

CFG NINJA AUDITS

Security Assessment

Ordinal Satoshi Token

June 20, 2023

Audit Status: Pass

Audit Edition: Basic



POWERED BY BLADE POOL

Risk Analysis

Classifications of Manual Risk Results

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

Manual Code Review Risk Results

Contract Priviledge	Description
Buy Tax	0%
Sale Tax	0%
Cannot Sale	Pass
Cannot Sale	Pass
Max Tax	0%
Modify Tax	No
Fee Check	Pass
Is Honeypot?	Not Detected
Trading Cooldown	Not Detected
Can Pause Trade?	Detected,Owner need to enable trade.
Pause Transfer?	Detected, Owner need to enable trade.

Contract Priviledge	Description
Max Tx?	Pass
Is Anti Whale?	Not Detected
Is Anti Bot?	Not Detected
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	0xa4E0252d1ceb649655D25e24840405ca9690E774
Self Destruct?	Not Detected
External Call?	Not Detected
Other?	Not Detected
Holders	1
Auditor Confidence	Low

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	0xa4E0252d1ceb649655D25e24840405ca9690E774
Name	Ordinal Satoshi
Token Tracker	Ordinal Satoshi (ORDISAT)
Decimals	18
Supply	100,000,000
Platform	Ethereum
compiler	v0.8.19+commit.7dd6d404
Contract Name	OrdinalSatoshi
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://etherscan.io/token/0x8FeD86b653A37386e01B63C6833B637ee8399AD4#code
Payment Tx	Corporate

Main Contract Assessed
Contract Name

Name	Contract	Live
Ordinal Satoshi	0xa4E0252d1ceb649655D25e24840405ca9690E774	Yes

TestNet Contract Assessed
Contract Name

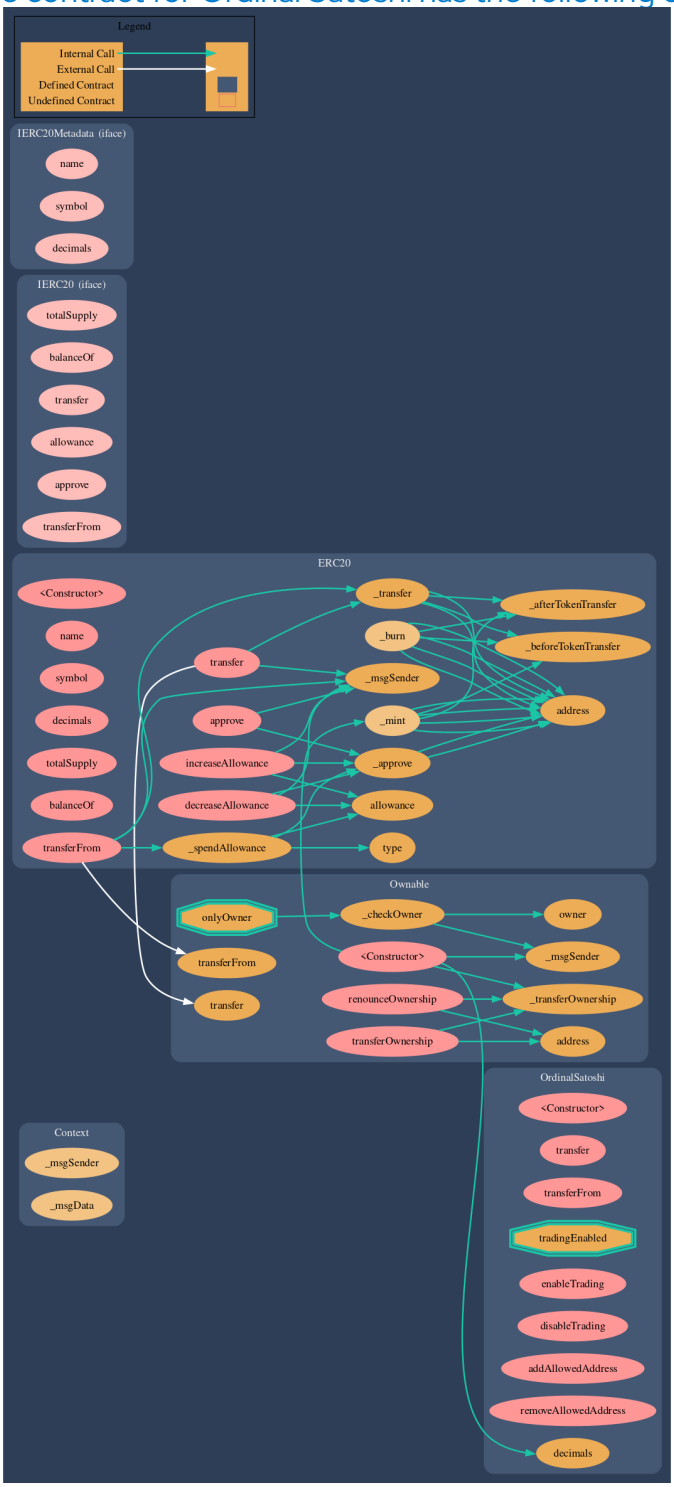
Name	Contract	Live
Ordinal Satoshi	0x1067acbF44D547DFac1f66F875a07e72CB0E8D6B	Yes

