

SKELETON ECOSYSTEM

SMART CONTRACT AUDIT



Peanut_Butter_Jelly

PBJ

BEP20

0x926cf0cebB455025442C9Bf4E9E13AA696320

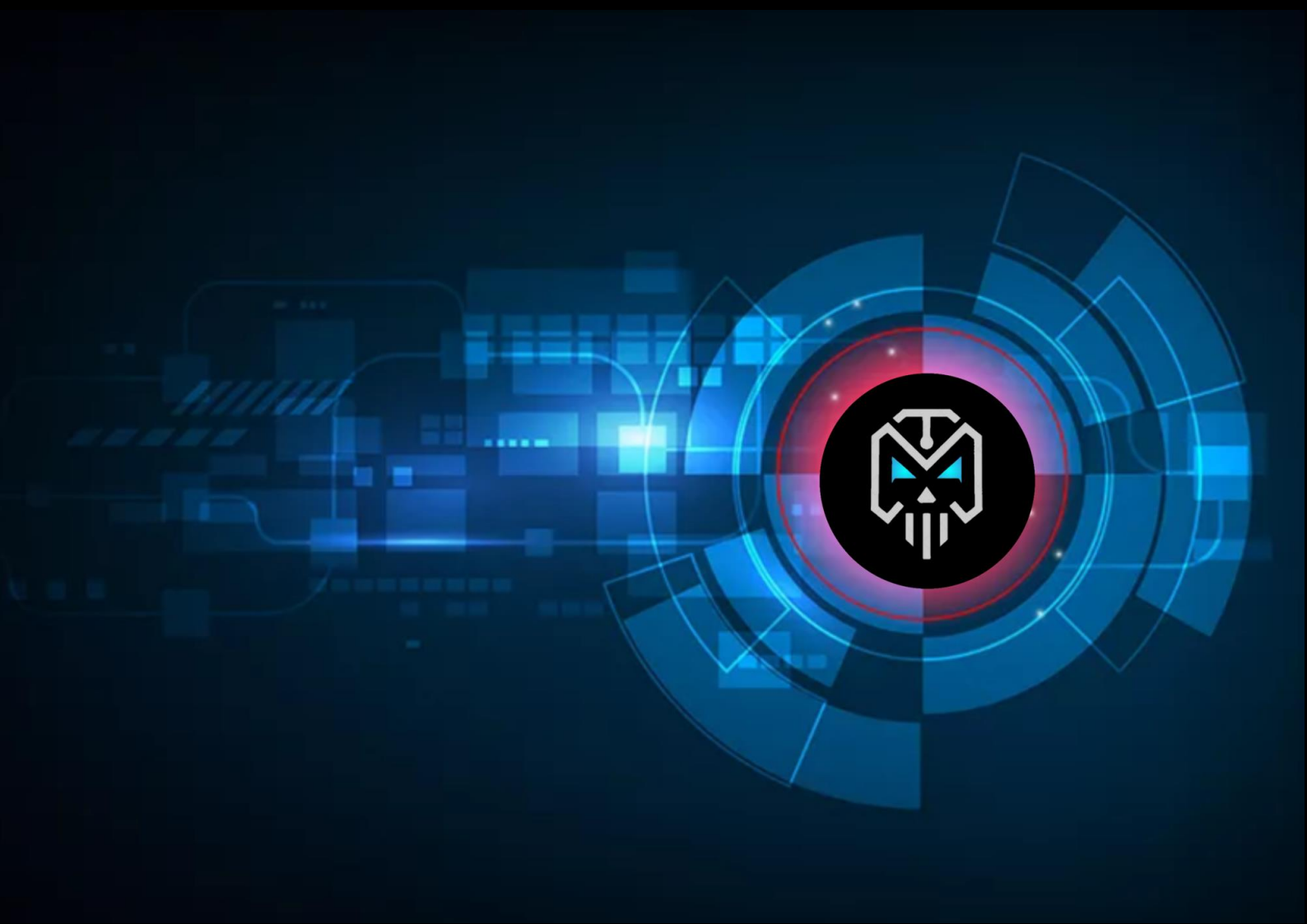


Table of Contents

Table of Contents	1
Disclaimer	2
Overview	3
Creation/Audit Date	3
Verified Socials	3
Contract Functions Analysis	4
Contract Safety and Weakness	8
Detected Vulnerability Description	12
Contract Flow Graph	15
Contract Interaction Graph	16
Inheritance Graph	17
Contract Descriptions	18
Audit Scope	33

Global Disclaimer

This document serves as a disclaimer for the crypto smart contract audit conducted by Skeleton Ecosystem. The purpose of the audit was to review the codebase of the smart contracts for potential vulnerabilities and issues. It is important to note the following:

Limited Scope: The audit is based on the code and information available up to the audit completion date. It does not cover external factors, system interactions, or changes made after the audit. The audit itself can not guarantee 100% safety and can not detect common scam methods like farming and developer sell-out.

No Guarantee of Security: While we have taken reasonable steps to identify vulnerabilities, it is impossible to guarantee the complete absence of security risks or issues. The audit report provides an assessment of the contract's security as of the audit date.

Continued Development: Smart contracts and blockchain technology are evolving fields. Updates, forks, or changes to the contract post-audit may introduce new risks that were not present during the audit.

Third-party Code: If the smart contract relies on third-party libraries or code, those components were not thoroughly audited unless explicitly stated. Security of these dependencies is the responsibility of their respective developers.

Non-Exhaustive Testing: The audit involved automated analysis, manual review, and testing under controlled conditions. It is possible that certain vulnerabilities or issues may not have been identified.

Risk Evaluation: The audit report includes a risk assessment for identified vulnerabilities. It is recommended that the development team carefully reviews and addresses these risks to mitigate potential exploits.

