

Assure DeFi®

THE VERIFICATION **GOLD STANDARD**



Security Assessment

EchoMetrix

Date: 28/06/2025

Audit Status: PASS

Audit Edition: Advanced



ASSURE DEFI®
THE VERIFICATION GOLD STANDARD

Risk Analysis

Vulnerability summary

Classification	Description
● High	High-level vulnerabilities can result in the loss of assets or manipulation of data.
● Medium	Medium-level vulnerabilities can be challenging to exploit, but they still have a considerable impact on smart contract execution, such as allowing public access to critical functions.
● Low	Low-level vulnerabilities are primarily associated with outdated or unused code snippets that generally do not significantly impact execution, sometimes they can be ignored.
● Informational	Informational vulnerabilities, code style violations, and informational statements do not affect smart contract execution and can typically be disregarded.

Executive Summary

According to the Assure assessment, the Customer's smart contract is **Well Secured**.

Insecure	Poorly Secured	Secured	<u>Well Secured</u>

Scope

Target Code And Revision

For this audit, we performed research, investigation, and review of the EchoMetrix contracts followed by issue reporting, along with mitigation and remediation instructions outlined in this report.

Target Code And Revision

Project	Assure
Language	Solidity
Codebase	ContractMTX.sol [SHA256] 002ca2e29bae26c219de9c9e3ac27cd3ca23ee8db35b9add6da3426fae8b1343 Deployed version: https://etherscan.io/token/0xa1ecd506d5b178d7220fe175013ffa43ccad9610
Audit Methodology	Static, Manual

Attacks made to the contract

In order to check for the security of the contract, we tested several attacks in order to make sure that the contract is secure and follows best practices.

Category	Item
Code review & Functional Review	<ul style="list-style-type: none">• Compiler warnings.• Race conditions and Reentrancy.• Cross-function race conditions.• Possible delays in data delivery.• Oracle calls.• Front running.• Timestamp dependence.• Integer Overflow and Underflow.• DoS with Revert.• DoS with block gas limit.• Methods execution permissions.• Economy model.• Private user data leaks.• Malicious Event log.• Scoping and Declarations.• Uninitialized storage pointers.• Arithmetic accuracy.• Design Logic.• Cross-function race conditions.• Safe Zeppelin module.• Fallback function security.• Overpowered functions / Owner privileges

AUDIT OVERVIEW



HIGH

No high vulnerabilities were found.



MEDIUM

1. Front-Running Vulnerability in Initial Liquidity Addition [Acknowledge]

Issue: The unleashTheMTX() function allows the owner to add initial liquidity without any protection against front-running. Malicious actors can monitor the mempool and front-run this transaction, potentially gaining an unfair advantage in the initial token distribution. This is a common issue that has been exploited in many token launches.

Recommendation: Implement a private liquidity addition process or use a lock mechanism, also consider using a launchpad or time-locked liquidity addition or set initial buy/sell fees to very high values before launch and reduce them after liquidity is added.

2. Ignored Failure of ETH Transfers [Fixed ✓]

Issue: Distributes ETH to teamWallet, treasuryWallet, and revWallet via low-level call but ignores the returned success flag. Failed transfers silently leave ETH trapped in the contract.

Recommendation: Ensure each transfer either succeeds or the entire transaction reverts, or implement a retry/pull-payment mechanism.

Fix: Added

```
require(success, "Withdrawal failed");
```

3. Gas-limit Denial-of-Service in Airdrops [Acknowledge]

Issue: Unbounded loop over input arrays can hit block gas limits if too many recipients are specified, reverting the entire airdrop.

Recommendation: Enforce a maximum length: `require(addresses.length <= 200, "Too many airdrops")`. Consider batch-slicing off-chain or via multiple transactions.



LOW

1. Potential Reentrancy in swapBack() [Acknowledge]

Issue: While the swapping modifier provides some protection, the external calls to wallet addresses could potentially be malicious contracts. The state changes occur after these calls, which is not ideal.

Recommendation:

Consider adding reentrancy guards for all external calls.

2. Fee Validation Inconsistency [Fixed ✓]

Issue: The function claims to limit fees to 4% in the require messages ("less than or equal to 4%") but actually checks against 60 (which would be 6%). This is inconsistent and misleading.

Recommendation:

```
require(_buyTotalFees <= 40, "Buy fees must be less than or equal to 4%");  
require(_sellTotalFees <= 40, "Sell fees must be less than or equal to 4%");
```

Fix: Require message edited



INFORMATIONAL

No informational issues were found.

Technical Findings Summary

Findings

Vulnerability Level	Total	Mitigated	Not Apply	Acknowledged	Partially Fixed	Fixed
High						
Medium	3			2		1
Low	2			1		1
Informational						

Assessment Results

Score Results

Review	Score
Global Score	90/100
Assure KYC	https://projects.assureddefi.com/project/echometrix
Audit Score	90/100

The Following Score System Has been Added to this page to help understand the value of the audit, the maximum score is 100, however to attain that value the project must pass and provide all the data needed for the assessment. Our Passing Score has been changed to 84 Points for a higher standard, if a project does not attain 85% is an automatic failure. Read our notes and final assessment below. The Global Score is a combination of the evaluations obtained between having or not having KYC and the type of contract audited together with its manual audit.

Audit PASS

Following our comprehensive security audit of the token contract for the EchoMetrix project, we inform you that the project has met the necessary security standards.

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Assure Defi has conducted an independent security assessment to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the reviewed code for the scope of this assessment. This report does not constitute agreement, acceptance, or advocating for the Project, and users relying on this report should not consider this as having any merit for financial EchoMetrix in any shape, form, or nature. The contracts audited do not account for any economic developments that the Project in question may pursue, and the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude, and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are entirely free of exploits, bugs, vulnerabilities or depreciation of technologies.

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