

# Audit Report ETH SHIBA

May 2022

Type BEP20

Network BSC

Address 0x69d10c8Bd0de1a9345AFA36819490D8BbCE0E5A3

Audited by © cyberscope



# **Table of Contents**

Table of Contents	1
Contract Review	4
Source Files	4
Filename	4
Audit Updates	4
Initial Audit	4
Contract Analysis	5
ST - Stop Transactions	6
Description	6
Recommendation	7
Updated 30 May 2022	7
ELFM - Exceed Limit Fees Manipulation	8
Description	8
Recommendation	9
Updated 30 May 2022	9
ULTW - Unlimited Liquidity to Team Wallet	10
Description	10
Recommendation	11
Updated 30 May 2022	11
BC - Blacklisted Contracts	12
Description	12
Recommendation	12
Updated 30 May 2022	12
Contract Diagnostics	13
L01 - Public Function could be Declared External	14
Description	14



Recommendation	14
L04 - Conformance to Solidity Naming Conventions	15
Description	15
Recommendation	15
L05 - Unused State Variable	16
Description	16
Recommendation	16
L07 - Missing Events Arithmetic	17
Description	17
Recommendation	17
L09 - Dead Code Elimination	18
Description	18
Recommendation	18
L12 - Using Variables before Declaration	19
Description	19
Recommendation	19
L14 - Uninitialized Variables in Local Scope	20
Description	20
Recommendation	20
L15 - Local Scope Variable Shadowing	21
Description	21
Recommendation	21
Contract Functions	22
Contract Flow	30
Domain Info	31
Summary	32
Updated 30 May 2022	32
Disclaimer	33

**About Cyberscope** 

34



# **Contract Review**

Contract Name	ETHSHIB
Compiler Version	v0.8.0+commit.c7dfd78e
Optimization	200 runs
Licence	None
Explorer	https://bscscan.com/token/0x69d10c8Bd0de1a9345A FA36819490D8BbCE0E5A3
Symbol	\$ETHSHIB
Decimals	18
Total Supply	1,000,000,000,000
Domain	ethshiba.io

# Source Files

Filename	SHA256
contract.sol	674ddb10cd99d9422a760105d60a381e1dc2e36bd63b 9064dc028089bed2da13

# **Audit Updates**

Initial Audit	23rd May 2022
Corrected	

# **Contract Analysis**

CriticalMediumMinorPass

Severity	Code	Description	Status
•	ST	Contract Owner is not able to stop or pause transactions	Resolved
•	OCTD	Contract Owner is not able to transfer tokens from specific address	
•	OTUT	Owner Transfer User's Tokens	
•	ELFM	Contract Owner is not able to increase fees more than a reasonable percent (25%)	Resolved
	ULTW	Contract Owner is not able to increase the amount of liquidity taken by dev wallet more than a reasonable percent	Resolved
•	MT	Contract Owner is not able to mint new tokens	
•	ВТ	Contract Owner is not able to burn tokens from specific wallet	
•	ВС	Contract Owner is not able to blacklist wallets from selling	Resolved



# ST - Stop Transactions

Criticality	critical
Location	contract.sol#L 1598, 1614, 1661, 1572
Status	Resolved

#### Description

The contract owner has the authority to stop transactions for all users excluding the owner. The owner may take advantage of it by setting the maxWalletToken and/or maxTransactionAmount to zero.

```
require(
   contractBalanceRecepient + amount <= maxWalletToken,
   "Exceeds maximum wallet token amount."
);</pre>
```

```
require(amount <= maxTransactionAmount, "transfer amount exceeds the
maxSellTransactionAmount.");</pre>
```

The contract owner can also convert the contract into a honeypot and prevent the users from selling by setting the \_SellTotalFees a higher value than \_BuyTotalFees or if the return value of the extraFeeOnSell function is over 100.

```
if(takeFee) {
    uint256 fees = amount.mul(_BuyTotalFees).div(100);
    if(automatedMarketMakerPairs[to]){
        fees += amount.mul(extraFeeOnSell()).div(100);
    }
    amount = amount.sub(fees);
```

```
function extraFeeOnSell() internal view returns(uint256)
{
    return _SellTotalFees.sub(_BuyTotalFees);
}
```



#### Recommendation

The contract could embody a check for not allowing setting the maxWalletAmount and maxTransactionAmount less than a reasonable amount. A suggested implementation could check that the minimum amount should be more than a fixed percentage of the total supply.