Not Financial Advice: This audit report is not intended as financial or investment advice. Decisions regarding the use, deployment, or investment in the smart contract should be made based on a comprehensive assessment of the associated risks.

By accessing and using this audit report, you acknowledge and agree to the limitations outlined above. Skeleton Ecosystem and its auditors shall not be held liable for any direct or indirect damages resulting from the use of the audit report or the smart contract itself.

Please consult with legal, technical, and financial professionals before making any decisions related to the smart contract.

Overview

Contract Name	BABYTOKEN
Ticker/Symbol	PBJ
Blockchain	Binance Smart Chain BEP20
Contract Address	0x926cf0cebB455025442C9Bf4E9E13AA696320162
Creator Address	0xEea616Dfc901b4f83aA3B89600D419538FFE7348
Current Owner Address	0x00
Contract Explorer	https://bscscan.com/address/0x926cf0cebb455025442c9bf4e9e13aa696320162#code
Compiler Version	v0.8.4+commit.c7e474f2
License	MIT
Optimisation	Yes with 200 Runs
Total Supply	1,000,000 PBJ
Decimals	18




Creation/Audit

Contract Deployed	23.01.2024
Audit Created	15.02.2024
Audit Update	V 1.0

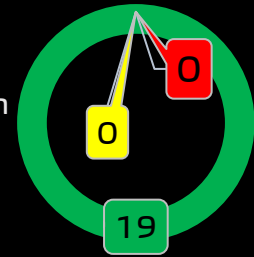
Verified Socials








Website	-
Telegram	https://t.me/Baby_Peanut_Butter_Jelly
Twitter (X)	https://twitter.com/P_NutButerJelly


Contract Function Analysis

 Pass
  Attention Item
  Risky Item

■ Pass
 ■ Attention
 ■ Risk



Contract Verified		The contract source code is uploaded to blockchain explorer and is open source, so everybody can read it.
Contract Ownership		0x00 Sometimes referred to as the "zero address" or "dead address" and is not owned by anyone.
Buy Tax	9 %	Shows the taxes for purchase transactions. Above 10% may be considered a high tax rate. More than 50% tax rate means may not be tradable. Fee can be set!
Sell Tax	9 %	Shows the taxes for sell transactions. Above 10% may be considered a high tax rate. More than 50% tax rate means may not be tradable. Fee can be set!
Honeypot Analyse		Holder is able to buy and sell. If honeypot: The contract blocks sell transfer from holder wallet. Multiple events may cause honeypot. Trading disabled, extremely high tax
Liquidity Status		Liquidity status on 15.02.2024 Lp Locked: 86.59% Pinklock for 15 days. Lp Burned: 13.03%
Trading Disable Functions		No Trading suspendable function found. If a suspendable code is included, the token maybe neither be bought or sold (honeypot risk). If contract is renounced this function can't be used
Set Fees function	 max 25%	Fee Setting function found. Contract renounced, function can not be triggered by owner. The contract owner ay contain the authority to modify the transaction tax. If the transaction tax is increased to more than 49%, the tokens may not be able to be traded (honeypot risk).
Proxy Contract		Not a Proxy contract.
Mint Function		No Mint Function detected Mint function is transparent or non-existent. Hidden mint functions may increase the amount of tokens in circulation and effect the price of the token. Owner can mint new tokens and sell.

Balance Modifier Function		<p>No Balance Modifier function found.</p> <p>If there is a function for this, the contract owner can have the authority to modify the balance of tokens at other addresses. For example revoke the bought tokens from the holders wallet. Common form of scam: You buy the token, but it's disappearing from your wallet.</p>
Blacklist Function		<p>No Blacklist Setting function found.</p> <p>If there is a blacklist, some addresses may not be able to trade normally. Example: you buy the token and right after your Wallet getting blacklisted. Like so you will be unable to sell. Honeypot Risk.</p>
Whitelist Function		<p>Whitelist Setting function found. Contract renounced, function can not be triggered by owner.</p> <p>If there is a function for this Developer can set zero fee or no max wallet size for addresses (for example team wallets can trade without fee. Can cause farming)</p>
Hidden Owner Analysis		<p>No Hidden or multi owner with authorisation</p> <p>For contract with a hidden owner, developer can still manipulate the contract even if the ownership has been abandoned.</p>
Retrieve Ownership Function		<p>No Functions found which can retrieve ownership of the contract.</p> <p>If this function exists, it is possible for the project owner to regain ownership even after relinquishing it. Also known as fake renounce.</p>
Self Destruct Function		<p>No Self Destruct function found.</p> <p>If this function exists and is triggered, the contract will be destroyed, all functions will be unavailable, and all related assets will be erased.</p>
Specific Tax Changing Function		<p>No Specific Tax Changing Functions found.</p> <p>If it exists, the contract owner may set a very outrageous tax rate for assigned address to block it from trading. Can assign all wallets at once!</p>
Trading Cooldown Function		<p>No Trading Cooldown Function found. If there is a trading cooldown function, the user will not be able to sell the token within a certain time or block after buying. Like a temporary honeypot.</p>
Max Transaction and Holding Modify Function		<p>No Max Transaction and Holding Modify function found</p> <p>If there is a function for this, the maximum trading amount or maximum position can be modified. Can cause honeypot</p>
Transaction Limiting Function		<p>No Transaction Limiter Function Found.</p> <p>The number of overall token transactions may be limited (honeypot risk)</p>

Details of Risk – Attention Items

Removing Risk of contract function based on renounced ownership

Transaction Receipt Event Logs

223

Address

0x926cf0cebb455025442c9bf4e9e13aa696320162

Name

OwnershipTransferred (index_topic_1 address previousOwner, index_topic_2 address newOwner) [View Source](#)

Topics

0

0x8be0079c531659141344cd1fd0a4f28419497f9722a3daafe3b4186f6b6457e0

1: previousOwner

Dec ▾

→ 0xEea6160fc901b4f83aa3B89600D419538FFE7348

2: newOwner

Dec ▾

→ 0x00

Data

0x

Following detected contract functions serve as informational purposes about the contract. The owner has no more authorisation to trigger the following functions.