Solidity Code Provided

SolID	File Sha-1	FileName
Ordinal	d6aaf218846b38ee6aaf6abbacfdbf26b34edf87	ordinal2.sol
Ordinal		
Ordinal		
Ordinal		

Call Graph

The contract for Ordinal Satoshi has the following call graph structure.



Smart Contract Vulnerability Checks

The Smart Contract Weakness Classification Registry (SWC Registry) is an implementation of the weakness classification scheme proposed in EIP-1470. It is loosely aligned to the terminologies and structure used in the Common Weakness Enumeration (CWE) while overlaying a wide range of weakness variants that are specific to smart contracts.

ID	Severity	Name	File	location
SWC-100	Pass	Function Default Visibility	ordinal2.sol	L: 0 C: 0
SWC-101	Pass	Integer Overflow and Underflow.	ordinal2.sol	L: 0 C: 0
SWC-102	Pass	Outdated Compiler Version file.	ordinal2.sol	L: 0 C: 0
SWC-103	Pass	A floating pragma is set.	ordinal2.sol	L: 0 C: 0
SWC-104	Pass	Unchecked Call Return Value.	ordinal2.sol	L: 0 C: 0
SWC-105	Pass	Unprotected Ether Withdrawal.	ordinal2.sol	L: 0 C: 0
SWC-106	Pass	Unprotected SELFDESTRUCT Instruction	ordinal2.sol	L: 0 C: 0
SWC-107	Pass	Read of persistent state following external call.	ordinal2.sol	L: 0 C: 0
SWC-108	Pass	State variable visibility is not set..	ordinal2.sol	L: 0 C: 0
SWC-109	Pass	Uninitialized Storage Pointer.	ordinal2.sol	L: 0 C: 0
SWC-110	Pass	Assert Violation.	ordinal2.sol	L: 0 C: 0

ID	Severity	Name	File	location
SWC-111	Pass	Use of Deprecated Solidity Functions.	ordinal2.sol	L: 0 C: 0
SWC-112	Pass	Delegate Call to Untrusted Callee.	ordinal2.sol	L: 0 C: 0
SWC-113	Pass	Multiple calls are executed in the same transaction.	ordinal2.sol	L: 0 C: 0
SWC-114	Pass	Transaction Order Dependence.	ordinal2.sol	L: 0 C: 0
SWC-115	Pass	Authorization through tx.origin.	ordinal2.sol	L: 0 C: 0
SWC-116	Pass	A control flow decision is made based on The block.timestamp environment variable.	ordinal2.sol	L: 0 C: 0
SWC-117	Pass	Signature Malleability.	ordinal2.sol	L: 0 C: 0
SWC-118	Pass	Incorrect Constructor Name.	ordinal2.sol	L: 0 C: 0
SWC-119	Pass	Shadowing State Variables.	ordinal2.sol	L: 0 C: 0
SWC-120	Pass	Potential use of block.number as source of randonmness.	ordinal2.sol	L: 0 C: 0
SWC-121	Pass	Missing Protection against Signature Replay Attacks.	ordinal2.sol	L: 0 C: 0
SWC-122	Pass	Lack of Proper Signature Verification.	ordinal2.sol	L: 0 C: 0
SWC-123	Pass	Requirement Violation.	ordinal2.sol	L: 0 C: 0
SWC-124	Pass	Write to Arbitrary Storage Location.	ordinal2.sol	L: 0 C: 0
SWC-125	Pass	Incorrect Inheritance Order.	ordinal2.sol	L: 0 C: 0

