

# CFG NINJA AUDITS

Security Assessment

**BABYHKDOGE Token** 

June 6, 2023

Audit Status: Pass

Audit Edition: Advance



3LADE POOL



## **Risk Analysis**

#### **Classifications of Manual Risk Results**

Classification	Description
Critical	Danger or Potential Problems.
Major	Be Careful or Fail test.
Minor	Pass, Not-Detected or Safe Item.
<ul><li>Informational</li></ul>	Function Detected

#### **Manual Code Review Risk Results**

Contract Priviledge	Description
Buy Tax	1
Sale Tax	1
Cannot Sale	Pass
Cannot Sale	Pass
Max Tax	1
Modify Tax	Not Detected
Fee Check	Pass
Is Honeypot?	Not detected
Trading Cooldown	Not Detected
Can Pause Trade?	Pass
Pause Transfer?	Not Detected





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?	Detected
Can Mint?	Pass
Is Proxy?	Not Detected
Can Take Ownership?	Not detected
Hidden Owner?	Not detected
<ul><li>Owner</li></ul>	0xa91b06c2dfc4698789b5cc13a9430d9e483aec7c
Self Destruct?	Not Detected
① Other?	Not detected
Other?	Not detected
<ul><li>Holders</li></ul>	2
Auditor Confidence	High

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	0x82a4fe2C1988Df296869CE2bE82EA14c3E679986
Name	BABYHKDOGE
Token Tracker	BABYHKDOGE (BABYHKDOGE)
Decimals	9
Supply	420,690,000,000
Platform	Binance Smart Chain
compiler	v0.8.18+commit.87f61d96
Contract Name	BABYHKDOGE
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://bscscan.com/address/0x82a4fe2C1988Df296869CE2b E82EA14c3E679986#code
Payment Tx	Oxccea1d3d4ececda7f1d411a8531a69b04a7e97019ea2481d3fe8 67a8723bc7b2





## Main Contract Assessed Contract Name

Name	Contract	Live
BABYHKDOGE	0x82a4fe2C1988Df296869CE2bE82EA14c3E679986	Yes

#### **TestNet Contract was Not Assessed**

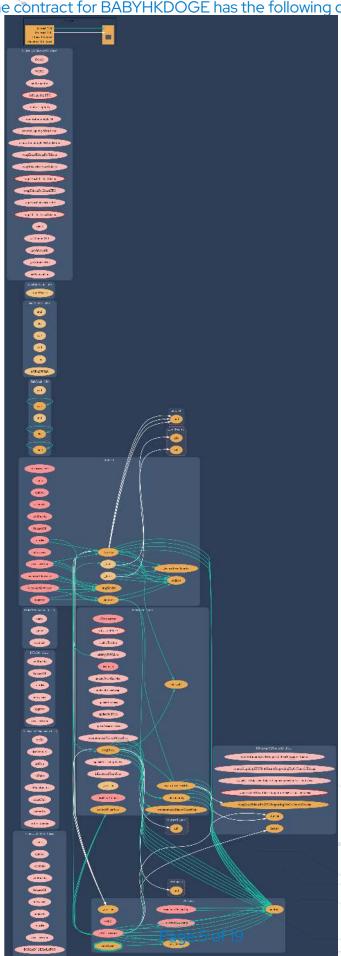
#### **Solidity Code Provided**

SolID	File Sha-1	FileName
BABYHKDOGE	9de509995c3867fa3184cec7960b7a5d89396d	5f BABYHKDOGE.sol
BABYHKDOGE		
BABYHKDOGE		
BABYHKDOGE		



## Call Graph

The contract for BABYHKDOGE 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	BABYHKDOGE.sol	L: 0 C: 0
SWC-101	Pass	Integer Overflow and Underflow.	BABYHKDOGE.sol	L: 0 C: 0
SWC-102	Pass	Outdated Compiler Version file.	BABYHKDOGE.sol	L: 0 C: 0
SWC-103	Low	A floating pragma is set.	BABYHKDOGE.sol	L: 7 C: 0
SWC-104	Pass	Unchecked Call Return Value.	BABYHKDOGE.sol	L: 0 C: 0
SWC-105	Pass	Unprotected Ether Withdrawal.	BABYHKDOGE.sol	L: 0 C: 0
SWC-106	Pass	Unprotected SELFDESTRUCT Instruction	BABYHKDOGE.sol	L: 0 C: 0
SWC-107	Pass	Read of persistent state following external call.	BABYHKDOGE.sol	L: 0 C: 0
SWC-108	Pass	State variable visibility is not set	BABYHKDOGE.sol	L: 0 C: 0
SWC-109	Pass	Uninitialized Storage Pointer.	BABYHKDOGE.sol	L: 0 C: 0
SWC-110	Pass	Assert Violation.	BABYHKDOGE.sol	L: 0 C: 0





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





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

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





## Smart Contract Vulnerability Details

SWC-103 - Floating Pragma.

