



Cyberscope

# Audit Report

## **Token LUSD**

May 2025

Network    BSC

Address    0x5bb4d589467c25A5Ac8db930372dc5dA30C3410E

Audited by    © cyberscope

# Analysis

● Critical ● Medium ● Minor / Informative ● Pass

Severity	Code	Description	Status
●	ST	Stops Transactions	Passed
●	OTUT	Transfers User's Tokens	Passed
●	ELFM	Exceeds Fees Limit	Passed
●	MT	Mints Tokens	Passed
●	BT	Burns Tokens	Passed
●	BC	Blacklists Addresses	Passed

## Diagnostics

● Critical ● Medium ● Minor / Informative

Severity	Code	Description	Status
●	L09	Dead Code Elimination	Unresolved

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## Risk Classification

The criticality of findings in Cyberscope's smart contract audits is determined by evaluating multiple variables. The two primary variables are:

1. **Likelihood of Exploitation:** This considers how easily an attack can be executed, including the economic feasibility for an attacker.
2. **Impact of Exploitation:** This assesses the potential consequences of an attack, particularly in terms of the loss of funds or disruption to the contract's functionality.

Based on these variables, findings are categorized into the following severity levels:

1. **Critical:** Indicates a vulnerability that is both highly likely to be exploited and can result in significant fund loss or severe disruption. Immediate action is required to address these issues.
2. **Medium:** Refers to vulnerabilities that are either less likely to be exploited or would have a moderate impact if exploited. These issues should be addressed in due course to ensure overall contract security.
3. **Minor:** Involves vulnerabilities that are unlikely to be exploited and would have a minor impact. These findings should still be considered for resolution to maintain best practices in security.
4. **Informative:** Points out potential improvements or informational notes that do not pose an immediate risk. Addressing these can enhance the overall quality and robustness of the contract.

Severity	Likelihood / Impact of Exploitation
● Critical	Highly Likely / High Impact
● Medium	Less Likely / High Impact or Highly Likely/ Lower Impact
● Minor / Informative	Unlikely / Low to no Impact

## Review

Contract Name	LUSD
Compiler Version	v0.5.16+commit.9c3226ce
Optimization	200 runs
Explorer	<a href="https://bscscan.com/address/0x5bb4d589467c25a5ac8db930372dc5da30c3410e">https://bscscan.com/address/0x5bb4d589467c25a5ac8db930372dc5da30c3410e</a>
Address	0x5bb4d589467c25a5ac8db930372dc5da30c3410e
Network	BSC
Symbol	LUSD
Decimals	18
Total Supply	10,000,000,000,000
Badge Eligibility	Yes

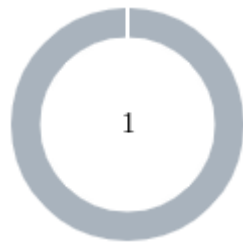
## Audit Updates

Initial Audit	27 May 2025
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## Source Files

Filename	SHA256
LUSD.sol	ed30bc5b6a7d6d7d8a0d75f9d2a31abe92bf3feebbc1d250c6390646cd d3d7c6

## Findings Breakdown



● Critical	0
● Medium	0
● Minor / Informative	1

Severity	Unresolved	Acknowledged	Resolved	Other
● Critical	0	0	0	0
● Medium	0	0	0	0
● Minor / Informative	1	0	0	0

## L09 - Dead Code Elimination

Criticality	Minor / Informative
Location	LUSD.sol#L460,476
Status	Unresolved

### Description

In Solidity, dead code is code that is written in the contract, but is never executed or reached during normal contract execution. Dead code can occur for a variety of reasons, such as:

- Conditional statements that are always false.
- Functions that are never called.
- Unreachable code (e.g., code that follows a return statement).

Dead code can make a contract more difficult to understand and maintain, and can also increase the size of the contract and the cost of deploying and interacting with it.

```
function _burn(address account, uint256 amount) internal {
    require(account != address(0), "BEP20: burn from the zero address");

    _balances[account] = _balances[account].sub(amount, "BEP20: burn
amount exceeds balance");
    _totalSupply = _totalSupply.sub(amount);
    emit Transfer(account, address(0), amount);
}

function _burnFrom(address account, uint256 amount) internal {
    _burn(account, amount);
    _approve(account, _msgSender(),
allowances[account][_msgSender()].sub(amount, "BEP20: burn amount
exceeds allowance"));
}
```



