

# Audit Report MoonKakashi

December 2021

Type BEP20

Address 0x21614f734B17dCfA604Ca0E28758D32dCe6eCA9d

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# **Table of Contents**

Table of Contents	1
Contract Review	3
Audit Updates	3
Contract Analysis	4
Contract Diagnostics	5
L01 - Public Function could be Declared External	6
Description	6
Recommendation	6
L04 - Conformance to Solidity Naming Conventions	7
Description	7
Recommendation	7
L09 - Dead Code Elimination	8
Description	8
Recommendation	8
L11 - Unnecessary Boolean equality	9
Description	9
Recommendation	9
L07 - Missing Events Arithmetic	10
Description	10
Recommendation	10
Contract Functions	11
Contract Flow	16
Domain Info	17
Summary	18
Disclaimer	19
About Coinscope	20



# **Contract Review**

Contract Name	BuybackBabyToken
Compiler Version	v0.8.4+commit.c7e474f2
Optimization	200 runs
Licence	MIT
Explorer	https://bscscan.com/token/0x21614f734B17dCfA604Ca0E28758D32dCe6eCA9d
Symbol	MKN
Decimals	9
Total Supply	1,000,000,000
Source	contract.sol
Domain	moonkakashi.io

# **Audit Updates**

Initial Audit	31st December 2021
Corrected	

# **Contract Analysis**

CriticalMediumMinorPass

Severity	Code	Description
•	ST	Contract Owner is not able to stop or pause transactions
•	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%)
•	ULTW	Contract Owner is not able to increase the amount of liquidity taken by dev wallet more than a reasonable percent
•	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



# **Contract Diagnostics**

CriticalMediumMinor

Severity	Code	Description
•	L01	Public Function could be Declared External
•	L04	Conformance to Solidity Naming Conventions
•	L09	Dead Code Elimination
•	L11	Unnecessary Boolean equality
•	L07	Missing Events Arithmetic



#### L01 - Public Function could be Declared External

Criticality	minor
Location	contract.sol#L1411,L664,L643 and 1 more

#### Description

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

```
setFees
transferOwnership
unauthorize
...
```

#### Recommendation

Use the external attribute for functions never called from the contract



# L04 - Conformance to Solidity Naming Conventions

Criticality	minor
Location	contract.sol#L952,L1474,L1473 and 19 more

#### 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.

```
_decimals
_minDistribution
_minPeriod
...
```

#### Recommendation

Follow the Solidity naming convention. <a href="https://docs.soliditylang.org/en/v0.4.25/style-guide.html#naming-conventions">https://docs.soliditylang.org/en/v0.4.25/style-guide.html#naming-conventions</a>



#### L09 - Dead Code Elimination

Criticality	minor
Location	contract.sol#L36,L48,L77 and 9 more

#### Description

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

trySub
tryMul
tryMod
...

#### Recommendation

Remove unused functions.



# L11 - Unnecessary Boolean equality

Criticality	minor
Location	contract.sol#L1011

#### Description

The comparison to boolean constants is redundant. Boolean constants can be used directly and do not need to be compare to true or false.

require(bool,string)(buyBacker[msg.sender] == true,Not a buybacker)

#### Recommendation

Remove the equality to the boolean constant.



# L07 - Missing Events Arithmetic

Criticality	minor
Location	contract.sol#L1464,L1456,L1379 and 2 more

#### 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.

```
targetLiquidity = _target
swapThreshold = _amount
buybackMultiplierNumerator = numerator
...
```

#### Recommendation

Emit an event for critical parameter changes.