CWE-664: Improper Control of a Resource	Through its
Lifetime.	

**References:** 

#### **Description:**

Contracts should be deployed with the same compiler version and flags that they have been tested with thoroughly. Locking the pragma helps to ensure that contracts do not accidentally get deployed using, for example, an outdated compiler version that might introduce bugs that affect the contract system negatively.

#### Remediation:

Lock the pragma version and also consider known bugs (https://github.com/ethereum/solidity/releases) for the compiler version that is chosen.

Pragma statements can be allowed to float when a contract is intended for consumption by other developers, as in the case with contracts in a library or EthPM package. Otherwise, the developer would need to manually update the pragma in order to compile locally.

#### **References:**

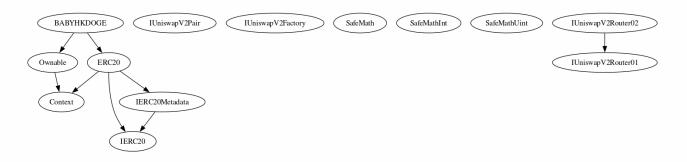
Ethereum Smart Contract Best Practices - Lock pragmas to specific compiler version.





## **Inheritance**

The contract for BABYHKDOGE has the following inheritance structure.





## **Smart Contract Advance Checks**

ID	Severity	Name	Result	Status
BABYHKDO GE-01	Minor	Potential Sandwich Attacks.	Pass	Not-Found
BABYHKDO GE-02	Minor	Function Visibility Optimization	Pass	Detected
BABYHKDO GE-03	Minor	Lack of Input Validation.	Pass	Detected
BABYHKDO GE-04	Major	Centralized Risk In addLiquidity.	Pass	Detected
BABYHKDO GE-05	Minor	Missing Event Emission.	Pass	Detected
BABYHKDO GE-06	Minor	Conformance with Solidity Naming Conventions.	Pass	Detected
BABYHKDO GE-07	Minor	State Variables could be Declared Constant.	Pass	Not-Found
BABYHKDO GE-08	Minor	Dead Code Elimination.	Pass	Not-Found
BABYHKDO GE-09	Major	Third Party Dependencies.	Pass	Not-Found
BABYHKDO GE-10	Major	Initial Token Distribution.	Pass	Not-Found
BABYHKDO GE-11	Minor	Multisend is present in code.	Pass	Detected
BABYHKDO GE-12	Major	Centralization Risks In The X Role	Pass	Not-Found
BABYHKDO GE-13	Informational	Extra Gas Cost For User	Pass	Not-Found





ID	Severity	Name	Result	Status
BABYHKDO GE-14	Medium	Unnecessary Use Of SafeMath	Fail	Detected
BABYHKDO GE-15	Medium	Symbol Length Limitation due to Solidity Naming Standards.	Pass	Not-Found
BABYHKDO GE-16	Medium	Invalid collection of Taxes during Transfer.	Pass	Not-Found
BABYHKDO GE-17	Informational	Conformance to numeric notation best practice.	Pass	Not-Found
BABYHKDO GE-18	Medium	Stop Transactions by using Enable Trade.	Pass	Not-Detected





#### BABYHKDOGE-14 | Unnecessary Use Of SafeMath

Category	Severity	Location	Status
Logical Issue	Medium	BABYHKDOGE.sol: 7,9	Detected

#### **Description**

The SafeMath library is used unnecessarily. With Solidity compiler versions 0.8.0 or newer, arithmetic operations

will automatically revert in case of integer overflow or underflow.

library SafeMath {

An implementation of SafeMath library is found.

using SafeMath for uint256;

SafeMath library is used for uint256 type in contract.

#### Remediation

We advise removing the usage of SafeMath library and using the built-in arithmetic operations provided by the

Solidity programming language

#### **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.
Major	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
Minor	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.
<ul><li>Informational</li></ul>	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
Major	1	0	0
Medium	0	0	0
Minor	0	0	0
<ul><li>Informational</li></ul>	0	0	0
Total	1	0	-0





## **Social Media Checks**

Social Media	URL	Result
Twitter	https://twitter.com/babyhkdoge	Pass
Other		Fail
Website	https://babyhkdoge.xyz	Pass
Telegram	https://t.me/BABYHKDOGEGLOBAL	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	84/100
Auditor Score	89/100
Review by Section	Score
Manual Scan Score	36/53
SWC Scan Score	36/37
Advance Check Score	12 / 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:**

- Contract has taxes up to 25%.
- Owner can't set max tx amount.
- No high-risk Exploits/Vulnerabilities Were Found in the Source Code.

## Auditor Score =89 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 owneronly 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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