

# **Smart Contract Security Audit**

**Project: MEME Exchange** 

Oct 04, 2023



**Contract Address** 

0x3611a05ed89c751e0F9eFa931b3B64da7A81464e

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#### **Disclaimer**

The contents of this report reflect only the CRACKEN TECH audit team's understanding of the current progress and status of the security of the code audited, to verify the integrity of the code provided for the scope of this audit. You agree that your access and/or use, including but not limited to any associated services, products, protocols, platforms, content, and materials, will be at your sole risk. Given the size of the project, the findings detailed here are not to be considered exhaustive, and further testing and audit are recommended after the issues covered are fixed. We do not warrant, endorse, guarantee, or assume responsibility for any product or service advertised or offered by a third party through the product, any open source or third-party software, code, libraries, materials, or information linked to, called by, referenced by or accessible through the report, its content, and the related services and products, any hyperlinked websites, any websites or mobile applications appearing on any advertising, and we will not be a party to or in any way be responsible for monitoring any transaction between you and any third-party providers of products or services.

All information provided in this report does not constitute financial or investment advice, nor should it be used to signal that any persons reading this report should invest their funds without sufficient individual due diligence regardless of the findings presented in this report.

The review does not address the compiler layer, any other areas beyond the programming language, or other programming aspects that could present security risks. If the audited source files are smart contract files, risks or issues introduced by using data feeds from off- chain sources are not extended by this review either.



#### **Audit Review**

The source code of the MEME EXCHANGE Token was audited in order to acquire a clear impression of how the project was implemented. The Cracken Tech audit team conducted in-depth research, analysis, and scrutiny, resulting in a series of observations. A detailed list of each issue found, and vulnerabilities in the source code will be included in the audit report. The problems and potential solutions are given in this report, we will identify common sources for such problems and comments for improvement.

The auditing process will follow a routine as special considerations by Cracken:

- Review of the specifications, sources, and instructions provided to Cracken to make sure the contract logic meets the intentions of the client without exposing the user's funds to risk.
- Manual review of the entire codebase by our experts, which is the process of reading source code line-by-line in an attempt to identify potential vulnerabilities.
- Specification comparison is the process of checking whether the code does what the specifications, sources, and instructions provided to Cracken describe.
- Test coverage analysis determines whether the test cases cover the code and how much code is exercised when we run the test cases.
- Symbolic execution is analyzing a program to determine what inputs cause each part of a program to execute.
- Reviewing the codebase to improve maintainability, security, and control based on the established industry and academic practices.



## **Project Review**

#### **Token Summary**

Parameter	Result
Token Name	MEME EXCHANGE
Token Symbol	MEME
Token Decimal	18
Total Supply	800,000,000,000
Platform	PEGO
Buy Tax Fee	0%
Sell Tax Fee	0%
Contract Creation Date	September-23-2023 03:08:22 PM +8 UTC
Liquidity Status	Unlocked
Compiler Version	v0.8.4+commit.c7e474f2
Optimization	200
Contract Address	0x3611a05ed89c751e0f9efa931b3b64da7a81464e
Deployer Address	0x3735adf84c569A7e5Ccae3aF45d51d887a2a8b2F
Owner Address	0x3735adf84c569a7e5ccae3af45d51d887a2a8b2f

#### Source Code

CRACKEN was commissioned by MEME EXCHANGE to perform an audit based on the following smart contract:

https://scan.pego.network/address/0x3611a05ed89c751e0F9eFa931b3B64da7A81464e



# **Smart Contract Vulnerability Checks**

Vulnerability	Auto-Scan	Manual-Scan	Result
Unencrypted Private Data On- chain	Completed	Completed	Low/No Risk
Code With No Effects	Completed	Completed	Low/No Risk
Message call with hardcoded gas amount	Completed	Completed	Low/No Risk
Unexpected Ether balanced	Completed	Completed	Low/No Risk
Right-To-Left-Override control character (U+202E)	Completed	Completed	Low/No Risk
Typographical Error	Completed	Completed	Low/No Risk
DoS With Block Gas Limit	Completed	Completed	Low/No Risk
Arbitrary Jump with Function Type Variable	Completed	Completed	Low/No Risk
Insufficient Gas Grieving	Completed	Completed	Low/No Risk
Incorrect Inheritance Order	Completed	Completed	Low/No Risk
Write to Arbitrary Storage Location	Completed	Completed	Low/No Risk
Requirement Violiation	Completed	Completed	Low/No Risk
Missing Protection against Signature Replay Attacks	Completed	Completed	Low/No Risk
Weak Sources of Randomness from Chain Attributes	Completed	Completed	Low/No Risk
Authorization through tx.origin	Completed	Completed	Low/No Risk
Delegate call to Untrusted Callee	Completed	Completed	Low/No Risk