# **Contract Functions**

Contract	Туре	Bases		
	Function Name	Visibility	Mutability	Modifiers
SafeMath	Library			
	tryAdd	Internal		
	trySub	Internal		
	tryMul	Internal		
	tryDiv	Internal		
	tryMod	Internal		
	add	Internal		
	sub	Internal		
	mul	Internal		
	div	Internal		
	mod	Internal		
	sub	Internal		
	div	Internal		
	mod	Internal		
Clones	Library			
	clone	Internal	✓	
	cloneDeterministic	Internal	✓	
	predictDeterministicAddress	Internal		
	predictDeterministicAddress	Internal		
IUniswapV2Fa ctory	Interface			
	feeTo	External		-
	feeToSetter	External		-
	getPair	External		-
	allPairs	External		-
	allPairsLength	External		-
	createPair	External	1	_



	setFeeTo	External	✓	-
	setFeeToSetter	External	✓	-
IUniswapV2Ro uter01	Interface			
	factory	External		-
	WETH	External		-
	addLiquidity	External	✓	-
	addLiquidityETH	External	Payable	-
	removeLiquidity	External	<b>✓</b>	-
	removeLiquidityETH	External	<b>✓</b>	-
	removeLiquidityWithPermit	External	✓	-
	removeLiquidityETHWithPermit	External	<b>✓</b>	-
	swapExactTokensForTokens	External	<b>✓</b>	-
	swapTokensForExactTokens	External	<b>✓</b>	-
	swapExactETHForTokens	External	Payable	-
	swapTokensForExactETH	External	1	-
	swapExactTokensForETH	External	1	-
	swapETHForExactTokens	External	Payable	-
	quote	External		-
	getAmountOut	External		-
	getAmountIn	External		-
	getAmountsOut	External		-
	getAmountsIn	External		-
IUniswapV2Ro uter02	Interface	IUniswapV2 Router01		
	removeLiquidityETHSupportingFeeOn TransferTokens	External	1	-
	removeLiquidityETHWithPermitSuppo rtingFeeOnTransferTokens	External	1	-
	swapExactTokensForTokensSupporti ngFeeOnTransferTokens	External	<b>√</b>	-
	swapExactETHForTokensSupporting FeeOnTransferTokens	External	Payable	-
	swapExactTokensForETHSupporting FeeOnTransferTokens	External	<b>√</b>	-



IERC20Extend ed	Interface			
	totalSupply	External		-
	decimals	External		-
	symbol	External		-
	name	External		-
	balanceOf	External		-
	transfer	External	1	-
	allowance	External		-
	approve	External	1	-
	transferFrom	External	1	-
Auth	Implementation			
7.00.1	<constructor></constructor>	Public	1	-
	authorize	Public	1	onlyOwner
	unauthorize	Public	<b>✓</b>	onlyOwner
	isOwner	Public		-
	isAuthorized	Public		-
	transferOwnership	Public	1	onlyOwner
IDividendDistri butor	Interface			
	setDistributionCriteria	External	✓	-
	setShare	External	✓	-
	deposit	External	Payable	-
	process	External	1	-
DividendDistri butor	Implementation	IDividendDi stributor		
	<constructor></constructor>	Public	1	-
	setDistributionCriteria	External	<b>✓</b>	onlyToken
	setShare	External	<b>✓</b>	onlyToken
	deposit	External	Payable	onlyToken
	process	External	<b>✓</b>	onlyToken
	shouldDistribute	Internal		
	distributeDividend	Internal	1	