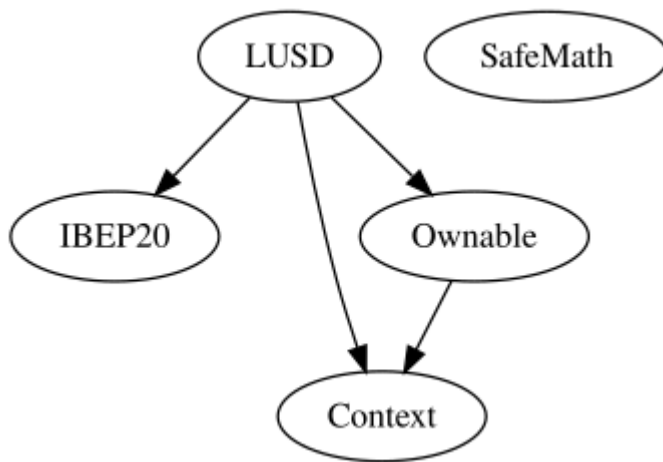
## Recommendation

To avoid creating dead code, it's important to carefully consider the logic and flow of the contract and to remove any code that is not needed or that is never executed. This can help improve the clarity and efficiency of the contract.

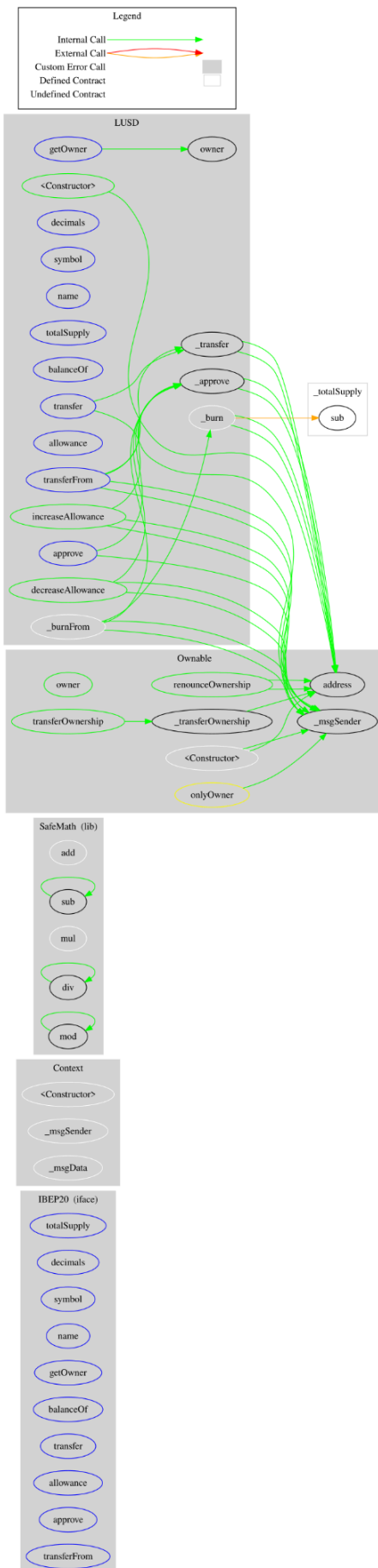
## Functions Analysis

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
LUSD	Implementation	Context, IBEP20, Ownable		
		Public	✓	-
	getOwner	External		-
	decimals	External		-
	symbol	External		-
	name	External		-
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
	increaseAllowance	Public	✓	-
	decreaseAllowance	Public	✓	-
	_transfer	Internal	✓	
	_burn	Internal	✓	
	_approve	Internal	✓	
	_burnFrom	Internal	✓	

## Inheritance Graph



# Flow Graph



## Summary

LUSD contract implements a token mechanism. This audit investigates security issues, business logic concerns and potential improvements. LUSD is an interesting project that has a friendly and growing community. The Smart Contract analysis reported no compiler error or critical issues. The contract Owner can access some admin functions that can not be used in a malicious way to disturb the users' transactions.

## Disclaimer

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Blockchain technology and cryptographic assets present a high level of ongoing risk. Cyberscope's position is that each company and individual are responsible for their own due diligence and continuous security. Cyberscope'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 analyze. The assessment services provided by Cyberscope are subject to dependencies and are under continuing development. You agree that your access and/or use including but not limited to any services reports and materials will be at your sole risk on an as-is where-is and as-available basis. Cryptographic tokens are emergent technologies and carry with them high levels of technical risk and uncertainty. The assessment reports could include false positives, false negatives and other unpredictable results. The services may access and depend upon multiple layers of third parties.

# About Cyberscope

Cyberscope is a blockchain cybersecurity company that was founded with the vision to make web3.0 a safer place for investors and developers. Since its launch, it has worked with thousands of projects and is estimated to have secured tens of millions of investors' funds.

Cyberscope is one of the leading smart contract audit firms in the crypto space and has built a high-profile network of clients and partners.



**The Cyberscope team**

[cyberscope.io](https://cyberscope.io)