Vulnerability	Auto-Scan	Manual-Scan	Result
Use of Deprecated Solidity Functions	Completed	Completed	Low/No Risk
Assert Violation	Completed	Completed	Low/No Risk
Reentrancy	Completed	Completed	Low/No Risk
Unprotected SELF-DESTRUCT Instruction	Completed	Completed	Low/No Risk
Unprotected Ether Withdrawal	Completed	Completed	Low/No Risk
Outdated Compiler Version	Completed	Completed	Low/No Risk
Integer Overflow and Underflow	Completed	Completed	Low/No Risk
Function Default Visibility	Completed	Completed	Low/No Risk



#### **Manual Code Review**

#### **Classification of Issues**

Severity	Description
High-Risk	A vulnerability that affects the desired outcome when using a contract, or provides the opportunity to use a contract in an unintended way.
Medium-Risk	A vulnerability that could affect the desired outcome of executing the contract in a specific scenario.
Low-Risk	A vulnerability that does not have a significant impact on possible scenarios for the use of the contract and is probably subjective.
Informational	A vulnerability that has an informational character but is not affecting any of the code.

#### **Findings**

Severity	Found
High-Risk	0
Medium-Risk	0
Low-Risk	0
Informational	0



# Privileged Functions onlyOwner

Function Name	Parameters	Visibility
approve	address spender, unit256 amount	External
burn	address account, unit256 amount	Internal
decreaseAllowance	address spender, unit256 subtractedValue	Public
renounceOwnership	None	Public
rescueETH	None	External
rescueToken	address tokenAddress, unit256 tokens	Public
setAddrParam	address _ecologBuildAddr, address _ecologDevelopAddr	External
setBlackList	address account, bool isBlack	Public
setClubAddr	address_clubAddr	Publilc
setExcludeFromFees	address account, bool excluded	Public
setlsOpenSwap	bool_isOpenSwap	Pub
transfer	address to, unit256 amount	External
transferFrom	address from,address to, unit256 amount	External
transferOwnership	address newOwner	Public



#### **Contract Ownership**

The contract ownership of MEME EXCHANGE is not renounced. The ownership of the contract grants special powers to the protocol creators, making them the sole addresses that can call sensible ownable functions that may alter the state of the protocol.

The current owner is the address 0x3735adf84c569A7e5Ccae3aF45d51d887a2a8b2F which can be viewed: HERE

The owner wallet has the power to call the functions displayed on the privileged functions list above, if the owner's wallet is compromised these privileges could be exploited.

We recommend the team renounce ownership at the right time if possible, or gradually migrate to a time lock with governing functionalities in respect of transparency and safety considerations.

#### **Liquidity Overview**

**Liquidity Information** 

The token does not have liquidity at the moment of the audit



### **Tokenomics**

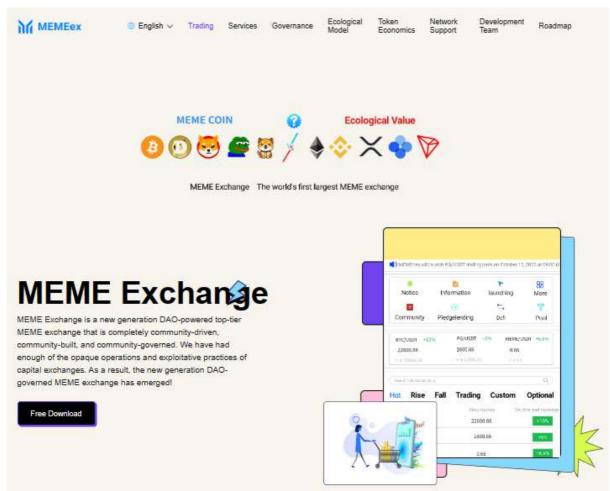
Rank	Address	Quantity (Token)	Percentage
1	0x3735adf84c569A7e5Ccae3aF45d51d887a2a8b2F	800,000,000,000	100.00%

#### **Social Media Check**

Social Media Type	Link	Result
Website	https://www.bimeme.com	Checked
Twitter	https://twitter.com/MEMEcex	Checked