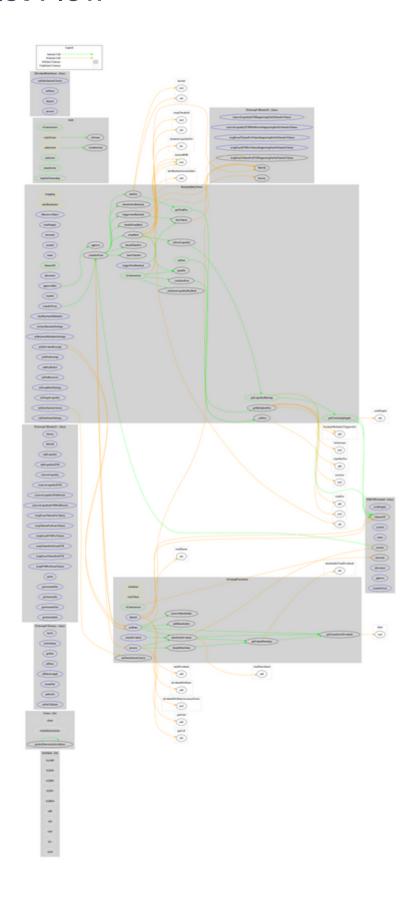
	claimDividend	External	✓	-
	getUnpaidEarnings	Public		-
	getCumulativeDividends	Internal		
	addShareholder	Internal	1	
	removeShareholder	Internal	1	
BaseToken	Implementation			
BuybackBaby Token	Implementation	IERC20Exte nded, Auth, BaseToken		
	<constructor></constructor>	Public	Payable	Auth
	_initializeFees	Internal	1	
	_initializeLiquidityBuyBack	Internal	1	
	<receive ether=""></receive>	External	Payable	-
	totalSupply	External		-
	decimals	External		-
	symbol	External		-
	name	External		-
	balanceOf	Public		-
	allowance	External		-
	approve	Public	<b>✓</b>	-
	approveMax	External	<b>✓</b>	-
	transfer	External	✓	-
	transferFrom	External	✓	-
	_transferFrom	Internal	✓	
	_basicTransfer	Internal	✓	
	shouldTakeFee	Internal		
	getTotalFee	Public		-
	getMultipliedFee	Public		-
	takeFee	Internal	1	
	shouldSwapBack	Internal		
	swapBack	Internal	1	swapping
	shouldAutoBuyback	Internal		
	triggerZeusBuyback	External	1	authorized
	clearBuybackMultiplier	External	1	authorized



triggerAutoBuyback	Internal	✓	
buyTokens	Internal	✓	swapping
setAutoBuybackSettings	External	✓	authorized
setBuybackMultiplierSettings	External	✓	authorized
setIsDividendExempt	External	✓	authorized
setIsFeeExempt	External	✓	authorized
setBuyBacker	External	✓	authorized
setFees	Public	✓	authorized
_setFees	Internal	✓	
setFeeReceivers	External	✓	authorized
setSwapBackSettings	External	✓	authorized
setTargetLiquidity	External	✓	authorized
setDistributionCriteria	External	✓	authorized
setDistributorSettings	External	✓	authorized
getCirculatingSupply	Public		-
getLiquidityBacking	Public		-
isOverLiquified	Public		-
	buyTokens setAutoBuybackSettings setBuybackMultiplierSettings setIsDividendExempt setIsFeeExempt setBuyBacker setFees _setFees setFeeReceivers setSwapBackSettings setTargetLiquidity setDistributionCriteria setDistributorSettings getCirculatingSupply getLiquidityBacking	buyTokens setAutoBuybackSettings External setBuybackMultiplierSettings External setIsDividendExempt External setIsFeeExempt External setBuyBacker External setFees Public _setFees Internal setSwapBackSettings External setTargetLiquidity External setDistributionCriteria External setDistributorSettings External getCirculatingSupply Public getLiquidityBacking  External Public Public	buyTokens Internal  setAutoBuybackSettings External  setBuybackMultiplierSettings External  setIsDividendExempt External  setIsFeeExempt External  setBuyBacker External  setFees Public  _setFees Internal  setFeeReceivers External  setSwapBackSettings External  setTargetLiquidity External  setDistributionCriteria External  setDistributorSettings External  getCirculatingSupply Public  getLiquidityBacking Public



# **Contract Flow**



# Domain Info

Domain Name	moonkakashi.io
Registry Domain ID	b3d5763034d14cd49b802352415bf32c-DONUTS
<b>Creation Date</b>	2021-12-08T20:28:14Z
Updated Date	2021-12-13T20:28:42Z
Registry Expiry Date	2022-12-08T20:28:14Z
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 23 days before the creation of the audit. It will expire in 11 months.

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



# Summary

MoonTakishi is a community driven meme Token. The project has a friendly and growing community. The smart contract analysis reported no compiler errors or critical issues. The contract Owner can change the fees in the contract, but there are limitations to what he can set.



#### 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.

Coinscope 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.

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The Coinscope team disclaims any liability for the resulting losses.



# **About Coinscope**

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.

Coinscope is aiming to make crypto discoverable and efficient globally. It provides all the essential tools to assist users draw their own conclusions.



The Coinscope.co team

https://www.coinscope.co