The contract could embody a check for not allowing setting the taxes more than a reasonable amount.

The team should carefully manage the private keys of the owner's account. We strongly recommend a powerful security mechanism that will prevent a single user from accessing the contract admin functions. That risk can be prevented by temporarily locking the contract or renouncing ownership.

#### Updated 30 May 2022

The team has renounced ownership and resolved the issues.



# **ELFM - Exceed Limit Fees Manipulation**

Criticality	critical
Location	contract.sol#L1451, 1461
Status	Resolved

#### Description

The contract owner has the authority to increase over the allowed limit of 25%. The owner may take advantage of it by calling the setBuyFees and setSellFees functions with a high percentage value.

```
function setSellFees(uint256 sellEthRewardFee, uint256 sellLiquidityFee,
uint256 sellMarketingFee, uint256 sellBackSHIBAFee) external onlyOwner
{
    _SellETHRewardsFee = sellEthRewardFee;
    _SellLiquidityFee = sellLiquidityFee;
    _SellMarketingFee = sellMarketingFee;
    _SellBackSHIBAFee = sellBackSHIBAFee;
    _SellTotalFees =
    _SellETHRewardsFee.add(_SellLiquidityFee).add(_SellMarketingFee).add(_SellBackSHIBAFee);
}
```



#### Recommendation

The contract could embody a check for the maximum acceptable value.

The team should carefully manage the private keys of the owner's account. We strongly recommend a powerful security mechanism that will prevent a single user from accessing the contract admin functions. That risk can be prevented by temporarily locking the contract or renouncing ownership.

# Updated 30 May 2022

The team has renounced ownership and resolved the issues.



# **ULTW - Unlimited Liquidity to Team Wallet**

Criticality	minor
Location	contract.sol#L1567, 1734, 1804
Status	Resolved

#### Description

The contract owner has the authority to transfer funds without limit to the team wallet. These funds have been accumulated from fees collected from the contract. The owner may take advantage of it by setting a high fee to the swapTokensAtAmount variable and by calling the manualSwapTokensForEth and withdrawStuckBNB functions.

```
function changeSwapTokensAtAmount(uint256 swapAmount) external onlyOwner
{
    swapTokensAtAmount = swapAmount;
}
```



```
function withdrawStuckBNB() external onlyOwner{
          require (address(this).balance > 0, "Can't withdraw negative or
zero");
          payable(owner()).transfer(address(this).balance);
    }
```

#### Recommendation

The contract could embody a check for the maximum amount of funds that can be swapped. Since a huge amount may volatile the token's price.

The team should carefully manage the private keys of the owner's account. We strongly recommend a powerful security mechanism that will prevent a single user from accessing the contract admin functions. That risk can be prevented by temporarily locking the contract or renouncing ownership.

# Updated 30 May 2022

The team has renounced ownership and resolved the issues.



# BC - Blacklisted Contracts

Criticality	medium
Location	contract.sol#L1584, 1586
Status	Resolved

#### Description

The contract owner has the authority to stop contracts from transactions. The owner may take advantage of it by calling the addToBlacklist function.

```
require(!_blacklisted[to] && !_blacklisted[from], "address is blacklisted");
```

Also, the owner can block users by enabling the tradingEnabed boolean and calling the addToWhitelist function.

```
if(!_whitelisted[from]) { require(tradingEnabled, "Trading is not enabled
yet");}
```

#### Recommendation

The team should carefully manage the private keys of the owner's account. We strongly recommend a powerful security mechanism that will prevent a single user from accessing the contract admin functions. That risk can be prevented by temporarily locking the contract or renouncing ownership.

#### Updated 30 May 2022

The team has renounced ownership and resolved the issues.

