

Security Assessment: PlutoChain TOKEN

December 1, 2024



- Audit Status: **Pass**
- Audit Edition: **Advance**
































Risk Analysis

Classifications of Manual Risk Results

Classification	Description
 Critical	Danger or Potential Problems.
 High	Be Careful or Fail test.
 Medium	Pass, Not-Detected or Safe Item.
 Low	Function Detected

Manual Code Review Risk Results

Contract Privilege	Description
 Buy Tax	0%
 Sale Tax	0%
 Cannot Buy	Pass
 Cannot Sale	Pass
 Max Tax	0%
 Modify Tax	No
 Fee Check	Pass
 Is Honeypot?	Not Detected
 Trading Cooldown	Not Detected
 Can Pause Trade?	Pass
 Pause Transfer?	Not-Detected
 Max Tx?	Pass
 Is Anti Whale?	Not-Detected
 Is Anti Bot?	Not-Detected

Contract Privilege	Description
 Is Blacklist?	Not-Detected
 Blacklist Check	Pass
 is Whitelist?	Not-Detected
 Can Mint?	Pass
 Is Proxy?	Not Detected
 Can Take Ownership?	Not Detected
 Hidden Owner?	Not-Detected
 Owner	0x57272861395F1858eA5400fbB7A24b7Cebc211A0
 Self Destruct?	Not Detected
 External Call?	Not-Detected
 Other?	Not Detected
 Holders	1
 Auditor Confidence	Medium
 KYC Present	No
 KYC URL	

The following quick summary it's added to the project overview; however, there are more details about the audit and its results. Please read every detail.

Project Overview

Token Summary

Parameter	Result
Address	0x1F385578266496cD4a4c435a6BB2A60b9bD9CEEf
Name	PlutoChain
Token Tracker	PlutoChain (PLUTO)
Decimals	18
Supply	300,000,000
Platform	ETHEREUM
compiler	v0.8.26+commit.8a97fa7a
Contract Name	PlutoChain
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://etherscan.io/address/0x1F385578266496cD4a4c435a6BB2A60b9bD9CEEf#code
Payment Tx	Corporate

Main Contract Assessed Contract Name

Name	Contract	Live
PlutoChain	0x1F385578266496cD4a4c435a6BB2A60b9bD9CEEf	Yes

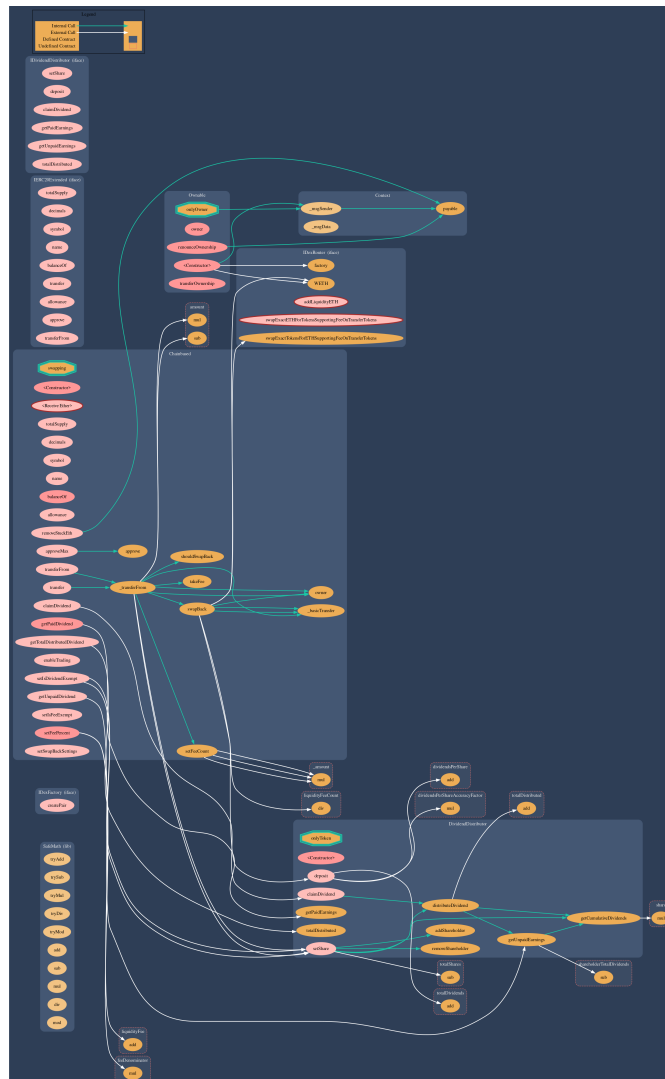
TestNet Contract was Not Assessed

Solidity Code Provided

SolidID	File Sha-1	FileName
PlutoChain	d491e62d9dfc55296754e342308406413a0844cb	PlutoChain.sol
PlutoChain		.sol
PlutoChain		.sol
PlutoChain		.sol
PlutoChain		.sol
PlutoChain		.sol

