

# Audit Report **BFM Token**

November 2024

Network BSC

Address 0xEcCA434e838eEbE30E561d0Ec3E3016efd1d340A

Audited by © cyberscope



# **Analysis**

CriticalMediumMinor / InformativePass

Severity	Code	Description	Status
•	ST	Stops Transactions	Passed
•	OTUT	Transfers User's Tokens	Passed
•	ELFM	Exceeds Fees Limit	Passed
•	MT	Mints Tokens	Passed
•	ВТ	Burns Tokens	Passed
•	ВС	Blacklists Addresses	Passed



## **Diagnostics**

Critical
 Medium
 Minor / Informative

Severity	Code	Description	Status
•	L04	Conformance to Solidity Naming Conventions	Unresolved



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#### **Risk Classification**

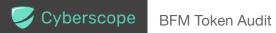
The criticality of findings in Cyberscope's smart contract audits is determined by evaluating multiple variables. The two primary variables are:

- 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:

- 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.
- 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.
- 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
<ul> <li>Critical</li> </ul>	Highly Likely / High Impact
<ul><li>Medium</li></ul>	Less Likely / High Impact or Highly Likely/ Lower Impact
Minor / Informative	Unlikely / Low to no Impact



## **Review**

Contract Name	BFMToken
Compiler Version	v0.8.21+commit.d9974bed
Optimization	200 runs
Explorer	https://bscscan.com/address/0xecca434e838eebe30e561d0ec3 e3016efd1d340a
Address	0xecca434e838eebe30e561d0ec3e3016efd1d340a
Network	BSC
Symbol	BFM
Decimals	8
Total Supply	300,000,000

### **Audit Updates**

Initial Audit	13 Nov 2024
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#### **Source Files**

Filename	SHA256
BFMToken.sol	f73e6b0bd649fc92bdd8e4d29b8c98cfb0fcaf840df76930842325cc0e09 41bd



# **Findings Breakdown**



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



#### **L04 - Conformance to Solidity Naming Conventions**

Criticality	Minor / Informative
Location	BFMToken.sol#L221
Status	Unresolved

#### Description

The Solidity style guide is a set of guidelines for writing clean and consistent Solidity code. Adhering to a style guide can help improve the readability and maintainability of the Solidity code, making it easier for others to understand and work with.

The followings are a few key points from the Solidity style guide:

- 1. Use camelCase for function and variable names, with the first letter in lowercase (e.g., myVariable, updateCounter).
- 2. Use PascalCase for contract, struct, and enum names, with the first letter in uppercase (e.g., MyContract, UserStruct, ErrorEnum).
- Use uppercase for constant variables and enums (e.g., MAX\_VALUE, ERROR\_CODE).
- 4. Use indentation to improve readability and structure.
- 5. Use spaces between operators and after commas.
- 6. Use comments to explain the purpose and behavior of the code.
- 7. Keep lines short (around 120 characters) to improve readability.

```
uint8 private constant _decimals = 8
```

#### Recommendation

By following the Solidity naming convention guidelines, the codebase increased the readability, maintainability, and makes it easier to work with.

Find more information on the Solidity documentation

https://docs.soliditylang.org/en/v0.8.17/style-guide.html#naming-convention.

# **Functions Analysis**

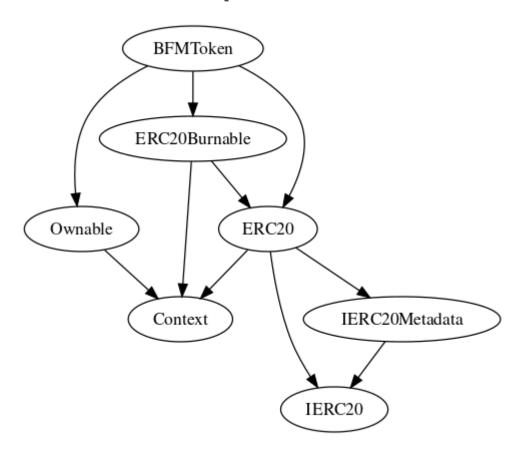
Contract	Туре	Bases		
	Function Name	Visibility	Mutability	Modifiers
Ownable	Implementation	Context		
		Public	1	-
	owner	Public		-
	_checkOwner	Internal		
	renounceOwnership	Public	✓	onlyOwner
	transferOwnership	Public	✓	onlyOwner
	_transferOwnership	Internal	✓	
IERC20	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	1	-
IERC20Metadat	Interface	IERC20		
	name	External		-
	symbol	External		-



	decimals	External		-
ERC20Burnable	Implementation	Context, ERC20		
	burn	Public	✓	-
	burnFrom	Public	✓	-
BFMToken	Implementation	ERC20, ERC20Burna ble, Ownable		
		Public	✓	ERC20
	decimals	Public		-

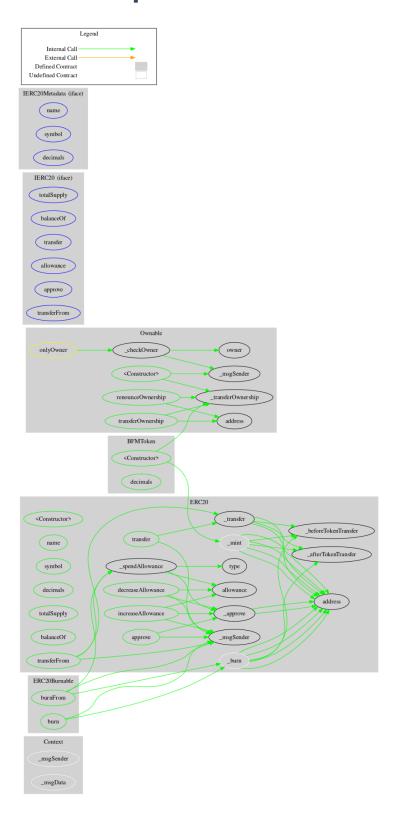


# **Inheritance Graph**





## Flow Graph





## **Summary**

BFM Token is an interesting project that has a friendly and growing community. The Smart Contract analysis reported no compiler error or critical issues. This audit investigates security issues, business logic concerns and potential improvements.



#### **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

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