⚠ Set Fee [Max 25%]

The contract owner may contain the authority to modify the transaction tax. If the transaction tax is increased to more than 49%, the tokens may not be able to be traded (honeypot risk).

```

3115
    ftrace | funcSig
3116    function setLiquidityFee(uint256 value!) external onlyOwner {
3117        liquidityFee = value!;
3118        totalFees = tokenRewardsFee.add(liquidityFee).add(marketingFee);
3119        require(totalFees <= 25, "Total fee is over 25%");
3120    }
3121
    ftrace | funcSig
3122    function setMarketingFee(uint256 value!) external onlyOwner {
3123        marketingFee = value!;
3124        totalFees = tokenRewardsFee.add(liquidityFee).add(marketingFee);
3125        require(totalFees <= 25, "Total fee is over 25%");
3126    }
3127
  
```

⚠ Whitelist [Set Fee Excluded Wallets]

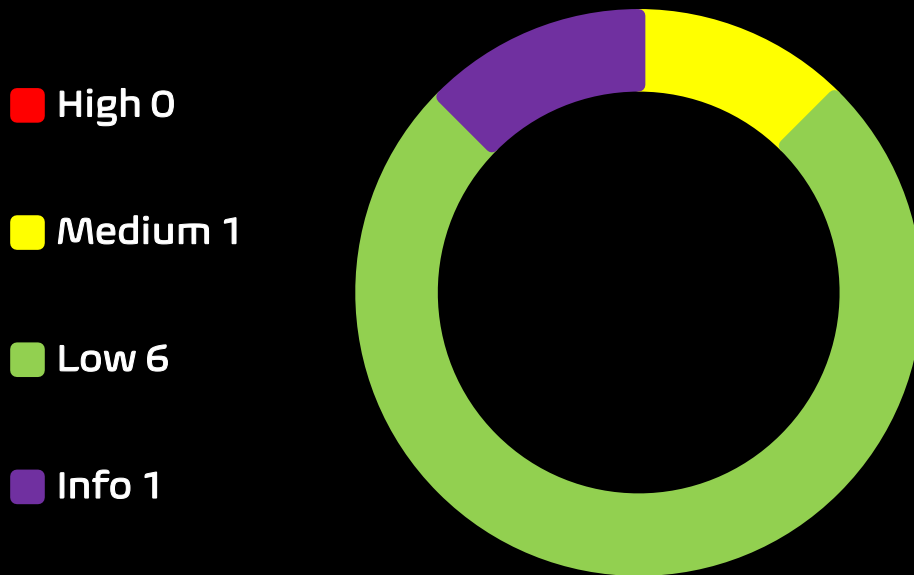
If there is a function for this Developer can set zero fee or no max wallet size for addresses (for example team wallets can trade without fee. Can cause farming)

```

3080
    ftrace | funcSig
3081    function excludeFromFees(address account!) external onlyOwner {
3082        require(
3083            !_isExcludedFromFees[account!],
3084            "BABYTOKEN: Account is already excluded"
3085        );
3086        _isExcludedFromFees[account!] = true;
3087
3088        emit ExcludeFromFees(account!);
3089    }
3090
    ftrace | funcSig
3091    function excludeMultipleAccountsFromFees(
3092        address[] calldata accounts!
3093    ) external onlyOwner {
3094        for (uint256 i = 0; i < accounts!.length; i++) {
3095            _isExcludedFromFees[accounts![i]] = true;
3096        }
3097
3098        emit ExcludeMultipleAccountsFromFees(accounts!);
3099    }
  
```


Contract Security

Total Findings: 8



High Severity Issues: High possibility to cause problems, need to be resolved.

Medium Severity Issue: Will likely cause problems, recommended to resolve.

Low Severity Issues: Won't cause problems, but for improvement purposes could be adjusted.

Informational Severity Issues: Not harmful in any way, information for the developer team.

Contract Security

List of Found Issues

High severity Issues: (0)

Medium severity issues: (1)

- Authorization through tx.origin

Low severity issues: (6)

- Long number literals
- Approve Front Running Attack (Sandwich Bots)
- Outdated Compiler Version
- Missing Events
- Unchecked Array Length
- Re-org Attack

Informational severity issues: (1)

- Public Functions Should be Declared External

Contract Weakness Classisication

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

ID	Description	AI	Manual	Result
SWC-100	Function Default Visibility	Passed	Passed	Passed
SWC-101	Integer Overflow and Underflow	Passed	Passed	Passed
SWC-102	Outdated Compiler Version	Low	Passed	Passed
SWC-103	Floating Pragma	Passed	Passed	Passed
SWC-104	Unchecked Call Return Value	Passed	Passed	Passed
SWC-105	Unprotected Ether Withdrawal	Passed	Passed	Passed
SWC-106	Unprotected SELFDESTRUCT Instruction	Passed	Passed	Passed
SWC-107	Reentrancy	Passed	Passed	Passed
SWC-108	State Variable Default Visibility	Passed	Passed	Passed
SWC-109	Uninitialized Storage Pointer	Passed	Passed	Passed
SWC-110	Assert Violation	Passed	Passed	Passed
SWC-111	Use of Deprecated Solidity Functions	Passed	Passed	Passed
SWC-112	Delegatecall to Untrusted Callee	Passed	Passed	Passed
SWC-113	DoS with Failed Call	Passed	Passed	Passed
SWC-114	Transaction Order Dependence	Passed	Passed	Passed
SWC-115	Authorization through tx.origin	High	Medium	Medium
SWC-116	Block values as a proxy for time	Passed	Passed	Passed
SWC-117	Signature Malleability	Passed	Passed	Passed
SWC-118	Incorrect Constructor Name	Passed	Passed	Passed
SWC-119	Shadowing State Variables	Passed	Passed	Passed