# **Contract Diagnostics**

CriticalMediumMinor

Severity	Code	Description
•	L01	Public Function could be Declared External
•	L04	Conformance to Solidity Naming Conventions
•	L05	Unused State Variable
•	L07	Missing Events Arithmetic
•	L09	Dead Code Elimination
•	L12	Using Variables before Declaration
•	L14	Uninitialized Variables in Local Scope
•	L15	Local Scope Variable Shadowing

# L01 - Public Function could be Declared External

Criticality	minor	
Location	contract.sol#L352,378,386,397,415,437,456,741,750,800,815,843,857,930,934,9 41,947,1351,1360,1367,1388,1407,1436,1481,1500,1504,1508,1512,1516,1734, 1922,1966	

# Description

Public functions that are never called by the contract should be declared external to save gas.

process
getAccountAtIndex
manualSwapTokensForEth
dividendTokenBalanceOf
withdrawableDividendOf
isExcludedFromMaxWallet
isExcludedFromMaxTx
isExcludedFromFees
updateGasForProcessing
...

#### Recommendation

Use the external attribute for functions never called from the contract.



# L04 - Conformance to Solidity Naming Conventions

Criticality	minor
Location	contract.sol#L843,850,857,867,769,775,998,999,1016,1052,1252,1336,1341,134 6,1351,1355,1431,1436,1809,1198,1200,1205,1206,1207,1208,1210,1212,1213, 1214,1215,1216,1220,1221,1877

#### Description

Solidity defines a naming convention that should be followed. Rule exceptions:

- Allow constant variable name/symbol/decimals to be lowercase.
- Allow \_ at the beginning of the mixed\_case match for private variables and unused parameters.
- account
- \_shibaWalletAddress
- \_marketingWalletAddress
- \_SellTotalFees
- \_SellBackSHIBAFee
- \_SellMarketingFee
- \_SellLiquidityFee
- \_SellETHRewardsFee
- \_BuyTotalFees

---

#### Recommendation

Follow the Solidity naming convention.

https://docs.soliditylang.org/en/v0.4.25/style-guide.html#naming-conventions

# L05 - Unused State Variable

Criticality	minor
Location	contract.sol#L594

# Description

There are segments that contain unused state variables.

MAX\_INT256

## Recommendation

Remove unused state variables.

# L07 - Missing Events Arithmetic

Criticality	minor
Location	contract.sol#L1431,1436,1451,1461,1567

# Description

Detected missing events for critical arithmetic parameters. There are functions that have no event emitted, so it is difficult to track off-chain changes.

```
swapTokensAtAmount = swapAmount
_SellETHRewardsFee = sellEthRewardFee
_BuyETHRewardsFee = buyEthRewardFee
maxTransactionAmount = _maxTxAmount
maxWalletToken = _maxToken
```

#### Recommendation

Emit an event for critical parameter changes.

# L09 - Dead Code Elimination

Criticality	minor
Location	contract.sol#L877,640

# Description

Functions that are not used in the contract, and make the code's size bigger.

abs \_\_transfer

## Recommendation

Remove unused functions.

# L12 - Using Variables before Declaration

Criticality	minor
Location	contract.sol#L1679

## Description

The contract is using a variable before the declaration. This is usually happening either if it has not been declared yet or the variable has been declared in a different scope.

iterations claims lastProcessedIndex

#### Recommendation

The variables should be declared before any usage of them.

# L14 - Uninitialized Variables in Local Scope

Criticality	minor
Location	contract.sol#L1679

# Description

The are variables that are defined in the local scope and are not initialized.

iterations lastProcessedIndex claims

#### Recommendation

All the local scoped variables should be initialized.

# L15 - Local Scope Variable Shadowing

Criticality	minor
Location	contract.sol#L795,843,850,857,867

# Description

The are variables that are defined in the local scope containing the same name from an upper scope.

```
_owner
_symbol
_name
```

#### Recommendation

The local variables should have different names from the upper scoped variables.





