



# **Smart Contract Security Audit**

<u>TechRate</u> November, 2021

### **Audit Details**



Audited project

**BabyXape** 



Deployer address

0x60de7d2612dc012eb5768d34a5a6ebfbb26ab6bc



**Client contacts:** 

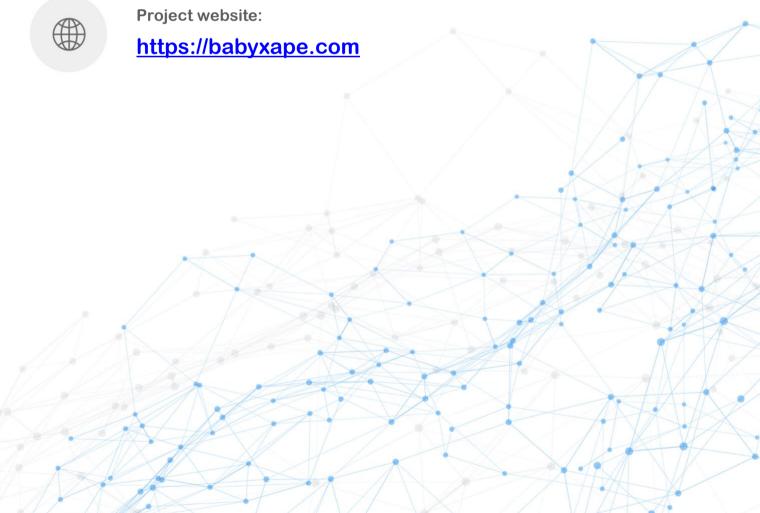
BabyXape team



Blockchain

**Binance Smart Chain** 





### **Disclaimer**

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the below disclaimer below – please make sure to read it in full.

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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

### **Background**

TechRate was commissioned by BabyXape to perform an audit of smart contracts:

 $\frac{https://bscscan.com/address/0x234003ffa399e8bc53236ac777f4c781b10d1344\#cod}{e}$ 

#### The purpose of the audit was to achieve the following:

- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

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## **Contracts Details**

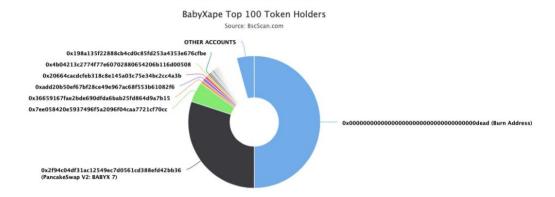
#### Token contract details for 17.11.2021

Contract name	BabyXape
Contract address	0x234003FFa399E8bc53236AC777F4C781B10D1344
Total supply	100,000,000,000
Token ticker	BABYX
Decimals	9
Token holders	1,737
Transactions count	16,880
Top 100 holders dominance	95.71%
Liquidity fee	1
Rewards fee	5
Total fee	11
Uniswap V2 pair	0x2f94c04df31ac12549ec7d0561cd388efd42bb36
Contract deployer address	0x60de7d2612dc012eb5768d34a5a6ebfbb26ab6bc
Contract's current owner address	0x60de7d2612dc012eb5768d34a5a6ebfbb26ab6bc

# **BabyXape Token Distribution**

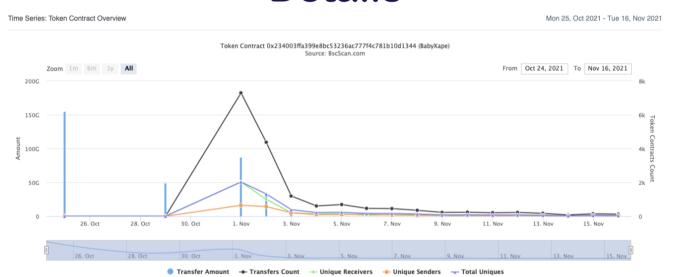


Token Total Supply: 100,000,000,000.00 Token Ⅰ Total Token Holders: 1,737



(A total of 95,708,984,756.03 tokens held by the top 100 accounts from the total supply of 100,000,000,000.00 token)

# BabyXape Contract Interaction Details



# BabyXape Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	Burn Address	50,000,000,000.00000024	50.0000%
2	B PancakeSwap V2: BABYX 7	30,039,010,228.221162955	30.0390%
3	ⓑ 0x7ee058420e5937496f5a2096f04caa7721cf70cc	5,000,000,000	5.0000%
4	0x36659167fae2bde690dfda6bab25fd864d9a7b15	812,181,092.946171524	0.8122%
5	0xadd20b50ef67bf28ce49e967ac68f553b61082f6	705,196,740.704550164	0.7052%
6	0x20664cacdcfeb318c8e145a03c75e34bc2cc4a3b	652,360,539.49517306	0.6524%
7	0x4b04213c2774f77e60702880654206b116d00508	509,999,999.99999999	0.5100%
8	0x198a135f22888cb4cd0c85fd253a4353e676cfbe	409,828,536.344743441	0.4098%
9	0xee0fcfd6e0ab53c8cac5789e549510d5a42f536a	399,032,485.840434312	0.3990%
10	0x3b76f3ef3507f85fbc1442de70b410c7ee98e050	361,840,374.853419788	0.3618%

