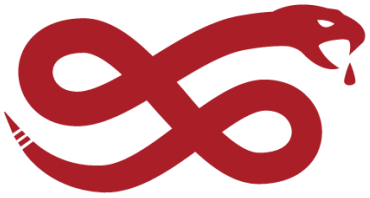


SLITHER

Silent Base Security Analysis

Website	https://silentbase.xyz
Contract Address	-
File Name	SilentBaseMarket.sol
Whitepaper	https://silentbase.xyz/files/whitepaper_v2.pdf
Audit Date	Friday, August 2, 2024

SUMMARY

Silent Base Market is a decentralized order book exchange built on the EVM blockchain. The smart contract, written in Solidity, utilizes the ReentrancyGuard from OpenZeppelin for security against reentrancy attacks. It supports trading of ERC-20 tokens through a pair-based system, where each pair consists of a source and a destination token. Users can create, cancel, and execute buy and sell orders, which are then matched automatically by the smart contract.

The exchange handles both limit and market orders, ensuring efficient trade execution. It maintains detailed records of trades and orders, and supports functionalities such as depositing and withdrawing funds, freezing and unfreezing balances, and sorting and matching orders by price. The contract also includes administrative controls for managing token pairs and inactive tickers.

SCOPE

The audit focused on the following files:

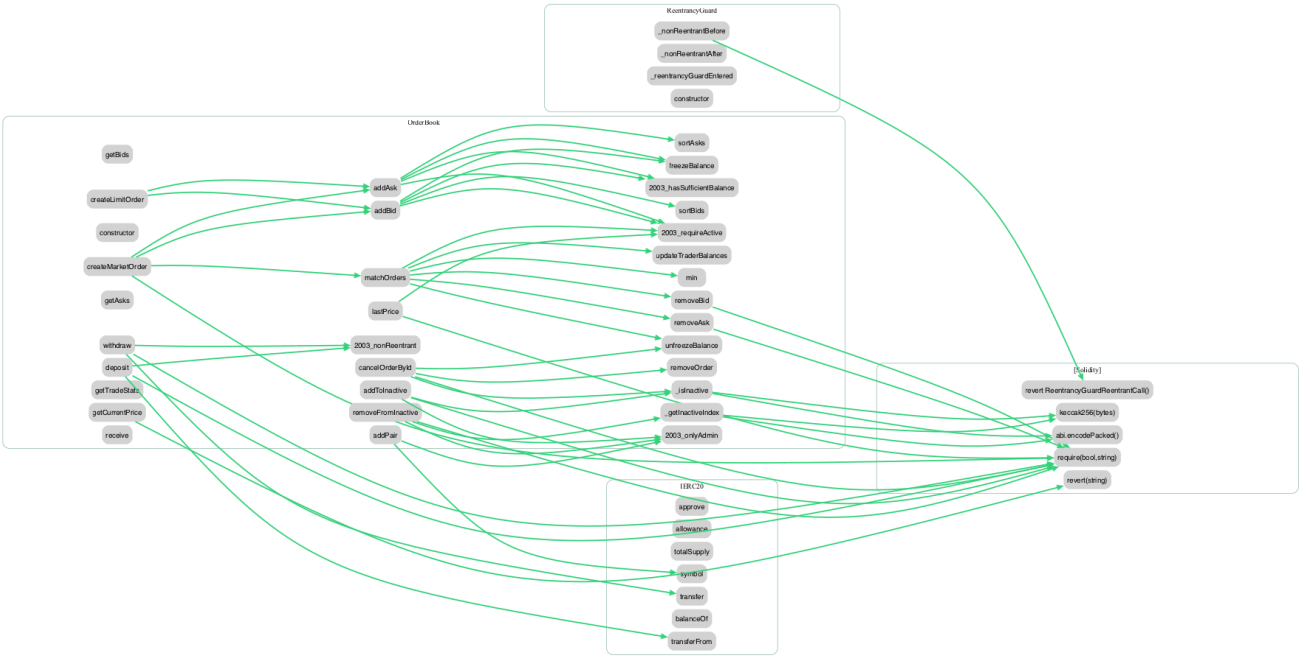
- **SilentBaseMarket.sol**

METHODOLOGY

The audit was conducted using both manual code review and automated analysis tools. The following techniques were used:

- Static analysis
- Symbolic execution
- Manual code review

CALL GRAPH



Name	Functions	ERCS	ERC Info	Complex code	Features
IERC20	7	ERC20	• No Minting • Approve Race Cond.	No	
OrderBook	33			No	• Receive ETH • Send ETH • Tokens interaction

RESULTS

Warning	Notes	Confidence	Impact
dead-code	[ReentrancyGuard._reentrancyGuardEntered()](node_modules/@openzeppelin/contracts/utils/ReentrancyGuard.sol#L81-L83) is never used and should be removed	Medium	Informational
solc-version	Version constraint ^0.8.20 contains known severe issues (https://solidity.readthedocs.io/en/latest/bugs.html) 1. VerbatimInvalidDeduplication 2. FullInlinerNonExpressionSplitArgumentEvaluationOrder 3. MissingSideEffectsOnSelectorAccess. It is used by: 1. [^0.8.20](contracts/SilentBaseMarket.sol#L2) 2. [^0.8.20](node_modules/@openzeppelin/contracts/utils/ReentrancyGuard.sol#L4)	High	Informational

THANK YOU