# **Contract Functions**

Contract	Туре	Bases		
	Function Name	Visibility	Mutability	Modifiers
IEDO00				
IERC20	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	<b>✓</b>	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
IERC20Metad ata	Interface	IERC20		
	name	External		-
	symbol	External		-
	decimals	External		-
Context	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
SafeMath	Library			
	add	Internal		
	sub	Internal		
	sub	Internal		
	mul	Internal		
	div	Internal		
	div	Internal		
	mod	Internal		
	mod	Internal		



ERC20	Implementation	Context, IERC20, IERC20Met adata		
	<constructor></constructor>	Public	✓	-
	name	External		-
	symbol	External		-
	decimals	Public		-
	totalSupply	Public		-
	balanceOf	Public		-
	transfer	Public	✓	-
	allowance	Public		-
	approve	Public	1	-
	transferFrom	Public	<b>✓</b>	-
	increaseAllowance	Public	<b>✓</b>	-
	decreaseAllowance	Public	<b>✓</b>	-
	_transfer	Internal	1	
	_mint	Internal	1	
	_burn	Internal	1	
	_approve	Internal	<b>✓</b>	
	_beforeTokenTransfer	Internal	<b>✓</b>	
SafeMathUint	Library			
	toInt256Safe	Internal		
SafeMathInt	Library			
	mul	Internal		
	div	Internal		
	sub	Internal		
	add	Internal		
	abs	Internal		
	toUint256Safe	Internal		
DividendPayin gTokenInterfa ce	Interface			
	dividendOf	External		-



	withdrawDividend	External	1	-
DividendPayin gTokenOption alInterface	Interface			
	withdrawableDividendOf	External		-
	withdrawnDividendOf	External		-
	accumulativeDividendOf	External		-
Ownable	Implementation	Context		
	<constructor></constructor>	Public	1	-
	owner	Public		-
	renounceOwnership	Public	1	onlyOwner
	transferOwnership	Public	✓	onlyOwner
DividendPayin gToken	Implementation	ERC20, Ownable, DividendPay ingTokenInt erface, DividendPay ingTokenOp tionalInterfa		
	<constructor></constructor>	Public	✓	ERC20
	distributeETHDividends	Public	1	onlyOwner
	withdrawDividend	Public	1	-
	_withdrawDividendOfUser	Internal	1	
	dividendOf	Public		-
	withdrawableDividendOf	Public		-
	withdrawnDividendOf	Public		-
	accumulativeDividendOf	Public		-
	_transfer	Internal	✓	
	_mint	Internal	1	
	_burn	Internal	1	
	_setBalance	Internal	1	
IterableMappi ng	Library			



	get	Public		-
	getIndexOfKey	Public		-
	getKeyAtIndex	Public		-
	size	Public		-
	set	Public	1	-
	remove	Public	<b>√</b>	-
IUniswapV2Pa ir	Interface			
	name	External		-
	symbol	External		-
	decimals	External		-
	totalSupply	External		-
	balanceOf	External		-
	allowance	External		-
	approve	External	✓	-
	transfer	External	1	-
	transferFrom	External	1	-
	DOMAIN_SEPARATOR	External		-
	PERMIT_TYPEHASH	External		-
	nonces	External		-
	permit	External	✓	-
	MINIMUM_LIQUIDITY	External		-
	factory	External		-
	token0	External		-
	token1	External		-
	getReserves	External		-
	price0CumulativeLast	External		-
	price1CumulativeLast	External		-
	kLast	External		-
	mint	External	<b>✓</b>	-
	burn	External	1	-
	swap	External	1	-
	skim	External	1	-
	sync	External	1	-



	initialize	External	✓	-
IUniswapV2Fa ctory	Interface			
	feeTo	External		-
	feeToSetter	External		-
	getPair	External		-
	allPairs	External		-
	allPairsLength	External		-
	createPair	External	✓	-
	setFeeTo	External	✓	-
	setFeeToSetter	External	✓	-
IUniswapV2Ro uter01	Interface			
	factory	External		-
	WETH	External		-
	addLiquidity	External	✓	-
	addLiquidityETH	External	Payable	-
	removeLiquidity	External	✓	-
	removeLiquidityETH	External	✓	-
	removeLiquidityWithPermit	External	1	-
	removeLiquidityETHWithPermit	External	1	-
	swapExactTokensForTokens	External	1	-
	swapTokensForExactTokens	External	1	-
	swapExactETHForTokens	External	Payable	-
	swapTokensForExactETH	External	1	-
	swapExactTokensForETH	External	<b>✓</b>	-
	swapETHForExactTokens	External	Payable	-
	quote	External		-
	getAmountOut	External		-
	getAmountIn	External		-
	getAmountsOut	External		-
	getAmountsIn	External		-