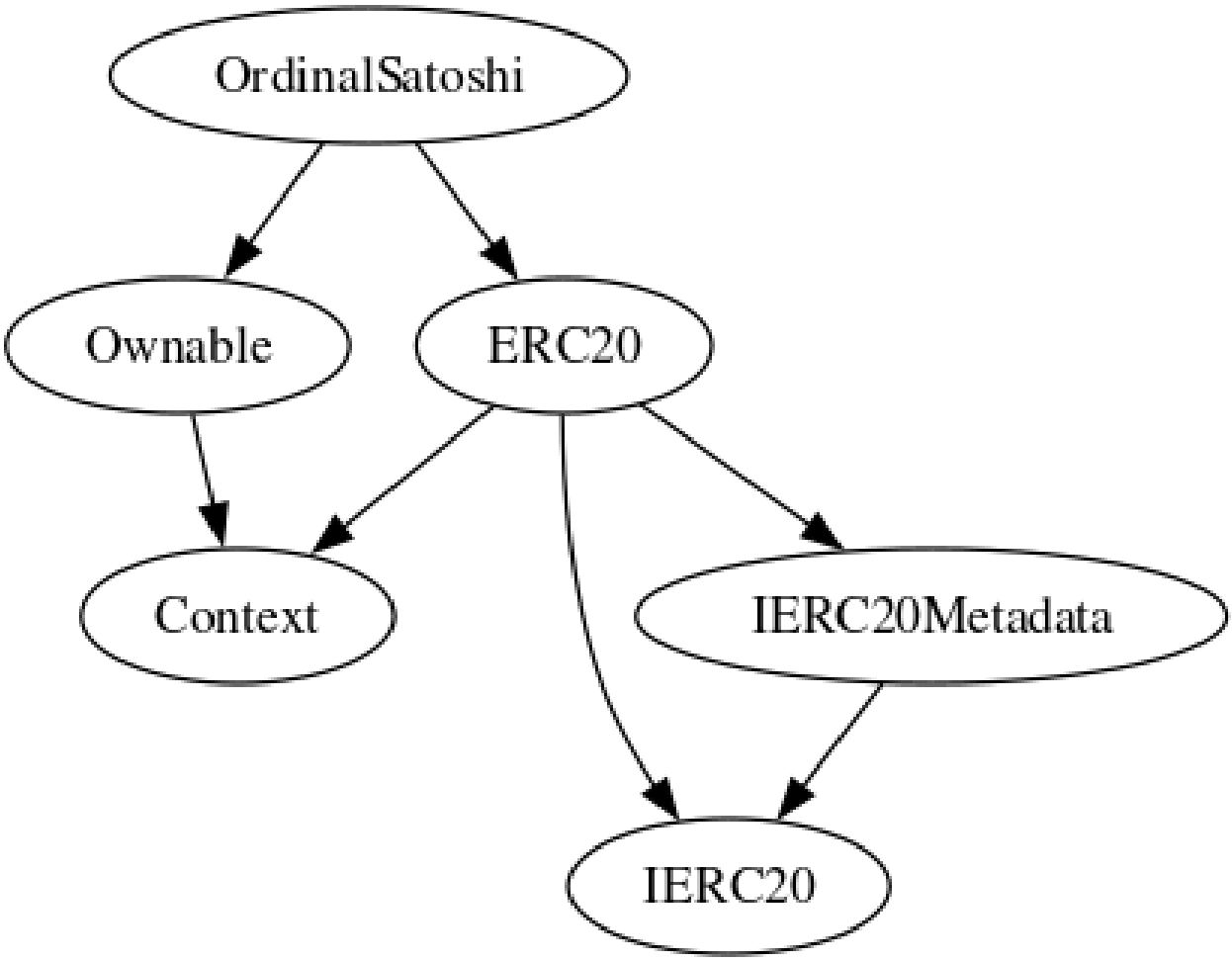


ID	Severity	Name	File	location
SWC-126	Pass	Insufficient Gas Griefing.	ordinal2.sol	L: 0 C: 0
SWC-127	Pass	Arbitrary Jump with Function Type Variable.	ordinal2.sol	L: 0 C: 0
SWC-128	Pass	DoS With Block Gas Limit.	ordinal2.sol	L: 0 C: 0
SWC-129	Pass	Typographical Error.	ordinal2.sol	L: 0 C: 0
SWC-130	Pass	Right-To-Left-Override control character (U +202E).	ordinal2.sol	L: 0 C: 0
SWC-131	Pass	Presence of unused variables.	ordinal2.sol	L: 0 C: 0
SWC-132	Pass	Unexpected Ether balance.	ordinal2.sol	L: 0 C: 0
SWC-133	Pass	Hash Collisions with Multiple Variable Length Arguments.	ordinal2.sol	L: 0 C: 0
SWC-134	Pass	Message call with hardcoded gas amount.	ordinal2.sol	L: 0 C: 0
SWC-135	Pass	Code With No Effects (Irrelevant/Dead Code).	ordinal2.sol	L: 0 C: 0
SWC-136	Pass	Unencrypted Private Data On-Chain.	ordinal2.sol	L: 0 C: 0

We scan the contract for additional security issues using MYTHX and industry-standard security scanning tools.

