Write to Arbitrary Storage Location	Complete	No risk
SWC-125	Incorrect Inheritance Order	Complete	No risk
SWC-126	Insufficient Gas Griefing	Complete	No risk
SWC-127	Arbitrary Jump with Function Type Variable	Complete	No risk
SWC-128	DoS With Block Gas Limit	Complete	No risk
SWC-129	Typographical Error	Complete	No risk
SWC-130	Right-To-Left-Override control character (U+202E)	Complete	No risk



SWC-131	Presence of unused variables	Complete	No risk
SWC-132	Unexpected Ether balance	Complete	No risk
SWC-133	Hash Collisions With Multiple Variable Length Arguments	Complete	No risk
SWC-134	Message call with hardcoded gas amount	Complete	No risk
SWC-135	Code With No Effects	Complete	No risk
SWC-136	Unencrypted Private Data On-Chain	Complete	No risk





Contracts Description Table

Contract	Туре	Bases		
L	Function Name	Visibility	Mutabilit y	Modifiers
IERC20	Interface			
L	totalSupply	External !		NO!
L	balanceOf	External !		NO!
L	transfer	External !		NO!
L	allowance	External !		NO!
L	approve	External !	•	NO!
L	transferFrom	External !	•	NO!
IERC20Metadat a	Interface	IERC20		
L	name	External !		NO!
L	symbol	External !		NO!
L	decimals	External !		NO!
Context	Implementation			
L	_msgSender	Internal 🔒		
L	_msgData	Internal 🔒		
Ownable	Implementation	Context		
L		Public !	•	NO!
L	owner	Public !		NO!





Contract	Туре	Bases		
L	_checkOwner	Internal 🗎		
L	renounceOwnershi p	Public !		<mark>onlyOwne</mark> r
L	transferOwnership	Public !		<mark>onlyOwne</mark> r
L	_transferOwnership	Internal 🗎		
LamboCoin	Implementation	Context, IERC20Metadata , Ownable		
L		Public !		NO!
L	name	Public !		NO!
L	symbol	Public !		NO!
L	decimals	Public !		NO !
L	totalSupply	Public !		NO !
L	balanceOf	Public !		NO!
L	transfer	Public !		NO!
L	allowance	Public !		NO!
L	approve	Public !		NO!
L	transferFrom	Public !		NO!
L	increaseAllowance	Public !		NO!
L	decreaseAllowance	Public !		NO !
L	_transfer	Internal 🔒	•	
L	_mint	Internal 🗎		





Contract	Туре	Bases	
L	_burn	Internal 🗎	
L	burn	External !	NO!
L	_approve	Internal 🍙	

Legend

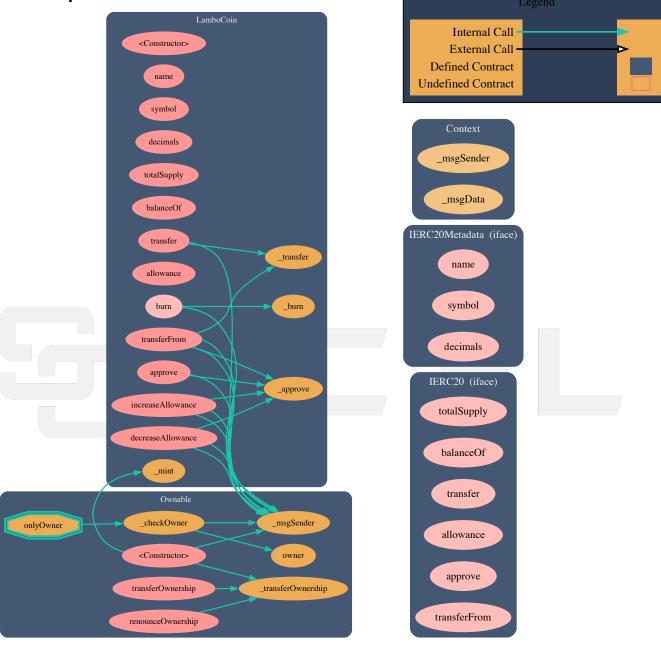
Symbol	Meaning		
	Function can modify state		
ds	Function is payable		





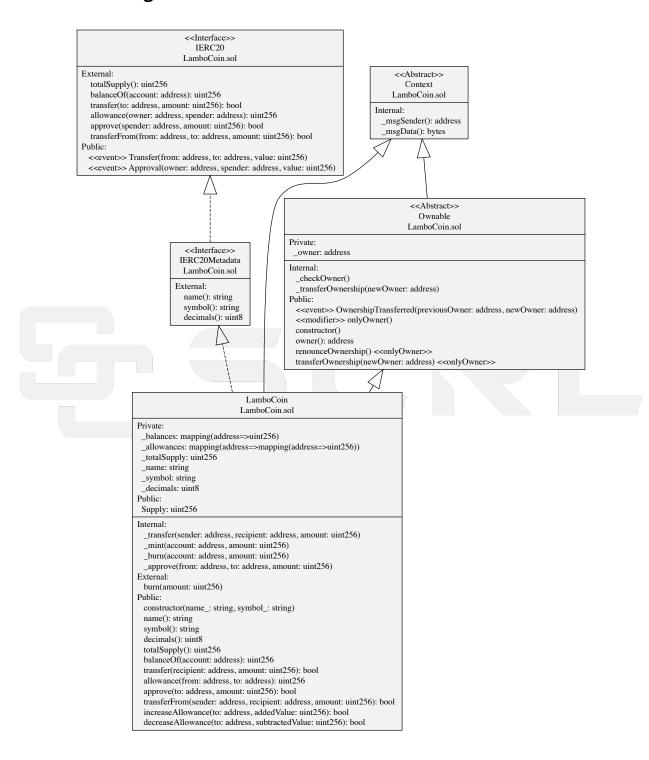
行っていて

Call Graph





UML Class Diagram





About SCRL

SCRL (Previously name SECURI LAB) was established in 2020, and its goal is to deliver a security solution for Web3 projects by expert security researchers. To verify the security of smart contracts, they have developed internal tools and KYC solutions for Web3 projects using industry-standard technology. SCRL was created to solve security problems for Web3 projects. They focus on technology for conciseness in security auditing. They have developed Python-based tools for their internal use called WAS and SCRL. Their goal is to drive the crypto industry in Thailand to grow with security protection technology.



Smart Contract Audit

Our top-tier security strategy combines static analysis, fuzzing, and a custom detector for maximum efficiency.

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