IUniswapV2Ro uter02	Interface	IUniswapV2 Router01		
	removeLiquidityETHSupportingFeeO nTransferTokens	External	✓	-
	removeLiquidityETHWithPermitSupp ortingFeeOnTransferTokens	External	1	-
	swapExactTokensForTokensSupporti ngFeeOnTransferTokens	External	1	-
	swapExactETHForTokensSupporting FeeOnTransferTokens	External	Payable	-
	swapExactTokensForETHSupporting FeeOnTransferTokens	External	✓	-
ETHSHIB	Implementation	ERC20, Ownable		
	<constructor></constructor>	Public	✓	ERC20
	<receive ether=""></receive>	External	Payable	-
	setTradingEnabled	External	1	onlyOwner
	addToBlackList	External	1	onlyOwner
	removeFromBlackList	External	<b>✓</b>	onlyOwner
	isBlacklisted	Public		-
	addToWhitelist	External	✓	onlyOwner
	setAutomatedMarketMakerPair	Public	✓	onlyOwner
	updateDividendTracker	Public	1	onlyOwner
	updateUniswapV2Router	Public	<b>✓</b>	onlyOwner
	excludeOrIncludeFromFees	Public	<b>✓</b>	onlyOwner
	excludeOrIncludeMultipleAccountsFr omFees	Public	1	onlyOwner
	excludeOrIncludeFromMaxTx	Public	1	onlyOwner
	excludeOrIncludeFromMaxWallet	Public	<b>✓</b>	onlyOwner
	setMaxWalletToken	External	1	onlyOwner
	setMaxtx	Public	1	onlyOwner
	setMarketingWallet	External	1	onlyOwner
	setShibaWallet	External	1	onlyOwner
	setBuyFees	External	1	onlyOwner
	setSellFees	External	1	onlyOwner
	_setAutomatedMarketMakerPair	Private	1	



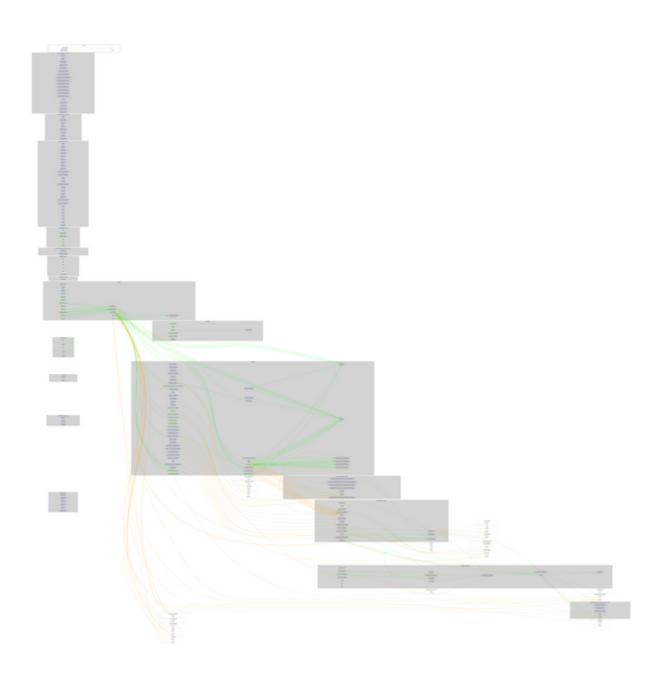
	updateGasForProcessing	Public	✓	onlyOwner
	updateClaimWait	External	✓	onlyOwner
	getClaimWait	External		-
	getTotalDividendsDistributed	External		-
	isExcludedFromFees	Public		-
	isExcludedFromMaxTx	Public		-
	isExcludedFromMaxWallet	Public		-
	withdrawableDividendOf	Public		-
	dividendTokenBalanceOf	Public		-
	excludeFromDividends	External	✓	onlyOwner
	getAccountDividendsInfo	External		-
	getAccountDividendsInfoAtIndex	External		-
	processDividendTracker	External	1	-
	claim	External	1	-
	getLastProcessedIndex	External		-
	getNumberOfDividendTokenHolders	External		-
	changeSwapTokensAtAmount	External	1	onlyOwner
	extraFeeOnSell	Internal		
	_transfer	Internal	1	
	swapAndLiquify	Private	<b>✓</b>	
	swapTokensForEth	Private	1	
	manualSwapTokensForEth	Public	<b>✓</b>	onlyOwner
	swapTokensForETH	Private	<b>√</b>	
	addLiquidity	Private	<b>✓</b>	
	swapAndSendDividends	Private	<b>✓</b>	
	withdrawStuckBNB	External	<b>✓</b>	onlyOwner
	removeStuckToken	External	<b>√</b>	onlyOwner
ETHSHIBDivid endTracker	Implementation	Ownable, DividendPay ingToken		
	<constructor></constructor>	Public	<b>√</b>	DividendPayin gToken
	_transfer	Internal		
	withdrawDividend	Public		-
	excludeFromDividends	External	/	onlyOwner