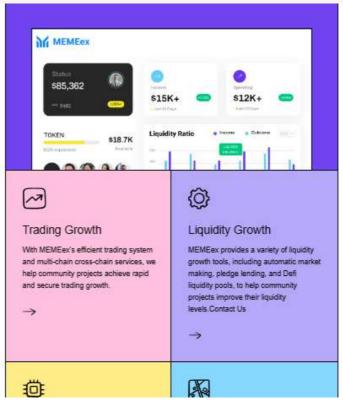
#### **Website Review**



#### **MEME Services**

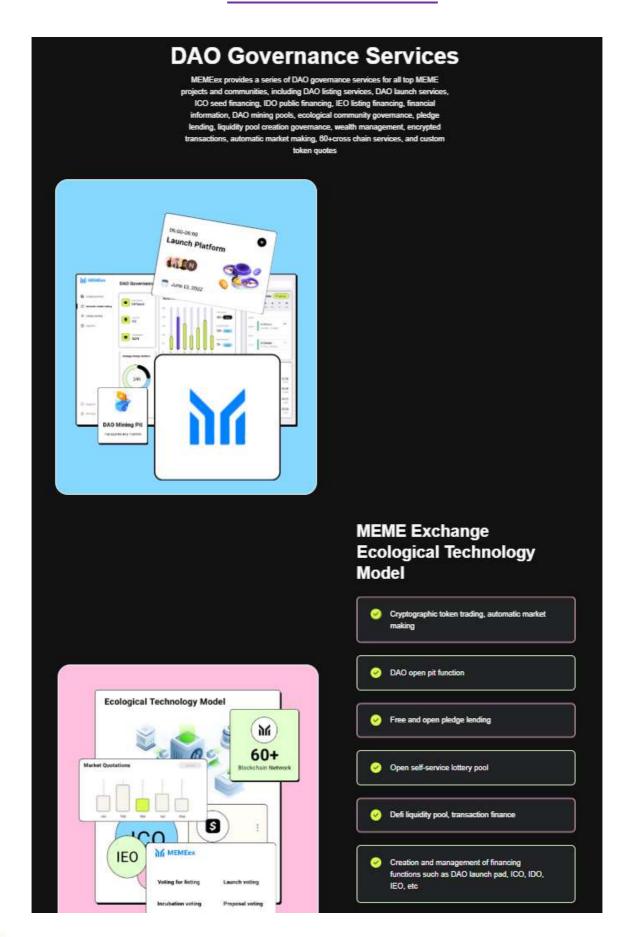
We provide a comprehensive and transparent governance platform that offers trading growth, liquidity growth, token ecosystem creation, and community development assistance for all top-tier community projects.

No longer serving money, no longer serving relationships, no longer serving exploiters. We will always serve the community, always serve the users, always serve decentralization.





#### **Website Review**





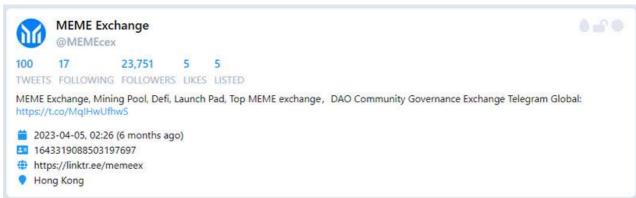
#### Certificate #1: RSA 2048 bits (SHA384withRSA) Server Key and Certificate #1 bimeme.com Fingerprint SHA258: 0095/5a8b201125bba78b/50d50b33ca7ef2a7ebu388bc57ddda06798e347fe Pin SHA256; LOuGXtxRjA1IRKXCKQsKqudPMwRyMSz6rNT6LAH4Ndk= Common names Alternative names Serial Number 5e8cc98d4ebed8f116403d870ef12dee Valid from Fri, 25 Aug 2023 00:00:00 UTC Valid until Thu, 23 Nov 2023 23:59:59 UTC (expires in 1 month and 20 days) Key Weak key (Debian) ZeroSSL RSA Domain Secure Site CA Issuer AIA: http://zerossl.orl.sectigo.com/ZeroSSLRSADomainSecureSiteCA.orl Signature algorithm SHA384withRSA Extended Validation Certificate Transparency Yes (certificate) OCSP Must Staple Revocation information OCSP: http://zerossl.ocsp.sectigo.com Revocation status Good (not revoked) **DNS CAA** No (more info) Trusted Mozilla Apple Android Java Windowe

- Mobile Friendly
- Contains no code errors
- SSL is secured
- No spelling errors



#### **Twitter Review**





- No suspicous activities or events
- No suspicious IP activities.



#### **Audit Conclusion**

- The owner cannot pause trading
- The owner cannot mint new token
- The owner cannot blacklist users
- The owner cannot change the max tx amount
- The owner cannot change buy/sell fees up
- The owner can set whitelist wallets.
- The ownership is yet to be renounced.

#### **AUDIT IS PASSED**