Call Graph

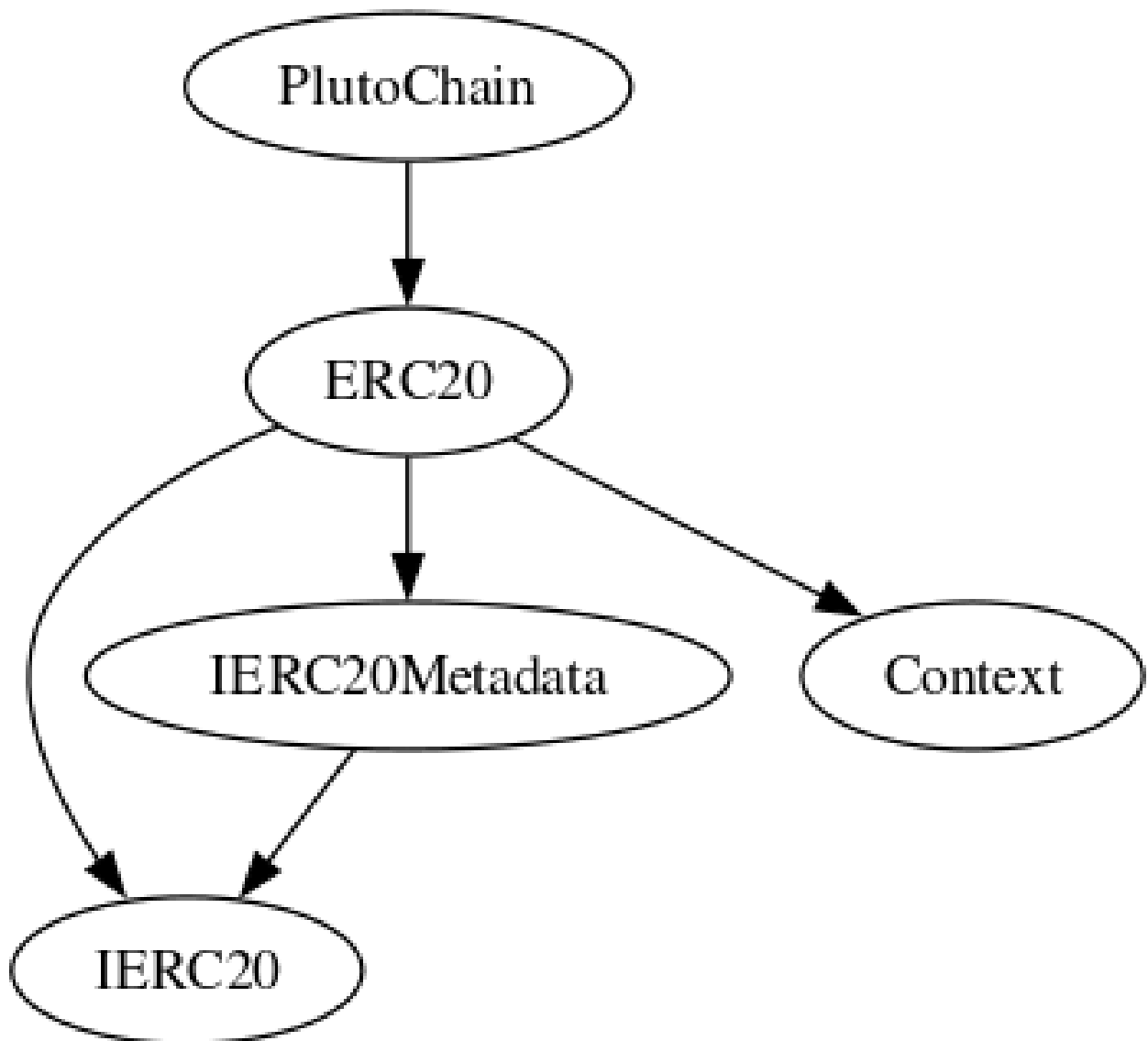
The contract for PlutoChain has the following call graph structure.