SWC-120	Weak Sources of Randomness from Chain Attributes	Passed	Passed	Passed
SWC-121	Missing Protection against Signature Replay Attacks	Passed	Passed	Passed
SWC-122	Lack of Proper Signature Verification	Passed	Passed	Passed
SWC-123	Requirement Violation	Passed	Passed	Passed
SWC-124	Write to Arbitrary Storage Location	Passed	Passed	Passed
SWC-125	Incorrect Inheritance Order	Passed	Passed	Passed
SWC-126	Insufficient Gas Griefing	Passed	Passed	Passed
SWC-127	Arbitrary Jump with Function Type Variable	Passed	Passed	Passed
SWC-128	DoS With Block Gas Limit	Passed	Passed	Passed
SWC-129	Typographical Error	low	Passed	Passed
SWC-130	Right-To-Left-Override control character (U+202E)	Passed	Passed	Passed
SWC-131	Presence of unused variables	Passed	Passed	Passed
SWC-132	Unexpected Ether balance	Passed	Passed	Passed
SWC-133	Hash Collisions With Multiple Variable Length Arguments	Passed	Passed	Passed
SWC-134	Message call with hardcoded gas amount	Passed	Passed	Passed
SWC-135	Code With No Effects	Passed	Passed	Passed
SWC-136	Unencrypted Private Data On-Chain	Passed	Passed	Passed

Detected High and Medium Severity Vulnerability Description.

⚠️ Authorization through tx.origin (2 Items)

Item: 1	Location:	Line 3257	Severity:	■ Medium
Item: 2	Location:	Line 3357	Severity:	■ Medium

Function	In Solidity, tx.origin is a global variable that returns the address of the account that sent the transaction. Using the variable for authorization could make a contract vulnerable. For example, if an authorized account calls a malicious contract which triggers it to call the vulnerable contract that passes an authorization check since tx.origin returns the original sender of the transaction which in this case is the authorized account.
Remediation	tx.origin should not be used for authorization in smart contracts. It does have some legitimate use cases, for example, To prevent external contracts from calling the current contract, you can implement a require of the form require(tx.origin == msg.sender). This prevents intermediate contracts from calling the current contract, thus limiting the contract to regular codeless addresses.

⚠️ Approve of front running attack. Also known as Sandwich Bot attack. (2 Item)

Item: 1	Location:	Line 277-280	Severity:	Low
---------	-----------	--------------	-----------	-----

Function	<p>The <code>approve()</code> method overrides current allowance regardless of whether the spender already used it or not, so there is no way to increase or decrease allowance by a certain value atomically unless the token owner is a smart contract, not an account.</p> <p>This can be abused by a token receiver when they try to withdraw certain tokens from the sender's account. Meanwhile, if the sender decides to change the amount and sends another approve transaction, the receiver can notice this transaction before it's mined and can extract tokens from both the transactions, therefore, ending up with tokens from both the transactions. This is a front-running attack affecting the ERC20 Approve function. The function approve can be front-run by abusing the <code>_approve</code> function.</p>
Remediation	<ol style="list-style-type: none"> 1.Introduce mechanisms that limit the maximum acceptable gas price for transactions. This can help prevent front-runners from drastically increasing the gas fees to prioritize their transactions. 2.Use transaction taxes to prevent against front-run attack

```

277  function approve(address spender, uint256 amount) public virtual override returns (bool) {
278      _approve(msgSender(), spender, amount);
279      return true;
280  }

```

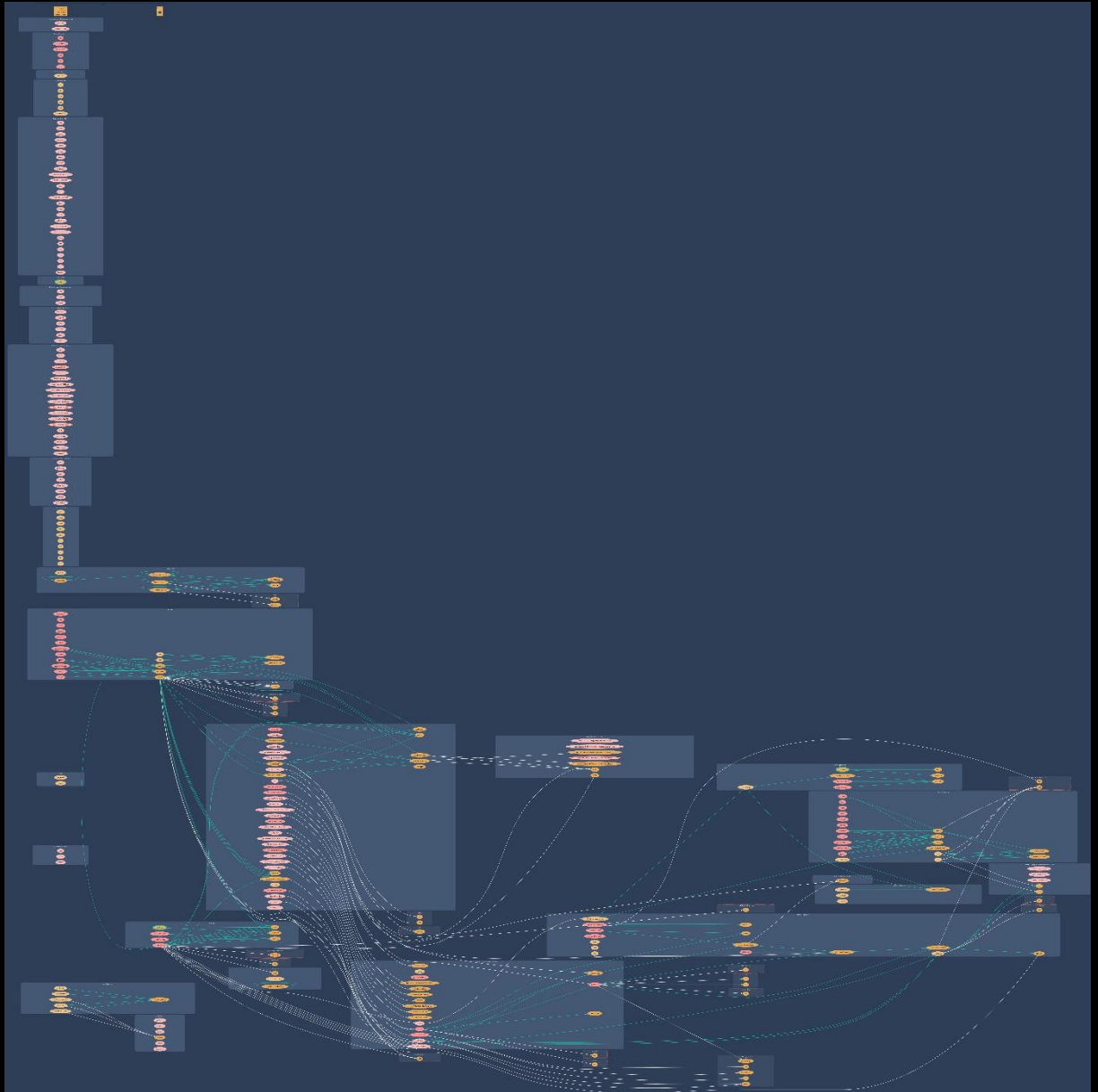
Item: 2	Location:	Line 285-297	Severity:	Low
---------	-----------	--------------	-----------	-----