### **Contract functions details**

```
+ [Lib] SafeMath
 - [Int] add
 - [Int] sub
 - [Int] sub
 - [Int] mul
 - [Int] div
 - [Int] div
+ [Int] IBEP20
 - [Ext] totalSupply
 - [Ext] decimals
 - [Ext] symbol
 - [Ext] name
 - [Ext] getOwner
 - [Ext] balanceOf
 - [Ext] transfer #
 - [Ext] allowance
 - [Ext] approve #
 - [Ext] transferFrom #
+ [Int] IDEXFactory
 - [Ext] createPair #
+ [Int] IDEXRouter
 - [Ext] factory
 - [Ext] WETH
 - [Ext] addLiquidity #
 - [Ext] addLiquidityETH ($)
 - [Ext] swapExactTokensForTokensSupportingFeeOnTransferTokens #
 - [Ext] swapExactETHForTokensSupportingFeeOnTransferTokens ($)
 - [Ext] swapExactTokensForETHSupportingFeeOnTransferTokens #
+ [Int] IDividendDistributor
 - [Ext] setDistributionCriteria #
 - [Ext] setShare #
 - [Ext] deposit ($)
 - [Ext] process #
+ DividendDistributor (IDividendDistributor)
 - [Pub] <Constructor> #
 - [Ext] setDistributionCriteria #
   - modifiers: onlyToken
 - [Ext] setShare #
  - modifiers: onlyToken
 - [Ext] deposit ($)
  - modifiers: onlyToken
 - [Ext] process #
  - modifiers: onlyToken
 - [Int] shouldDistribute
 - [Int] distributeDividend#
```

- [Ext] claimDividend #

- [Pub] getUnpaidEarnings
- [Int] getCumulativeDividends
- [Int] addShareholder #
- [Int] removeShareholder #

#### + Auth

- [Pub] <Constructor> #
- [Pub] authorize #
  - modifiers: onlyOwner
- [Pub] unauthorize #
  - modifiers: onlyOwner
- [Pub] isOwner
- [Pub] is Authorized
- [Pub] transferOwnership #
  - modifiers: onlyOwner

#### + BabyXape (IBEP20, Auth)

- [Pub] <Constructor>#
  - modifiers: Auth
- [Ext] <Fallback> (\$)
- [Ext] name
- [Ext] symbol
- [Ext] decimals
- [Ext] totalSupply
- [Ext] getOwner
- [Pub] getCirculatingSupply
- [Pub] balanceOf
- [Ext] allowance
- [Pub] approve #
- [Ext] approveMax #
- [Int] launched
- [Int] launch #
- [Ext] changeTxLimit #
- modifiers: authorized
- [Ext] changeWalletLimit #
  - modifiers: authorized
- [Ext] changeRestrictWhales #
  - modifiers: authorized
- [Ext] changelsFeeExempt #
  - modifiers: authorized
- [Ext] changeIsTxLimitExempt #
  - modifiers: authorized
- [Ext] changelsDividendExempt #
  - modifiers: authorized
- [Ext] changeFees #
  - modifiers: authorized
- [Ext] changeFeeReceivers #
  - modifiers: authorized
- [Ext] changeSwapBackSettings #
  - modifiers: authorized
- [Ext] changeDistributionCriteria #
  - modifiers: authorized
- [Ext] changeDistributorSettings #
  - modifiers: authorized
- [Ext] transfer #

- [Ext] transferFrom #- [Int] \_transferFrom #
- [Int] \_basicTransfer #
- [Int] takeFee #
- [Pub] tradingStatus #
  - modifiers: onlyOwner
- [Int] swapBack #
  - modifiers: lockTheSwap

(\$) = payable function # = non-constant function

# **Issues Checking Status**

Issue description	Checking status
1. Compiler errors.	Passed
2. Race conditions and Reentrancy. Cross-function race conditions.	Passed
3. Possible delays in data delivery.	Passed
4. Oracle calls.	Passed
5. Front running.	Passed
6. Timestamp dependence.	Passed
7. Integer Overflow and Underflow.	Passed
8. DoS with Revert.	Passed
9. DoS with block gas limit.	Passed
10. Methods execution permissions.	Passed
11. Economy model of the contract.	Passed
12. The impact of the exchange rate on the logic.	Passed
13. Private user data leaks.	Passed
14. Malicious Event log.	Passed
15. Scoping and Declarations.	Passed
16. Uninitialized storage pointers.	Passed
17. Arithmetic accuracy.	Passed
18. Design Logic.	Passed
19. Cross-function race conditions.	Passed
20. Safe Open Zeppelin contracts implementation and usage.	Passed
21. Fallback function security.	Passed

### **Security Issues**

High Severity Issues

No high severity issues found.

No medium severity issues found.

Low Severity Issues

No low severity issues found.

# Owner privileges (In the period when the owner is not renounced)

- Owner can change trading status.
- Authorized addresses can change the maximum transaction amount.
- Authorized addresses can change maximum wallet amount restriction.
- Authorized addresses can change restrictWhales value.
- Authorized addresses can exclude from fees.
- Authorized addresses can exclude from max transaction limit.
- Authorized addresses can exclude from dividends.
- Authorized addresses can change fees.
- Authorized addresses can fee receivers.
- Authorized addresses can distribution criteria.
- Authorized addresses can change distribution GAS.

#### Conclusion

Smart contracts do not contain high severity issues! Liquidity pair contract's security is not checked due to out of scope.

Liquidity locking details provided by the team: https://www.pinksale.finance/#/pinklock/record/997?chain=BSC

#### TechRate note:

Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.