Inheritance






The contract for PlutoChain has the following inheritance structure.

The Project has a Total Supply of 300,000,000








Technical Findings Summary

Classification of Risk

Severity	Description
 Critical	Risks are those that impact the safe functioning of a platform and must be addressed before launch. Users should not invest in any project with outstanding critical risks.
 High	Risks can include centralization issues and logical errors. Under specific circumstances, these major risks can lead to loss of funds and/or control of the project.
 Medium	Risks may not pose a direct risk to users' funds, but they can affect the overall functioning of a platform
 Low	Risks can be any of the above but on a smaller scale. They generally do not compromise the overall integrity of the Project, but they may be less efficient than other solutions.
 Informational	Errors are often recommended to improve the code's style or certain operations to fall within industry best practices. They usually do not affect the overall functioning of the code.

Findings

Severity	Found	Pending	Resolved
 Critical	0	0	0
 High	0	0	0
 Medium	0	0	0
 Low	0	0	0
 Informational	0	0	0
Total	0	0	0

Social Media Checks

Social Media	URL	Result
Twitter	https://x.com/PlutoChain	Pass
Other	https://discord.gg/PlutoChain	Yes
Website	https://plutochain.io/	Pass
Telegram	https://t.me/PlutoChainAnnouncements/	Pass

We recommend to have 3 or more social media sources including a completed working websites.

Social Media Information Notes:

Auditor Notes: undefined

Project Owner Notes:



Assessment Results

Score Results

Review	Score
Overall Score	86/100
Auditor Score	90/100
Review by Section	Score
Manual Scan Score	9
Auto Scan Score	37
Advance Check Score	40

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.

Audit Passed



Assessment Results

Important Notes:

- General Overview: The contract is based on OpenZeppelin's ERC20 implementation, which is widely used and well-audited. Implements standard ERC20 functions with additional safety features like `increaseAllowance` and `decreaseAllowance`.¹
- Security Features:¹
- Reentrancy: Not a concern due to no external calls in token operations.¹
- Overflow/Underflow: Solidity 0.8.x handles these errors natively.¹
- Zero Address Checks: Properly implemented in critical functions.¹
- Potential Risks: Allowance Race Condition: Exists but mitigated by `increaseAllowance` and `decreaseAllowance`.¹
- Hooks: `_beforeTokenTransfer` and `_afterTokenTransfer` are empty but can be overridden, which could introduce risks if not managed properly.¹
- Access Control: Initial minting is controlled by the contract deployer, who receives the total supply.¹
- Code Quality: Code is clean and follows OpenZeppelin's standards. Functions are well-documented, enhancing readability and maintainability.¹
- Testing and Deployment: Ensure comprehensive testing,

especially if hooks are overridden. Verify deployment parameters, particularly the initial supply and owner address.

Auditor Score =90
Audit Passed



Appendix

Finding Categories

Centralization / Privilege

Centralization / Privilege findings refer to either feature logic or implementation of components that act against the nature of decentralization, such as explicit ownership or specialized access roles in combination with a mechanism to relocate funds.

Gas Optimization

Gas Optimization findings do not affect the functionality of the code but generate different, more optimal EVM opcodes resulting in a reduction on the total gas cost of a transaction.

Logical Issue

Logical Issue findings detail a fault in the logic of the linked code, such as an incorrect notion on how `block.timestamp` works.

Control Flow

Control Flow findings concern the access control imposed on functions, such as owner-only functions being invoke-able by anyone under certain circumstances.

Volatile Code

Volatile Code findings refer to segments of code that behave unexpectedly on certain edge cases that may result in a vulnerability.

Coding Style

Coding Style findings usually do not affect the generated byte-code but rather comment on how to make the codebase more legible and, as a result, easily maintainable.

Inconsistency

Inconsistency findings refer to functions that should seemingly behave similarly yet contain different code, such as a constructor assignment imposing different requirements on the input variables than a setter function.

Coding Best Practices

ERC 20 Coding Standards are a set of rules that each developer should follow to ensure the code meets a set of criteria and is readable by all the developers.

Disclaimer

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 advocacy for the Project, and users relying on this report should not consider this as having any merit for financial advice 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 deprecation of technologies.

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