Function	<p>The <code>swapTokensForEth()</code> method overrides current allowance regardless of whether the spender already used it or not, so there is no way to increase or decrease allowance by a certain value atomically unless the token owner is a smart contract, not an account.</p> <p>This can be abused by a token receiver when they try to withdraw certain tokens from the sender's account. Meanwhile, if the sender decides to change the amount and sends another approve transaction, the receiver can notice this transaction before it's mined and can extract tokens from both the transactions, therefore, ending up with tokens from both the transactions. This is a front-running attack affecting the ERC20 Approve function. The function <code>swapTokensForEth</code> can be front-run by abusing the <code>_approve</code> function.</p>
Remediation	<ol style="list-style-type: none"> 1.Introduce mechanisms that limit the maximum acceptable gas price for transactions. This can help prevent front-runners from drastically increasing the gas fees to prioritize their transactions. 2.Use transaction taxes to prevent against front-runattack

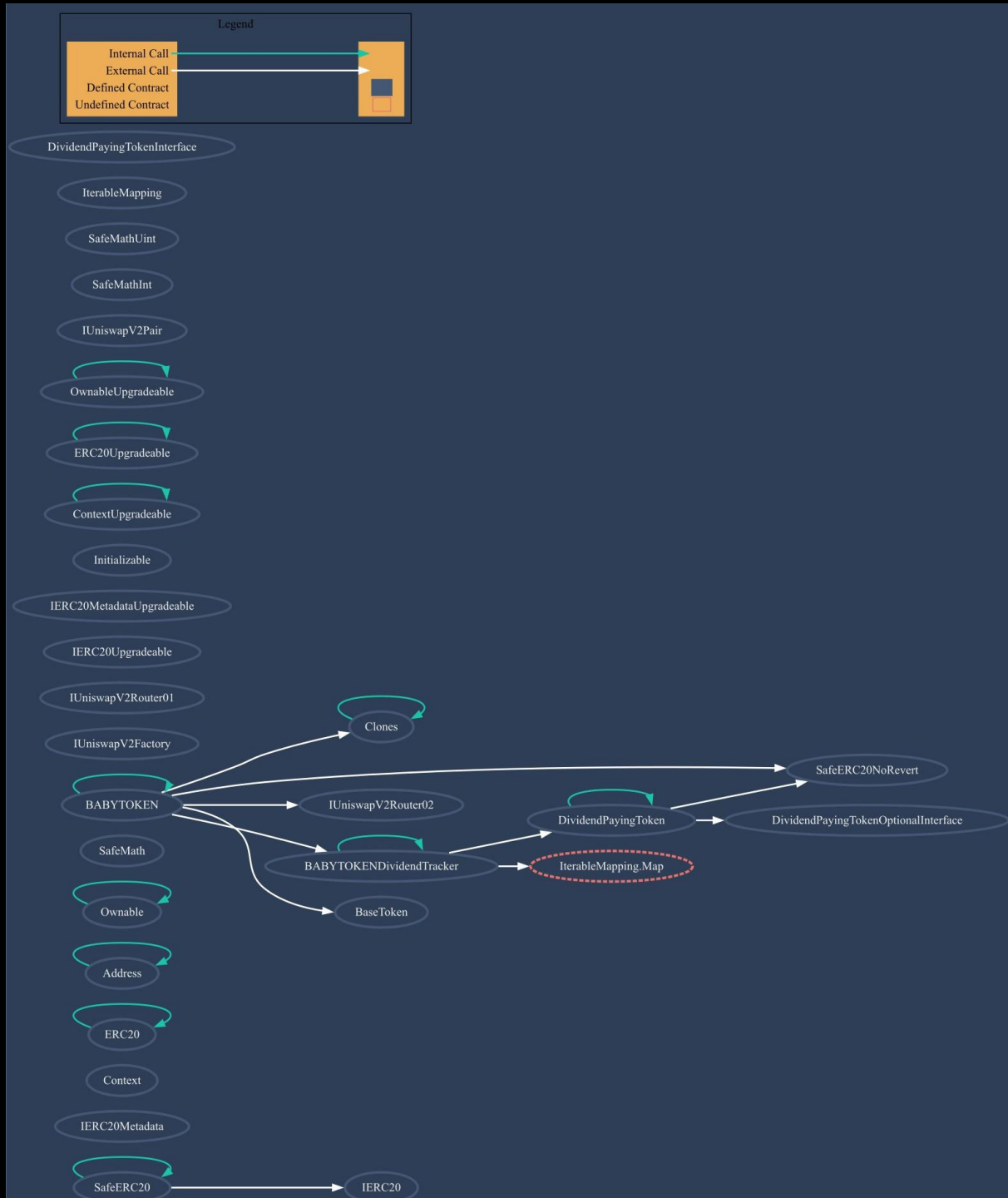
```

ftrace | funcSig
295 function transferFrom(
296     address sender!,
297     address recipient!,
298     uint256 amount!
299 ) public virtual override returns (bool) {
300     _transfer(sender!, recipient!, amount!);
301
302     uint256 currentAllowance = allowances[sender!][_msgSender()];
303     require(currentAllowance >= amount!, "ERC20: transfer amount exceeds allowance");
304     unchecked {
305         _approve(sender!, _msgSender(), currentAllowance - amount!);
306     }
307
308     return true;
309 }
  