updateClaimWait	External	1	onlyOwner
getLastProcessedIndex	External		-
getNumberOfTokenHolders	External		-
getAccount	Public		-
getAccountAtIndex	Public		-
canAutoClaim	Private		
setBalance	External	✓	onlyOwner
process	Public	✓	-
processAccount	Public	1	onlyOwner



# **Contract Flow**





# Domain Info

Domain Name	ethshiba.io
Registry Domain ID	f317d4e1148f4dcb8544d434edb9c0ca-DONUTS
Creation Date	2022-03-04T02:22:54Z
Updated Date	2022-03-20T06:53:40Z
Registry Expiry Date	2023-03-04T02:22:54Z
Registrar WHOIS Server	whois.advancedregistrar.com
Registrar URL	http://www.netearthone.com
Registrar	NetEarth One Inc. dba NetEarth
Registrar IANA ID	1005

The domain has been created 3 months before the creation of the audit. It will expire in 9 months.

There is no public billing information, the creator is protected by the privacy settings.



# Summary

There are some functions that can be abused by the owner like stopping transactions, manipulating fees, transferring funds to the team's wallet and blacklisting addresses. The contract can be converted into a honeypot and prevent users from selling if the owner abuses the admin functions. A multi-wallet signing pattern will provide security against potential hacks. Temporarily locking the contract or renouncing ownership will eliminate all the contract threats.

#### Updated 30 May 2022

The team has renounced ownership and resolved the issues.

# Disclaimer

All the content provided in this document is for general information only and should not be used as financial advice or a reason to buy any investment.

Cyberscope team provides no guarantees against the sale of team tokens or the removal of liquidity by the project audited in this document. Always Do your own research and protect yourselves from being scammed.

The Cyberscope team has audited this project for general information and only expresses their opinion based on similar projects and checks from popular diagnostic tools. Under no circumstances did Cyberscope receive a payment to manipulate those results or change the awarding badge that we will be adding in our website.

Always Do your own research and protect yourselves from scams. This document should not be presented as a reason to buy or not buy any particular token.

The Cyberscope team disclaims any liability for the resulting losses.



# About Cyberscope

Coinscope audit and K.Y.C. service has been rebranded to Cyberscope.

Coinscope is the leading early coin listing, voting and auditing authority firm. The audit process is analyzing and monitoring many aspects of the project. That way, it gives the community a good sense of security using an informative report and a generic score.

Cyberscope and Coinscope are aiming to make crypto discoverable and efficient globally. They provide all the essential tools to assist users draw their own conclusions.



The Cyberscope team

https://www.cyberscope.io