Inheritance

The contract for Ordinal Satoshi has the following inheritance structure.



Smart Contract Advance Checks

ID	Severity	Name	Result	Status
ORDISAT-01	Low	Potential Sandwich Attacks.	Pass	Not Detected
ORDISAT-02	Low	Function Visibility Optimization	Pass	Not Detected
ORDISAT-03	High	Lack of Input Validation.	Pass	Not Detected
ORDISAT-04	High	Centralized Risk In addLiquidity.	Pass	Not Detected
ORDISAT-05	Low	Missing Event Emission.	Pass	Not Detected
ORDISAT-06	Low	Conformance with Solidity Naming Conventions.	Pass	Not Detected
ORDISAT-07	Low	State Variables could be Declared Constant.	Pass	Not Detected
ORDISAT-08	Low	Dead Code Elimination.	Pass	Not Detected
ORDISAT-09	High	Third Party Dependencies.	Pass	Not Detected
ORDISAT-10	High	Initial Token Distribution.	Pass	Not Detected
ORDISAT-11	High	Router and Pair not allowed by default.	Pass	Not Detected
ORDISAT-12	High	Centralization Risks In The X Role	Pass	Not Detected
ORDISAT-13	Informational	Extra Gas Cost For User..	Pass	Not Detected
ORDISAT-14	Medium	Unnecessary Use Of SafeMath	Pass	Not Detected
ORDISAT-15	Medium	Symbol Length Limitation due to Solidity Naming Standards.	Pass	Not Detected



ID	Severity	Name	Result	Status
ORDISAT-16	Medium	Taxes can be up to 100%	Pass	Not Detected
ORDISAT-17	Informational	Conformance to numeric notation best practice.	Pass	Not Detected
ORDISAT-18	Critical	Stop Transactions by using Enable Trade.	Fail	Detected

ORDISAT-18 | Stop Transactions by using Enable Trade.

Category	Severity	Location	Status
Logical Issue	Critical	ordinal2.sol: L: 595 C: 14	Detected

Description

Enable Trade is presend on the following contract and when combined with Exclude from fees it can be considered a whitelist process, this will allow anyone to trade before others and can represent and issue for the holders.

Remediation

We recommend the project owner to carefully review this function and avoid problems when performing both actions.

Project Action

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	1	0	0
High	0	0	0
Medium	0	0	0
Low	0	0	0
Informational	0	0	0
Total	1	0	0

Social Media Checks

Social Media	URL	Result
Twitter	https://twitter.com/OrdinalSatoshi	Pass
Other	https://discord.com/invite/ordinalsatoshi	Pass
Website	https://ordinalsatoshi.io/	Pass
Telegram	https://t.me/OrdinalSatoshiOfficial	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	97/100
Auditor Score	82/100
Review by Section	**Score**
Manual Scan Score	28/53
SWC Scan Score	37 /37
Advance Check Score	32 /19

The Following Score System Has been Added to this page to help understand the value of the audit, the maximun score is 100, however to attain that value the project most pass and provide all the data needed for the assessment. Our Passing Score has been changed to 80 Points, if a project does not attain 80% is an automatic failure. Read our notes and final assessment below.

Audit Passed



Assessment Results

Important Notes:

- The Contract has enable trade.
- The owner will need to enable trade.
- The project has KYC with AssureDefi.
- Please DYOR on the project.

Auditor Score =82
Audit Passed



Appendix

Finding Categories

Centralization / Privilege

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

Gas Optimization

Gas Optimization findings do not affect the functionality of the code but generate different, more optimalEVM 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 howblock.timestamp works.

Control Flow

Control Flow findings concern the access control imposed on functions, such as owner-only functionsbeing 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 mayresult in a vulnerability.

Coding Style

Coding Style findings usually do not affect the generated byte-code but rather comment on how to makethe 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 require statements on the input variables than a setterfunction.

Coding Best Practices

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



Disclaimer

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