```

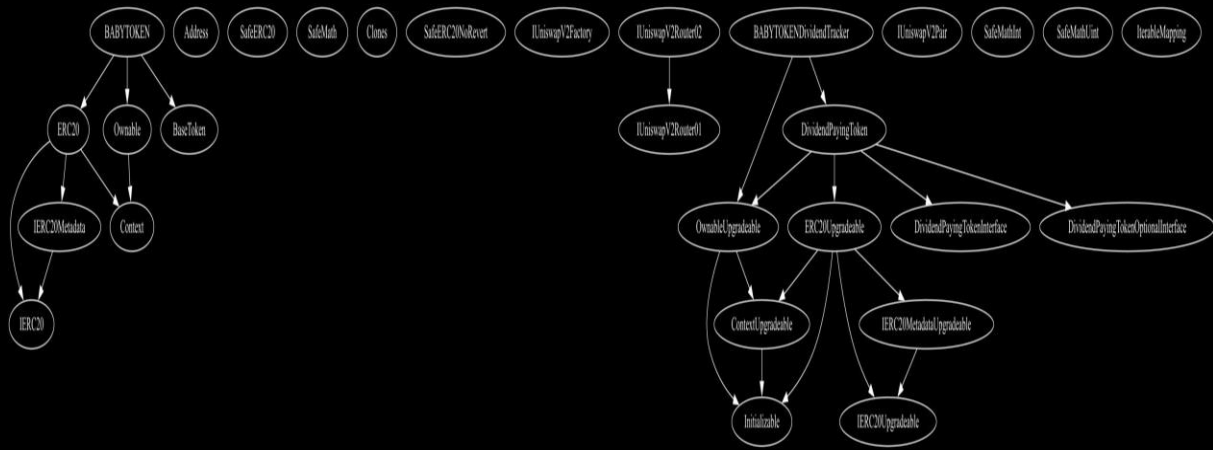
Contract Flow Graph

















Contract Interaction Graph



Inheritance Graph







































































Contract Functions


























Contract	Type	Bases		
L	Function Name	Visibility	Mutability	Modifiers
IERC20	Interface			
L	totalSupply	External 		NO 
L	balanceOf	External 		NO 
L	transfer	External 		NO 
L	allowance	External 		NO 
L	approve	External 		NO 
L	transferFrom	External 		NO 
IERC20Metadata	Interface	IERC20		
L	name	External 		NO 
L	symbol	External 		NO 
L	decimals	External 		NO 
Context	Implementation			
L	_msgSender	Internal 		
L	_msgData	Internal 		
ERC20	Implementation	Context, IERC20, IERC20Metadata		
L		Public 		NO 
L	name	Public 		NO 
L	symbol	Public 		NO 




























Contract	Type	Bases		
L	decimals	Public 🔓		NO 🔒
L	totalSupply	Public 🔓		NO 🔒
L	balanceOf	Public 🔓		NO 🔒
L	transfer	Public 🔓	🔒	NO 🔒
L	allowance	Public 🔓		NO 🔒
L	approve	Public 🔓	🔒	NO 🔒
L	transferFrom	Public 🔓	🔒	NO 🔒
L	increaseAllowance	Public 🔓	🔒	NO 🔒
L	decreaseAllowance	Public 🔓	🔒	NO 🔒
L	_transfer	Internal 🔒	🔒	
L	_mint	Internal 🔒	🔒	
L	_burn	Internal 🔒	🔒	
L	_approve	Internal 🔒	🔒	
L	_beforeTokenTransfer	Internal 🔒	🔒	
L	_afterTokenTransfer	Internal 🔒	🔒	
Address	Library			
L	isContract	Internal 🔒		
L	sendValue	Internal 🔒	🔒	
L	functionCall	Internal 🔒	🔒	
L	functionCall	Internal 🔒	🔒	
L	functionCallWithValue	Internal 🔒	🔒	












































Contract	Type	Bases		
L	functionCallWithValue	Internal 🔒	🔒	
L	functionStaticCall	Internal 🔒		
L	functionStaticCall	Internal 🔒		
L	functionDelegateCall	Internal 🔒	🔒	
L	functionDelegateCall	Internal 🔒	🔒	
L	verifyCallResult	Internal 🔒		
SafeERC20	Library			
L	safeTransfer	Internal 🔒	🔒	
L	safeTransferFrom	Internal 🔒	🔒	
L	safeApprove	Internal 🔒	🔒	
L	safeIncreaseAllowance	Internal 🔒	🔒	
L	safeDecreaseAllowance	Internal 🔒	🔒	
L	_callOptionalReturn	Private 🔒	🔒	
Ownable	Implementation	Context		
L		Public 🔓	🔒	NO 🔓
L	owner	Public 🔓		NO 🔓
L	renounceOwnership	Public 🔓	🔒	onlyOwner
L	transferOwnership	Public 🔓	🔒	onlyOwner
L	_setOwner	Private 🔒	🔒	












































Contract	Type	Bases		
SafeMath	Library			
L	tryAdd	Internal 		
L	trySub	Internal 		
L	tryMul	Internal 		
L	tryDiv	Internal 		
L	tryMod	Internal 		
L	add	Internal 		
L	sub	Internal 		
L	mul	Internal 		
L	div	Internal 		
L	mod	Internal 		
L	sub	Internal 		
L	div	Internal 		
L	mod	Internal 		
Clones	Library			
L	clone	Internal 		
L	cloneDeterministic	Internal 		
L	predictDeterministicAddress	Internal 		
L	predictDeterministicAddress	Internal 		
SafeERC20NoRevert	Library			
L	safeTransfer	Internal 		







































Contract	Type	Bases		
IUniswapV2Factory	Interface			
L	feeTo	External 		NO 
L	feeToSetter	External 		NO 
L	getPair	External 		NO 
L	allPairs	External 		NO 
L	allPairsLength	External 		NO 
L	createPair	External 		NO 
L	setFeeTo	External 		NO 
L	setFeeToSetter	External 		NO 
IUniswapV2Router01	Interface			
L	factory	External 		NO 
L	WETH	External 		NO 
L	addLiquidity	External 		NO 
L	addLiquidityETH	External 		NO 
L	removeLiquidity	External 		NO 
L	removeLiquidityETH	External 		NO 
L	removeLiquidityWithPermit	External 		NO 
L	removeLiquidityETHWithPermit	External 		NO 
L	swapExactTokensForTokens	External 		NO 
L	swapTokensForExactTokens	External 		NO 

























Contract	Type	Bases		
L	swapExactETHForTokens	External 		NO 
L	swapTokensForExactETH	External 		NO 
L	swapExactTokensForETH	External 		NO 
L	swapETHForExactTokens	External 		NO 
L	quote	External 		NO 
L	getAmountOut	External 		NO 
L	getAmountIn	External 		NO 
L	getAmountsOut	External 		NO 
L	getAmountsIn	External 		NO 
IUniswapV2Router02	Interface	IUniswapV2Router01		
L	removeLiquidityETHSupportingFeeOnTransferTokens	External 		NO 
L	removeLiquidityETHWithPermitSupportingFeeOnTransferTokens	External 		NO 
L	swapExactTokensForTokensSupportingFeeOnTransferTokens	External 		NO 
L	swapExactETHForTokensSupportingFeeOnTransferTokens	External 		NO 
L	swapExactTokensForETHSupportingFeeOnTransferTokens	External 		NO 


































Contract	Type	Bases		
IERC20Upgradeable	Interface			
L	totalSupply	External 		NO 
L	balanceOf	External 		NO 
L	transfer	External 		NO 
L	allowance	External 		NO 
L	approve	External 		NO 
L	transferFrom	External 		NO 
IERC20MetadataUpgradeable	Interface	IERC20Upgradeable		
L	name	External 		NO 
L	symbol	External 		NO 
L	decimals	External 		NO 
Initializable	Implementation			
ContextUpgradeable	Implementation	Initializable		
L	__Context_init	Internal 		initializer
L	__Context_init_unchained	Internal 		initializer
L	_msgSender	Internal 		
L	_msgData	Internal 		
ERC20Upgradeable	Implementation	Initializable, ContextUpgradeable, IERC20Upgradeable, IERC20MetadataUpgradeable		






























Contract	Type	Bases		
L	__ERC20_init	Internal 		initializer
L	__ERC20_init_unchained	Internal 		initializer
L	name	Public 		NO 
L	symbol	Public 		NO 
L	decimals	Public 		NO 
L	totalSupply	Public 		NO 
L	balanceOf	Public 		NO 
L	transfer	Public 		NO 
L	allowance	Public 		NO 
L	approve	Public 		NO 
L	transferFrom	Public 		NO 
L	increaseAllowance	Public 		NO 
L	decreaseAllowance	Public 		NO 
L	_transfer	Internal 		
L	_mint	Internal 		
L	_burn	Internal 		
L	_approve	Internal 		
L	_beforeTokenTransfer	Internal 		
L	_afterTokenTransfer	Internal 		
OwnableUpgradable	Implementation	Initializable, ContextUpgradable		

Contract	Type	Bases		
L	__Ownable_init	Internal 		initializer
L	__Ownable_init_unchained	Internal 		initializer
L	owner	Public 		NO 
L	renounceOwnership	Public 		onlyOwner
L	transferOwnership	Public 		onlyOwner
L	_setOwner	Private 		
IUniswapV2Pair	Interface			
L	name	External 		NO 
L	symbol	External 		NO 
L	decimals	External 		NO 
L	totalSupply	External 		NO 
L	balanceOf	External 		NO 
L	allowance	External 		NO 
L	approve	External 		NO 
L	transfer	External 		NO 
L	transferFrom	External 		NO 
L	DOMAIN_SEPARATOR	External 		NO 
L	PERMIT_TYPEHASH	External 		NO 
L	nonces	External 		NO 
L	permit	External 		NO 
L	MINIMUM_LIQUIDITY	External 		NO 




















Contract	Type	Bases		
L	factory	External 		NO 
L	token0	External 		NO 
L	token1	External 		NO 
L	getReserves	External 		NO 
L	price0CumulativeLast	External 		NO 
L	price1CumulativeLast	External 		NO 
L	kLast	External 		NO 
L	mint	External 		NO 
L	burn	External 		NO 
L	swap	External 		NO 
L	skim	External 		NO 
L	sync	External 		NO 
L	initialize	External 		NO 
SafeMathInt	Library			
L	mul	Internal 		
L	div	Internal 		
L	sub	Internal 		
L	add	Internal 		
L	abs	Internal 		
L	toUint256Safe	Internal 		
SafeMathUint	Library			
L	toInt256Safe	Internal 		

Contract	Type	Bases		
IterableMapping	Library			
L	get	Public 		NO 
L	getIndexOfKey	Public 		NO 
L	getKeyAtIndex	Public 		NO 
L	size	Public 		NO 
L	set	Public 		NO 
L	remove	Public 		NO 
DividendPayingTokenInterface	Interface			
L	dividendOf	External 		NO 
L	withdrawDividend	External 		NO 
DividendPayingTokenOptionalInterface	Interface			
L	withdrawableDividendOf	External 		NO 
L	withdrawnDividendOf	External 		NO 
L	accumulativeDividendOf	External 		NO 
DividendPayingToken	Implementation	ERC20Upgradable, OwnableUpgradable, DividendPayingTokenInterface, DividendPayingTokenOptionalInterface		
L	__DividendPayingToken_init	Internal 		initializer

Contract	Type	Bases		
L	distributeCACHED dividends	Public 		onlyOwner
L	withdrawDividend	Public 		NO 
L	_withdrawDividendOfUser	Internal 		
L	dividendOf	Public 		NO 
L	withdrawableDividendOf	Public 		NO 
L	withdrawnDividendOf	Public 		NO 
L	accumulativeDividendOf	Public 		NO 
L	_transfer	Internal 		
L	_mint	Internal 		
L	_burn	Internal 		
L	_setBalance	Internal 		
BABYTOKENDividendTracker	Implementation	OwnableUpgradable, DividendPaying Token		
L	initialize	External 		initializer
L	_transfer	Internal 		
L	withdrawDividend	Public 		NO 
L	excludeFromDividends	External 		onlyOwner
L	isExcludedFromDividends	Public 		NO 
L	updateClaimWait	External 		onlyOwner

Contract	Type	Bases		
L	updateMinimumTokenBalanceForDividends	External 		onlyOwner
L	getLastProcessedIndex	External 		NO 
L	getNumberOfTokenHolders	External 		NO 
L	getAccount	Public 		NO 
L	getAccountAtIndex	Public 		NO 
L	canAutoClaim	Private 		
L	setBalance	External 		onlyOwner
L	process	Public 		NO 
L	processAccount	Public 		onlyOwner
BaseToken	Implementation			
BABYTOKEN	Implementation	ERC20, Ownable, BaseToken		
L		Public 		ERC20
L		External 		NO 
L	setSwapTokensAtAmount	External 		onlyOwner
L	excludeFromFees	External 		onlyOwner
L	excludeMultipleAccountsFromFees	External 		onlyOwner
L	setMarketingWallet	External 		onlyOwner
L	setTokenRewardsFee	External 		onlyOwner

Contract	Type	Bases		
L	setLiquiditFee	External ⓘ		onlyOwner
L	setMarketingFee	External ⓘ		onlyOwner
L	_setAutomatedMarketMakerPair	Private 		
L	updateGasForProcessing	Public ⓘ		onlyOwner
L	updateClaimWait	External ⓘ		onlyOwner
L	getClaimWait	External ⓘ		NO ⓘ
L	updateMinimumTokenBalanceForDividends	External ⓘ		onlyOwner
L	getMinimumTokenBalanceForDividends	External ⓘ		NO ⓘ
L	getTotalDividendsDistributed	External ⓘ		NO ⓘ
L	isExcludedFromFees	Public ⓘ		NO ⓘ
L	withdrawableDividendOf	Public ⓘ		NO ⓘ
L	dividendTokenBalanceOf	Public ⓘ		NO ⓘ
L	excludeFromDividends	External ⓘ		onlyOwner
L	isExcludedFromDividends	Public ⓘ		NO ⓘ
L	getAccountDividendsInfo	External ⓘ		NO ⓘ
L	getAccountDividendsInfoAtIndex	External ⓘ		NO ⓘ
L	processDividendTracker	External ⓘ		NO ⓘ

Contract	Type	Bases		
L	claim	External 		NO 
L	getLastProcessedIndex	External 		NO 
L	getNumberOfDividendTokenHolders	External 		NO 
L	_transfer	Internal 		
L	swapAndSendToFee	Private 		
L	swapAndLiquify	Private 		
L	swapTokensForEth	Private 		
L	swapTokensForCake	Private 		
L	addLiquidity	Private 		
L	swapAndSendDividends	Private 		



Function
can modify
state



Function
is payable

Audit Scope

Audit Method.

Our smart contract audit is an extensive methodical examination and analysis of the smart contract's code that is used to interact with the blockchain. Goal: discover errors, issues and security vulnerabilities in the code. Findings getting reported and improvements getting suggested.

Automatic and Manual Review

We are using automated tools to scan functions and weaknesses of the contract. Transfers, integer over-undeflow checks such as all CWE events.

Tools we use:

Visual Studio Code

CWE

SWC

Solidity Scan

SVD

In manual code review our auditor looking at source code and performing line by line examination. This method helps to clarify developer's coding decisions and business logic.

Skeleton Ecosystem

<https://skeletonecosystem.com>

<https://github.com/SkeletonEcosystem/Audits>

